



State Ownership in Banking

- Theory applied to a case study of the Norwegian government's ownership in DnB NOR

Av Jon Arne Rasmussen

Independent study work within the Master Degree in
Economics and Business Administration
Major in Financial Economics
Thesis advisor: Kåre Petter Hagen

This thesis was written as a part of the master program at NHH. Neither the institution, the supervisor, nor the censors are - through the approval of this thesis - responsible for neither the theories and methods used, nor results and conclusions drawn in this work.

Abstract

State ownership in banking has received considerable coverage in the academic literature. However, there are very few recognised case studies of state ownership of banks in developed countries. The motivation for this thesis is thus to investigate the properties of state ownership in the context of a highly developed country

Theoretical and empirical work suggest that the success of government ownership in banks depends on the quality of government and financial institutions, independent regulation, the rationale for ownership, and recognition of good corporate governance standards. Apart from some minor issues, the case study of the Norwegian government's bank ownership supports this view. Institutions are well developed, the rationale for ownership is moderate, and the government applies corporate governance standards that are broadly agreed upon. The result is that the government is rather successful in achieving its goals, and avoiding most of the pitfalls normally associated with government ownership.

Foreword

The main motivation for this thesis was a sincere interest in the mechanisms that apply to government ownership in general, and ownership of banks in particular. The initial draft contained a broader analysis which was eventually shortened considerably and adapted to the characteristics of the case study. However, the theoretical framework is very elaborate, and can easily be applied to the study of government ownership of banks in other countries. A potential weakness of the thesis is the lack of a comparative study. Applying the framework to a cross-country study of government owned banks may produce an even deeper insight into the effects of different institutional environments and government policies.

I would like to thank my thesis advisor Kåre Petter Hagen, professor at the Department of Economics at the Norwegian School of Economics and Business Administration, for excellent advice and recommendations with respect to sources of information. Furthermore, I would like to thank Kjell Arne Aasgaarden and Anders Hole, respectively head of section and senior advisor at the Section for Licencing, Laws, and Regulation under the Department of Finance and Insurance Supervision at the FSAN, and Knut J. Utvik, deputy director general at the Ownership Department of the Norwegian Ministry of Trade and Industry, for invaluable information provided during interviews.

Contents

Abstract.....	2
Foreword.....	2
Part 1 Background.....	5
1.1 State ownership in general.....	5
1.1.1 The debate on government ownership and interference.....	5
1.1.2 The state as owner of last resort.....	7
1.1.3 Prerequisites for government involvement and ownership.....	8
1.1.4 Ownership and the political agenda.....	10
1.2 State ownership and involvement in banking.....	11
1.2.1 The debate on state ownership in banking.....	11
1.2.2 Legal system, financial development, and government interference.....	12
1.2.3 Finance and growth.....	13
1.2.4 Banking and the economy.....	14
1.2.5 Government ownership and economic performance.....	16
1.2.6 Main insights from previous studies.....	19
Part 2 Theoretical framework.....	20
2.1 The rationale for state ownership of banks.....	20
2.1.1 Public choice theory and government intervention.....	21
2.1.2 Perspectives on government ownership.....	25
2.1.4 Synthesis of perspectives and public choice theory.....	26
2.1.5 Efficiency issues.....	27
2.1.6 Pitfalls.....	31
2.2 How to exercise government ownership.....	33
2.2.1 Internal organisation of government ownership.....	34
2.2.2 Contracting theory.....	40
2.2.3 Corporate governance of banks.....	44
Part 3 The Norwegian government's ownership in DnB NOR.....	62
3.1 Introduction.....	62
3.2 Policy environment and institutional framework.....	65
3.2.1 Ownership policies.....	65
3.2.2 Internal organisation of governance.....	67
3.2.3 Institutional factors.....	68
3.2.4 The government's corporate governance policies.....	71
3.2.5 Regulation and public supervision of banks.....	72
3.2 Rationale for ownership in DnB NOR.....	77
3.2.1 Government's interest in nationally located headquarters.....	78
3.2.2 Secondary reasons for ownership.....	79
3.2.3 Unforeseen or understated effects of ownership.....	80
3.3 Corporate governance of DnB NOR.....	81
3.3.1 Contact with the company.....	81
3.3.2 The responsibilities of the board.....	82
3.3.3 Election of board members.....	84
3.3.4 The government's opinion on management compensation.....	85
3.4 Theoretical predictions and observed effects of government ownership.....	86
3.4.1 The Rationale for ownership - comparing theory with reality.....	87
3.4.2 The government's administration of ownership compared with theory.....	89
3.4.3 Predictions and DnB NOR operations.....	98
Summary and concluding remarks.....	104

Appendix.....	107
1. The Norwegian government's principles for corporate governance.....	107
2. Main principles of The Norwegian government's guidelines for the remuneration of top executives in state-owned companies.....	107
3. OECD Guidelines on Corporate Governance of State-owned Enterprises.....	108
4. Explanation of Standard & Poor's credit ratings.....	108
References.....	110

List of tables

Table 1: Perspectives on ownership and public choice theory.....	27
Table 2: Governance structures (Hendrixe 2003).....	42
Table 3: Depositors' dilemma.....	57
Table 4: Evolution of government ownership in Norway (Gleinsvik et al. 2001).....	63
Table 5: Ownership share and associated rights and responsibility.....	70
Table 6: Standard & Poor's ratings for DnB NOR.....	99
Table 7: Application of CSR policies (from corporate web pages).....	100

List of diagrams

Diagram 1: DnB NOR's commitments according to geographical location.....	98
Diagram 2: Based on the companies' annual reports for 2002-2009.....	99

Part 1 Background

Questions pertaining to the reasons and outcomes of government ownership of enterprise have been discussed in depth both within academic and political circles. Furthermore, the debate has evolved following several paradigmatic shifts in thinking about ownership and state involvement in the economy. From the mercantilistic economy of the earlier centuries towards the current paradigm of the Washington consensus, theory and experience have supplied us with the tools necessary to discuss the topic of government ownership in a broad context of prerequisites and implications. However, the discussion has often been generalised in its broad focus on government ownership, and there has been a lack of attention paid to government ownership in specific sectors of the economy. This preliminary part of the paper begins with a discussion of issues pertaining to state ownership in general. Thereafter, we will endeavour into a more thorough investigation of the results and implications of academic work concerned with the specific case of state-owned banks.

1.1 State ownership in general

1.1.1 The debate on government ownership and interference

In a supposedly balanced inquiry into the broad set of aspects related to government ownership and privatisation, von Weisäcker et al. (2005) reflect on the historical prerequisites for privatisation throughout the 20th century. They refer to the fact that much of the 19th and the earlier part of the 20th century were characterised by a large and increasing share of government involvement in societal functions. This involvement included goods and services within social and commercial infrastructure. Communist ideologies gaining a foothold within the Soviet states and socialist ideologies evolving in Western Europe and Latin America provided the political circumstances under which nationalisation schemes were possible and supposedly in the interest of the people. Earlier colonies of the European nations adopted nationalisation policies as a response to the need for essential infrastructure in a period of transition from colonial rule.

However, the common belief that government ownership and interference in economic development were contributing to a more efficient economy met severe criticism in the later part of the 20th century. In particular, economic theory generated in the 1960's laid the academic foundation of a privatisation movement emanating in the 1980's. A diverse set of phenomena were pushing for an increase in privatisation measures and a reduction in restrictions on private enterprise. Technological developments, globalisation and the growth of private operators led to a trend of

questioning the participation of the public sector in the economy, effectively promoting an alternative mode of production, preferably in the hands of private owners and entrepreneurs. This would presumably improve efficiency, and the efficiency measures applied supported such a paradigmatic shift. Renowned scholars such as Hayek, Friedman and Coase had contributed to an understanding of the political economy as a conflict between the societal goals of equity and efficiency. Government involvement through ownership was perceived as a form of cronyism, and would thus probably lead to inefficient outcomes. This neo-classical perspective gained influence as the Keynesian perspective, its ideological adversary at the time, was increasingly associated with the simultaneous presence of two economic evils, namely stagnation and inflation. They jointly constituted the feared stagflation that could be avoided, almost exclusively, by restricting the role of government and focusing on sound and conservative fiscal and monetary policies. An important factor in such policies was the belief that the view of classical economics pertaining to market failure did not pay sufficient attention to government failure. In elementary courses in microeconomics, most students become familiar with possible market failures caused by externalities, public goods and natural monopolies. These phenomena are somewhat interrelated, but the important stance is that the economic disturbances they create can be overcome by actions taken by a benevolent government through regulation or outright ownership of the factors of production. As with most other theories, we start off with a simplification where the basic assumptions need empirical evidence for the theory to be valid.

Von Weisäcker et al. (2005) argue that the historical debate on government ownership and interference has been characterised by polar perspectives on the ability and willpower of the state in acting on behalf of its subjects. The classical economic perspective that professors teach in elementary economics courses makes a decisive assumption about the benevolence of the state. The two polar perspectives disagree on the prevalence of such a characteristic of the state authorities. The statist view holds that, lacking a direct profit motive, the public sector will automatically act in the interest of the public good. The state is perceived as benevolent. The libertarian view, exemplified by Milton Friedman, assumes that competition and profit-seeking will lead to allocative efficiency as producers who successfully satisfy consumer demand will survive, while those that do not, will perish. The market is seen as efficient while the state is inevitably inefficient and sometimes even malevolent. These two perspectives are extreme in the sense that they are not exhaustive, and do not consider more pragmatic alternatives. They agree, however, that the right ownership of assets is the key to good results. Von Weisäcker et al. (2005) consider the majority of the 'classic' privatisation efforts during the 1980's in a libertarian perspective, where change of

ownership was key. Including another dimension to the debate, the theory and application of regulation provide a more pragmatic stance to the debate. Whether the state or the private sector is in control of assets, regulation can presumably avoid some of the undesirable traits related to one or the other of the two ownership types.

The authors provide a significant amount of evidence in favour of such a pragmatic view, where privatisation accompanied by strong regulation produces good results. In recent years, some have argued for public ownership accompanied by strong, independent regulation which can ensure that public services operate in the interest of their users rather than their employees. Von Weisäcker et al. provide several examples of more or less successful initiatives to make public service providers more accountable and responsive in order to improve performance without resorting to privatisation. The increased focus on regulation can, to a certain extent, be seen as evidence of an increase in state influence in recent years.

1.1.2 The state as owner of last resort

In a classic paper entitled *Economic Backwardness in Historical Perspective*, Gerschenkron (1962) argues that industrialisation processes in a number of historical instances differed along the dimension of economic backwardness or, in other words, the lag between the the leading industrial nation(s) and those that followed in the path of industrial transformation. The potential for industrial development is said to depend on the relative backwardness of a particular country. Even though there were many obstacles in the way of successful industrialisation attempts, the potential for adopting technological innovations developed in the early industrialised states constituted a considerable opportunity to narrow the gap. One of the most important obstacles was the financing of necessary infrastructure and production facilities.

The main argument holds that the lag in initiation of industrialisation had certain effects on the institutional framework for financing industrial endeavours. In England, the gradual industrialisation and the related building up of capital in a pre-industrial period facilitated private financing of industrial development and made potential universal or industrial banks unnecessary. In backward countries, the wealth was less concentrated and there was considerable distrust in industrialisation processes. This context made private entrepreneurial initiatives more cumbersome, and left a gap to be filled by financial institutions with a long-term perspective such as the *Crédit Mobilier* in France and the universal banks in Germany. A third path for financing industrial transformation occurred in

Russia in the latter part of the nineteenth century. In this instance, the state took responsibility for industrialisation based on military necessities under unfavourable economic circumstances. In contrast to industrialisation in Germany and France a couple of decades earlier, the financing of industrial transformation in Russia could not rely on banks. A distinctive feature of the Russian economy at the time was the extreme dispersion of wealth which made it almost impossible for a banking system to attract enough funds to finance large-scale industrialisation. The state managed to acquire the necessary financing through taxation, effectively directing resources from consumption to investment. The involvement of the Russian state in the process of industrialisation has been severely criticised by the lack of efficiency, and the presence of corruptive practices and incompetence in the bureaucracy. However, the state made a significant and unavoidable contribution to industrial development in Russia.

What we can learn from Gerschenkron's (1962) elaborations on industrialisation in Europe is that the institutional framework for investment in industrial enterprise depends on the allocation of wealth within a nation. The allocation of wealth depended on the relative backwardness of a nation and its former economic activities. In some cases there was a role for the state in economic development through ownership or, in more general terms, through the effective reallocation of wealth and resources from consumption towards investment. More recent studies have also paid attention to the effect of the structure of wealth on the institutional framework for allocation of capital, but the main focus has been directed towards prerequisites for 'good' government interference in the economy.

1.1.3 Prerequisites for government involvement and ownership

Evans (1995) observes that during the twentieth century the state has gained an increasingly pervasive influence as an institution and a social actor from the poorest to the most developed welfare states. The modern state has been bestowed upon a role in economic transformation and welfare. Mainly because the success of the state has become more dependent on economic performance, its legitimacy rests to a larger extent on its ability to intervene effectively in the economy. Evans (1995) argues that the global context of the international division of labour, more service oriented industries, and the evolution of industries that are less dependent on natural endowments has extended the potential role of state-led industrial transformation. His argument can be analysed along the lines of comparative advantage, where the original Ricardian version emphasise natural endowments while Heckscher and Ohlin's refinement focuses on relative domestic scarcities of labour and capital. Considering more recent theoretical endeavours to pin-point the

determinants of comparative advantage (see Porter 1990 and Cline 1987), the emergence of such seems to rely on an increasingly complex system of competitive and corporate ties among local firms, as well government policies and a host of other social and political institutions.

Even though Evans studies economic transformation in the particular context of the IT sector in newly industrialising countries, his perspective and theoretical argument extends to a more general perspective on state intervention in the economy. State-led economic transformation can push for participation in so-called "leading sectors" located in the innovative end of the product cycle, where the highest value-added is created. Landes (1998), an economic historian, supports the statement that comparative advantage can change, for the better or worse of a nation's economic well-being. Evans (1995) argues that we need to focus on the quality and not the amount of state intervention. There is considerable variation in the internal structure of states and in their relations with society as a whole. These factors contribute to the determination of states' capacities for action and the roles that states are capable of playing. In making a distinct separation between predatory states and developmental states, Evans adds an interesting point of view to the debate on the benevolence of the state. Predatory states are those that extract resources from the society in a way that hampers development and capital accumulation. Developmental states, on the other hand, are those that have not only presided over development, but also contributed actively to industrial transformation and economic development. The problem with predatory states is that they lack the ability to prevent individual incumbents from pursuing their own goals instead of acting in the general interest of the people. Developmental states have an internal structure more similar to the Weberian ideal of bureaucracy. Recruitment based on merits and long-term career concerns creates a sense of commitment and coherence which, in Evans' opinion, provide the state with a certain autonomy. However, the developmental state is also highly embedded in society as it interacts with other actors, among them private entrepreneurs. It is not insulated from society such as Weber described the ideal bureaucracy. These characteristics of the developmental state is what Evans calls 'embedded autonomy'. It refers to a state which is autonomous in its decision making, even though these decisions are considered to be valuable only as far as they are embedded in society.

It thus becomes clear that we need to include characteristics of states pertaining to their internal organisation and external ties in order to make decent predictions related to the efficacy of state involvement in the economy. In light of more recent academic literature and official statements made by the World Bank and the IMF, Evans argues that the neo-liberal perspective on state involvement in the economy, namely that such involvement is unnecessary and harmful, no longer

has the same relevance and support as it had in the 1970's and 80's.

1.1.4 Ownership and the political agenda

Politics and economics is of course closely connected, and this is often the case with ownership policies as well. Politicians are in the business of pleasing their constituencies and producing the policies which are in the interest of associated lobby groups, employers, employees, and other groups with political power in a society. In democratic states, the basic prediction of the public choice theory (see Mueller 2003) is that, at least in the long run, the politicians will base their political choices on the interest of the median voter. More elaborate theories within this line of thought point to the importance of interest groups and politician's structural dependence on capital owners in forming their policies (Przeworski 1990). Government ownership has to be considered in a context of political dependence, especially in democratic countries. This has led several authors to question the purpose of government ownership, and direct attention towards governments and public servants who exploit government ownership stakes to further their own political agenda. Bennesen (1998) theorises that political involvement in the operation of firms can provide lobby groups with incentives to try to influence policy choices, giving rise to inefficient behaviour. Shleifer and Vishny (1994) argue that politicians will try to bribe managers of state owned enterprises into pursuing political objectives such as excess employment. An important element of such arguments is that voters cannot organise in order to conduct sufficient monitoring activity of the state policies. Politicians will thus not be held entirely responsible for money spent on bribing or subsidising businesses and/or interest groups, but will gain significant political support from such schemes.

Empirical studies comparing the performance of publicly owned versus privately owned firms seem to indicate that the publicownership entails lower economic performance (Ehrlich et al. 1994, Megginson et al. 1994, Thomsen and Pedersen 2000). Some even find evidence supporting the view that the reason for inefficiency in publicly owned firms is excess employment (Bartel and Harrison 1999). There may be more than a handful of political objectives that politicians would like to pursue through the government ownership stake in different sectors of the economy, but we will not go into detail on all such potential political schemes here. It is, however, important to bear in mind all of the potential objectives of politicians when trying to identify the motive and possible consequences of government ownership.

1.2 State ownership and involvement in banking

Banks are in general highly regulated, and are often characterised by state ownership. They are more often than not considered to be a special type of firm, constituting an essential part of modern economies. They were at the heart of the recent financial crisis, even though there is some disagreement as to whether they were the only institutions to blame for the economic downturn we have seen the last two years. Whatever the initial causes of the crisis, it has shown how dependent the economy is on a healthy banking system, and what may be the result if something goes awfully wrong. Commentators have referred to the depression of the 1930's as a comparable crisis. Banks failures also played an important part in the economic downturn in the thirties, and the effects on the real economy were devastating. Possible links from bank failure to the real economy are loss of deposits (less relevant in the contemporary context of deposit insurance), reduction in the supply of loans and other banking services, and contagion from one or more failed banks to the rest of the financial industry (Ashcraft 2005). As banks are considered to be cornerstones of modern economies, it is in the interest of governments to secure their well-being. This explains the emphasis on regulation and government interference in this industry, but does not provide politicians and government officials with a clear policy as to how they should intervene in this sector.

1.2.1 The debate on state ownership in banking

Views on government ownership of banks has developed over time. In the post-World War II period policy-makers seemed to be more inclined towards direct state ownership than in more recent periods (Andrews 2005), which also included ownership in banks. From the 1970's and onwards, state ownership of banks has fallen into disfavour, which has led to numerous privatisation in the latter part of the twentieth century. Supporters of government ownership in banks often cite the developmental role of government with respect to the financial sector. Governments who prefer to be in control of strategic sectors of the economy often refer to banking as one such sector.

A less benign view of government ownership in banking argues that such involvement is based on political objectives such as the support of some supporters at the expense of the economy as a whole. This "political view" holds that state-owned banks are particularly desirable as instruments for pleasing political constituencies as it is easier to disguise politically motivated lending policies given the complexity of the banking industry and the resulting asymmetry of information between banks and outsiders. Such inefficient lending may turn out to be harmful to the financial condition

of state-owned banks, but losses due to politically motivated lending policies can often be deferred for some time. This provides political incumbents with a possibility to gain political support while potential losses occur during the reign of other political parties or regimes.

Whether state-owned banking is based on a developmental view or a political view, the motive for government control is to finance projects that would not be funded without government intervention. The difference between the two perspectives on government ownership in banking is that the developmental view assumes a more or less benign government which acts in the interest of the people and economic growth, while the political view holds that government is mainly interested in servicing the needs and demands of a smaller group of political supporters, or gaining the support of such constituencies.

1.2.2 Legal system, financial development, and government interference

Most of the empirical work on the topic have revealed that government banks underperform relative to privately owned banks (Ianotta et al 2007, Berger et al 2005, Bonin et al 2005), even though some authors provide evidence that the gains related to privatisation of banks are less significant than that related to privatisation in other sectors (Verbrugge et al 1999). Some even find no significant performance difference between publicly and privately owned banks (Altunbas et al 2001). However, there might still exist legitimate reasons for government ownership. In light of Gerschenkron's view on development, government ownership could be a necessary evil if the private sector is unable to finance the establishment of banks. Admitting that private banking has to be accompanied by a certain institutional, regulatory, and legal framework in order to function properly, Verbrugge et al (1999) list nine minimum conditions¹ for achieving a viable banking system through privatisation. They constitute a list of requirements that could be difficult to satisfy, especially in countries in transition (see for example Sherif et al 2003).

Several authors point out that state ownership of banks are more prevalent in countries with a less developed financial, regulatory and legal system. La Porta et al (2002) find that government ownership is associated with low levels of per capita income, underdeveloped financial systems and poor protection of property rights, while Andrews' (2005) empirical study provide evidence that state-owned banks occur more frequently in countries with weak institutions such as the rule of law,

¹These conditions include: deposit insurance, a sufficiently independent regulatory system, governance systems of truly independent shareholders, good financial reporting systems, methods for dealing with bad loans before and during privatisation, elimination of the propensity to lend to state owned enterprises (SOE's), assurances that if the government retains minority ownership it will act as a passive owner, reduction of the influence of insider control, and acceptance of sales to foreign owners in order to attract sufficient capital

and insufficient government infrastructure. These studies are somewhat interrelated to studies on the effect of legal systems and framework on financial development. Beck et al (2003, 2005) find that adaptability of the legal system, a trait associated with legal systems based on common law, is negatively correlated with obstacles which firms report they face in accessing external finance. Djankov et al (2007) study data on creditor protection through credit registries and legal creditor rights and conclude that these factors are associated with higher ratios of private credit to gross domestic product. La Porta et al (1998) find evidence supportive of the hypothesis that financing by diversified shareholders is more difficult in countries which lacks a sufficient legal framework designed to protect small shareholders. All these articles support the view that efficient and sustainable financial markets depend on some particular legal institutions and information systems. This is supportive of Gerschenkron's view that the state may feel obliged to take on responsibility for financial intermediation in situations where no decent alternative exists. However, the state is also at least partially responsible for the legal framework and most of the institutions that are fundamental to a well-functioning financial market. Thus, government has a dual role in financial development. On the one hand, government controlled banks and financial institutions can alleviate some of the problems related to the lack of a decent private sector, and thus remove some of the pressure for regulatory and legal reform. On the other hand, the lack of a decent and effective legal and institutional framework strengthen the call for government to be responsible for financial services. In other words, governments may face a dilemma in its choice of policy for financial development.

1.2.3 Finance and growth

Several authors have indicated a positive empirical relationship between financial development and the development of the economy as a whole. In 1911, Joseph A. Schumpeter argued that the services provided by financial intermediaries were crucial for technological innovation and economic development. Some have argued that the causality goes in the other direction, from economic development to financial development, while others have discredited the importance of financial intermediation as a driver of growth altogether (see for example King and Levine 1993). Several recent academic papers on the subject have found evidence supportive of Schumpeter's argument, and the debate seems to have shifted its focal point towards the specific, beneficial constituents of financial development and their impact on economic development.

In a cross-country study of 80 countries for the period 1960-1989, King and Levine (1993) find evidence in support of Schumpeter's view that the financial system can promote economic growth.

They find that various measures of the level of financial development are strongly associated with real per capita GDP growth, the rate of physical capital accumulation, and improvements in the efficiency with which economies employ physical capital. In an examination of links between the financial and real sectors of five countries that experienced rapid industrialisation in the 1870-1929 period², Rousseau and Wachtel (1998) find evidence supportive of the view that the intensity of financial intermediation has a positive impact on economic output. Rousseau (1999) also find that the expansion of the financial superstructure that began near the Meiji restoration in Japan (ca. 1879) played a leading role in the rapid expansion of output and investment over the next three decades.

For a long time, academics have tried to identify the channels through which financial development affects economic growth and performance. Levine and Zervos (1998) find empirical evidence suggesting that stock market liquidity and banking development are both positively and robustly correlated with contemporaneous and future rates of economic growth, capital accumulation, and productivity growth. Since their measures of stock market liquidity and banking development both are statistically significant in explaining growth, the findings suggest that banks provide a different type of financial services than stock markets. Beck et al (2000) find evidence indicating that financial intermediaries exert a large, positive impact on total factor productivity growth, which feeds through to overall GDP growth. A potential link between financial intermediaries and productivity is the quality of lending procedures. One particular study supports this view. Jayaratne and Strahan (1996) study the effect of liberalising intrastate branch reform in the U.S. on economic growth, and find that such branch reform led to accelerating economic growth, mainly through increases in loan quality. However, the availability of external finance does not always correspond to the demand, and under such circumstances the provision of additional external finance may be more important than the quality of the intermediation process. Supportive of this view, Rajan and Zingales (1998) find that industries that are relatively more in need of external finance develop disproportionately faster in countries with more developed financial systems. It is fair to say that the general idea that financial development can foster development of the real economy has gained enormous support in the empirical literature. In this paper, however, it is of greater interest to look at the role of banks in the financial system and their effect on economic development.

1.2.4 Banking and the economy

Financial markets can be thought of as the "brain" of the entire economic system, the central locus

² U.S., Canada, United Kingdom, Norway, Sweden

of decision-making: if they fail, not only will the sector's profits be lower than they would otherwise have been, but the performance of the entire economic system may be impaired (Stiglitz et al. 1993). Banks play a pivotal role in the financial markets, especially when other parts of the financial market does not function properly. The principal roles of financial markets in general, and banks in particular, consist of transferring capital from savers to borrowers; agglomerating capital; selecting projects; monitoring; enforcing contracts; transferring, sharing, and pooling risks; and recording transactions. In this description, banks and capital markets deal not only with intertemporal trade but also with risk and information. The three are inexorably linked. Since intertemporal trade involves dollars today for promises of dollars in the future, there is always the risk of default, and information about the borrower's likelihood of repayment is critical. Thus even if we would like to separate the exchange, risk, and information roles, we cannot. This complicated constellation of tasks is what defines the role of banks and financial markets.

Academics have for a long time tried to pin-point the separate effect of banking development on the economy, and whether banks provide services different from those provided by other financial intermediaries. Ashcraft (2005) study FDIC-induced failures of healthy banks in the U.S. in 1988 and 1992, and find that these failures had significant and apparently permanent effects on real economic activity, mainly through a severe contraction in bank lending. This result tends to confirm that banks have an important role as intermediaries which cannot easily, or hastily be replaced. In other words, banks are special intermediaries. James (1987) argues that bank loans are unique in the sense that banks provide a special service in their lending activity that is not available from other lenders. His empirical results indicate that borrowers bear the costs of reserve requirements on certificates of deposits. Furthermore, he finds a positive stock price reaction to the announcement of new bank credit arrangements that is larger than the stock price reaction to other credit arrangements. These two findings indicate that banks provide a special service which has a value in the stock market exceeding the indirect cost of reserve requirements.

The effect of competition on banking activity seems to be yet another particular trait of the industry. Normally, economic theory predicts that increased competition will benefit the consumer or buyers of services offered by a firm. However, banking is more complicated because of its intermediary role and deposit insurance. Empirical evidence point to a potentially negative effect of banking competition on newly formed and small firms' ability to attract debt financing³. Some authors stress

³ In a study of the firm-level impact of the Riegle-Neil Interstate Banking and Branching Efficiency Act of 1994 in the U.S., Zarutskie (2006) finds that increased competition in the banking market resulted in newly formed firms taking on less external debt and realising higher returns on assets. The effects are reversed as firms age, and the author contends

the efforts of smaller banks in attaining 'soft' information on borrowers, which is particularly important for smaller firms with a limited historical and accounting record⁴. Whatever the reasons, the differential lending behaviour of large and small banks is an important and specific characteristic of banking, and should be treated carefully by government as owner and regulator.

1.2.5 Government ownership and economic performance

Given the importance of the banking sector in the economy and the ineffectiveness of the private sector in providing necessary banking services under some circumstances, government ownership and start-ups of banks could potentially alleviate some of the financing problems faced by firms. On the other hand, government ownership may be susceptible to partisan political influence and social and developmental objectives could conflict with commercial viability (Andrews 2005). In trying to identify a specific effect of government ownership of banks on economic performance, scholars encounter the problem of disentangling the effect of government ownership from the effect of associated insufficiency of the institutional framework. As Andrews note, countries with poor institutional structure are more likely to have state-owned banks and weak public sector governance, and thus are more prone to banking crises. Improving the institutional structure, including reducing the direct intervention of government in economic activities, usually involves reducing government ownership in the banking sector. Whether or not state-owned banks have adverse effects on the likelihood of banking crises, a typical response to such crises is nationalisation and subsequent divestiture.

The prevalence of government ownership within banking has triggered a thorough investigation of its track record. La Porta et al (2002) document a large and pervasive government ownership of banks around the world. Looking at numbers for 1995, these authors find that the world mean of government ownership in banking was 41.6 percent. This is a surprisingly high percentage if we take into consideration that bank privatisation had been completed in many countries during the period stretching from 1970 to 1995. Furthermore, La Porta et al find that government ownership is more prevalent in countries characterised by poverty, lack of political rights and democracy, lower security of property rights, and where government is less efficient. This evidence does not bode well

that there is a differential impact of competition on firms depending on their age which has been underscored in earlier literature on the subject.

⁴ Berger, Miller et al (2005) find that small banks tend to lend to more difficult clients while bigger banks lend to larger firms with a good accounting record. Adding that larger banks lend at a greater distance, interact more impersonally with their borrowers, and have shorter and less exclusive relationships lead the authors to conclude that small banks have an advantage in lending based on soft information. This type of information contrasts with the hard information which relates to numbers and accounting figures easily analysed from a distance, potentially in a back-office of a larger bank.

for effective state administration of banks. Consequently, La Porta et al (2002) find significant statistical evidence of state ownership leading to reduction in subsequent financial development. They also find a negative and significant relationship between government ownership and economic and productivity growth. However, in dividing their sample into financially developed and underdeveloped countries, they find that government ownership has a statistically significant effect on income growth only in less financially developed countries. Developed countries appear to be better equipped to deal with the potentially negative consequences of government ownership.

Apart from evidence suggesting state ownership is associated with more poorly operated financial systems (Barth et al. 1999), a collection of diverse studies paint a more nuanced picture. Verbrugge et al. (1999) find a limited effect of privatisation on bank profitability, operating efficiency, leverage, and non-interest revenue. However, they argue that continued significant government ownership hampers market-oriented governance and decision-making systems. Some evidence of the differential impact of government ownership comes from a wide variety of country studies. In a study of the German banking market, Altunbas et al (2001) find little evidence to suggest that privately owned banks are more efficient than their mutual and public-sector counterparts. In Argentina, Berger et al (2005) observe that state-owned banks have poor long-term performance and that state-owned banks who underwent privatisation improved dramatically⁵. The poor performance of some of the state-owned banks could be related to an insufficient institutional structure. Supportive of this view, the authors find that state-owned banks that underwent restructuring also experienced positive results. In Italy, Sapienza's (2004) empirical study indicates that state-owned banks charge lower interest rates than do privately owned banks to similar or identical firms, even if firms are able to borrow more from privately owned banks. Furthermore, state-owned banks mostly favour large firms and firms located in depressed areas, and their lending behaviour is affected by the electoral results of the party affiliated with the bank: the stronger the political party in the area where the firm is borrowing, the lower the interest rates charged.

Studies of particular groups of countries can enlighten our understanding of the subject even more. A study by Dinç (2005) suggests that government-owned banks in emerging markets increase their lending in election years relative to private banks. Emerging economies thus seem to experience difficulties in restraining politically motivated lending. On the other hand, the analysis finds no such

⁵ However, one of the problems of the banking sector in Argentina was the provision of easy and cheap credit to provincially-owned banks through rediscounting from the central bank. This allowed these banks to finance many questionable projects for the provincial governments. This problem was alleviated through regulation, and the provincial banks encountered financial distress as their cheap source of funds disappeared.

election-year increase in the lending policies of government-owned banks in developed economies. In a study of transition countries, Bonin et al. (2005) observe that privatization by itself is not sufficient to increase bank efficiency as government-owned banks are not appreciably less efficient than domestic private banks. The most positive impact of change in ownership occurs when foreign owners enter the market. Their empirical results suggest that foreign-owned banks, in particular those with a strategic foreign owner⁶, collect more deposits and make more loans, adjusted for size, than domestic private banks indicating that they provide better service as well. The question of whether the government is an owner seems to be less important than whether enough foreign investors and owners are present in these transitional markets. In a study which tries to identify the necessary factors for a well-developed financial system, Andrianova et al (2008) find cross-country evidence suggesting that institutional factors are relatively more important determinants of the share of state banks than political or historical ones. They argue that rather than privatizing or subsidizing state banks, governments in developing countries should build institutions that foster the development of private banking. The performance of government owned banks seem to depend on some country specific factors that are more frequent in developed countries. Some have argued that institutional structure and legal framework are among these factors, and this is an argument that fits quite well with the empirical research on the subject.

Yeyati et al (2004) separates developing from developed nations in their study of state-owned banks and their effect on the national economy. They find that the significance of state-owned banks are negatively correlated with GDP per capita in poorer countries, but that this correlation disappears when they control for an index of overall government intervention in the economy. Furthermore, they find no significant correlation between state-owned banks and GDP per capita in industrial countries. As in more general studies, when applying the analysis to all countries, these authors find evidence of a negative correlation between state ownership and GDP per capita. This study support the hypothesis that state-owned banks have different effects on the economy depending on whether we are looking at developing or developed nations, and on the intensity of government intervention in general. It also becomes clear that, while institutional factors seem to be unrelated to state-owned banks in developed countries, such factors are correlated with state-ownership in developing countries. In developing countries, the authors find a positive correlation between rule of law and state-ownership, and a negative relationship between property rights and state-ownership. Another interesting result is that, conditional on a given share of public bank ownership, the positive impact

⁶ The participation of an international institutional investor has a considerable additional positive impact on profit efficiency

of financial development on growth is larger in countries with a large share of state-owned banks. Yeyati et al argue that it is possible to interpret this result as evidence of a stronger negative impact of state-ownership on growth in countries with low financial development. The authors argue that a possible explanation for this finding is that countries with well-developed financial systems are better equipped to deal with the distortions that arise from government ownership.

1.2.6 Main insights from previous studies

Recent academic work provide some lessons as to how governments can intervene in the economy while avoiding some of the unfortunate effects of such intervention. Benevolent governments combined with a strong and reasonable internal government structure may allow states to interact in a responsible manner with societal actors and private entrepreneurs. When a state is incapable of making civil servants act in the interest of the general will of the people, we are often left with a predatory state, mainly interested in extracting rents from society. Keeping in mind these different typologies, it becomes clear that we need to identifying the necessary components of a developmental state, and not refuse state involvement altogether. The question is not only how much, but what kind of state involvement and ownership we deem preferable. The political agenda can supersede the interests of mere private owners and their assumed struggle for higher profits. Politicians are in the most basic sense dependent upon the popular vote and election results. Given an often complex and intransparent network of governance, politicians can try to influence the decision-making and policies of government owned firms in order to gain the hearts and minds of voters. Such policies are often in conflict with strict profit motives, even though they can be in the short-term interest of voters. This problem is somewhat different and less disturbing than those of the resource-extracting, predatory government. Still, the issue of political influence can become harmful to the long-term perspectives of an economy and need to be harnessed in order to improve government involvement in the economy.

The banking sector is, and has been, one of the cornerstones of a well-functioning, modern economy, and the state has been much more than just a spectator to its development. It has been at the heart of the two largest economic crises during the last one hundred years, triggering calls for government intervention. It is less clear what type of role the state should have on this sector. Some argue in favour of government ownership, others stick to strict regulation, while hard-nose liberals might prefer that government takes on a passive role and lets the banking sector develop according to its own business-logic. The weights given to each of these points of view have changed considerably, as the post-WWII support for government intervention faded during the 1970's and

80's. Intervention has gained some support in recent decades, but pitfalls related to state-influenced lending policies remain a topic of utmost importance. In this context, it may be equally important to improve the institutional environment in which a modern financial industry could evolve. Observing a higher frequency of state-owned banks in countries characterised by underdeveloped legal systems and an insufficient institutional framework, it seems as if Gerschenkron was right in arguing that governments take on responsibility where the private sector is incapable of getting involved. However, the state is also responsible for the legal and institutional framework within which a banking sector develops, and state-ownership can hardly be seen as a good substitute for legal and institutional reform. Governments may still be interested in jump-starting financial development through ownership of banks, and the case for such involvement could be strengthened by the huge amount of academic literature informing us about the apparently strong relationship between financial development and economic performance. Supposedly, financial intermediaries are crucial for technological innovation and economic development; banks provide a service distinctively different from stock markets; and efficient intermediaries improve productivity by increasing the quality of the lending process. Studies of market responses to bank loans and bankruptcies adds to the impression that banks are indeed special intermediaries, which usually incites a special regulatory regime. Banking is a special sector, and government ownership within this sector is pervasive around the world, particularly in poorer countries with less developed institutions. Government ownership has been linked to poorer growth prospects, but more developed economies seem to avoid some of the the realted problems with such ownership. As government involvement in the economy and the financial sector is to some extent unavoidable, it is necessary to identify the factors that alleviate the problems associated with government ownership and involvement.

Part 2 Theoretical framework

In order to perform a decent analysis of the Norwegian government's ownership in the country's largest financial institution, DnB NOR, we need a broad theoretical framework. This framework has been divided into two parts, the first part will discuss different rationales for government intervention and ownership in banks, and the second part will focus on issues pertinent to how governments can exercise ownership.

2.1 The rationale for state ownership of banks

There are many possible rationales for government ownership of banks, and some may prove to be

less beneficial to a country's economic well-being than others. In analysing the different rationales, we can identify associated assumptions and implications for governance which are essential for the evaluation of ownership in the case study.

2.1.1 Public choice theory and government intervention

In the academic literature, theories of political economy try to explain the intertwined relationship between economics and politics. As an academic branch of political economy mainly emanating from economic theory, public choice theory analyse political institutions and decision-making by applying the theoretical approach of methodological individualism. Theories developed within this academic branch can improve our understanding of the processes that determine the choices made by politicians and civil servants, and how these choices are transformed into government action. In an academic work which has been called the 'bible' for all scholars in the field of public choice theory, Mueller (2003) identifies two main reasons for collective choice; allocative efficiency and redistribution. Elaboration on these two rationales will allow us to understand the difference in logic associated with each of them.

2.1.1.1 Allocative efficiency

In situations or markets characterised by public goods or externalities, collective choice can, at least in theory, improve allocative efficiency. Public goods have two specific characteristic, namely jointness of supply and the impossibility or inefficiency of excluding others from its consumption. In the most extreme case, provision of a public good implies no marginal costs and no chance of excluding individuals from its consumption. Even in less extreme cases, say, where marginal costs are very low and exclusion is costly, there is room for collective action, often initiated by larger organisations of individuals such as local authorities or the state. Protection is often cited as an example of a public good. Taking this example a bit further, protection of property rights could also be perceived as a public good, and consequently the state is the main agent for protecting the property rights within most countries. As for externalities, the second reason for collective choice, they arise when the consumption or production activity of one individual or firm has an unintended impact on the utility or production function of a third party. This unintended impact corresponds to the non-excludability condition related to public goods in the sense that it is impossible to exclude a third party from the side effects related to consumption or production of a good characterised by externalities. As with public goods, externalities seem to leave some room for collective choice. Where only a few individuals or firms are concerned with the effects of externalities, the Coase theorem implies that the mere allocation of property rights will lead to an efficient allocation. When

larger groups of people and/or firms are involved, the coordination necessary for an efficient allocation can be very expensive and in some cases almost impossible. Some argue that extending financial services to areas where private banks cannot operate profitably may increase financial development with positive externalities on growth or poverty reduction (Burgess and Pande, 2003)

2.1.1.2 Redistribution

"A decent provision for the poor is the true test of civilization." These are the words of Samuel Johnson (cited in Mueller 2003), and they refer to our second category of reasons for collective choice, namely redistribution. The distinction between allocative efficiency and redistribution is that the latter aims to gratify the wants of only a part of the community while the former is meant to improve the allocations of resources to satisfy the collective needs of all members of a community. There are several reasons for a redistributive policy, and Mueller (2003) identifies five categories.

Redistribution as insurance

Redistribution can serve as a form of insurance against poverty in a society marked by uncertainty about individual success. Assuming that individuals are capable of estimating their own probability of being poor, a private insurance company cannot serve this market as more or less accurate private information about risks induces adverse selection in insurance markets. This implies that forcing everybody to join an insurance program can lead to a Pareto improvement. This type of logic is often cited in favour of a welfare state.

Redistribution as a public good

Redistribution can also be considered as a public good in the sense that wealthier individuals have some altruistic motives for supporting the poor. Larger schemes of such support cannot rely solely on voluntary association if some of the richer individuals are opportunistic and prefer free-riding on the effort of others. In such cases, redistribution through taxation solves the collective action problem, effectively avoiding free-riding.

Redistribution to satisfy fairness norms

Satisfying some sort of fairness norms in a society is a third reason for redistribution⁷. People seem to adhere to fairness norms which induces them to prefer a more equal distribution. Again, such preferences can be transformed into a government policy of money transfers.

⁷ Such behaviour can perhaps best be exemplified by the dictator experiments applied in the study of behavioural economics. Dictators who are given a certain amount of money to be distributed among one other individual and themselves, tend to voluntarily give a certain amount of money to the other participants in the experiments.

Redistribution to improve allocative efficiency

Productive resources might end up in the hands of people unable to fully exploit their potential. A transfer of resources towards those capable of achieving a higher pay-off from utilising these resources can potentially improve allocative efficiency and total welfare. Modern welfare states are often designed to redistribute in a way that improves allocative efficiency. In subsidising food, housing, medical treatment, and education, governments try to allocate resources towards sustaining and improving the human capital of the society as a whole.

Redistribution as taking

A final and less enticing type of redistribution is that of taking. In a democratic system, it is theoretically possible for the majority to lawfully expropriate the wealth of the minority through abuse of the electoral system. In less democratic states, the popular support required for such extreme redistributive policies is of course lower. In general, the potential for redistribution as taking can lead to excessive efforts in trying to acquire subsidies or transfers, or in trying to lower taxes so as to reduce the potential for such subsidies.

2.1.1.3 Public choice theory and intervention in banking

The strict division into allocative efficiency and redistribution as motives for intervention and, more broadly, reasons for organising into states, is not sufficient for categorising all types of government intervention. However, the categories are more or less exhaustive, and it is possible to analyse government intervention as a combination of the two. For instance, government ownership in banking can be seen as a way to solve the problem of asymmetric information between depositors and bankers countries where the private banking sector is perceived as opportunistic due to a lack of a decent regulatory and legal framework (Andrianova et al 2008). Such issues could also be solved by introducing deposit insurance, but in a system where opportunistic behaviour overshadows good banking practices, such policies can lead to large losses. In this context, it is of some interest to observe that in theory, deposit insurance is somewhat similar to an ownership stake, although without any associated control rights. This issue will be discussed further in following parts of this paper. Solving the asymmetric information problem could, however, be seen as a public good in the sense that allows an increase in capital flowing through the intermediation industry, potentially improving allocative efficiency. As mentioned, nationalisation of banks often occur as a response to financial crises, and could thus be perceived as a way to alleviate problems of negative externalities caused by bankruptcy of financial intermediaries. Abstracting from the potentially dangerous moral

hazard created when bailing out unhealthy banks, removing the externalities related to banking failure can under some circumstances improve allocative efficiency. In this context, government ownership is only a temporary approach, and privatisation should follow. Furthermore, banks seem to provide some special service to an economy which other intermediaries cannot provide, and in situations where private banks cannot operate efficiently, the possible positive externalities associated with banks can make government owned banks socially optimal.

Redistribution as a rationale for government ownership is more in line with the political view on government ownership. Governments can apply redistribution policies in order to gain support from constituencies or simply to increase the wealth of incumbents. In owning banks, governments can easily politicise lending and financing policies in order to sustain and/or enrich local communities, or increase the wealth of political supporters. In some instances, improving the availability of financial services can improve allocative efficiency, but the potential for political suasion can prove harmful in the long run. How to categorise the redistribution incurred depends on the structure and policies of the government owned bank. A lending policy aimed at allowing everybody to own a home or start a business can function as a form of social insurance policy. Everybody contributes through taxation to the losses incurred by government in sustaining an unprofitable banking policy, and everybody can potentially profit from such a policy when in need⁸. Government ownership can also lead to redistribution as a public good in the sense that richer individuals subsidise the banking services of poorer individuals. As discussed above, such a policy will not work out well if free-riding is possible. Moreover, government owned banks can act in accordance with certain fairness norms. If such ownership allows the authorities to manipulate the interest rate policies of the banking sector, it is theoretically possible to transfer funds from lenders or depositors to borrowers, or the other way around. In general, financing policy can adhere to some fairness norms as a logic for redistribution. The operation of a government owned bank can also redistribute in order to improve allocative efficiency. Whereas privately owned banks may be less interested in contributing to the general welfare and/or education of the population, this is usually in the general interest of the people and will more often than not improve allocative efficiency and economic growth. Finally, government ownership can facilitate redistribution as taking. Government ownership of banks leave the savings and investments of individuals in the hands of state officials, and these officials could be motivated by other factors than social insurance, the public good, fairness norms, or allocative efficiency. It is not unlikely that some of the representatives of the government have private

⁸ The policies of Fanny Mae and Freddie Mac in the U.S. previous to the financial crisis that erupted in 2007 come to mind, although the effects of a 'social' lending policy proved to be disastrous.

economic motives, and act according to these. Outright extraction of the societal wealth can be the result, and this is the greatest risk people encounter in leaving their financial resources to the discretion of others.

2.1.2 Perspectives on government ownership

In trying to categorise the different motives for government ownership of banks, academics have gathered around a typology comprising development, social objectives, political interests, and agency problems. Sapienza (2004) include all but the developmental objectives in her paper, while Yeyati et al. (2004) distinguish between developmental and social objectives. I would argue that this distinction is useful, and we will therefore discuss all the four typologies in more detail.

2.1.2.1 Developmental view

The developmental view on government ownership is normally associated with Gerschenkron (1962) who stresses the need for public intervention in economies where the scarcity of capital, general distrust of the public, and endemic fraudulent practices among debtors may fail to generate the sizeable financial sector required to facilitate economic development. In this perspective, governments can intervene through ownership in order to directly increase access to finance and improve financial development in general. Furthermore, government ownership can facilitate lending directed towards sectors of the economy which are essential for future growth prospects. However, governments are not always capable of allocating credit efficiently. Improving the legal and economic institutions facilitating the growth of private credit could have a more beneficial effect on development in the long run.

2.1.2.2 Social view

The social view emphasizes the role of the public sector to compensate for market imperfections that leave socially profitable investments underfinanced (Yeyati et al. 2004). This view on government ownership differs from the developmental view as it predicts that government ownership occurs not as a reaction to missing or incomplete markets, but in response to market failures caused by public goods, externalities and other factors which lead to discrepancies between private return and social return⁹. In general, the social view considers government actions and policies as maximising a welfare function and improving Pareto efficiency. Both the developmental and the social view argue that financial markets in general, and the banking sector in particular, are

⁹ Stiglitz et al (1993) identify seven potential market failures associated with financial markets: Monitoring as a public good; externalities of monitoring, selection, and lending; externalities of financial disruption; missing and incomplete markets; imperfect competition; pareto inefficiency of competitive markets; uninformed investors.

different from other markets, and that government intervention can improve allocative efficiency within this sector.

2.1.2.3 Political view

The political view argues that politicians are interested in owning banks not because it facilitates development or socially optimal policies, but because it allows politicians to channel funds to political supporters and/or incumbents, or addressing short-term political issues. Political suasion can harm the functioning of the financial sector, and result in inefficient lending policies and higher probability of bank failure. In this view, government ownership leads to inefficient redistribution without any attention given to allocative efficiency. Even though market failures may disturb the functioning of financial markets, the political view is more concerned with the effects of government failure. Leaving the government in control of banks is associated with less efficient outcomes than a privately controlled banking system. This view does lend support to some government regulation, but not direct ownership

2.1.2.4 Agency view

The agency view focuses on the agency problems within government. In this view, governments can have a wide range of objectives, both social, developmental and political. However, agency problems hamper states' ability to intervene effectively. The main argument is that government officials and bureaucrats do not have the incentives necessary for carrying out their mandate. Democratic countries normally adhere to an institutional structure consisting of many principal-agent relationships. The principal-agent framework can be applied to a long line of relationships stretching from voters, through parliament, government, ministry (or ministries), to departments in charge of ownership. This complex set of agents and principals, and the resulting lack of incentives to perform effective corporate governance is what leads supporters of the agency view to prefer private rather than state ownership.

2.1.4 Synthesis of perspectives and public choice theory

Attempting to match the above perspectives on government ownership with the public choice theory is a useful exercise. It allows us to identify the main ideas behind each of the perspectives and provides a framework for the case analysis in the fourth part of this thesis. The perspectives are evaluated on the basis of their focus on allocative efficiency, their motive for redistribution, and their political economy stance. Not all of the perspectives fit perfectly into this framework, but it

Perspectives	Public choice theory		Political economy stance	
	Allocative efficiency	Redistribution motive	Market	Government
Developmental	Promoting development as a public good	Improving allocative efficiency	Uncapable of initiating economic development	Benevolent, but might be inefficient
Social	Correcting for public goods and externalities	Fairness norms, insurance and public goods	Inefficient due to market failures	Benevolent and efficient
Political	Could be achieved through regulation	Taking and political distribution	Efficient despite some failures	Inefficient and opportunistic
Agency	Lack of incentives hamper efficiency	N/A	Less affected by agency problems	Inefficient due to agency problems

Table 1: Perspectives on ownership and public choice theory

illustrates some distinctive features. In particular, the agency view does not imply any strict focus on allocative efficiency or redistribution. It simply states that governments are unable to carry out any ownership policy in an efficient manner. The political economy stance of the different perspectives has been included because assumptions about the functioning of the market and government leads to very different conclusions pertaining to the effect of ownership. More confidence in the market, and a less benevolent government is associated with a pessimistic view on government ownership and intervention in the economy, and vice versa. These are theoretical assumptions or opinions, sometimes based on empirical research. However, in a case study, such assumptions should be investigated further in order to formulate policy implications. In part four, we will try to identify the factors which influence government efficiency, opening the black box of the internal clockwork of government.

2.1.5 Efficiency issues

The evaluation of efficiency is highly dependent on the goals of an entity. The orthodox perspective within economics and finance focuses on shareholder value and a company's risk-adjusted return. As governments often have other objectives than those of private enterprises, we might need to apply a broader interpretation of efficiency to the analysis of government owned banks.

2.1.5.1 Government has a bad track record

A considerable amount of academic work has shown that government owned banks tend to be less efficient than privately owned banks¹⁰. Moreover, their banking activity seems to be very peculiar,

¹⁰ La Porta et al (2002) find that government ownership of banks in 1970 is associated with slower subsequent financial development in a world-wide sample. However, the effect of privatisation on bank performance seem to be less pronounced than in other sectors (Verbrugge et al, 1999). In a sample of 60 countries, Barth et al (1999) find that the greater the share of bank assets controlled by state-owned banks, on average, the less will be financial development as well as the development of the nonbank sector and the stock market. Bonin et al (2005) focus their study on transition countries and conclude that, after adjusting for size, government-owned banks make fewer loans, collect fewer deposits, and have higher non-interest expenditures than majority foreign owned banks. In a European context, private banks appear to be more profitable than both mutual and public sector banks. this probably stems from higher net returns on their earning assets rather than from a superior cost efficiency (Iannotta et al, 2007). These authors also

with a larger share of their funding coming from the wholesale interbank and capital markets, a higher liquidity and lower investments in loans (Iannotta et al. 2007). This special financial intermediation model is consistent with the existence of conjectural or explicit government guarantees, which in turn allow these banks to avoid the indirect costs (in terms of capital markets effects) of their poorer asset quality and less profitable intermediation activity. The academic work on the subject measures efficiency of banks along a broad set of parameters¹¹, and state-owned banks seem to underperform along all dimensions. The potential difference in operations between state-owned and privately owned banks seem to underscore one possible explanation for the poor performance of state-owned banks. Government as an owner may have other objectives than the private sector, making the standard efficiency measures less relevant. However, one would expect the government to be interested in promoting financial development, in contrast with the results mentioned above. Academics have a hard time in determining the direction of causality between financial and economic development and state-ownership within banking. If the causality runs from financial underdevelopment to state-ownership, this would be in line with the development view. The poor performance of state-owned banks would then be explained by underdeveloped institutions and an environment inhospitable to private intermediaries. Even if state-owned banks are less efficient than private ones, they could, if no decent alternative exists, have a positive effect on economic and financial development. This type of argument sheds some light on the ambiguity that surrounds the interpretation of results found in empirical research on the subject.

2.1.5.2 Efficiency measures

If governments have different objectives than the private sector, the traditional performance indicators applied in the analysis of banks would be insufficient in determining whether state ownership is successful. A thorough analysis of the performance of government owned banks need acknowledge the government's objectives, whether these are identical to those applied by the market, or of a more social or developmental character. This makes it extremely difficult to compare the performance of publicly and privately owned banks and could, if the objectives of government are difficult to quantify, make it nearly impossible to conclude on the overall performance of state-owned banks. On the other hand, if the performance of government owned banks is considered

show that public sector banks have poorer loan quality and higher insolvency risk than other types of banks. They argue that their results indicate that public sector banks are on average less profitable and riskier than other banks.

Furthermore, state-owned banks in Argentina tend to have very high nonperforming loan ratios, and poorer long-term performance on average than domestically-owned banks or foreign-owned banks (Berger et al, 2005). Finally, Sapienza (2004) find that state-owned banks charge systematically lower interest rates to similar or identical firms than do privately owned banks.

¹¹ These parameters include contribution to financial development (usually some index of private credit or liquid liabilities over GDP), the development of the non-bank sector, amount and quality of loans given and deposits collected, insolvency risk, non-interest expenditures, and, last but not least, profitability

solely in relation to market-based measures, this could potentially pressure these banks into mimicking the private sector. This is what De la Torre (2004) calls the 'Sisyphus Syndrome'. In Greek mythology, the gods punished Sisyphus into rolling a boulder up a steep hill, but before the boulder would reach the top of the hill, it would always roll back down, forcing him to start all over again. The analogy to state-owned banks is that these might be pressured into mimicking the private sector through market-based systems of performance measurement. Sisyphus is pushing the boulder up the hill. This would leave the state-owned banks efficient, but utterly redundant. This situation would trigger demands for a reintroduction of a social mandate in order to legitimise the operations of the state-owned bank. The boulder rolls down the hill, and the bank would again become unprofitable according to the market-based measures. And the story is repeated. Regarding the efficiency of state-owned banks, we can extract two important lessons from the analogy to the Sisyphus Syndrome. The legitimacy of state-owned banks rest on their ability to act differently than privately owned banks, preferably in accordance with economic and/or social development. Secondly, limiting the role of owners to the profitability paradigm can make state-ownership redundant. An analysis of bank performance based on market indices and results can prove insufficient, although such an analysis would serve well as a complement to other indicators of success.

2.1.5.3 Government objectives diverging from efficiency

In general, state-ownership is legitimised by running a different type of operations than would be the case under private ownership. As for banking operations, this could imply alleviating market failures through lending policies or collection of deposits. If we continue to assume that we are dealing with a benevolent government, state-ownership could induce a long-term ownership strategy focusing, for example, on contributing to a national development policy. Government objectives could also differ according to the development of the financial sector. In a country with underdeveloped economic and legal institutions, state-owned banks might take on an orthodox business model, effectively stepping in where privately owned banks cannot operate profitably. In more financially developed countries, there is less room for state-owned banks running a profit-led operation. The main government ownership objectives mentioned in the academic literature on the subject are listed below.

National ownership

Preserving long-term national ownership could be one such positive influence. If the wealth of a country is highly dispersed, concentrated, national ownership would be difficult to achieve without

the involvement of the state. This argumentation presupposes that a national, long-term owner can have a positive influence on financial services. The local knowledge of a nationally owned banks with headquarters situated within the country's borders, could potentially affect its lending policies. A certain bias towards financing local businesses at home and abroad could improve local firms' access to finance, facilitating their expansion and positive effect on the national economy¹². Empirical evidence of a host-country bias in choosing financial services seem to confirm the importance of a nationally located financial intermediary (Berger et al., 2002).

Smoothing external shocks

Governments may also be interested in smoothing the negative effects of external shocks on the economy. Yeyati et al. (2004) argue that banks may frustrate expansionary monetary policy because they have limited incentives to lend during periods of economic downturns and low interest rates and do not internalize the fact that, by increasing lending, they would push the economy out of recession. In such situations, state-owned banks could play a role in providing the financial means necessary to avoid the negative effects of a crisis¹³. A system of regulation and/or contingency contracts could prove less effective than ownership. This is because, while private banks could be induced to increase lending by offering government guarantees or subsidies, the process would require some sort of legislative action and would probably be more time consuming than simply instructing a manager of a public bank to increase lending.

Extending access to finance

Some are concerned that, with private ownership, excessive concentration in banking can lead to limited access to credit by many parts of society (The World Bank and Oxford University Press 2001). However, the World Bank Policy Research Report argues that state ownership tends to reduce competition and limit access to finance. Contending that state ownership leads to less competition, it is unlikely that it leads to greater availability of credit¹⁴. Whether state-owned banks can extend finance to businesses unable to attain finance from privately owned banks is thus more

12 This argument serves as the basis for government-ownership of DnB NOR ASA, Norway's largest bank measured by total combined assets (About the group, DnB NOR web site, 17.05.2010). The most recent Government's Ownership Policy (Norwegian Ministry of Trade and Industry, 2008) states that the state's ownership interest in DnB NOR ASA is to ensure that the group has its head office in Norway and that it acts as a partner for Norwegian companies in Norway and in the export market. This policy is legitimised by arguing that it provides business and industry with a large and highly competent Norway-based financial group.

13 However, Yeyati et al. (2004) find little empirical evidence suggesting that state-owned banks attenuates the smoothing effect of financial development, even though they seem to play a role in reducing the elasticity of credit to external shocks.

14 Indeed, La Porta et al. (2002) find that the greater the state ownership, the larger is the share of credit going to the top 20 firms.

of a theoretical debate. Even though there might be a theoretical case for direct lending towards sectors and industries that generate positive externalities, critics of government intervention argue that this eventually leads to a situation in which credit allocation is dictated by political rather than economic considerations (Yeyati et al. 2004).

Caretaker during crisis

During crises, governments often feel compelled to recapitalise nationally owned banks in order to reduce the risk of bankruptcy and systemic failure. In the midst of the recent financial crisis, several governments made attempts at improving the financial balance sheet of the most important financial institutions. Systemic crises have often led to an increase in government ownership, or 'care taking'¹⁵. Given the bad track record of permanent government ownership, restructuring policy needs to include an exit strategy which allows the private sector to regain control when market confidence has been restored. It should be stressed that explicit or implicit government guarantees can induce banks to increase their risk exposure, often described as the moral hazard problem of state guarantees. In the recent financial crisis, this problem has occurred in the context of American banks which were considered "too big to fail", referring to the potentially disastrous effects of large scale bankruptcy on the financial markets. The World Bank (2001) argue that government intervention following a crisis could be successful as long as it is designed to reduce the likelihood of a subsequent crisis and moral hazard by imposing real costs on all involved parties, and get resources back in productive use by restructuring and use the private sector to pick winners and losers

2.1.6 Pitfalls

Governments ownership is subject to several potential pitfalls. Since good government ownership depends on a recognition of these pitfalls, the most important ones are discussed in some detail.

2.1.6.1 Perverse economic incentives

State ownership of banks face several potential pitfalls, some of which are portrayed by the political view of government ownership depicted above. First and foremost, the officials and bureaucrats lack the incentives which private owners have in terms of direct economic pay-off related to bank performance. Furthermore, government employees in charge of exercising ownership might be

¹⁵ In financial crises, even governments who under normal circumstances despise taking ownership stakes in banks, might feel that bank owners exercise their 'put option' of handing over the bank's deposit liabilities with insufficient funds to repay them (The World Bank and Oxford University Press 2001). A 'put option' refers to a contractual option of selling an asset at a predetermined price at a predetermined point in time (European put option) or time interval (American put option).

more interested in personal gains and career opportunities within government than running a profitable business. This problem is aggravated by the often stated societal and developmental objectives of government owned banks, which could serve as an explanation or excuse for low performance. Where discretion is called for, it can be very difficult to trace the rationale for corporate decision-making. Outright corruption could be the motivation for some decisions, and such activity can often be hard to reveal. Hart et al. (1997) model the behaviour of government as a business owner and find that if political patronage is a severe problem, the case for privatisation becomes stronger since spending public resources on wealth transfers to interest groups is easier with in-house provision (government ownership). On the other hand, these authors proscribe government ownership if corruption is the most severe problem. Through privatisation, the corrupt government employee could be able to extract considerable profits from the privatisation process, and the decision to privatise may be strongly influenced by this potential, private economic gain, and less coherent with social efficiency. In general, the economic incentives of politicians, government officials and employees are considerably different than those of private owners. If the organisation of government allows such perverse economic incentives to influence the government's ownership strategy, the results could be devastating.

2.1.6.2 Soft budget constraints

The term 'soft budget constraint' was originally introduced by Kornai (1979) to describe economic behaviour in socialist economies marked by shortage. The term has been applied somewhat inconsistently, but refer primarily to situations where a business in financial trouble can count on receiving financial support from interrelated organisations. In the context of state-owned banks, the soft budget constraint refers to a situation where the bank can count on the government to supply funding in times of crisis. If the government agency in charge of ownership policy can appropriate funds from the treasury without bearing the full costs, the government as a whole could face problems of intertemporal inconsistency in policy. It is in the long-term interest of the government as owner to enforce a hard budget constraint in order to force profitability and avoid moral hazard problems. However, in the short-term the government may want to provide financial aid to state-owned entities in order to avoid bankruptcy, and the potential financial contraction and job-losses associated with bank failure. This constitutes a inconsistency of objectives which could make government act schizophrenically and issue conflicting orders (Kornai et al. 2003). The motivation for providing soft budget constraints can be stronger for government owners as they are potentially more interested in avoiding economic spillover effects related to bankruptcy than private owners¹⁶.

¹⁶ Furthermore, if corrupt practices are involved, the motive for soft budget constraints become stronger as government officials in charge of the state-owned firm may fear losing a source of bribes if the bank is allowed to go bankrupt.

Kornai et al. (2003) argue that the source of soft budget constraints is the inability of the supporting organisation (the state in our case) to make dynamic commitments. As the argument goes, it is in the interest of the owner ex ante to declare that it will not bail out the business (hard budget constraint) in order to provide the correct incentives to management. However, ex post, when the firm is facing financial trouble, the potential losses generated by failure and the future prospects for the firm may induce the owner into supporting the firm financially. The commitment problem implies that management in the company correctly predicts that financial problems will be accompanied by bailout. This is a source of moral hazard, which lowers the incentives of the management, and the economic potential of the firm.

2.1.7.3 Government failure

We have argued above that the state can play a positive role in development through intervention and ownership. However, this theoretical stance assumes a more or less benevolent, or developmental state. Another important assumption is that the government is able to pick projects and businesses that will flourish in the future. A certain consistency in its industrial policy is also warranted. All of these assumptions are related to the internal structure of government and the competency of government officials as well as their willingness to stick to a long-term developmental and/or fiscal policy. As governments change rather frequently, it is very likely that industrial and economic policies change as well. Inconsistency in policy can lead to failed development initiatives and loss of time and resources invested therein. State-owned enterprises resulting from development or socially motivated policies can end up in the hands of less benevolent governments, leading to predatory behaviour by state officials and/or corrupt practices, lowering the economic prospects of the state-owned businesses. Where states are successful in furthering economic development, privatisation of state-owned banks and other businesses may prove socially optimal. There is some evidence, however, that governments are often reluctant to let go of banks through privatisation, at least through full privatisation (Verbrugge et al. 1999). Even though these state-owned banks may have played an important role in economic development, changing circumstances may trigger calls for private owners who appear to be better suited for running a profitable intermediation business.

2.2 How to exercise government ownership

This part of the paper abstracts from the rationales for ownership and focuses on the activities normally related to the ownership role. However, the motivation for ownership will often affect the optimal choice of corporate governance strategy. We will abstract from the primary principal-agent

relationship between the people and politicians, and how the ownership mandate is worked out. Since we are dealing specifically with state-ownership, we will, first of all, identify some characteristics of the bureaucracy and state administration as described by Tirole (1994). The second step is to clarify the relationship between the government and the firm in a contract-based theoretical perspective (Hendrixe 2003). Thirdly, we will consult corporate governance theory which will allow an insight into the mechanisms pertaining to the governance of banks.

2.2.1 Internal organisation of government ownership

It is essential to analyse the internal organisation of states in order to understand how government can function as an owner of banks. Some may argue that governments are organised in a manner similar to the private sector, and that it can be analysed using the same tools and methods. Tirole (1994) argues that there is some scope for a separate theoretical appraisal of the organisation of government¹⁷. He develops and elaborates on incentive theory, and apply this theoretical perspective to the analysis of the internal processes of government. In turn, he discusses specificities of the design of incentives in the public, implications of low-powered incentives in government, the application of rules versus discretion, and the division of labour within government. All of these topics are of interest to us, and will be elaborated upon in the following sections.

2.2.1.1 Determinants of incentives in the public sector

Multiplicity of goals

Tirole (1994) argue that government agencies and civil servants often face a multidimensional mandate. This does not necessarily make it more difficult to provide incentives to civil servants and agencies as performance related to the different goals could be given appropriate weights in remuneration policies. The problem arises when performance within one or more of the tasks is difficult to measure. For example, the mandate of the agency in charge of corporate governance of the state-owned bank may include social goals which are difficult to measure. Furthermore, difficulties can arise in determining the allocation of weights to the potentially conflicting goals. The entity in charge of ownership could face a budget constraint in funding the government-owned bank as well as goals related to degree of solvency or lending policy. The contingencies which are meant

¹⁷ It has to be stressed that this section on the internal organisation of government is based on a theoretical perspective where economics is applied to a field dominated by political science and sociology. The choice of perspective facilitates a comparison with the corporate governance literature which has been applied to private ownership of corporations. It increases the theoretical consistency of this part of the paper, and highlights some of the differences between the public sector and private corporations. In general, this framework for understanding the organisation of government provides us with the tools necessary to analyse the impact of government ownership on the performance and goals of banks.

to condition the formal incentive schemes could thus be hard to measure and verify. This could leave the incentive scheme incomplete and distortionary.

Lack of comparison

Where possible, comparing the results of an organisation or its management with one in the same sector or industry allows a separation of idiosyncratic risk from aggregate risk. Removing the sector-specific risk from the formal incentive scheme increases the accuracy of the performance evaluation and creates a stronger link between performance and pay. However, state-agencies are often monopolists in their respective area, implying that there is no good source of comparison. The theoretical policy advice is to implement low-powered incentive schemes where the agent bears only a small fraction of the risk in the performance measure. In our context of state-owned banks, the agency in charge of ownership could be evaluated on the basis of bank performance relative to other banks. However, the mandate of such an agency often includes goals not directly related to profit. The 'equal compensation principle' implies that if the principal is not able to monitor the amount of time allocated to each task, then the marginal rate of return to the employee from time and attention spent in each of the activities must be equal (Holmström and Milgrom 1991). If these other performance indicators are noisy, this implies that low-powered incentives should be applied to all task. If not, the agent encounters an undesirable amount of risk, or allocates time only to the accurately measurable task with performance-related payment scheme.

Heterogeneity of owners' tastes

The principals of government agencies are the people. Their tastes as to the goals of a government agency are heterogeneous and potentially inconsistent over time. Normally, the goals of an enterprise are profitability and shareholder value. However, the mandate of a government agency in charge of ownership policy could change depending on the political incumbents or events triggering demands for change in ownership policy¹⁸. This could potentially explain some of the bailouts of banks during the recent financial crisis, where a supposedly short-term social mandate received support at the expense of more long-term goals consisting of profitability, competition, and avoiding moral hazard.

Dispersed ownership

If we consider government agencies as the agents, and the people as principals, then the elected

¹⁸ One example of time inconsistency is the Sisyphus Syndrome described in part 2.1.5.2., where the alternation between profit-related goals and a social mandate creates a considerable time inconsistency problem. Lack of time consistency in the agency's mandate leaves it prone to commitment problems.

politicians could be seen as filling the role of the board of directors in a corporation where the people are the owners. The media monitors the actions of the politicians and informs voters on the performance of politicians and the agencies under their control. However, the tasks of governments are so complex that political takeovers may be less related to the efficiency and performance of single agencies, and even less related to the performance of government-owned entities such as banks. In this context, freedom of the press facilitate monitoring activities by the people.

2.2.1.2 Implication: Low-powered incentives

Formal incentives

Monetary incentives do exist in government, but tend to be low-powered due to two main factors. One of these factors has been mentioned above and relates to the difficulty of measuring accurately the performance of government employees. The second factor is that there often exists a tension between measurable and nonmeasurable objectives. For example, keeping costs down is often in conflict with qualitative objectives. An agency in charge of an ownership stake in a bank could face a budget constraint which limits its ability to perform optimal monitoring of the bank. If quality is an important factor in the operations of the agency, low-powered incentives are called for in order to avoid that too much attention is given to measurable, quantitative goals, with adverse effects on quality. This concern exists in the private sector as well, but Tirole (1994) conjecture that the quality concern is stronger in government than in the private sector.

Career concerns and missions

Tirole (1994) argue that career concerns are more important in the public sector. Public servants may be more interested in improving future prospects in the public or private sector, with an associated focus on reputation and image. This induces public servants to try to 'mislead' the internal and/or external job market about their ability. Holmström (1982) developed a model of career concerns where he identifies a set of conditions for career concerns in government to be effective¹⁹. Elaborating on the model developed by Holmström, Tirole (1994) includes the aspect of multiple interpretations of performance in the analysis of career concerns. The outcome of the model reveals information about talent only if the agent devotes any attention to a task. Using multiplicative models of talent and effort instead of additive ones, the possible range of pure strategy equilibria is extended²⁰. Different equilibria have separate implications as to the incentives

19 These conditions are as follows: Performance on the task should be visible by those who grant promotions and wage increases, are potential employers, or vote for or against the official; current performance should be informative about the official's ability in future tasks; the official should be forward looking and not discount the future too much; signalling should not be too costly to the official.

20 Tirole (1994) mentions unfocused and focused equilibria, as well as a 'fuzzy mission' equilibria. The first of these

and focus of the agent. The agent may be induced to focus on specific tasks, or exert lower effort on task associated with lower expected payoff. In order to maintain focus and incentives to perform well on the tasks preferred by the principal, it is essential to reach an understanding considering the agent's mission.

Mission setting

Tirole (1994) argue that the setting of a particular mission by constitution, law, or a charismatic boss may create a common understanding of the performance signals. Furthermore, if the mission is aligned with professional norms, this may facilitate its accomplishment. Another factor that may facilitate the success of a mission is whether this is in the self-interest of the official to whom it has been given. If the ownership agency is given a social mandate broadly agreed upon among political parties and in parliament, it may prove to be a rewarding task for the agency itself. Although missions would force officials into revealing their abilities, they could be less averse to mission setting if they know their ability before choosing effort. In such situations, high ability officials prefer having a mission as this would let them demonstrate this ability. The high ability officials would announce such a mission themselves if they were given the right to do so, while the lower ability officials would follow suit in order not to reveal their identity. In contrast, when the official does not know his ability at performing a certain task, he may refuse engagement altogether. We conjecture that mission setting seems to work better in theory when they are aligned with professional norms, serve some self-interest, and when officials are confident as to their competence within the field of the mission.

2.2.1.3 Rules versus discretion

One potential pitfall of the low-powered incentive schemes applied in government is the capture of decision-making by interest groups. Often classified as corruption, such practices arise as a consequence of discretionary power over decision-making. Government officials are assumed to have superior information concerning their specific tasks, and are thus given some discretionary power in the governmental hierarchy. The official may influence the choice of policy by releasing only the information in favour of the cause of a certain interest group. It is, however, possible to

equilibria refers to a situation where the agent rationally decides to exert no effort on a task that the market does not pay attention to, leaving the performance measure uninformative concerning the talent of the agent. In the second equilibrium, the market pays attention to the task, the agent rationally decides to focus on the task. The 'fuzzy mission' equilibrium refers to a situation where the agent pursues a single mission, although the market does not know which. The market makes inferences ex post about which task the agent decided to focus on. It is rational for the agent to focus all his efforts on the task where he performs best. The effort exerted by the agent is lower in a 'fuzzy mission' equilibrium than in single mission equilibria, even though the agent focuses on a single activity in both equilibria. This is because the market does not give full credit for good performance, or full stigma for poor performance in the 'fuzzy mission' equilibrium.

design the civil service in ways that avoid capture of decision-making.

Reduction of stakes

If the stakes the interest groups have in the discretionary decision are reduced, the government officials' temptation to be captured is also reduced. Enforcing the application of rules to decision-making reduces the discretionary power of the official and thus reduce the potential pay-off to the interest group from lobbying activities. An official in charge of the corporate governance activity related to a state-owned bank would be left with less discretionary power if the government provides a code of conduct and a well developed ownership policy.

The strength of interest groups

The influence of an interest groups has been linked to the group's organisation. More concentrated groups, such as producers and large customers, are usually well organised, whereas taxpayers are more dispersed, leaving them prone to free-riding behaviour. The influence of interest groups will, of course, also depend on the size of their stake in the decision-making. Tirole (1994) argues that asymmetric information between an agency and its political principals will leave interest groups more influential if they have an interest in suppressing, rather than revealing, the information available to the agency and itself. In the context of a state-owned bank, potential interest groups include customers (especially large ones), competitors (present and prospective), employees (if well-organised), and other financial stakeholders (such as lenders).

Incentive schemes vs institutions

In the theoretical literature on contracts there is a distinction between the complete contracts approach and the incomplete contracts approach. In the former type of modelling, every possible future event has been included in the contract and has been assigned a certain activity. In the incomplete contracts approach, control rights become important in unforeseen situations where some discretion is called for. If control rights are conferred on a single group of officials in government, it may lead to abuse through self-serving actions and capture (Tirole 1994). However, the bureaucratic structure of governments is often designed to divide control rights among several branches of government. This is an important feature when considering state-owned banks. The ownership entity may have to convince the ministry of finance in order to acquire financial support for the bank. Furthermore, banks are normally regulated by a state agency with control rights related to the bank's adherence to regulation. Banks are also affected by the policy of agencies in charge of enforcing market competition. If all these roles were to be given to a single agency, it

could create a severe case of regulatory capture. Fortunately, the norm is that conflicting goals should be allocated to different agencies.

2.2.1.5 Division of labour within government

Intertemporal aspects

Tirole argues that intertemporal commitment by a benevolent government maximises social welfare because the government can always duplicate what would obtain under noncommitment and in general do better. Unfortunately, governments are not always benevolent, and this may explain some of the many legal restrictions on commitments faced by governments. This is because short-term commitments coupled with rotation of governments provide a check against inappropriate decisions, including collusion. On the other hand, elections with rational voters who are informed about the government's policy can make the government more accountable, and may raise the desirability of long-term commitment.

Multiministry oversight

Governments are often full of dissonant objectives and tight systems of checks and balances. It seems as if government is not designed to behave as a coherent entity. As Tirole (1994) contends, contractors and public enterprises are often subject to control by several government officials with substantially different goals. An example of this duality of government is that public enterprises often respond to both a 'spending ministry' in charge of developing the industry, and a finance ministry in charge of reducing government spending. The time inconsistency problem associated with the soft budget constraint in section 2.1.7.2 can be solved by shifting control rights to a cost-conscious ministry when further investments require substantial borrowing. This restores the government's credibility and strengthens the firm's incentives. In practical terms, this could be achieved by obliging the ownership agency to get approval from for example the ministry of finance in order to go forth with refinancing of state-owned enterprises.

Checks and balances

Tirole (1994) also argue that competition in government among advocates of specific interests or causes may give rise to good policy setting. The classical case in support of such a view is to be found in courts. Here, a system of conflict and partiality, where none of the parties are expected to act in the interest of social welfare, has prevailed for centuries and is deemed to be an integral part of a democratic system. In government, we find the same system recurring in the different roles and mandates of ministries. They cater to diverging interests, and are competing for parts of the public

sector budget. Perhaps most importantly, multipartism could act as a system of advocates representing distinct political constituencies. Assuming that the system is made to pick the decision which maximises social welfare given the information created and diffused, competition between agencies and/or ministries will create a larger amount of information than a single agency (Tirole, 1994). Even though such competition may have some adverse effects on the agencies' incentives to conceal information unfavourable to their cause, it is often seen as more preferable than having a single agency with even stronger incentives to conceal information.

2.2.1.6 Main insights concerning government organisation

We have seen that incentives in the public administration tend to differ significantly from the incentive systems in the private sector. Multiplicity of goals and lack of comparison trigger calls for low-powered incentives, owners' heterogeneous tastes make governments prone to commitment problems, while dispersed ownership can hamper monitoring activities by voters. Formal incentives are thus less important in the public sector, while career concerns remain influential. Mission setting can help the management in maintaining focus in models where career concerns can lead to multiple equilibria. Capture of decision-making is a phenomenon which is particularly related to discriminatory processes within government. It is theoretically possible to reduce the probability of such corrupt practices by reducing the discretionary power of government officials, effectively reducing the stakes of interest groups. Dividing control rights in unforeseen events among several agencies can also reduce the likelihood of capture. Finally, we have seen that the division of labour within government aims at dealing with the issues mentioned above. Governments are sometimes restricted from engaging in long-term commitments because this practice protects the people against inappropriate decisions and collusion in times of a less than benevolent government. Multiminsty oversight strengthens the credibility of government, and reduces the time-inconsistency problem associated in particular with the soft budget constraint issue. The many checks and balances which exists in government serves a purpose in information gathering and the promotion of different perspectives, even though the administration as such may appear to be somewhat schizophrenic. These insights will allow us to understand the framework for government action and its relation to the environment, including government owned banks.

2.2.2 Contracting theory

The theory of economics of organisations deals primarily with contracting theory under different assumptions concerning the classical principal-agent relationship (Hendrikse 2003). This theoretical branch tries to answer questions about the optimal size of organisations, and the pro's and con's of

in-house provision through ownership versus external contracting. It is considered as orthodox to start off with the assumption of complete contracts, and extend the analysis by considering the impact of incomplete contracts. This part will provide the theoretical framework for analysing the principal-agent relationship and a general description issues related to the choice between ownership and external contracting as governance mechanisms.

2.2.2.1 Complete contracts

Under the assumption of complete contracts and no asymmetric information, the distinction between in-house provision and contracting out becomes irrelevant. Instead of owning the entity in charge of some government policy, the government could simply write a complete contract prescribing actions to each set of future circumstances, and enforce this contract through the court system. If the government is interested in lending to rural areas even though this is an unprofitable venture, it can agree on a contract with one or more banks, and pay a fair amount for these services. In general, the pursuit of social goals does not, on its own, make the case for government ownership (Shleifer, 1998). If, however, we allow for asymmetric information between the principal and the agent, we encounter problems of hidden actions and hidden characteristics which increases the costs of contracting.

Where asymmetric information makes it impossible for the principal to observe the actions of the agent, the former will have to link economic incentives to some observed variable which is indirectly related to the agent's effort. It becomes optimal for the principal to consider the agent's risk aversion, the uncertainty of the environment, profitability of incremental effort and the agents discretion regarding the choice of activities when formulating the agent's economic incentives. As the agent becomes more risk averse, he will have to be compensated more for the risk inherent in the performance measure. Increased uncertainty regarding the environment reduces the optimal incentive intensity, as the agent will require a higher risk premium. Where the effort of the agent has a strong link to profitability, the optimal contract implies a higher incentive intensity. Finally, if the discretion of the agent regarding the choice of activities is substantial, the incentives should be stronger in order to avoid inefficient allocation of effort. Hidden action problems induces the principal to gather information which can help in perfecting the performance measures used in incentive schemes, and perform an increasing amount of monitoring activities as the agent's pay becomes more sensitive to performance. Problems of hidden characteristics arise when there is asymmetric information concerning some characteristic of an agent or potential agent. Good agents would like to send signals which confirm their identity, and the bad agents would, if not to costly,

imitate the actions of good agents in order not to be identified. Under some circumstances it is possible for a principal to create contract options where the two types of agents select different contracts depending on their characteristics. When such self-selection is not easily obtained, external contracting can become a costly affair. The principal may have to choose between expensive measures to reveal the true identity of the potential contracting partner, or accept the potential effect of adverse selection.

2.2.2.2 Incomplete contracts

The analysis becomes more complicated if one assumes that complete contracts are not feasible. One would then have to include transaction and influence costs in the analysis of the principal-agent relationship. Transaction costs economics hold that in situations where transaction-specific investments are made, it is not desirable to start a market relationship (Hendrikse 2003). Such investments may lead to various types of ex-post opportunistic behaviour due to incompleteness of contracts. This problem is usually referred to as the hold-up problem, and can be solved through vertical integration. The theory implies that in situations with high level of asset specificity²¹, long-term contracts and vertical integration are possible efficient forms of governance. Higher uncertainty surrounding the transaction, increasing the possibility for ex post renegotiation, is also dealt with more effectively with vertical integration. The latter solves these problems because it removes the conflict of interest between the two parties in the transaction. More limited uncertainty favours long-term contracts, and if the level of asset specificity is low, the efficient choice of governance structure is the market. The choice of governance structure and the determining factors are depicted in the table below. The transaction costs theory identifies market failures and prescribes vertical integration as a way to avoid costs of market transactions. On the other hand, influence cost theory looks at possible organisational failure, and sees the market as the governance

structure of last resort. Influence costs are defined as the costs of activities aimed at changing organisational decisions to allow

		Degree of uncertainty	
		Low	High
Asset Specificity	Low	Market	Market
	High	Long-term contract	Vertical integration

Table 2: Governance structures (Hendrikse 2003)

interested parties to capture organisational rents (Hendrikse, 2003). Such actions include lobbying, political activities, and distorting and manipulating information. The occurrence of influence activities requires that somebody has the power to make decisions with an unclear impact on various organisational members, and that interested groups within the organisation have access to

²¹ High asset specificity refers to a situation where the investment has a much higher value in the transaction than in the market.

means in order to influence the decision-maker. These requirements seem to be fulfilled in most organisations. Even though larger organisations, or vertical integration through ownership may improve coordination and remove hold-up problems, larger organisations increase the potential for influence activities. These two effects work in opposite directions as to the optimal size of an organisation or conglomerate. In determining whether ownership is the best solution, we have to consider the relative importance of transaction costs and influence costs. This could also have an effect on the observed relationship between the state as an owner, and state-owned banks.

2.2.2.3 Ownership rights

An important part of a governance system is the allocation of ownership rights, also referred to as residual rights. Ownership gains importance when unforeseen events arise, where there are no specific contractual agreements. In such situations, the allocation of property rights with respect to assets will determine the allocation of quasi-surplus, the division of which has not been addressed in the specific contractual agreements. The theoretical literature distinguishes between specific and residual rights. Specific rights can be determined in contracts as they are verifiable in courts, while residual rights determine who has decision-making power in circumstances not described in the contract. Such residual rights are associated with ownership, and can function as a second-best solution in a world with incomplete contracts as they protect against opportunistic behaviour regarding specific investments. For our purposes, it is possible to argue that ownership is a strategy which allows state-owned banks to engage in investments which are in the specific interest of government. The vertical integration solves the coordination problem that would reduce transaction-specific investment if the governance structure was to be based on contracting.

2.2.2.4 Contracting theory applied to public ownership

In an attempt to apply contracting theory to government ownership, Hart et al. (1997) assumes a world of contractual incompleteness. The choice a politician faces is whether she will hire public employees and provide them with employment contracts, or sign a contract with a private supplier who in turn contracts with his or her employees. The fundamental difference between public and private ownership is the allocation of residual control rights. The authors use a classical framework for analysis where the provider of a good or service can invest time and/or resources in cost reductions or quality improvements, and where cost reductions has adverse effects on quality. In general, a private contractor has stronger incentives both to improve quality and reduce costs than a government employee has. This is because the government employee receives only a fraction of the returns to quality improvements and cost reductions. However, a private contractor will probably

invest too much in cost reduction as he ignores the negative impact on quality. The main policy implication is thus to use in-house provision (government control residual rights) when the adverse effects of cost reduction on quality are large. On the other hand, public ownership removes the excessive tendency to engage in cost reduction and replaces this with a weak incentive to engage in both cost reductions and quality improvements. Private ownership may thus be preferred to public ownership when the deterioration in quality from cost reductions are small, or when opportunities for cost reductions are small and the government employees have relatively weak incentives. In the first case, the stronger incentives the private contractor have in both reducing costs and improving quality are both desirable. In the second case, there is less scope for potentially damaging cost reductions and the private contractor's stronger incentive to improve quality gives him the edge over in-house provision²².

2.2.3 Corporate governance of banks

Corporate governance is a theoretical perspective which focuses on the effects of separation of ownership and control in modern corporations. It applies principal-agent models and game theory combined with insights from the theory of corporate finance in order to analyse the relationship between owners and managers of corporations. General corporate governance theory is based on the work by Tirole (2006) is supplemented by theory on corporate governance of banks in particular to provide the basis for this part of the paper. The orthodox view is that corporate governance is concerned with the mechanisms which allow insiders or managers to attract external finance by credibly committing to return funds to the investors. Some argue that this is a very narrow view of corporate governance that does not account for other stakeholders such as employees, suppliers, customers, and the community surrounding the firm. However, the shareholder value ideology has many supporters in the academic literature, and is the most appropriate perspective for our purposes. The role of other stakeholders will be discussed in some detail in section 2.2.3.7.

²² Hart et al. (1997) also argue that competition in the market strengthens the case for private provision if consumers are able to assess the quality of the good or service themselves. In such situations, the private contractor would face socially optimal incentives, and no government intervention would improve allocative efficiency. Allowing for alternative interpretations of the government's agenda, including corruption and patronage, the analysis of Hart et al. (1997) becomes even more nuanced. These authors model the behaviour of a corrupt politician, and find that, under reasonable assumptions, the politician is able to extract a higher bribe from privatising the public firm than by keeping the business in-house. A corrupt politician would thus be biased towards privatisation, even though this may not be the most efficient solution. Assuming that in-house provision makes it easier for the politician to spend public resources on wealth transfers to interest groups, a politician motivated by patronage would be biased towards in-house provision. Corruption and patronage are normally considered to be highly inefficient practices, and the decision concerning public or private ownership have to consider whether such practices could influence the outcome.

2.2.3.1 The separation of ownership and control

As a point of departure, we start off with the description of a corporation where the manager is also the sole owner of the corporation. Such a manager is often referred to as an entrepreneur. The entrepreneur will reap all the profit from the effort he exerts in his firm. In other words, she has perfect incentives to maximise the profitability of the firm. However, in the real world, the individuals with profitable projects are not always able to finance these projects themselves. Furthermore, the entrepreneur above may eventually need some external financing to reap the benefits of scale economies in production. Finally, assuming that the manager is risk averse, she would probably prefer not to put all her eggs in one basket. Holding ownership stakes in more than one firm will reduce exposure to firm specific risk, effectively increasing the value of the risk-return relationship of her portfolio. All these arguments induce a manager or an entrepreneur into seeking external financing, whether it is from the stock market, bond market, or the local bank. Shifting our attention to the perspective of potential investors, we recognise that investors are interested in investing in projects or businesses with an expected positive return. However, even though the manager is able to run a profitable business, she might be less than cooperative when deciding on the division of the profits among herself and investors. We are now approaching the core of the problems inherent in the separation of ownership and control, namely moral hazard. Moral hazard occurs when the interests of the principal (owner) and the agent (manager) are not aligned²³.

Owners are usually well aware of problems with moral hazard, and try to avoid the negative effects of such behaviour. On the other hand, there are several factors which complicates effective functioning of corporate governance policies. Tirole (2006) mentions several dysfunctions of the institutional responses in terms of corporate governance. First of all, lack of transparency may allow the management substantial rewards while the owners remain ignorant. Second, Tirole identifies a significant rise in total value of compensation packages to top executives in the U.S. over the years. This has led some authors (Bebchuk and Fried, 2004) to question whether these compensation packages are really in the interest of shareholders, suggesting that the managers themselves are in charge of working out their own compensation packages. Third, tenuous links

²³ Tirole (2006) mention four different ways in which the actions of managers can diverge from the interests of owners. First, managers may exert an insufficient amount of effort in running a profitable business. As argued by Jensen and Meckling (1976), when the manager owns less than 100 percent of the firm, he receives less than 100 percent of the return on effort exerted in raising profitability. He will have weaker incentives to perform well on the job than an owner-manager. Second, the manager may engage in extravagant investments which are in the interest of the manager, but will reduce shareholder value. Third, managers may engage in entrenchment strategies in order to secure their jobs, even if this is not in the interest of shareholders. Finally, self-dealing can allow managers to extract personal benefits from the firm to the detriment of shareholders. Such benefits include everything from harmless perks to illegal insider trading.

between performance and compensation in the U.S. (Tirole, 2006) indicate severe problems of alignment of managers' and owners' interests. The lack of such links may result from poorly constructed compensation packages, managers ability to maintain stable compensation despite poor results, managers being able to get out on time before losses are incurred, and golden parachutes. Fourth, as insiders, managers are often able to manipulate the accounting numbers on which the compensation is directly or indirectly based. It seems obvious that all of these issues should be considered carefully in formulating executive compensation.

2.2.3.2 Banks as liquidity producers

The liquidity production role of banks has some important implications for corporate governance. The capital structure of banks is unique as banks tend to have very little equity relative to other firms, and their liabilities are largely in the form of demand deposits while assets often consist of long-maturity loans. Macey and O'Hara (2003) argue that it is this 'liquidity production' role of banks that make them 'special'. This role may lead to a collective action problem as banks only keep a fraction of deposits on reserve at any one time. The mismatch resulting from the banks' role as liquidity producers can leave the bank insolvent if a bank run occurs. Even in banks that appear solvent, the depositors' inability to coordinate their actions can cause bank runs. This is an application of the classical prisoner's dilemma, and constitutes the primary rationale for deposit insurance. Furthermore, stakeholders with an interest in the continuing operations of the bank will have to pay attention to the possibility of a bank run. For corporate governance purposes, any policies which ameliorates the reputation of the bank and makes depositors more confident in the banks financial position could reduce the likelihood of a bank run.

The high debt-to-equity ratio implied by the liquidity production role of banks has a significant influence on the conflict between the interests of debtholders and shareholders. This may induce shareholders to engage in risk-shifting behaviour, effectively reducing the value of the creditors' claims on the bank²⁴. Two factors tend to mitigate the problem of excessive risk-taking (Macey and O'Hara 2003). Firstly, lenders may insist on some form of protection, or covenants, against actions by corporate managers that threaten their fixed claims. Secondly, managers tend to be more risk-averse than shareholders which tend to reduce their risk-taking behaviour. This second argument will, to some extent, depend on the structure of the manager's compensation package and other incentives. Deposit insurance, which removes depositors' incentives to monitor banks, intensifies

²⁴ By increasing the risk of the bank, shareholders increase the expected value of their claim as they reap the full benefit if company value is high, but are not liable for losses in excess of the invested share capital. Such losses are incurred by creditors.

the conflict of interest between lenders and shareholders. Contending that the operations of banks create specific challenges related to corporate governance, Macey and O'Hara (2003) believe that a clear case can be made for bank directors being held to a broader, if not a higher, standard of care than other directors. Especially, high leverage and the mismatch in term structure and liquidity of assets and liabilities in banking leads these authors to propose that bank directors should owe fiduciary duties to fixed claimants as well as to equity claimants.

A final issue which links the liquidity production role with corporate governance is divergence of privately optimal and socially optimal liquidity provision. This divergence can become large during financial crises. Under such circumstances, uncertainty in the financial markets may limit liquidity and potentially lead to a credit crunch. During the recent crisis, the focal point of uncertainty was to a large extent counterparty risk. The opacity of banks and other financial institutions restricted lending between financial institutions and to other sectors. If the lending policies during crises are based on irrational behaviour, it could be in the interest of governments to intervene in order to improve the liquidity production of banks. Where regulations and fiscal and monetary policies are unable to reverse the tide of credit contraction, state-owned banks can be forced or strongly encouraged to expand lending. It is somewhat unclear whether such policies are warranted, and what the effects may be. However, during the recent financial crisis we have seen several governments initiating policies aimed at overcoming problems of credit contraction.

2.2.3.3 Opaqueness of banks

Banks seem to be particularly affected by information asymmetry and the resulting opaqueness as lending quality and risk composition can easily be manipulated and are difficult to reveal by outsiders. Consequently, traditional corporate governance mechanisms such as information gathering and monitoring are more difficult to perform in the banking sector. As with the corporate governance of other firms, controlling shareholders in banks are interested in increasing the bank's risk profile as they gain from the upside in value and can 'put' the firm to the debtholders in case of negative returns. The debtholders, on the other hand, are not interested in upside potential and would prefer the bank to stay solvent until all debt payments have been made. However, the extraordinary opacity of banks makes it difficult for debtholders to restrict controlling shareholders from risk-shifting.

Levine (2004) argue that holders of subordinated debt and debentures can ease informational asymmetries in banks and boost corporate governance. However, creditors rely on legal systems to

support their rights, and where the enforcement of creditor rights is less developed, the corporate governance role of creditors is weakened. Furthermore, large creditors can profit from the information asymmetries as insiders, possibly at the detriment of other debtholders and the bank's financial health. The insider argument could also be applied to other insiders such as large shareholders. These could benefit from the opaqueness of the bank in using it to exploit outside investors and the government. Levine refer to several studies of connected lending practices which could be associated with exploitation of outsiders.

The greater informational asymmetries could also have an influence on incentive contracts. The logic of this relationship has been depicted in part **2.2.2.1** above. As outcomes are difficult to measure and easy to manipulate, managers have more control of their own compensation. Compensation packages with strong incentives can thus induce distortive behaviour by managers at the expense of long term profitability of the bank.

2.2.3.4 Managerial incentives in banking

First of all, it's important to acknowledge that managers are motivated by more than just monetary incentives. Although stock options and bonuses contribute to the alignment of the incentives of managers and owners, other factors such as job security, career goals and capital market monitoring may influence the incentives of managers. Furthermore, competition in the product market can limit the potential for managerial slack and put pressure on management to run an efficient business. Intrinsic motivation is another category of incentives which may influence the behaviour of managers. Even though social responsibility, fairness, equity and other intrinsic factors could have significant implications for how a manager runs the firm, they are often excluded from analyses of corporate governance, and are not discussed in this paper either.

Monetary incentives

Normally, top executives receive a compensation package consisting of a fixed salary, bonus, and stock-based incentives. The two variable components of this package are meant to align the incentives of the top executive with those of the owners. Such compensation packages will only work as long as the manager is unable to unwind the incentives through trade. Usually, this is avoided by forcing the executive to hold on to stock options or stocks in the company. Bonus plans are normally based on accounting data and, as we have seen above, the manager could potentially manipulate these accounting data in order to influence the bonus payment. Both of the two incentive components of the standard compensation package are thus prone to manipulation. Bonuses and

stock-based compensation have somewhat different effects on incentives as they are related to different measures of performance. Bonuses are based on accounting data which depict current profit, while the value of stocks and stock options are based on market data which account for more long-term value creation. When the executive is given a combination of bonuses and stocks and/or stock options, he will have incentives to balance short term profit and long term growth. The weights the two components are given in a compensation package depends on the interests of the owners. The main idea is that bonuses and stock-based compensation tend to be complements, and therefore both of them tend to be included in compensation packages.

Another important issue to consider when formalising executive compensation is that the performance measures should be filtered in order to measure the effort exerted by the manager more accurately. performance measures should be immunised against external shocks which the manager cannot be held responsible for, and be trimmed in order to measure results over which the manager has control. If possible, stock options could be constructed to include information about the performance of similar firms in the same sector or line of business. Such 'yardstick competition' or relative performance measures can create stronger incentives than straight stock options or stocks²⁵. Tirole (2006) observe a lack of such filtering of performance measures in the U.S., which seems to confirm that those in charge of compensating managers are either acting in the interest of the latter, or ignorant of the potential gains of filtering.

The opaqueness of banks, heavy regulation, banks' role as liquidity producers, and deposit insurance schemes are phenomena that affect corporate governance of banks in particular. As these factors tend to have a significant impact on the capital structure of banks and the interests of investors and managers, they would presumably also have an impact on the optimal compensation packages of bank managers. John and Qian (2003) argue that the heavy regulation of banks and the high leverage of these institutions influence the optimal compensation scheme. In particular, as regulation may act as a substitute for incentive features in managerial compensation, the pay-performance sensitivity for bank managers should be lower than for managers in other sectors. Depositors are the primary claimants, implying that the objective of corporate governance is broader than just aligning the incentives of management and shareholders. Management should also be given incentives to act on behalf of debtholders to an adequate degree. John and John (1993) find

²⁵ It is also of some interest to observe the pro's and con's of stock options versus straight stocks. Stock options are cheaper than stocks, implying that for a given compensation budget, options will provide stronger incentives than stocks. However, if the manager ends up in a situation where the options are 'out of the money', and he or she finds it impossible to produce results which will get the options back 'in the money', the incentive feature of the options practically disappears.

that, in addition to aligning the incentives of top managers and shareholders, managerial compensation in a levered firm also serves as a precommitment device to minimise the agency costs of debt. Consequently, in highly leveraged firms, the optimal compensation package has low pay-performance sensitivity. Furthermore, John and John (1993) argue that deposit insurance premia should be tied to the pay-performance sensitivity of the bank management compensation structure. Although this is more of a policy advice to regulators, it may also be in the interest of long-term owners to link pay-performance sensitivity to the fraction of insured deposits in the capital structure of the bank. This could alleviate the risk-shifting behaviour of management caused by deposit insurance. This may be in the particular interest of government as bank-owner, assuming that the government has stronger incentives than other owners to improve the stability of the banking system as a whole. Moreover, as depositors constitute a large group of voters, the incentives of a government responsive to voters' interests would presumably be more aligned with those of depositors than other claimants.

Researchers have also argued that pay-performance should be linked to firm size and risk. Schaefer (1998) develops a simple agency model to study the effect of firm size on optimal pay-performance sensitivity of the manager's compensation package. His conclusion restates a central lesson from agency theory, namely that the optimal incentive contract trades off the provision of incentives with the costs of loading risk on the agent at the margin. Schaefer's model predicts that if the marginal productivity of effort increases with size more slowly than the amount of risk faced by the manager, larger firms will find it optimal to forego powerful incentives in favour of better risk sharing. This prediction of the model is supported by results in an empirical study of firm size and management compensation in large American firms in the early 1990's. Estimations reveal that CEO pay-performance sensitivity appears to be approximately inversely related to the square root of firm size as measured by either market capitalisation or assets. The size argument applies to large banks in particular. In the aftermath of the recent financial crisis, there has been considerable focus on large banks and the systemic importance of these large financial institutions²⁶. Bank managers and shareholders are usually not inclined to correct for potential externalities related to failure. Again, a benevolent government who cares about the health of the financial system may have the incentives to account for this externality. Where government has an ownership share, it could induce the bank to internalise this externality.

²⁶ Roubini (2008) argues that the securitisation and globalisation leading up to the recent financial crisis implied an increase in connectedness between financial institutions nationally and internationally. Failure of large financial institutions can thus have very negative impacts on the rest of the financial sector.

The recent crisis also led to increased focus on the compensation schemes of bank managers. Roubini (2008) argue that the system of compensation of bankers and operators was flawed, leading to excessive moral hazard in the form of gambling for redemption. In the U.S., a large fraction of such compensation was based on bonuses tied to short term-profits. Combined with the fact that such bonuses were only one-sided (managers were only exposed to the upside), this resulted in incentives to take larger risks than warranted by maximisation of shareholder value. It seems apparent that bank owners need to be very careful in designing compensation schemes for managers. Moreover, the financial crisis has shed some new light on the opacity of the financial industry. Recent financial innovations such as securitisation and the development of new and exotic financial instruments have made financial markets and institutions less transparent. Regulators and supervisors may have a role to play in promoting fair valuation and risk assessments. Improving procedures for valuation and risk-assessment is also in the interest of bank-owners, and could diminish problems of information asymmetry caused by the opacity of banks and other financial institutions.

Until these issues have been sorted out, the informational asymmetries should be accounted for in the design of management compensation schemes. Theoretically, less transparency leads to greater moral hazard problems. When the manager is in possession of information unavailable to owners and creditors, there is greater potential for hidden action. This calls for stronger performance-based pay to align the incentives of management and owners, and extended monitoring activities by investors. However, the complexity of financial innovations could, at the same time, increase the uncertainty surrounding the banking business. This would tend to reduce the optimal pay-performance sensitivity of management compensation (Holmström and Milgrom 1987). Both of these effects need to be taken into consideration when designing compensation schemes and deciding on the amount of effort to expend on monitoring activities.

Other managerial incentives

Managers face many implicit incentives which accompanies the explicit incentives mentioned above. Poor performance could trigger dismissal or attempts at takeover or proxy fights which could endanger the position of the executive. Furthermore, poor performance may induce the owners or the board members to intensify monitoring activities and keep management on a tighter leash. It is usually also in the interest of executive managers to avoid bankruptcy as this would also endanger their position. These implicit factors provide incentives over and above those of the monetary incentives. The two types of incentives can thus be seen as substitutes. When there are

stronger implicit incentives, there is less need for explicit, monetary incentives. Normally, we observe a combination of both.

A factor which has not yet been discussed, but has a considerable influence on the quality of a firm's management, is competition in the product market. Competition allows for the construction of relative performance payments through filtered stock options or other types of adjusted performance compensation. Furthermore, competition in the product market can filter out exogenous shocks, as these will normally hit all competitors more or less equally. Competition will also increase the risk of bankruptcy, effectively strengthening this implicit incentive. On the other hand, competition may also create perverse effects such as inducing the manager to gamble on 'beating the market'. This could have potentially disastrous effects on shareholder value, and lead to excessive risk taking. The orthodox view is, however, that competition tend to put some healthy pressure on management. Banking market competition appears to be lower than in other sectors as banks tend to form long-run relationships with their customers. This may be a response to the informational asymmetries associated with making loans.

2.2.3.5 The board of directors

The board of directors represent the shareholders in meetings with management, and is in charge of monitoring the latter. It approves major business decisions and take part in formulating and approving corporate strategy. It is normally also responsible for executive compensation, oversight of risk management, and audits (Tirole, 2006). It can also have advisory functions vis à vis management. Boards of directors are not always able or willing to perform these tasks appropriately, and have traditionally been described as ineffective rubber-stampers under the control of management. This have triggered calls for more accountable boards. As the argument goes, boards often lack independence, as many members have conflicting interests through contractual or more informal ties to the firm. The worst case scenario, at least if we consider incentives, is when the CEO is also the chairman of the board, resulting in a severe conflict of interests. Another problem is that board members may not pay enough attention to the operations of the firm, leaving them unable to challenge the information and policies provided by managers. As with managers, the board members may lack sufficient incentives to perform their tasks according to the interests of shareholder. Under some circumstances, board members could be put on trial by shareholders, but this is option is used mainly when outright fraud has been committed The compensation of board members often has no link to company performance, but we should note that some board members have proper incentives as they themselves are shareholders in the firm. Finally, board members may

be reluctant to confront management and more interested in avoiding conflicts as they have an ongoing relationship with management.

There are remedies for the problems related to boards which we identified above. First of all, we should mention that the different roles of board members could create conflicting goals. Board members should extract information from the management, and at the same time interfere with management based on this information. Even though independence is seemingly a desirable trait of a board member, this often goes hand in hand with less knowledge about the operations of, and the challenges facing the firm. However, having independent board members in compensation committees is a policy which could avoid some conflict of interests. Tirole (2006) cites several reports on corporate governance where some degree of independence with reference to board members is stressed. Some have focused on self-evaluation of board performance, and others have made the case for obliging directors to take independent professional advice paid by the firm. In evaluating the performance and composition of a board of directors, we need to look at all the above factors combined.

2.2.3.6 Investor activism and monitoring

As mentioned above, active monitors interfere with the decisions of managers in order to increase the value of investors' claims. Such interference apply to strategic decisions, investments, asset sales, managerial compensation, design of takeover defences, and board size and composition (Tirole, 2006). Intervention by monitors require that they have some sort of control. Tirole (2006) distinguish between formal and real control. Formal control refers to the control enjoyed by owners with a majority of voting shares, or other forms of majority control rights. In contrast, minority owners who is able to persuade enough other owners to create a majority have real control. Ability to attain real control depends on the ease of communication among investors, potential for coalition-building, and congruence of interests among investors. Furthermore, an investor will have to be credible in order to gain real control. In this setting, credibility is based on reputation, absence of conflicting interests, and the amount of shares held by the investor. When an investor or a group of investor has real or formal control, it is possible to launch a proxy fight. When unhappy with the performance of the firm, investors with control can seek election to the board of directors with the goal of removing management or formalise a resolution on specific corporate policies. Such proxy competitions function to discipline the board and management even when the threat of intervention is not carried out. However, there are some international differences in the application and frequency of proxy fights. International differences in the structure of ownership, in particular

ownership concentration and stability, influence the choice of governance mechanisms and the use of proxy fights. For example, Anglo-Saxon countries are known for dispersed ownership and frequent reshuffling of portfolios.

Monitoring is supposed to alleviate agency problems between investors and management, but the principal-agency framework can also be applied to the relationship between the investor community and the monitors. In the words of Tirole (2006); who monitors the monitor? This question is particularly relevant for institutional investors such as mutual funds and governments holding ownership stakes on behalf of others. Another problem is that individual monitors may not act in the interest of other owners as they do not internalise the latter's welfare. This can lead to excessive free-riding and consequent undermonitoring. Monitors can also decide to collude with management or engage in self-dealing in order to benefit from their position. In observing such tendencies, several authors (Coffee 1991, Porter 1992, Bhidé 1993) have argued that the long-term investors are the only good monitors. High liquidity in the capital markets has a cost. Investors exit instead of using their voice in trying to improve corporate governance. A nonnegligible factor is the restrictions placed on monitors through regulation, and the possibilities that the legal framework offer for activism.

Several external parties perform monitoring activities. These include boards of directors, auditors, large shareholders, large creditors, investment banks and rating agencies. Monitoring can be active or speculative, and can be based on prospective or retrospective information. Active monitoring implies interference with management in order to increase the value of investors' claims. Such monitoring assess the implications of corporate policies and intervene in order to raise firm value. Under normal circumstances, large shareholders are the primary actors through general meetings and so forth. However, raiders use active monitoring in identifying the prospects of a firm, and during bankruptcy proceedings or financial distress the creditors can force concessions on management based on active monitoring. On the other hand, speculative monitoring is not linked to the exercise of control rights. In contrast to active monitoring, which is primarily prospective and forward looking, speculative monitoring is partly backward looking and retrospective. People engaged in speculative monitoring activities are not interested in raising value, but in analysing the value of the firm. This analysis serves as a basis for adjusting investment positions in the firm, that is, whether to sell or buy stocks in the firm. In this way, speculative monitoring contributes to a fair valuation of the firm in the market. As the market value is often used both in compensation packages and in evaluation of the board of directors, it has a significant impact on corporate

governance even though this is not its initial purpose. All in all, monitoring activities are essential to corporate governance as they provide information of utmost importance to those in charge of governance, and to those in charge of daily operations.

2.2.3.7 Takeovers and leveraged buyouts

Takeovers and buyouts have an important influence on corporate governance. First, the possibility for takeover or buyout will create stronger incentives for managers who risk losing their job if the firm bank is acquired by new owners. However, temporary threat of takeover or buyout could lead to short term strategies aimed at fending off the threats with adverse effects on long-term profitability. In trying to avoid takeovers, managers often adopt takeover defences. Keeping a staggered board which is difficult to replace or enforcing supermajority rules concerning mergers and corporate restructuring are potential defensive mechanisms. Handing out shares to employees who are assumed to vote with the management is another frequently used strategy. Diluting the raider's equity is another group of takeover defence. Furthermore, poison pills in the form of special rights of target shareholders to buy shares at a discount could reduce the value of equity in a takeover at the expense of the raider. Fearing the negative effects of a takeover, management may be looking for a white knight, with a friendlier attitude towards management, to take over the firm. Finally, management could engage in greenmail, where the management uses company money to purchase the raider's block of target stock at a premium. This would reduce the value of the company to other shareholders and can be seen as a form of collusion between the management and the raider against other shareholders. Most of these takeover defences have negative effects on shareholder value, and it is a puzzle why shareholders would approve of such measures. If it's not in the interest of the incumbent shareholders, it could be a sign of excessive managerial power and poor corporate governance. Leverage buyouts differ from takeovers in the use of debt in the takeover process. Supposedly, the new management will have stronger monetary incentives in terms of ownership shares, active monitoring will increase as ownership becomes more concentrated, and high leverage forces management and the partnership to cut costs and improve efficiency (Tirole, 2006). Because of the high leverage, the business will have to create large and steady cash flows, usually associated with mature industries. High leverage can of course be obtained without buyout simply by increasing lending and using the funds to buy back shares.

The large discrepancies between insider and outsider information in banking discourage takeovers and leveraged buyouts (at least by outsiders). Prowse (1997) find that hostile takeovers in banking are indeed rare, even in industrialised countries. Takeovers can be even more difficult in countries

without efficient securities markets. This is not particularly related to banks, but adds to the other factors which reduces competition in the market for governance of banks.

2.2.3.8 Liability structure and corporate governance of banks

High leverage of banks

To analyse the effect of leverage we need to take a look at the lenders perspective²⁷. The main effect of debt is that it disciplines management in several ways. First, by obliging management to make regular fixed payments it avoids the 'free cash flow' problem analysed by Jensen (1986), leaving less resources to the discretion of managers. Second, debt incentivises management into generating cash flows beyond the future debt repayments. Third, creditors are normally given control of the firm when it is in financial distress, and may use their right to force bankruptcy, or threaten to use it in order to gain some control. If management cares about staying in control, the threat of losing it would give him incentives to keep the company afloat financially. Fourth, leverage provides stronger incentives for managers who hold a substantial amount of claims over the firm's cash flow. By assuring that any increase in the firm's profit goes to the manager, he becomes by and large a residual claimant on his own performance.

But there are also some negative effects of debt. First, debt reduces the firm's liquidity, leaving the firm less immune to external shocks and potentially making it difficult to find financial resources for ongoing projects and new investments. Second, ability of debtholders to force bankruptcy can also lead to expensive bankruptcy proceedings, especially if the company has to be liquidated. The parties in bankruptcy proceedings are often unable to work out a solution where the firm's operations can continue. This may be due to transaction costs, bargaining inefficiencies, and legal expenses, and have less to do with the expected profitability of the firm. Third, indirect costs may appear just in anticipation of bankruptcy. Managers may be induced to gamble with the company's resources in order to stay out of bankruptcy.

Deposits and deposit insurance

Implicit or explicit insurance of deposits is a frequently applied policy in modern financial systems. Deposit insurance is supposed to reduce the likelihood of bank runs by removing the incentives which cause the coordination problem between depositors. In a simple prisoner's dilemma framework, we can illustrate the choices facing two depositors where the bank holds twenty percent

²⁷ In this context, the possible tax advantages of debt are less interesting than its effect on corporate governance purposes, it is sufficient to observe that tax advantages may trigger lending in excess of what would otherwise be optimal.

of the value of deposits in liquid assets. The analysis is simple. Without deposit insurance, any of

Depositor's dilemma without insurance		Depositor B		Depositor's dilemma with insurance		Depositor B	
		Stay	Withdraw			Stay	Withdraw
Depositor A	Stay	100, 100	0, 100	Depositor A	Stay	100, 100	100, 100
	Withdraw	100, 0	20, 20		Withdraw	100, 100	100, 100

Table 3: Depositors' dilemma

the two depositors has an incentive to withdraw their deposit if they fear that the other depositor will do so. Strict application of game theory takes the argument even further. If depositor A believes that depositor B fears that A will withdraw his deposit, depositor A has incentives to withdraw. In the end, it becomes a game of beliefs, where it is very difficult to predict rational behaviour. The rationale for dealing with the problem seems reasonable. For our purposes, it is perhaps more interesting to look at the right side of the table, where the authorities have introduced deposit insurance covering the full amount of A and B's deposits. For simplicity, we have not included transaction costs which are often associated with deposit insurance schemes. We can conclude that the risk of a bank run is next to nothing. Depositor A and B are totally ignorant of the financial position of the bank. In corporate governance terms, they have no incentives to monitor the actions of the bank, as they have nothing to gain by doing so. If we include a dynamic dimension to the depositor's dilemma without insurance, it starts to resemble a real bank run. The depositor's who get in front of the line outside the branch office (when the bank's internet site has crashed due to overload), are able to retrieve their deposits while those who are late end up with nothing. This gives the depositors incentives to be informed about the bank's financial health, and act on that information, through exit or voice.

Depositors could potentially contribute to the corporate governance of banks, but when deposits are insured, the depositors are unaffected by bank performance and risk, and disincentivised. This has three interrelated implications. First, as mentioned, depositor insurance reduces the incentives of depositors to monitor banks. Second, deposit insurance induces banks to rely less on uninsured creditors with incentives to monitor and more on insured depositors with no incentives to exert corporate governance. Third, insured deposits help produce banks with very low capital-asset ratios relative to other firms. Thus, deposit insurance increases both the ability of owners to increase risk as depositors lack incentives to monitor the banks and the incentives for bank owners to increase risk because of lower capital-asset ratios (Levine 2004). Furthermore, banks approaching insolvency can continue to attract liquidity in the form of government insured deposits. The insurance eliminates the market forces that starve non-financial firms of cash. In such situations a bank's operations take the form of a Ponzi scheme where the government indirectly supplies the

ever-increasing flow of money needed for the scheme to work. Eventually, the government or the deposit insurance corporation ends up with a large loss to cover. Government regulators are not ignorant of the moral hazard effects of deposit insurance. Some argue that regulation and supervision can control this moral hazard problem by carefully designing the insurance scheme. However, Barth et al. (2004) find a significant, and economically large, positive relationship between the generosity of the deposit insurance scheme and bank fragility. Official supervisory power and tighter capital regulations do not seem to mitigate this negative relationship. On the other hand, greater confidence in the legal system to settle disputes does mitigate, although it does not eliminate, the negative association of moral hazard and bank fragility. For corporate governance purposes, we thus need to look at the legal environment, and perhaps also regulations, in order to determine the potential effects of deposit insurance on owners' incentives. In general, lack of deposit insurance increases the likelihood of bank runs while introduction of deposit insurance can prevent bank runs but distort owners' incentives and create moral hazard.

2.2.3.9 Policy environment and regulation

Firms make a lot of contractual concessions to investors in order to increase pledgeable income. Such agreements take place in an institutional environment that could differ widely among nations²⁸. Tirole (2006) define the term 'contracting institutions' as the laws and regulations that govern contracts and contract enforcement as well as other policy variables such as taxes, labour laws, and macroeconomic policies that affect pledgeable income and value. He refers to evidence which show that lower investor protection can lead to higher shareholder concentration as an alternative mechanism of dealing with corporate governance. We need to acknowledge that shareholder and creditor rights can be very different between countries, and that creditors and shareholders may have different responsibilities and opportunities depending on the policy environment.

For corporate governance purposes it is essential to recognise that banks are heavily regulated. The economic importance of banks induces governments to pay specific attention to this sector. All types of regulation are not necessary favourable though. Barth et al. (2004) mention the following five categories of regulation:

1. Restrictions on bank activities and the mixing of banking and commerce
2. Regulations on domestic and foreign bank entry

²⁸ As we saw in section 1.2.2, the legal system can have a considerable influence on financial development.

3. Regulations on capital adequacy
4. Supervisory power, independence, and resources
5. Regulations fostering information disclosure and private-sector monitoring

Restrictions on banking activities and banking-commerce links have several theoretical reasons. Conflicts of interests could arise, a broader range of possible activities increase the scope for moral hazard, complexity makes banks more difficult to monitor, universal banks can more easily become 'too big to discipline', and, finally, large financial conglomerates may reduce competition and efficiency. We see that several of these factors could potentially affect corporate governance. Restrictions on banking activity could facilitate monitoring, reduce moral hazard, and potentially reduce concentration in the product market, putting more pressure on management. However, these regulations do not appear to be substitutes for good governance. They could facilitate corporate governance by making the industry less complicated and less prone to moral hazard, and should thus be considered more as complements to governance.

Restrictions on entry by domestic and foreign banks would reduce competition in the banking market. As we saw in section 1.2.4, academics seem to disagree on the effect of competition on bank performance. Lack of competition can increase the franchise value, enhancing prudent behaviour of bank managers. On the other hand, competition leads to reduction in prices, or interest rates in the case of banks, with positive repercussions on the entire economy. For corporate governance purposes, we conclude that competition induces more efficient management, and leaves less financial resources at the discretion of managers. It also improves the prospects for 'yardstick competition' among managers, and relative performance evaluation. If, on the other hand, competition makes the management less risk-prudent, this could imply a trade-off between risk-taking incentives and efficiency on the one hand, and prudent behaviour, free-cash flow problems, and better performance evaluation on the other.

Regulations on capital adequacy are seen as risk-reducing restrictions in traditional approaches to bank regulation (Barth et al. 2004). The logic is that capital serves as a buffer against losses and possible failure. Furthermore, greater amounts of capital at risk restrains the proclivity for bank owners to engage in high risk activities. Capital requirements could thus have the function of aligning the incentives of bank owners with depositors and other creditors. This could have important implications for corporate governance, but there are many conflicting theoretical

predictions concerning the effect of capital requirements on risk-taking behaviour²⁹. For corporate governance purposes, the effects of this regulatory feature should be treated carefully as the associated theory and evidence must be considered as conflicting and inconclusive.

In a corporate governance perspective, granting supervisory powers to a government agency (or a government sponsored one) may contribute to total monitoring efforts. This is especially important when we consider the opaqueness of banks and the difficulties private investors face in coping with informational asymmetries. Public supervision could also help prevent banks from excessive risk-taking behaviour in the context of deposit insurance, and act as a substitute for insufficient monitoring by insured and disincentivised depositors. Whether or not bank supervision has a positive effect on corporate governance depends on the competence and professionalism of the regulatory agency³⁰. If supervisors and regulators are not able to act according to professional standards, their actions could hinder bank operations and have a negative impact on corporate governance. Barth et al (2004) do not find evidence of any strong correlation between features constituting the 'core' of supervision and nonperforming loans. On the other hand, they find that diversification guidelines can have a stabilising effect. Again the inconclusive evidence calls for a careful treatment of the implications of supervision for corporate governance. Public supervision is not necessarily a substitute for private monitoring activities, and under some circumstances it could be a bad complement.

Regulations on private-sector monitoring of banks include measures such as requirements to obtain certified audits and/or ratings, to produce accurate, comprehensive and consolidated information on activities and risk-management procedures, and making bank directors liable for misleading and erroneous information. In a corporate governance perspective, these measures can help in alleviating problems of asymmetric information. On the other hand, Barth et al. (2004) argue that we should not rely exclusively on private-sector monitoring, especially in countries where poorly developed capital markets, accounting standards, and legal systems distorts the private sector's incentives to monitor. They find a negative correlation between private monitoring and nonperforming loans, but no significant relationship between such monitoring and banking crises.

²⁹ Barth et al. (2004) find mixed results concerning the effect of capital requirements on bank stability, where the latter is measured by non-performing loans and banking crises. Furthermore, capital requirements do not seem to ameliorate the risk-taking incentives produced by generous deposit insurance. These authors find a strong positive relationship between stringent capital requirements and the likelihood of banking crises after controlling for other features of the regulatory and supervisory regime. The evidence seem to support the theories predicting a positive relationship between capital adequacy and risk-taking.

³⁰ As we have seen in section 1.1, the effectiveness of government intervention, including regulation and supervision, relies on the benevolence of government agencies and their ability to refrain from corruption and patronage.

Regulations fostering information disclosure and private-sector monitoring seem to have a restrictive effect on risk-taking, and the authors above conclude that their evidence is consistent with theories emphasising private-sector control.

Regulation could have a considerable impact on corporate governance. We have to be aware of this when analysing corporate governance of banks. Focusing exclusively on corporate governance by owners, creditors, and other direct stakeholders could give rise to some misleading conclusions. Corporate governance does not happen in an environmental vacuum. In banking, supervisors and regulators constitute an important aspect of corporate governance.

2.2.3.10 Shareholder value or stakeholder society

We have so far considered only one perspective of the corporate governance debate, namely the shareholder value perspective. A broader view would ultimately include all stakeholders related to the firm, whether it is employees, customers, suppliers, or third parties affected by some external effects of the corporate venture. Corporate social responsibility has gained influence as part of corporate strategy in recent years. Such responsibilities can include duties towards employees, communities, creditors, or more ethical considerations related to the operations of a firm. Even though some corporate social responsibility strategies include policies which are unrelated to the operations of the firm, the main idea is to internalise potential externalities. When trying to distinguish between shareholder value and stakeholder society as different paradigms of corporate policy, it can be helpful to exclude from stakeholder society those policies which in fact serve the goal of shareholder value. Treating employees fairly and decently may appear to be motivated by altruism at first sight, but could also be part of a plan to build a good reputation as employer in order to attract the best people. The distinction becomes clear if we accept that truly socially responsible organisations are those that consciously make decisions that reduce overall profits. In order to guarantee that the corporation serve the interests of stakeholders, the latter need to be given some control rights, either through the legal system or through bargaining.

Objections to the stakeholder society governance structure are mainly based on efficiency arguments. If managers pay less attention to shareholders and creditors, this will eventually make financing more expensive. When financing is obtained, a governance structure where many stakeholders have a say could reduce efficiency in decision-making. Furthermore, if the different stakeholders come to an agreement, it would probably involve a longer list of objectives than that of the shareholders alone. As discussed in section 2.2.1.1, when agents face a multitude of objectives,

incentives are known to be (and should be) poor. Proponents of the shareholder value paradigm would not disagree on the need to look after stakeholders. However, they would argue that managers should be the servants of shareholders, and that other stakeholders should be covered through the contractual and legal apparatus.

Part 3 The Norwegian government's ownership in DnB NOR

This comparative case study will allow us to apply the empirical evidence and theoretical arguments to concrete observations. It does not, however, allow us to challenge the empirical results related to government ownership of banks. Studying separate cases of government ownership may give an insight into mechanisms which empirical research cannot identify. We are primarily interested in analysing the circumstances of government ownership and how they could be linked to different rationales for ownership and how ownership is exercised by the Norwegian government. The comparative study will focus on the case of government ownership of banks in Norway, where the state has a considerable minority stake in the country's largest bank, DnB NOR. Focusing on one country allows us to consider the framework of government ownership, its efficacy, and its economic effects in more detail. This part is mainly based on easily accessible information related to government ownership and information attained through interviews with Knut J Utvik, deputy director at the Ownership Department of the Norwegian Ministry of Trade and Industry, and Kjell Arne Aasgaarden and Anders Hole, respectively head of section and senior advisor at the Section for Licencing, Laws, and Regulation under the Department of Finance and Insurance Supervision at the Financial Supervisory Authority of Norway (FSAN)³¹.

3.1 Introduction

Any observer of government ownership in Norway should be aware of the long tradition of government intervention and ownership within the economy. Gleinsvik et al. (2001) document an evolution of state ownership in Norway where policies have responded to events and external and internal motivation. The authors illustrate the development in a table which has been reproduced below. We can see that ownership policies have evolved to become more based on professionalism and separation of roles within government. These changes have been based on the government's experience with ownership and external forces such as the EEA agreement, globalisation, and transparency and coverage. It could seem as if government ownership has become more in touch with private sector governance policies. However, Gleinsvik et al. (2001) argue that there are some important differences between state and private ownership, especially regarding governance

³¹ The transcribed versions of these interviews can be delivered on demand (Norwegian)

mechanisms. Wholly-owned government companies are not listed or traded, removing market pricing as a signal to management. The government often aims at retaining its ownership stake, removing pressure on management from potential takeovers. Furthermore, some state-owned companies are more or less protected from bankruptcy, removing yet another management incentive. Finally, government tends to be reluctant to adhere to private sector management compensation schemes because they are considered as unfair. These are some of the factors that we need to keep in mind when studying state-ownership of the bank DnB NOR.

Period	Motivation	Policies
1970's	New governance ambitions & construction of Norwegian oil companies	State ownership essential policy
1980's	More catastrophically bad results & discredited state-ownership (right-wing progress)	Deregulation and competition & restructuring of unprofitable state enterprises
1990's	Separating sectoral regulation and commercial goals & EEA-agreement	Division of roles, autonomy and marketisation & focus on efficiency and operations
After 2000	Globalisation & rich state – ownership more transparent	Professionalism and autonomy in ownership administration & participation in restructuring

Table 4: Evolution of government ownership in Norway (Gleinsvik et al. 2001)

State involvement in the banking sector has been an important characteristic of public policy in Norway for long periods of time. During the 1960's and 70's, government officials became increasingly aware of the inability of the private banks to account for social welfare effects of banking. This sparked a considerable debate on the role of banks, and the potential for a democratisation of banking (Knutsen et al. 1998). Banks appeared to be financial institutions with a social mandate, and were supposed to act in accordance with government policies. When the circumstances and/or regulatory regime hindered the application of a social mandate, the banks received the blame. However, it was not the democratisation movement of the 60's and 70's which led to state-ownership of DnB NOR. Ownership occurred as a response to the financial crisis which struck Norway around 1990. Following deregulation and liberalisation of financial markets in the 1980's, Norway experienced extraordinary growth in credit, and changes in the allocation and access to credit for different sectors of the economy. The commercial property sector experienced high growth due to increased availability of credit during this period. Norway had become increasingly dependent upon income from the petroleum sector, and when oil prices fell considerably during the 1980's, this triggered a contraction in fiscal policy. However, up until the late 1980's, politicians encouraged banks to increase lending and engage in more risky projects and businesses. Increased lending was funded through openings in the currency markets due to liberalisation. As the Norwegian Krone fell in value towards the end of the 1980's, the new financing policy of the banks appeared to be an expensive affair. The responsibility for the banking crisis cannot be assigned to either the political authorities or the financial system in itself. It

occurred due to a combination of many factors which created the general financial crisis taking place in Norway between 1987 and 1992.

The banking crisis resulted in full state ownership of Norway's three largest commercial banks, namely *Den norske Bank* (DnB), *Christiania Bank og Kreditkasse* (CBK), and *Fokus Bank*. The State Bank Insurance Fund (Statens Banksikringsfond) and the State Bank Investment Fund (Statens Bankinvesteringsfond) were created in 1991 with the purpose of governing these banks. The former had a more short-term, caretaker role during crisis, while the latter was to have a more long-term perspective. The insurance fund was given the authority to acquire shares in the banking sector. As a result, the fund provided the three banks with equity in exchange for complete write-offs of shareholder capital, leaving the fund as the sole owner (Bjerkan 2009). The investment fund was established to ensure healthy refinancing of the banks, and acted as a supplement to the insurance fund. The paths of the three banks led to somewhat different destinations. Under state governance, Fokus Bank became a regional bank until the government sold its shares in 1995. It became a subsidiary of the Danish bank, Danske Bank, in 1999 (Kort om banken: Fokus Bank web pages, 31.05.2010). CBK experienced a gradual privatisation as the Norwegian government decided to reduce its ownership stake to 51 percent in 1995, down to 35 percent in 1999, and finally full privatisation in 2000 as a response to an offer by the Swedish bank MeritaNordbanken to buy all shares in CBK (Om Nordea: Nordea web pages, 31.05.2010). In DnB, the state reduced its ownership stake through the two funds gradually, ending up with a 42,9 percent share in the bank in 1999. As a result of a merger between DnB and Postbanken the same year, the government's share rose to 60,6 percent. Further privatisation in 2001 left the government with a 47,8 percent share, which was then fully administered by the State Bank Investment Fund. In 2003, a merger between DnB and Gjensidige NOR which resulted in the company DnB NOR led to a reduction in the government ownership stake to below 30 percent. This triggered a policy to increase the government's ownership stake to 34 percent, based on consent from the Storting. Following these acquisitions of other financial firms such as Vital Forsikring in 1996, Skandia Asset Management in 2002, Nordlandsbanken in 2003, and mergers with Postbanken in 1999, and Gjensidige NOR ASA, DnB NOR ASA has become Norway's largest financial services group with a total combined assets of NOK 2076 billion (About the group, DnB NOR web pages, 31.05.2010). This case study of government ownership in banking in Norway will thus focus on the state's 34 percent ownership share in DnB NOR ASA.

3.2 Policy environment and institutional framework

The government's policies related to ownership, organisation of ownership activities, and institutions provide a framework within which the actual practice of ownership can take place. Moreover, regulation has been framed as an important ingredient in the theoretical and empirical literature. This part focuses exclusively on these issues.

3.2.1 Ownership policies

The Norwegian state has a considerable direct ownership in Norwegian businesses. The ownership varies from ownership shares in large publicly listed companies to small businesses with sectoral mandates. Government has a long-term perspective on its ownership policy, and strive to become a predictable owner, applying generally accepted principles of corporate governance (Norwegian Ministry of Trade and Industry 2008). Companies are categorised according to the rationale and motivations for ownership, and different policies apply to the different categories. The categories are as follows:

1. Companies with commercial objectives
2. Companies with commercial objectives and ensuring head office functions in Norway
3. Companies with commercial objectives and other specific, defined objectives
4. Companies with sectoral policy objectives

The objectives assigned to the ownership of a company determines the allocation of control rights between ministries. For example, Gassco AS, a fully state-owned company in charge of operating the transport of gas from the Norwegian continental shelf is administered by the Ministry of Petroleum and Energy, as it has clearly defined sectoral policy objectives. The Department of Ownership within the Ministry of Trade and Industry administers state ownership in 22 companies which makes it the government entity with the largest number of companies under administration.

The government defines some general ownership policies which are applied more or less regardless of the objectives of ownership. The present government stresses the need for an active ownership policy. This should not, however, be confused with the term 'investor activism' used in the corporate governance literature. In general, the government does not aim at interfering with the decisions of managers. The government stress that an active ownership policy requires clearly defined goals of the company, a board composition which addresses the interests of all shareholders and the need for competence, capacity and diversity, and good systems for monitoring of the company's finances in

the broadest sense. Moreover, companies with commercial objectives have to acknowledge the fundamental requirement of profitability. This is not synonymous with the objective of short-term maximisation of profits, and the government stress that long-run competitiveness depends on factors such as sufficient investments in research and development (R&D) and human capital (Norwegian Ministry of Trade and Industry 2008). Moreover, the government encourages diversity of boards and management, and insists that companies under administration adopt high ethical standards. The companies are also expected to follow norms of social responsibility, which could have somewhat different interpretations according to the characteristics of the company under consideration.

The government itself has defined the rationale and goals of state ownership for all the above mentioned categories. Furthermore, in *The Government Ownership Policy* (Norwegian Ministry of Trade and Industry 2008), all government owned companies have been assigned firm-specific goals. For companies with commercial objectives, government sets a target rate of return based on the capital asset pricing model, with some room for discretion due to the incompleteness of this model. The government also communicates long-term expectations regarding dividends, normally formulated as a percentage of accounting results. Regardless of objective, the government expects that state-owned companies act in accordance with the policies listed below.

1. Long-term perspective on restructuring, especially in communities with few other opportunities for employment
2. High ambitions regarding R&D activities
3. Efficient use of resources and minimisation of the company's impact on the environment
4. Follow up work on health, safety and the working environment
5. Adoption of ethical guidelines
6. Combating corruption through transparency and public disclosure
7. Promotion of gender equality and recruitment of people with a minority background
8. Protection of operations, employees and the local community against accidents

The government insists that these general objectives support long-term profitability and sustainable industrial development. Most of these objectives are not very controversial, and belong to a trend of increased social awareness among companies in recent years. However, some of these objectives can be interpreted as part of a social mandate which businesses would not adhere to unless told to do so. This applies, in particular, to the first and seventh objective above which seem to be the most

politisised objectives. However, it seems likely that business can fulfill the objectives without endangering their long-term competitive position. Moreover, corporate social responsibility (CSR) policies based on these objectives should not be seen as distinct elements unrelated to corporate strategy and business development. Relating social responsibility to corporate strategy and business development is one possible way to avoid 'window dressing' of CSR policies, and making them effective and not only promotional.

To ensure that companies adhere to these objectives, government encourage the ministries in charge of ownership to perform follow-ups of the companies' work regarding the objectives. The Ministry of Trade and Industry, in charge of DnB NOR, has been the most active in following up the implementation of the objectives. In 2008, this ministry started working on an overview of implementation of objectives, and during the first half of this year, separate meetings on the subject were held with the all the companies under the ministry's administration. The current government aims at making such meetings on CSR an annual routine, ensuring that companies pay sufficient attention to these considerations.

A distinctive feature of the government's ownership policy is transparency. We can observe this from the extensive documentation on ownership policy, and its public availability. For the purposes of this paper, we have not encountered any problems whatsoever in attaining information on these policies. Most of the information is available on-line, giving civil society as a whole, and corporate stakeholders in particular, easy access to this information. This allows considerable scrutiny of government policies in this field, facilitating the work of media and the civil sector in criticising government policies. This tightens the link between the people as principals and government as an agent in the public choice perspective of public governance.

3.2.2 Internal organisation of governance

The government defines three main governmental tasks which are more or less related to government ownership. First, government formulates legislation. Second, it act as a public supervisory authority. Third, it manages the state's shares and other state property. The government insists on distinguishing between these three roles. A clear separation of these roles is seen as important in order to safeguard the legitimacy of each role. This is part of the reasoning behind the allocation of administrative control of most of the commercially oriented companies to the Ministry of Trade and Industry. Efforts to increase the organisational distance between roles, and concentrate ownership within one ministry aims at strengthening confidence in state administration of ownership and reduce role conflicts (Norwegian Ministry of Trade and Industry 2008).

Our focus here is on the ownership of DnB NOR, which is under the administration of the Ministry of Trade and Industry. We will thus abstract from the organisation of ownership within other ministries, where sectoral objectives tend to have a larger influence on the ownership policies. Within the *Ministry of Trade and Industry*, the *Department of Ownership*, established in 2002, administers the state ownership of 22 companies. This department has been organised in order to combine capacity for corporate governance with requirements pertaining to ministerial decision-making processes. A rather small, full-time staff at the department is organised into different firm-specific teams consisting of economists and lawyers in charge of exercising ownership and following up each company. There are three professional areas, with a deputy director general in charge of each of these areas, including finance, analysis, and legal matters. The deputy director generals are also responsible for following up a certain number of firm-specific teams. The administrative tasks of the *Ownership Department* include proposing candidates for the board of directors and nomination committees, monitoring and following up the company's financial performance, and formulating an opinion on other prospective ownership issues (Norwegian Ministry of Trade and Industry 2008).

The Ownership Department is supposed to be rather independent from the rest of the bureaucratic structure. When asked about the factors that ensure this independence, Knut J. Utvik states that the Ownership Department has restricted its attention towards dealing exclusively with ownership. They will not take part in the formulation of policies, and if anything touches upon subjects related to the companies where the government has an ownership stake, it will be dealt with by the Economic Policy Department.

3.2.3 Institutional factors

When government is involved as owner of separate legal entities, this implies that it has to exercise ownership in accordance with a certain institutional framework (Ministry of Trade and Industry 2008). This framework consists of the constitution and administrative law, company legislation, competition law, and legislation related to the stock exchange and securities. Policies must also be in accordance with EEA regulations, including rules considering subsidies.

First, the constitutional framework prescribes that the administration is organised such that the government and ministries have powers of instruction and control over other state bodies. This allows the government to act on decisions made in the Storting (Parliament), or directives and

wishes of the Storting. The constitution further stipulates that government is to administer state's ownership, and that the Storting has explicit authority to instruct the government in matters concerning state-owned businesses. Government also depends on the consent of the Storting for decisions regarding changes in ownership interests, including capital increases as well as the buying and selling of shares. Finally, the *Office of the Auditor General of Norway* is in charge of controlling each ministry's administration of government ownership, and reports to the Storting concerning these matters.

Second, company law has considerable influence on how the government may exercise ownership. It prescribes a clear division of roles between shareholders and the company's management. The legal framework holds that the board of directors and management is in charge of company administration. Management is responsible for, and in charge of the management of the company's operations. The state is to promote its interests as owner through the general meeting. If the minister does not act through the general meeting, legislation leaves the minister without any authority in the company. In companies where the government is only part owner, the law requires that government cannot favour itself at the expense of other shareholders. Equal treatment of all shareholders is an essential legal principle which limits the exchange of information and dialogue between the company and separate owners. Limited companies legislation puts restrictions on the dialogue between the state as owner and the company, although it does allow the state to communicate its opinion on issues of interest to society as a whole. In general, the authority of the state vis à vis companies where it has ownership interests depend on the state's ownership share. In wholly-owned companies, the state is granted more freedom to act through the general meeting, there are restrictions on gender equality of boards, the *Office of the Auditor General* benefits from increased control of administrative activities, and the owner can impose obligation on the company that will reduce its financial results. In partly owned companies, company law states that even majority owners need to respect the interests of minority owners, and cannot make decisions which are in conflict with the interests of minority owners or the company as a whole. This is a legislative imperative with important implications for the government as owner since the rationale for government ownership is often based on considerations which are not purely commercial. This implies that government and other owners may have diverging interests. Whether the realisation of government objectives are in conflict with the interests of other owners will depend on an overall assessment of the advantages, the position of the company, and other circumstances (Ministry of Trade and Industry 2008). Moreover, the government can realise different goals depending on the ownership share as illustrated below. It is obvious that the government's influence on a company

depends on its ownership share. The rationale for government ownership can thus often be tied to the size of the government's ownership share.

The requirement pertaining to equal treatment of all shareholders imply that the company cannot discriminate among shareholders unless this is based on the common interests of the company and the shareholders. Normally, large shareholders will not receive more information than the other shareholders, but under some circumstances there might be a legitimate call for giving large shareholders more informations than others. This could occur in relation to decisions regarding capital changes, merger negotiations, or other decisions which require a majority. The company and its investors are required by law to handle insider information in a proper manner. The government agency or ministry in charge of ownership may at some times receive inside information because of the many roles of government. However, in transactions which affect publicly listed companies, it must be clarified whether the government is in possession of insider information. When in possession of insider information, government (as with everybody else) has an obligation of non-disclosure, and the inside information must be restricted to people with a particular need for the information.

		Rights and responsibility
Owner- ship share	Wholly-owned	More control through general meeting. Can impose value reducing obligations.
	Partially owned	Equal treatment of shareholders.
	9/10	Majority owner can squeeze out other shareholders.
	2/3	Control over decisions to amend company articles of association: regarding mergers, demergers, capital changes, convertible loans, conversion, and dissolution.
	1/2	Control over decisions regarding approval of annual accounts, dividend payments, election of members of the board (if no corporate assembly) and corporate assembly.
	1/3	Negative control of decisions where 2/3 majority is required: Block movement of head office, capital changes, amendments of articles of association.

Table 5: Ownership share and associated rights and responsibility

In considering public subsidies, the government is restricted by the EEA agreement which forbids public subsidies. This also applies to public enterprises. The so-called market economy investor principle should be applied when deciding whether public funds injected in companies constitute subsidies. This implies that the government cannot inject funds into companies based on other considerations than those applied by private investors in funding decisions. The state is thus obliged to demand market return on capital injected into state-owned enterprises. However, when the state imposes obligations on a company that the board considers not to be commercially justified, the company should be compensated through separate allocations. Such allocations are restricted by the EEA agreement, and this agreement generally forbids operating subsidies for companies exposed to

competition. In Norway, the principle of freedom of information applies to public administration. The government insists that transparency increases confidence in government ownership. In relation to the administration of ownership, situations could occur where it is necessary to withhold some documents from the public. This will normally apply to price-sensitive information and documents with a confidential commercial content. Delayed publication of documents also apply to issues under the investigation of the *Office of the Auditor General*.

3.2.4 The government's corporate governance policies

Corporate governance policies can be identified within several parts of public policy. The Regulations for financial management in the state prescribes that entities responsible for companies that are government owned, fully or partially, shall produce written guidelines concerning how the management and control authority shall be exercised in relation to the company (Ministry of Trade and Industry 2008). The state is obliged to administer its ownership interests with special emphasis on...:

- Expediency of chosen form of incorporation, the company's articles of association, financing, and the composition of the board in relation to the company's objective and ownership.
- Equal treatment of all owners and a clear division of authority and responsibility between the owning entity and the board of directors.
- Achievement of the objectives set by the company's management.
- Satisfactory performance of the board of directors

The Regulations for financial management in the state also prescribes that governance, monitoring, and control should be adapted to the state's ownership share as well as particular traits and risk related to the company. It is also imperative that target rates of return should be set and followed up by the appropriate ministry.

The government has also formulated a set of ten principles for good corporate governance (see appendix). These principles are supposed to be applied by all state-owned companies. According to the government (Ministry of Trade and Industry 2008), the principles are in accordance with broadly accepted principles of corporate governance. Moreover, these principles are supposed to reduce risk related to the companies and ease outside financing as the application of reasonable guidelines increase market confidence. Publication of corporate governance principles is also part of public policy on disclosure of information related to public administration.

The principles are more or less in accordance with The Norwegian Code of Practice for Corporate Governance (2009), a set of guidelines for good corporate governance published by the Norwegian Corporate Governance Board (NCGB). NCGB is an organisation consisting of representatives of different interest groups of owners and issuers of shares on the stock exchange. To the extent that the government's corporate governance principles adhere to the guidelines given by NCGB, they are also in accordance with the principles of the private financial sector on this matter. It should be mentioned that the government's principles address some issues which NCGB has not paid much attention to, including 'reasonable' remuneration and incentive arrangements and consciousness of social responsibilities. Remuneration of top executives has been an important part of the continual public debate on corporate governance, and it seems as if the relatively egalitarian Norwegian society is reluctant to accept high remuneration of executives, especially when this occurs within a company where the government has an ownership stake. This observation supports the view of Gleinsvik et al. (2001) who argue that government is reluctant to adhere to private sector compensation schemes. Consciousness of social responsibilities can be interpreted very differently depending on the context. As we saw in section 3.1.1.1, the government's expectations concerning social responsibilities of state-owned companies are not very controversial, and can be seen as promoting long-term sustainable operations. It seems as if there is a convergence of the interests of companies and the government when the temporal perspective is extended. In the long term, companies may profit from a good reputation and having legitimised their operations. This is what most private companies use as an argument in favour of CSR policies. For the government, CSR policies reduce negative attention towards state-owned companies, and consequently fall in the opinion polls. Concerning these two divergences between government corporate governance policy and that of the private sector, we might expect an impact of government ownership on company policy.

3.2.5 Regulation and public supervision of banks

3.2.5.1 The role of The Financial Supervisory Authority of Norway

In order to provide an in-depth coverage of the role and function of the FSAN and regulations of banks, the publicly available information from the authority has been supplemented by information gathered during an interview with Kjell Arne Aasgaarden and Anders Hole, respectively head of section and senior advisor at the Section for Licencing, Laws, and Regulation under the Department of Finance and Insurance Supervision at the FSAN. The Financial Supervisory Authority of Norway

(FSAN) is the agency in charge of financial supervision in Norway. The authority supervises banks, finance companies, mortgage companies, insurance companies, pension funds, investment firms, securities fund management and market conduct in the securities market, stock exchanges and authorised market places, settlement centres and securities registers, estate agencies, debt collection agencies, external accountants and auditors (About Finanstilsynet: The Financial Supervisory Authority of Norway web pages 3.06.2010). This independent government agency built on laws and decisions emanating from the parliament, where its main goal is to promote financial stability and well functioning markets. Furthermore, the supervisory authority lists 6 intermediate goals tied to its role in the financial markets:

1. Sound financial institutions and firms with a fit and proper management, and good internal control and risk management
2. A robust infrastructure ensuring satisfactory settlements and payments
3. Good monitoring of risk in the household and corporate sector and in real estate and securities markets
4. Adequate information to investors and users in the financial market, and good quality financial reporting by listed companies
5. To promote financial market actors' compliance with the rules of conduct and to seek to prevent conduct which may undermine confidence in the financial market
6. To ensure that critical situations are handled with minimal harmful effects

The Financial Supervisory Act (Lov om tilsynet med finansinstitusjoner mv: Lovdata web pages 3.06.2010) lays the foundation of the agency's operations. This act explicitly defines the agency's area of responsibility, main goals, and formal ties, responsibilities and powers with respect to entities under supervision, auditors, and government. Moreover, the act describe formal duties and restrictions applying to the agency's employees, and provides for legally imposed financing of the agency's operations. As mentioned above, the FSAN is an independent agency. The Financial Supervisory Act prescribes that the FSAN board members should be appointed by the King. Moreover, the King appoints the director general, which is head of management, for a period of six years. Currently, the director general is serving his third consecutive term and has been director of the agency since 1993. The process of appointing the leadership of the FSAN secures the agency's independence vis à vis the government and other parts of the public service. Kjell Arne Aasgaarden stress that there is no direct link between the state agencies in charge of administration of ownership and the FSAN. The organisation of the state apparatus, where the *Ownership Department* and the FSAN are under two different ministries, implies that these two entities should not be in direct contact with eachother. Moreover, Aasgaarden states that the FSAN communicates with the

management and controlling bodies in their work, and not with single owners or groups of owners. In other words, the agency is relatively indifferent to the fact that the government has an ownership stake in DnB NOR.

Entities under supervision are obliged to provide the agency with any information that the agency requires at all times. This is to allow the FSAN to ascertain that the financial companies function optimally and in accordance with legislation and the purpose, conventions and the rationale for establishment of each institution. Auditors are obliged to report to the FSAN on any circumstances which could imply a breach of legislation, potentially harm the operations of the institution, or disapproval of the institution's accounts. Moreover, the FSAN has the power to force institutions to follow the applied legislation, have a higher responsible capital than the minimum restrictions, restrict total credit to a customer to a lower level than that prescribed by law, and change the composition of the control committee (in charge of supervising the company's activities and ensure, inter alia, that the company complies with statutory enactments, its Articles of Association and rules laid down by the Supervisory Board and approved by the General Meeting). The FSAN also has the power to summon the board of directors, the control committee, and the supervisory board to an extraordinary general meeting. Regarding the employees and board members of the FSAN, they are obliged to respect the confidentiality of operations, cannot be involved in any of the companies under supervision including ownership of shares etc., and cannot receive loans from the institutions under supervision unless consent has been granted by the appropriate ministry. The costs of running the FSAN are covered by the institutions which are under supervision each year, where the division of costs is made on the basis of the capital under management at the different institutions. In general, these legislations empower the FSAN to perform its tasks and provide it with a large degree of independence from both the government, other government agencies, and the financial sector.

On the other hand, the FSAN is not averse to contact with the financial industry. Tirole (1994) argue that it is preferable to avoid the influence of interest groups on the operations of the regulating authority. However, Kjell Arne Aasgaarden reveal that several interest groups influence and try to influence the FSAN. Financial industry groups are particularly important in this matter. Considering the banking sector, Finance Norway (FNO), the trade organisation for banks, insurance companies and other financial institutions in Norway, is the most important interest group. Aasgaarden believe that there has been a move towards an ideology where the industry is seen as providing important input to the FSAN. The FSAN is obliged by law to consult the affected parties when considering

new legislation. The authority has regular meetings with the industry representatives two times a year, and sometimes the FSAN and the industry establish project groups. The communication and cooperation between the FSAN and the industry is supposedly constructive and a source of improved knowledge on the effects of regulations. This relationship between the FSAN and the industry has developed considerably from the more conflictual relationship which existed between the supervisory authority and the industry organisations before.

3.2.5.2 Banking regulations

Regulation can potentially work to defend and improve conditions for established commercial actors, and change the power-structure in the market (Stigler 1971). Considering the Norwegian case, Kjell Arne Aasgaarden argue that this is not an issue since Norwegian regulation is basically the same as European regulation. The regulative framework which applies to the banking sector is more or less the common European legislation that Norway has adopted through the EEA agreement. According to Aasgaarden, there is not much additional legislation concerning Norwegian banks. Moreover, as Anders Hole states, one of the main building blocks of the European legislation is freedom of establishment. This ensures that all banks within the jurisdiction of this legislation has the same right to establish a business wherever they want. Aasgaarden argue that harmonisation of European legislation has had a positive effect on the Norwegian financial system as such. It has allowed for foreign entry into several parts of the Norwegian banking market, and consequent increase in competition.

Some authors argue that strong regulation can reduce the need for corporate governance through concentrated ownership (Demsetz and Lehn 1985). However, Kjell Arne Aasgaarden argue that the function of the FSAN cannot be seen as a substitute for the government exercising ownership in DnB NOR. On the other hand, he admits that the supervisory activity of the FSAN is often appreciated by the banks as an input in the daily management, particularly in smaller banks. In general Aasgaarden argues that the supervisory functions are qualitatively different from governance functions, although circulars published by the FSAN can be perceived by some as contributions to corrective behaviour.

The Norwegian regulations oblige financial institutions to consolidate into their financial statements all ownership shares in other companies. Aasgaarden says that the FSAN considers itself as among the best in class at complying banks and other financial institutions to consolidate their statements. Anders Hole adds that commercial bank legislation implies a limit of 4 percent for shares and

ownership in other companies. Furthermore, there are some legal requirements concerning what type of companies that can be included in a corporation.

Kjell Arne Aasgaarden state that the FSAN has an ideology that implies a positive attitude towards active ownership and active exercising of ownership rights. In general, the rights and the potential influence of shareholders are protected through the Limited Liability Act, but, as Anders Hole states, regulations imply that listed companies must provide continuous reports on their operations and finances. Aasgaarden adds that transparency of bank is an important issue in regulation, allowing whoever interested access to information in the form of annual reports and so on.

In the aftermath of the recent financial crisis, there has been a considerable focus on systemic risk related to large financial institutions. Kjell Arne Aasgaarden can confirm that DnB NOR is an institution which could be a potential source of systemic risk in the Norwegian context. He argues that there has been a gradual development towards focusing on systemic risk, where risk-based supervision implies that more weight is given to systemically important institutions. Moreover, he contends that most countries in Europe have moved away from quantitative restrictions on liquidity reserves before the crisis, while we now observe that they are returning rather quickly to their former policies. The supervisory authority in Norway has, according to Aasgaarden, been paying attention to the liquidity reserves and ability to support external shocks of all banks the whole time. Now they register that other countries are following suit.

3.2.5.3 Deposit insurance

A particular characteristic of banking in modern economies is the presence of deposit insurance. The deposit insurance in Norway is relatively high, covering deposits up to NOK 2.000.000. (Norwegian Banks' Guarantee Fund: Bankenes Sikringsfond web pages 11.06.2010). This makes the Norwegian deposit insurance scheme among the most generous in the world. Several academics have argued that deposit insurance strengthens the the banks' incentives to increase exposure to risk (Garcia-Marco and Robles-Fernandez 2008, Demirgüç-Kunt and Detragiache 2002, Barth, Caprio Jr and Levine 2004, Levine 2004). In other words, generous deposit insurance schemes can lead to serious problems of risk-shifting, reducing the expected value of debtors' and depositors' claims. Some of these authors (Demirgüç-Kunt and Detragiache 2002) claim that strong institutional environment can alleviate some of these problems, but this is a rather controversial issue (see for example Barth, Caprio Jr and Levine 2004). Kjell Arne Aasgaarden in the FSAN admits that Norway has a high level of deposit insurance. Observing actions by other European countries to

increase their formal level of deposit insurance during the recent financial crisis, he argues that we should consider the fact that Norway has never experienced the need to change the insurance policy. Moreover, he argues that the scheme is convenient in the sense that consumers can be confident in leaving large amounts, perhaps due to sale of assets, in their bank accounts without any worries. Aasgaarden states that Norway, through the Norwegian Banks' Guarantee Fund, has no plans to change the level of insured deposits. However, the European Union has definitive plans to regulate deposits as a standard across Europe, with a maximum level of deposit insurance at EUR 100.000. For Norway, this will eventually imply a considerable reduction in the level of deposit insurance (from today's NOK 2.000.000 to ca. NOK 800.000). Considering the current system of deposit insurance, Aasgaarden agrees that, at least in theory, it would have an impact on risk and risk-related behaviour. However, he claims that he is not in a position to evaluate the significance and empirical effects. On the other hand, he argues that some of the motivation for the Norwegian deposit insurance scheme is that it has appeared to work well over time.

3.2 Rationale for ownership in DnB NOR

In the *State Ownership Report* (Ministry of Trade and Industry 2008), it is explicitly stated that the rationale for ownership in DnB NOR is to ensure that the company is headquartered in Norway, and that the bank acts as a partner for Norwegian companies in Norway and in the export market. The company thus belongs to the second category of objectives for state-owned companies mentioned in section 3.1.1.1. According to the government, this will provide business and industry with access to a large and highly competent Norway-based financial group. The ownership report also states that the current government intends to hold on to its 34 percent stake in DnB NOR. As we can see from table 6 above, an ownership share of one third gives the government negative control of decisions where 2/3 majority is required. This gives the government the power to block movement of head office, capital changes, and amendments of articles of association.

In considering the rationale for government ownership in DnB NOR, several questions arise. First, why is it in the interest of the government that this financial institutions is headquartered in Norway? Second, why does the government feel obliged to have negative control over DnB NOR in order to guarantee nationally located headquarters? Third, does the government use its potential control for other purposes as well? Fourth, does the government ownership have any unforeseen or understated effects on the operations and strategies of DnB NOR?

3.2.1 Government's interest in nationally located headquarters

In the interview with Knut J. Utvik, deputy director general in the *Ownership Department*, these questions were answered in some detail. When asked why it is important to ensure national ownership in DnB NOR, the deputy director refers to two factors. First, DnB NOR is one of the largest Norwegian Companies and it is seen as important to ensure Norwegian ownership and headquarters in some companies because they are considered to be important arenas of learning for Norwegian businesses. It becomes a place where Norwegian competence and talents can develop. Knut J. Utvik stress that this line of thought is based on a more pragmatic perspective than the purely theoretical where everybody are fully mobile. Second, based on observations the director argues that distance and localisation has a certain significance for willingness to take on risks, and that being close to information about the situation in a society can influence decision-making during crises or downturns. A bank located close to the market is expected to be more confident in handling local phenomena than a bank with headquarters located far away, and where decisions are pulled towards the centre. the ownership report also states that government ownership ensures that the bank acts as a partner for Norwegian businesses in Norway and in the export market. But does ownership allow the state to induce the bank into lending to Norwegian businesses, or does the bank find it commercially preferable to lend to Norwegian businesses as a function of the localisation of headquarters? Knut J. Utvik argue that DnB NOR, as a Norwegian bank, has the necessary knowledge of Norwegian businesses, and thus the proximity and prerequisites necessary to follow these businesses in their foreign ventures as well. He stresses that DnB NOR mentions some sectors where they aim at being big on an international scale as well, and that there is no restrictions on involvement in international companies as far as the bank has the capacity to do so. Rephrasing the the question, I asked Knut J. Utvik what the government is afraid would happen if DnB NOR were to be fully privatised. He refers to the potential for a foreign owner who will relocate the headquarters abroad. This would leave the Norwegian public and businesses without an equally committed local bank. Utvik argues that this would probably harm businesses more than individual customers, as there are several banks present in the retail market. In particular, the absence of a Norwegian bank could lead to reduced financial activity vis à vis Norwegian businesses during crises. In the foreword of the State Ownership Report (2008) the Minister of Trade and Industry, Sylvia Brustad, argued that a large state owner shall ensure additional predictability and stability, and provides assurance that the companies can continue to focus on long-term creation of value even in times of crisis. When asked about the government's contribution to focus on the long-term perspective, Knut J. Utvik referred to the government's acceptance of no pay-outs during the crisis

year 2008, leaving the money within the company. Furthermore, the government supported an emission of new shares which allowed refinancing of the bank. Finally, government portrayed itself as a stable owner in choosing not to offer its shares for sale during the crisis, which could have worsened the bank's financial position.

These seem to be well formulated arguments for national ownership. But why should the state be the national owner? The director adds that the distribution of capital in the Norwegian society is such that there are no good alternatives to government ownership. As DnB NOR is a very large company, there is simply no organised capital capable of taking over the state's position. The fact that the two other banks which were nationalised after the crisis in the early 90's eventually became foreign owned when the government sold its shares (Fokus Bank under Danske Bank, and CBK under MeritaNordbanken to form Nordea) seems to support this view of the investor environment in Norway.

3.2.2 Secondary reasons for ownership

The government's general expectations and principles apply to its ownership of DnB NOR, and could potentially be linked to the rationale for ownership. In particular, the government expects the companies in its portfolio to be conscious of their social responsibilities. State ownership of DnB NOR thus implies an increased awareness and focus on CSR. When asked about how the social responsibilities of DnB NOR could be defined, Knut J. Utvik refers to a presence in society and attempts at playing a role in society and not being too passive. Moreover, the social responsibility includes consideration of the products the bank sells and promotes, and the localisation of operations with respect to countries where the bank should not be present. Utvik interprets ethical business to imply that the bank should pay attention to gender equality, working conditions, environmental impact, and avoid corruption. Examples include consideration of ethical and environmental aspects of the businesses which apply for financing, and the provision of sufficient information about risk etc. to individuals in selling the bank's products. When asked whether the government has been a main driving force in pushing social responsibility, the director posits that the government has been active in focusing on these topics and putting them on the agenda. The *Ownership Department* is careful not to impose a strict framework for CSR policies, as this would require more competence in this field. However, the department may insist that DnB NOR's operations have to be in accordance with general requirements developed in the society.

The government is not alone in focusing on CSR policies. More and more private businesses adopt

CSR policies, which may indicate that such policies are not in conflict with profit motives. Knut J. Utvik argues that, in general, lack of focus on social responsibility could have dire consequences for a company. He points to reputational factors, and that these could have real economic value. As for the government as owner, Utvik argues that the expectations regarding social responsibility is in accordance with the objective of long-term profitability. Based on observations, he argues that several other long-term owners shares the government's perspective on social responsibility. On the other hand, the *Ownership Report (2008)* states that the government as owner wants the companies where it has an ownership stake to define measures and/or guidelines which contribute to reducing the likelihood of negative individual events which are more likely to gain public attention. To the question of whether such measures and guidelines are more in the interest of the government than other owners, Utvik responds that the government is subject to significant monitoring by the media and the public, and that if government companies break many rules and so on, this could have a negative effect on public opinion regarding government ownership. Government ownership can thus create another dimension, as it provides the public with a distinct owner it can criticise and evaluate. Utvik argues that the potential for negative attention from the media could be a driving force in the area of social responsibility.

3.2.3 Unforeseen or understated effects of ownership

One possible understated effect of government ownership arise because of the government's policy to remain an owner with a long-term perspective. Knut J Utvik argues that it becomes more and more obvious that having a long-term owner is in the company's development interests, and that it therefore is also mainly in the interests of the shareholders. On the other hand, Gleinsvik et al. (2001) argue that a policy to keep a certain ownership share could reduce pressure on the management from possible takeover attempts.

Another potential understated effect is that keeping the headquarters of DnB NOR in Norway puts it under the jurisdiction of Norwegian supervisory authority. In Utvik's opinion, this has not been given much weight by the *Ownership Department*. He admits, however, that it could be of some importance that the largest active financial institution in Norway is under the country's supervisory authority instead of being just a branch of a foreign bank following special rules for capital adequacy and coverage of deposits and so on.

A third, but less obvious, implication of locating headquarters in Norway is that the investment arm of DnB NOR is located in Norway. DnB NOR markets, a subdivision of the bank, is the largest

single actor on the Oslo Stock Exchange. Knut J. Utvik rejects the idea that the location of this division of DnB NOR is part of the government's ownership policy. However, it is fair to assume that such a large actor bring considerable liquidity to the stock exchange, which is in the interest of listed companies.

3.3 Corporate governance of DnB NOR

In section 3.1.1.4 we adressed the general corporate governance principles of the government. The Ministry of Trade and Industry has also taken part in the formulation of the *OECD guidelines on Corporate Governance of State-owned Enterprises* (OECD 2005). The administration of state-owned enterprises is mainly in accordance with these guidelines. The essence of these guidelines are reproduced in the appendix. In the *Government Ownership Policy* (2008) the government elaborates on some topics related to corporate governance. This information has been supplemented with information from the interview with the deputy director general of the Ownership Department in order to get an insight into the state's corporate governance of DnB NOR.

3.3.1 Contact with the company

The ownership ministries are in charge of monitoring the companies' economic results. For DnB NOR the Ownership department is responsible for the contact with the company. This contact includes regular meetings with the management of the company where any part of the state's ownership policy can be discussed. These meetings between investor and management is in line with expectations related to communication between management and larger investors. The opinions expressed by government during these meetings should be considered as input to the company's management and board of directors (Norwegian Ministry of Trade and Industry, 2008). As such opnions are considered as inputs, the government stress that it is the board of directors who is responsible for making the right compromises and decisions in the best interest of the shareholders. Under some circumstances, it might be in the interest of the company to pass on inside information to large shareholders, such as the state. In such situations, the government is subject to normal legislation for handling confidential information. Knut J. Utvik in the Ownership Department argue that since they are not active on the stock market, it will normally create few problems to be in an inside position for a limited period. The Ministry has established routines to handle such information confidentially.

The last government ownership report to the Storting was given the title *An Active and Long-Term Ownership* (Ministry of Trade and Industry, 2006-2007). The title is supposed to emphasise the

main ambition of government ownership. Knut J. Utvik argues that Ownership Department does practice an active ownership, given the limitations implied by the decision not to sit on boards, and respecting the general roles in the governance structure. It is, first of all, through the general meeting that the ownership department exercise its ownership rights. The department participates actively in the general meeting through considerable preparation for voting on any subject on the agenda. In companies with election committees, such as DnB NOR, the department enters into the committees and participates actively in getting a board with the composition regarding diversity and competence that is appropriate for the company. The permanent secretary of the *Ministry of Trade and Industry* is a member of the nomination committee of DnB NOR. He is a former director general of the *Ownership Department*. Moreover, Utvik states that the department exercise an active ownership by communicating their expectations to return on investments. As mentioned in the general policy framework above, the government has set an expected long-term rate of return based on the capital asset pricing model (CAPM). In addition, the Ownership Department airs its grievances or concerns during quarterly meetings, where the focus could be on everything from risk-profile and market share, to performance on the retail market.

In the OECD Guidelines on Corporate Governance of State-owned Enterprises (2005) it is stressed that it is in the interest of the state that other owners do not perceive of the state as an intransparent and unpredictable owner, and that they feel that they are treated fairly. As the Norwegian government has adopted these guidelines, it is interesting to see how this works out. Knut J. Utvik states that the Ownership Department avoid interfering with management decisions using its majority. It is essential that they respect the role of the board and the normal division of responsibility. In general, holding on to a well-defined policy, including the government's principles for corporate governance, and respecting the implications of the Limited Liability Act and the *The Norwegian Code of Practice for Corporate Governance* (2009) will according to Utvik strengthen the transparency and predictability of government ownership.

3.3.2 The responsibilities of the board

According to the *Government's Ownership Policy* (Ministry of Trade and Industry, 2008), the state emphasise compliance with company legislation (Limited Liability Companies Act) pertaining to the relationship and distribution of competence between the shareholder, the board, the corporate assembly, and the company's management. The board of directors is responsible for the management of the company. This implies that it is not the responsibility of the minister as administrator of government ownership to make decisions regarding the operations of the company.

Development and restructuring of the company's operations, evaluation of larger projects, and long-term strategy are also responsibilities of the board. Moreover, the board is in charge of hiring and firing the top executive manager. The board and the manager is responsible for the administration of the company, and that the company is administered in the interest of all the owners. They are also subject to personal liability for damages and may be subject to criminal persecution with regards to their management of the company. Shareholders exercise supreme authority through the general meeting although it is a precondition that the board and management have considerable freedom of action with respect to the management of the company. The shareholders should not, under normal circumstances, intervene in affairs which constitute the responsibilities of the board and management. The main principle for the government's exercise of ownership is that it should exercise its ownership through preparations for, and decisions made during the general meeting. Key to the exercise of ownership is an obligation to take part in election committees to ensure professional, independent, and competent governing bodies which work on behalf of all shareholders and in the best interest of the company as a whole.

If the board does not appear to act in the interest of all shareholders, as expected by the government, the *Ownership Department* will consider attempts at changing the composition of the board or communicate an opinion about its composition. The OECD Guidelines on Corporate Governance of State-owned Enterprises also contend that all shareholder should be recognised, treated equally, and have equal access to information on the company. The government's policy is in accordance with these guidelines, and Knut J. Utvik says that the *Ownership Department* does pay attention to equal treatment of shareholders in the case of DnB NOR. They monitor whether the company follows rules and recommendations for good governance and distribute information equally. Furthermore, the department is reluctant to require information from the company that is not yet publicly available.

The government also has ambitions regarding the social responsibility of the companies where they have an ownership share. But how does the government induce DnB NOR into considering their social responsibility when they have no representatives on the board? According to Utvik, the Ownership Department has sent the board of DnB NOR their main views on the importance of questions related to social responsibility. Moreover, the department has separate meetings with the company where they deal with this type of issues. In the end, it is the board which will evaluate the company policy and make decisions on these matters. The department has communicated very few absolute requirements, but has tried to put these issues on the agenda.

In section 2.2.5, we have seen that the administration of banks may require a particular type of corporate governance. The Ownership Department follows the same guidelines for exercising ownership in all its companies, but Knut J. Utvik argues that firm-specific challenges may differ. In addition to arguments about the demand for special governance mechanisms in the banking industry (Macey and O'Hara 2003), academics have also argued that creditors may perceive of government ownership as a form of guarantee, effectively reducing their incentives to monitor the bank's activity (Levine 2004). When asked how the state deal with such potential problems, Utvik points to the department's work in attaining a competent board that puts such issues on the agenda. The *Ownership Department* stress, as often as possible, that it cannot subsidise its companies, and by this protect the interests of the creditors. Any state participation in capital expansions has to be in accordance with the *Market Economy Investor Principles* (see Slocock 2002). Utvik argues that some of these issues are more regulatory in nature, and should thus be dealt with by the *Financial Supervisory Authority*. Furthermore, some of the more complex issues may require a certain continuity of the board, facilitating a deeper insight into these issues.

3.3.3 Election of board members

In considering the division of roles between owner and the company, the company's board and corporate assembly have considerable responsibilities. Nomination of board members in DnB NOR takes place in the election committee. The government wishes to take part in the election committee, and has one representative present in the election committee of DnB NOR. In cooperation with representatives of the other shareholders, government aims at having the best possible composition of the company's governing bodies. The state stress the need for good procedures for the appointment of board members.

The Ministry of Trade and Industry has worked out instructions for the preparations for elections in the companies under the administration of the Ministry. These instructions state that elections should be organised within an internal election committee which prepares a recommendation for the election of members and remuneration proposals in accordance with more detailed rules. The purpose of these instructions is to establish good procedures for the internal election preparations as well. Through its representative in the external election committee, the government will ensure that the board represents a diversity of competence and has sufficient capacity to perform their duties. Moreover, for larger companies, the government would like to ensure that the board has representatives which have an understanding of social matters. As an owner, the government sees it

as very important that the company has industrially and financially competent boards, capable of performing efficient monitoring of the company. In this context, the independence of the board vis à vis the management, and its provision of broad and open information about the company to shareholders are important requirements. The government also requires that the board and corporate assembly have a balanced gender distribution.

Active politicians, including members of parliament (Storting), ministers, state secretaries, and civil servants whose area of responsibility is somehow affected by or related to the company's operations are excluded from becoming representatives in the company's governing bodies. This is meant to avoid conflicting interests, especially where the interests of the state does not fully converge with those of the shareholders. The state has also decided not to have its own board members in company's which are partially owned, including DnB NOR. Moreover, the state expects that the board of directors will evaluate their own performance. This should include an evaluation of the composition of the board and how the group of directors perform, both individually and as a group, in relation to the objectives that apply to their work. If the board fails at attaining the predetermined results or lack the necessary competence, the government will participate actively in changing the composition of the board.

As the government has decided not to have its own members on the board of directors, I asked Knut J. Utvik how the *Ownership Department* is able to exercise an active ownership policy. He responded that the government is not involved on the operative level, but communicates opinions on the higher strategic level. The *Ownership Department* can challenge the company through discussion and by giving their opinion as an owner and a competent group who follows up on its input. However, they are not directly involved in decisions, but are active in giving their opinion on what they consider to be in the long-term interest of the owners. Furthermore, they influence the board through the election process.

3.3.4 The government's opinion on management compensation

Normally, it is the election committee who propose a board remuneration plan to the general meeting. The government insists that the remuneration should reflect the board's responsibility, competence, time spent, and the complexity of the company. The remuneration should be moderate, in accordance with that of other similar companies. To ensure the independence of the board, its members should not have performance related or variable remuneration. Considering management compensation, the government has drawn up a set of guidelines for the remuneration of top

executives in state-owned companies. The purpose of these guidelines is to communicate the factors which the state wish to emphasise in voting on management compensation at the general meeting. The main principles of these guidelines are reproduced in the appendix.

These principles are in line with the prescriptions of the contracting and corporate governance theory described above. However, there are some differences if we look at the specificities of the government's opinion on management pay. First, the government states that options and other option-like compensation should not be applied in companies where the government has an ownership share. Second, share-based compensation should only be used if they are deemed appropriate in reaching long-term goals, and should have a lock-in period of at least two years. In general, any variable remuneration should be based on easily observed and measurable objectives which the management is able to influence. Furthermore, the total variable compensation should not be higher than the six month fixed salary. There are also some rather restrictive guidelines regarding pension benefits and compensation on termination of employment.

With regards to DnB NOR, Knut J. Utvik states that the Ownership Department has followed up on the guidelines for compensation during general meetings. There has been introduced a legal requirement in 2008 that boards of listed companies publicise and explain their own guidelines for executive compensation. The General Meeting is to cast an advisory vote concerning the guidelines, but for options and other share-related compensation, the vote is binding. The Ownership Department has voted against some proposition regarding management compensation, which has led to an increase in the general retirement age from 62 to 65 years. Furthermore, DnB NOR has abolished pension benefits in excess of 12 G (ca. NOK 900.000) in new agreements, confirming that the state has had a significant influence on compensation. When asked whether moderation of compensation can be in conflict with creation of value within the company, Utvik refers to a general policy of the government consisting of controlling inequalities, which seems to have been a good economic model. He argues that more variable compensation, for example based on market value, has not had a good track record as many of these compensation schemes seem to have paid off more or less independent of results.

3.4 Theoretical predictions and observed effects of government ownership

In trying to fit the observed government policies with the theory from part two of this paper, we can

identify some potential effects of government ownership on how the business operates. It will also help us in analysing whether the ownership policy of the government reaches its goals.

3.4.1 The Rationale for ownership - comparing theory with reality

As noted above, the Norwegian government has an ownership stake in DnB NOR in order to ensure that the bank keeps its headquarters situated in Norway. As the argument goes, there are no other Norwegian capitalists that are able and willing to take on the role as main owner of this national financial giant. It thus remains a responsibility of the government. This seems somewhat similar to Gerschenkron's (1962) description of Russia during industrialisation, where the government took on the role of financial intermediary when the private sector was unable to step in. On the other hand, there are some very important differences. It's not the inability of the private sector to absorb deposits or perform other financial services which is the issue in Norway today. It's merely the lack of a private-sector, nationally located bank. The government sees it as important to hold on to a nationally located bank because this may have some positive repercussions for the rest of the economy. In this sense, the government acts as a national 'owner of last resort'. If we abstract from all the potential pitfalls related to government ownership for a second, the government's rationale for ownership seems to be based on recognition of the important role banks play in the financial system, and how a well-functioning financial system can have a positive influence on the real economy. These relationships were discussed in part 1.2.

3.4.1.1 Perspectives on government intervention and public choice theory

We can also try to place the stated rationale for government ownership in DnB NOR in the framework of the perspectives on state ownership and public choice theory described in section 2.1. Ensuring that the Norwegian market has access to a nationally located bank could be perceived as a public good. This would put government ownership of DnB NOR in the social or developmental perspective. However, we have also seen that government as owner may not impose the correct incentives on the firm (Gleinsvik et al. 2001). This would indicate that the agency perspective is applicable. Government do seem to be somewhat restrictive on remuneration of top executives, which, in the agency perspective, could imply inefficiencies. Furthermore, the government appears to be motivated by allocative efficiency in ensuring provision of nationally based financial services. It could be argued, however, that ensuring national headquarters can have the indirect effect of increasing employment in the financial sector in Norway. Knut J. Utvik in the *Ownership Department* acknowledge that the headquarters do provide very good opportunities for development of human resources. There are two possible interpretations of this. If we contend that

the government ensures employment of headquarter staff at the bank by holding on to a 34 percent share of the bank, the ownership rationale is more in accordance with political distribution as described in the political view. If, on the other hand, training people in the profession of banking and finance has positive externalities for the rest of the economy, as argued by the *Ownership Department*, it is more in accordance with internalising externalities and the social perspective. As for the political economy stance, the government seems rather pragmatic, observing that the market is not able to run the bank on a national basis, and arguing that inefficiencies lead to positive effects of holding on to a nationally owned bank. On the other hand, the organisation of government ownership activity seems to be based on recognition of potential inefficiencies in government intervention and problems related to direct political interference in ownership.

Perspectives	Public choice theory		Political economy stance	
	Allocative efficiency	Redistribution motive	Market	Government
Developmental	Promoting development as a public good	Improving allocative efficiency	Uncapable of initiating economic development	Benevolent, but might be inefficient
Social	Correcting for public goods and externalities	Fairness norms, insurance and public goods	Inefficient due to market failures	Benevolent and efficient
Political	Could be achieved through regulation	Taking and political distribution	Efficient despite some failures	Inefficient and opportunistic
Agency	Lack of incentives hamper efficiency	N/A	Less affected by agency problems	Inefficient due to agency problems

Table 1: Perspectives on ownership and public choice theory

3.4.1.2 Efficiency issues and pitfalls

The government's ownership role in DnB NOR has gone from being a caretaker in the crisis around 1990 to becoming an owner ensuring a nationally located financial services provider. DnB NOR is supposed to be operating on a commercial basis, with expectations regarding return on investments. It is clearly not a development bank, and the Norwegian financial sector is not in need of one either. The government avoids too much intervention in strategic and operational matters by rejecting to take part in the board of directors. This policy makes patronage close to impossible, and the transparency of the government's ownership hinders corrupt practices. As the Ownership Department is obliged to get approval from the parliament (Storting) in order to take part in capital expansions, this may alleviate some of the problems of the 'soft budget constraint' mentioned in part 2.1.7.2. Leaving the financing decision to another governmental entity may help solve the commitment problem, but at the same time, the Storting is politically responsible to the people and may suffer from its own commitment problems.

According to the OECD Guidelines on Corporate Governance of State-owned Enterprises, state-owned firms should have access to finance on the same terms as their competitors. This is related to

the mentioned problems of the soft budget constraint, and has been under discussion in Norway during the recent financial crisis. In an online news article, two professionals within the financial industry (Bjørnstad 17.03.08) argued that the state ownership in DnB NOR could give the bank an advantage in the funding market. This case is different from the soft budget constraint setting, as the government is not directly supplying credit to the bank. It is the market which may perceive of government ownership as a form of insurance. Some have argued that such an explicit guarantee can have an effect on the banks behaviour (Ianotta et al. 2007), leading to funding through the interbanks and capital markets, higher liquidity, and lower degree of investment in the lending market. Knut J. Utvik does not find this issue to be very relevant for DnB NOR however. The Ownership Department is frequently in touch with rating agencies, and the latter seem not to give much thought to government ownership in their evaluations. Utvik argues that DnB NOR probably deserves its rating primarily based on its own merits.

3.4.2 The government's administration of ownership compared with theory

The observations concerning the Norwegian government's administration of ownership will be analysed in light of the theoretical framework in order to formulate theoretical predictions as to the functioning of state ownership in DnB NOR.

3.4.2.1 Internal organisation

The structure of the state apparatus provides an organisational separation of roles related to DnB NOR. The FSAN, which is in charge of enforcing regulation and public supervision, is an independent subdivision of the *Ministry of Finance*. Furthermore, the *Norwegian Competition Authority*, in charge of enforcing market competition, is under the administration of the *Ministry of Government Administration, Reform, and Church Affairs*. Most importantly, the *Ownership Department* which administrates government ownership in most of the companies with commercial objectives is under the *Ministry of Trade and Industry*. This organisational separation should ensure that government officials involved in affairs that affect DnB NOR and other state-owned companies do not have conflicting interests. The Ownership department has the sole purpose of administrating the ownership shares of the state. This reduces the multiplicity of roles, reducing even further the potential for a conflict of interests and facilitating measurement of the departments performance. However, the Ownership department is effectively the only government body in charge of administrating ownership shares in companies with commercial objectives. There is thus not much room for direct comparison with other ownership entities within government. It could, however, be possible to compare the performance of the *Ownership Department* with that of investment funds

with a similar portfolio. Considering the theory in the subject, it seems to have been a good idea to separate the administration of companies with commercial objectives from the administration of companies with broader and sectoral objectives. This allows the Ownership Department to focus on a simple set of objectives, leaving the sectoral ministries the right to govern companies with more complex objectives, and where sectoral knowledge and competence are needed.

Tirole (1994) argue that multiplicity of objectives, lack of comparison, and heterogenous tastes of owners (the people) tend to favour low-powered incentives in government. Furthermore, as there is often a conflict between measurable and non-measurable goals, it may not be in the interest of political principals to enforce performance payment to government officials. However, as we have seen above, the administration of government ownership shares in companies with commercial objectives is not very complex. It does not include many different objectives, it could be possible to compare with similar financial investors or portfolios, and the tastes of the owners do not seem to be very heterogenous in the case of commercial companies. There is a potential conflict between measurable and non-measurable goals, such as profitability vis à vis social responsibility, but this could hardly be enough to imply that low-powered incentives are called for. There seems to be a theoretical rationale for giving the ownership entity stronger incentives than what we observe today. This could be achieved by giving the administration of government ownership to a fund or another external entity where the state compensation scheme does not hinder performance payment. We should not forget the importance of career incentives in government, but, at least in theory, monetary incentives can increase the performance of an ownership entity over and above what career concerns can do.

As mentioned in section 2.2.1.3, low-powered incentives and discretionary powers may lead to capture of government agencies by interest groups. The Norwegian government states explicitly that it wishes to work against corruptive practices in the companies where it has an ownership share. Leaving the *Ownership Department* without much discretionary power could work to alleviate problems of capture. As we have seen, the government has formulated a clear policy for the companies where it has an ownership stake and a list of rules and procedures for the corporate governance of these companies. This reduces the stakes for interest groups willing to engage in corruption. Furthermore, rules regarding the transparency of ownership policies and governance and public access to documentation and so forth, reduces the likelihood of corrupt practices. The institutional framework, with an independent supervisory authority which is also in charge of monitoring the activity of DnB NOR makes it even more difficult to get away with corruption.

Considering the division of labour within the government, the role of the *Storting* in granting financial resources has been mentioned as a potential mechanism for avoiding intertemporal commitment problems. This is a form of multiminsty oversight which we can also identify in the relationship between the *Ministry of Finance* and the *Ministry of Trade and Industry*, which is the ministry in charge of the *Ownership Department*. Such a system of checks and balances can lead to a competition in government among advocates of specific interests that gives rise to a favourable policy setting (Tirole 1994). One advantage of such competition is its potential for incentivising several ministries and agencies to produce information related to a policy issue. Considering the case of DnB NOR, the *Norwegian Competition Authority* gathers information on the competitive environment, the *FSAN* gathers information on systemic and individual risk, and the *Ownership Department* gathers information related to investor monitoring. As these government entities are supposed to be independent of each other, the information flow between them is supposedly limited. However, government may be able to use the information provided by all the agencies in its work on updating and reforming ownership policies.

3.4.2.2 Contracting theory

The contracting theory described in section 2.2.2 can be applied to the choice of governance mechanism, whether contracts or ownership is called for, and possible results implied by the choice of governance mechanism. In our case, the Norwegian government has chosen an ownership stake in order to induce DnB NOR to appreciate the government's objective. We have seen that the main reason for government ownership is to ensure that the largest banking group in the country locates its headquarters within the country's borders. Could this be achieved through contracting? Could the government sign a contract implying some sort of financial compensation in exchange for national headquarters? Such a contract would be easy to enforce as there is no real opportunity for hidden action or other principal-agent problems. The contract could even stipulate that the bank has to employ a certain amount of people from Norway as top executives. On the other hand, the construction and organisation of a national headquarter is an investment with high asset specificity. It is in the particular interest of the government, and would probably have less value in the hands of other investors. As we can see from the table to the right, high asset specificity implies that a long-term contract or vertical integration would be the best governance structure. Considering the potential

		Degree of uncertainty	
		Low	High
Asset Specificity	Low	Market	Market
	High	Long-term contract	Vertical integration

Table 2: Governance structures (Hendrikse 2003)

commitment problem of governments, it is not unlikely that the bank would attach a high degree of uncertainty to a relationship where the government pays for national headquarters. This setting favours vertical integration, or ownership, as a governance mechanism. In other words, the optimal choice of governance mechanism depends on the ability of the contracting parties to reduce the uncertainty in the relationship. As mentioned above, a clearly defined contract would alleviate some of the principal-agent problems, and could also reduce the uncertainty of the relationship. The government could seek broad support in the parliament for a long-term contract, effectively making ex-post renegotiation less likely.

A long-term contract would probably be much cheaper than holding a 34 percent stake in the company. However, it would also be in direct conflict with EEA restrictions on public subsidies. The European Commission define public subsidies according to the so-called 'market economy investor principle' (MEIP). The essence of the MEIP is that when a public authority invests in an enterprise on terms and in conditions which would be acceptable to a private investor operating under normal market economy conditions, the investment is not a state aid (Sloccock 2002). There is no reason to believe that any other investors would pay DnB NOR to locate its headquarters in Norway, implying that a contract like the one above would be considered as an illegal public subsidy. In other words, the Norwegian government has no real choice between governance mechanisms. If the goal is to ensure national headquarters, the government is forced into ownership. This perspective reveals an important facet of the ownership issue. The government ownership has the same function as a subsidy would have. In theoretical terms, the government pays the bank for this service through lower dividends caused by non-optimal location of headquarters. As long as the government does not compensate other investors in any way, the government incur only 34 percent of these costs, proportional to its ownership share.

Government ownership can also have some other implications in the contracting theory. In the model of Hart et al. (1997), a private contractor might have too strong incentives to invest in cost reduction at the expense of quality. Assuming that the private contractor has stronger incentives than public employees to invest in both cost reductions and quality, there is still some room for government ownership. The stronger the negative effect of cost reductions on quality, and as quality becomes more important, the case becomes stronger for government ownership. In our case, if qualitative factors of the bank's operations are more important than reducing costs, and reduction of costs has a very negative impact on quality, the model of Hart et al. (1997) would support government ownership. In banking, it is possible to argue that cost reduction could reduce stability,

and that stability is a qualitative factor which is highly appreciated by the government. This relationship has not been mentioned in government reports, although the government insists that it has a long term perspective. This may reduce the call for short term profit incentives and consequent reduction in stability.

3.4.2.3 Corporate governance theory

The corporate governance literature identifies several factors which are relevant in the relationship between an owner and the management of a firm. The topics discussed in section 2.2.3 will here be applied to the Norwegian government's corporate governance of DnB NOR.

Managerial incentives

Concerning the managerial incentives, we have seen that the government has formulated a set of opinions on management compensation. These opinions are restrictive in the sense that they prescribe low-powered incentives in the management compensation. Restrictions apply to the amount of variable compensation, the application of options, the design of share-based remuneration, and the value of pension benefits and compensation on termination of employment. Some of these restrictions may be reasonable in a general corporate governance framework. This is particularly true for restrictions on compensation on termination of employment and restrictions that prescribe a high degree of correlation between variable remuneration and factors which the management is able to control. On the other hand, the government seems rather averse to the use of variable remuneration, especially option-based compensation which the state refrains from using. This aversion can be related to fairness ideals, and a general government policy on keeping economic inequality to a minimum. In a general corporate governance perspective, such policies would induce the board of directors to move away from the optimal compensation scheme which is best suited to align the interests of management with those of the owners. We would thus expect that the management, *ceteris paribus*, has less incentives to act in accordance with the interests of the owners.

But we also need to consider managerial incentives in light of our special case of banking. As we have observed in the theoretical part on corporate governance of banks, there are several factors in banking that could imply a need for low-powered incentives. Heavy regulation and high leverage of banks have been associated with lower pay-performance sensitivity of the optimal compensation scheme (John and Qian 2003). Moreover, the role of depositors as claimants calls for a broader objective of corporate governance than just aligning managerial and shareholders' interests. As

mentioned above, it could be in the interest of long-term owners to link compensation to the fraction of deposits in the liability structure in order to increase stability. DnB NOR is the largest financial institution in Norway. Theoretical arguments seem to favor lower pay-performance sensitivity for large firms, and especially for systemically important financial institutions such as DnB NOR. All these issues point towards a need for lower pay-performance sensitivity. These may not have been the main concerns of the government when it formulated its opinion on managerial compensation. However, the government's preference for low variable compensation and focus on fixed compensation seem to be in accordance with the corporate governance literature related to banks. As the government policy on compensation applies to all companies where the state has an ownership stake, it seems as if the relatively good fit between policy and theory is more or less accidental or random. The government's opinion that variable compensation has to be linked to more long-term performance is also in accordance with arguments made in the aftermath of the recent financial crisis (see Roubini 2008).

The corporate governance literature predicts that management can be motivated by other factors than pure monetary incentives. Implicit incentives related to the manager's performance, such as the fear of takeover or bankruptcy and consequent potential for losing the position as manager, could work to incentivise the management. These factors will be discussed in more detail below. Another factor which creates incentives for management is the monitoring activity by external parties. The government as owner has a unique opportunity and obligation to engage in monitoring activities. As the government stress the need for more low-powered incentives, it is probably even more important to monitor the activities of the management. The government is involved in active monitoring and sets target rates of long-term return to their investment. It is also actively involved in challenging the management on other performance indicators such as market share, and activity on the retail market. The Ownership Department has its own subdivision of lawyers and economist who should be able to provide the necessary competence for active monitoring. Furthermore, the department hires external consultants on a regular basis, which compensates for a small full-time staff. Speculative monitoring can also contribute to management incentives. Such monitoring is mostly backward looking and retrospective, but contributes to a fair valuation of the company. The government's focus on transparency could facilitate such speculative monitoring by supplying the market with more information than other investors would.

Product market competition can also facilitate corporate governance. In the Nordic countries, the banking industry is rather concentrated, and although Norway has a lower concentration in the retail

market than the other Nordic countries, it may still hamper competition (Report from the Nordic competition authorities 2006). As the lack of competition may reduce the risk of bankruptcy, it will also reduce the incentives of management related to fear of bankruptcy. On the other hand, the existence of other banks in the Norwegian market that are similar to DnB NOR facilitates relative performance measures by allowing owners to separate between external shocks and management performance in their compensation schemes.

The board of directors

The board of directors is the link between the *Ownership Department* and the management of DnB NOR. The government has a strict policy to act through the general meeting and by influencing the board of directors without having any members on the board. The government and the Ownership Department both stress the need for a competent board with a composition that allows it to perform its task optimally. The current board of directors of DnB NOR ASA consists of nine members and three deputies. They are highly competent, with degrees from some of the best educational institutions in Scandinavia. The board also includes three employee representatives. The competence and skills of the board are essential features which are also stressed in the corporate governance literature. In accordance with this literature, the government also insists that the board of directors should be independent vis à vis the management, effectively excluding top executives from sitting on the board. Moreover, the government excludes government officials who are affiliated with the company in any way from sitting on the board. This ensures that the duties of board members are not in conflict with other administrative tasks related to the operations of the bank. Finally, the government stress that the board of directors should perform regular evaluations of their own work. This has also been addressed in the corporate governance theory as a mechanism for improving corporate governance. On the other hand, the government has no preferences regarding the ownership stakes of board members. When owners sit on the board, they have stronger incentives to monitor the company's management, but this could also lead to collusion between the owner-board member and the management at the expense of other shareholders. The government may need to address this question as it can have a significant influence on the role and incentives of the board.

Investor activism

With a 34 percent ownership stake in DnB NOR ASA, the Norwegian government has the possibility to exercise what Tirole (2006) refers to as real control. In focusing on long-term issues, the government can build a coalition among investors who have the same temporal perspective. The

Ownership Department does express an interest in evaluation and possible changes of the board if it does not perform as intended. The willingness and ability of government as a large investor to alter the composition of the board can discipline the board, and is an important tool for exercising active ownership. The board of directors is supposed to monitor the activities of the management, but it can be equally important that large owners actively monitor the activities of the board. The role of board monitor filled by the Ownership Department is in line with what theory predicts for large, long-term investors.

Takeovers and leveraged buyouts

The potential for takeovers or leveraged buyouts is close to non-existent in the case of DnB NOR ASA. The government sticks to its policy of holding 34 percent of the shares in the financial institution, making it impossible for an outsider to gain full control of the company. There is only one other really large shareholder in the company, namely The Savings Bank Foudation DnB NOR which holds about 10 percent of the shares. This foundation is also a long-term investor, which makes it even less likely that someone would engage in a takeover or buyout (Facts and history: The Savings Bank Foundation DnB NOR web pages, 08.06.2010). Gleinsvik et al. (2001) argue that the tendency of the government to hold on to their shares reduce the potential managerial incentives created by the management's fear of being overthrown during takeovers or buyouts. On the other hand, the explicit long-term ownership policy may avoid instances where the management adopt takeover defences such as poison pills, staggered boards, supermajority rules, or handing out shares to loyal employees. The list could go on, but the main idea is that takeover defences are not in the shareholders' interest, and the benefit of avoiding such activity could balance the negative effects on performance incentives induced by lack of threats from outside investors.

Liability structure of DnB NOR and corporate governance

Banks are normally highly levered, which some have also linked to their instability. In the corporate governance literature, leverage disciplines management by imposing an obligation to pay out some of the profits in interest payments. In 2009, the total liabilities of DnB NOR as a percentage of total assets amounted to 94 percent (DnB NOR Annual Report 2009). This may appear to indicate a high degree of leverage, but it is actually lower than the liabilities/assets ration for its Scandinavian competitors. For Nordea, the ration is 96 percent while for Danske Bank the ratio is 97 percent (Nordea and Danske Bank Annual Reports 2009). The high degree of leverage increases the likelihood of bankruptcy, something the management would like to avoid as it ususally implies that management is replaced or looses its job. Moreover, the high leverage can strengthen the incentives

of management if the latter holds substantial claims over the firm's cash flow. However, the Norwegian government insists that variable compensation, including shares and other claims, should not be a main factor in management remuneration. On the other hand, as a long-term investor in the bank, the government would probably try to avoid bankruptcy as an outcome. This may reduce the managerial incentives created by high leverage. In avoiding bankruptcy, the bank will avoid the many costs related to bankruptcy procedures.

Another issue particular to the liability structure of banks is deposits and the often related deposit insurance. As we have seen, Norway has one of the most generous deposit insurance schemes in the world, at least if we consider formal deposit insurance policies. This leaves the depositors in banks affected by the insurance scheme with very few, if any, incentives to monitor the banks' behaviour. The public's deposits at DnB NOR accounts for about 34 percent of the bank's liabilities in 2009 (DnB NOR Annual Report 2009) which is not far from the fraction of deposits in liabilities of some of its main Scandinavian competitors. Nordea administers deposits accounting for about 32 percent of liabilities, while Danske Bank has deposits which constitute 29 percent of its liabilities (Nordea and Danske Bank Annual Reports 2009). As deposits constitute about one third of the bank's liabilities, and have very few incentives to take part in monitoring or other corporate governance activities, it becomes interesting to find out if anybody else engage in corporate governance activities related to the deposits. Potential suspects are the the agency in charge of administrating the deposit insurance, the supervisory authority, and/or the government as owner. In Norway, the Norwegian Banks' Guarantee Fund is in charge of securing the deposit liabilities of its member banks. Its main tasks consist of handling crises, preventive work, and management of the fund's assets. The Guarantee Fund has a separate department in charge of this preventive work, including analysis of member institutions, advisory services to smaller banks, organising courses, and calculating and collecting the levy and guarantees (About us: The Norwegian Banks' Gurantee Fund web pages 12.06.2010). The preventive work can potentially alleviate some of the problems associated with the generous deposit insurance scheme, although it is far from fully correcting for these problems.

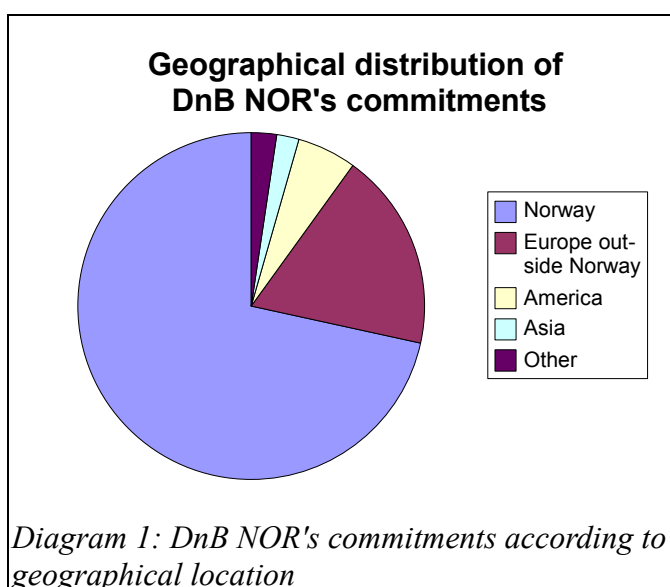
The FSAN is in charge of supervising the banks, but they do not consider their activity as a substitute for exercising ownership. On the other hand, their function as supervisors provide the agency with certain powers enabling it to enforce regulation and compliance with the main and intermediate goals of the FSAN listed in section 3.2.5.1. These goals are somewhat related to downside risk of banks as they refer to soundness of financial institutions, monitoring of market

risks, good risk management, and retaining confidence in the financial market. The indirect attention given to downside risk seems to support the view that reasonable financial authority supervision can counteract some of the negative consequence of deposit insurance. Furthermore, the Guarantee Schemes Act (Kredittilsynet 2004) gives the FSAN certain powers to interfere with the governance of financial institutions under circumstances such as payment or capital adequacy difficulties. This act also states that if a financial institutions cannot meet its liabilities and cannot be secured a sufficient financial basis for continued satisfactory operation, the King may order the institution to be placed under public administration. Such action has serious repercussions for the corporate governance of the financial, making former governing bodies inoperative, freezing payments to creditors, and forbidding new deposits, debts and extension of old debt. It is obviously a situation that the governing bodies of a bank would try their best to avoid. These legal provisions strengthen the position of the FSAN and the Norwegian Banks' Guarantee Fund vis à vis the banks, and incentivises management and shareholders to pay more attention to the solvency of the bank. The government as an owner has not formulated a governance policy specifically adapted to DnB NOR. In general, the *Ownership Department* does not differentiate between banks and other firms in its administration of ownership. Perhaps this is not an optimal policy given the role of deposits in the bank's liability structure and the generous deposit insurance scheme. Even if the government were to be more inclined than other investors to act in accordance with the interests of depositors, legislation requiring that all shareholders be treated equally might hinder any governance policies that are in the interest of depositors at the expense of shareholders.

3.4.3 Predictions and DnB NOR operations

3.4.3.1 National ownership and geographical focus of operations

Considering the government's rationale for ownership, we would expect that DnB NOR has concentrated its operations within the country's borders. This is exactly what we observe when studying the financial institution's commitments by geographical location, as shown in the diagram below (Based on DnB NOR Annual Report 2009). Geographical location has been determined by observing the address of the institution's customers. 72 percent of the bank's commitments are based in Norway. It is thus fair to say that

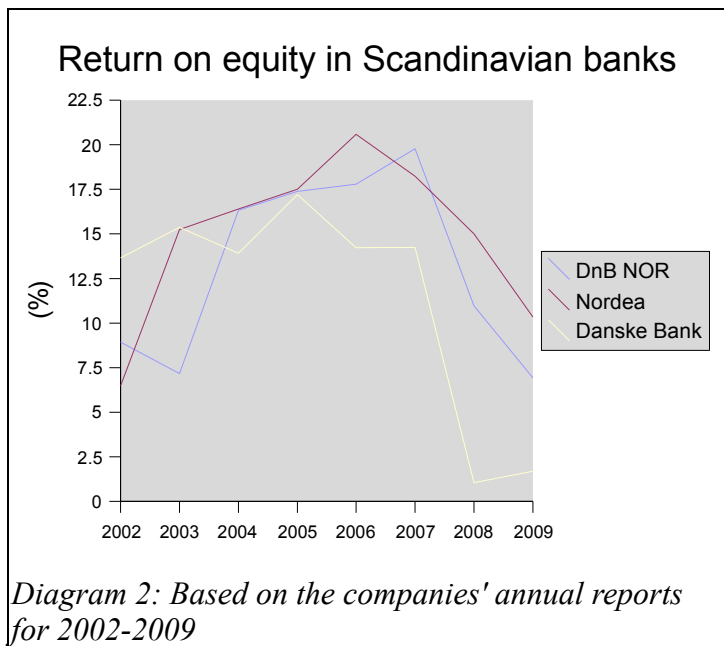


DnB NOR has focused on the Norwegian market, fulfilling the government's main rationale. Moreover, DnB NOR appears to have a considerable focus on development of the competence of its employees, diversity and equal opportunities, and the health, safety and working environment of its employees (Promoting work-life balance and diversity: DnB NOR web pages 16.06.2010). This is in accordance with the government's motivation for keeping headquarters in Norway, namely development of Norwegian competence and human resources.

3.4.3.2 Efficiency

Apart from insistence on nationally located headquarters, the government's ownership in DnB NOR has been defined as commercial. A simple test of the commercial viability of DnB NOR is to compare its financial results with those of similar financial institutions. Danske Bank and Nordea are reasonably good candidates as they also have their main operations in Scandinavia. We should keep in mind that the Swedish state is the second largest owner in Nordea, holding 19,9 percent of the share capital. On the other hand, the

largest owner in Danske Bank is the Møller Mærsk Group with 22,27 percent of the shares (The A.P. Møller Mærsk Group and A.P. Møller og Hustru Chastine Mc-Kinney Møllers Fond til almene Formaal). Using the companies' return on equity (ROE) allows us to observe differences in how much profit each company generates with the money shareholders have invested. The diagram above illustrates that the ROE of the



different institutions have experienced similar developments the last eight years. On average DnB NOR had a ROE of 13 percent while Nordea had a ROE of 15 percent, and Danske Bank had a ROE of 11 percent for the period running from 2002 until 2009. Keeping in mind that this is a very simple test, there is not much evidence of DnB NOR being less profitable than the two other Scandinavian institutions.

3.4.3.3 Low-powered incentives and risk

As we have seen above, the government adheres to a compensation policy where the main constituent is supposed

Period	Credit rating
May 2005	A+/Positive/A-1
May 2005	A+/Stable/A-1
June 2005	A+/Stable/A-1
October 2005	A+/Stable/A-1
April 2006	A+/Stable/A-1
March 2007	A+/Positive/A-1
April 2007	A+/Positive/A-1
April 2008	AA-/Stable/A-1+
January 2009	AA-/Negative/A-1+
April 2009	AA-/Negative/A-1+
December 2009	A+/Stable/A-1
March 2010	A+/Stable/A-1

Table 6: Standard & Poor's ratings for DnB NOR

to be fixed payments. The result is a rather low pay-performance sensitivity which would normally induce the management to take less risks. In order to assess the risk profile of DnB NOR, we can take a look at the company's credit ratings. The Counterparty Credit Rating is supposedly an opinion of a company's overall creditworthiness. DnB NOR Bank ASA, which is the largest banking subsidiary of the DnB NOR group has a long history of credit ratings from rating agencies such as Standard & Poor's, Moody's, and DBRS. DnB NOR Bank ASA has received very stable and high credit ratings from Standard & Poor's, as can be observed in the bank's history of credit ratings above (Standard & Poor's 2005-2010. See appendix for explanation of ratings). The other rating agencies also give DnB NOR a rather stable and high ratings (Moody's and DBRS 2005-2010). The main objection of the credit rating agencies is the substantial exposure of the bank to the shipping market. DnB NOR is one of the world's leading shipping banks, which is related to the importance of this sector in the Norwegian economy. Furthermore, Moody's latest rating report (2010) refers to a lack of geographical diversification, in accordance with our observations above. The bank's focus on the Norwegian market and a international business sector where Norwegian companies have a considerable market share, is in accordance with the government's interests of owning a financial institution servicing the needs of Norwegian businesses. The obvious disadvantage is the impact of the bank's business model on its credit rating. We would contend, however, that DnB NOR's banking operations have a rather low risk profile, as supported by statements in Standard and Poor's rating report for 2007.

3.4.3.4 Corporate social responsibility

The Norwegian government encourage DnB NOR, as well as other state-owned companies, to pay attention to the impact of its operations on society as a whole. It is somewhat difficult to determine the real effect of CSR policies, but there are several standards for corporate responsibility that banks may adhere to. Below, we can see the standards which the different Scandinavian banks comply

CSR Principles	DnB NOR	Nordea	Danske bank
UN Global Compact	X	X	X
OECD's guidelines for multinational companies	X		X
UNEP FI principles	X	X	X
UN Principles for Responsible Investments	X	X	X
Equator Principles	X	X	

Table 7: Application of CSR policies (from corporate web pages)

with. These principles cover a diverse set of responsibilities, including human rights, environmental impact, corruption and responsible investment. As we see from the table above, DnB NOR complies with a larger set of principles than the two other Scandinavian banks. Bearing in mind that many of these principles are overlapping, this serves as evidence of a strong commitment by DnB NOR to

uphold a high standard of corporate responsibility. Moreover, DnB NOR is listed on the Dow Jones Sustainability Indexes which tracks the financial performance of the leading sustainability-driven companies worldwide. Oekom Research has given DnB NOR 'prime status', a rating awarded to companies that are among the leaders in their industry and which meet industry-specific minimum requirements regarding environmental and social issues (Emphasis on transparency: DnB NOR web pages 14.06.2010). DnB NOR's adoption of these principles are in accordance with the government's ownership policy as portrayed in section 3.2.2. It is difficult to say whether it is the government as owner which has been the driving force behind the implementation of these principles, but it is evident that DnB NOR complies with the government's wishes in this area.

3.4.2.5 The recent financial crisis and government involvement

DnB NOR was not exempted from the negative effects of the recent financial crisis. On January 22, 2009, a Norwegian internet-based newspaper could document that shareholders in DnB NOR had lost close to eighty percent of their capital in less than one year (Krekling 22.01.2009). The topic of the article was whether the Norwegian government would have to protect DnB NOR from failure. The government announced that it would stick to its policy of holding a 34 percent ownership share, and the management of DnB NOR rejected the need for a government initiated rescue operation. The deterioration of DnB NOR's financial position during the crisis was partially due to its engagements in the Baltics through its subsidiary DnB NORDB (Ministry of Trade and Industry 2009-2010). The bank had the opportunity to acquire necessary capital from the Norwegian State Finance Fund, but preferred to go ahead with an emission of shares in order to strengthen its core capital. The government could have rejected the emission by using its negative power resulting from its 34 percent share, but eventually agreed. The emission provided DnB NOR with gross proceeds of NOK 14 billion. The government took part in the emission proportional to its 34 percent ownership share.

The government also launched some general measures to help the suffering financial sector in Norway. The first initiative was a scheme where the banks were offered the possibility to borrow government bonds in exchange for preferred bonds. The government bonds would serve as a guarantee for banks seeking new loans, or could be sold to improve financing prospects. The first auction of these government bonds was conducted on November 24., and DnB NOR was the only participant, receiving all the value of the auction of NOK 10 billion (Bjerkan 2009). Bjerkan argues that the scheme should be considered as government subsidy although ESA found came to the opposite conclusion in its evaluation. Initially the scheme received substantial criticism from being

specifically designed for DnB NOR. Eventually the government altered the scheme to include several savings banks which were effectively left out of the as a consequence of the initial design (Nordbø and Krekling 08.02.2009). In the interview with Knut J. Utvik, he confirmed that there had been some criticism of the rescue operation. He argued that the intention was to help the Norwegian financial sector and that DnB NOR was a large actor in this market.

As discussed in section 3.4.1.2, some market participants argued that DnB NOR benefitted from having the Norwegian government as a large owner during the financial crisis. In the newspaper article mentioned above (Bjørnestad 17.03.2008), Terje Fatnes, an analyst in SEB Enskilda Securities stated that DnB NOR was the Norwegian bank who borrowed the most from abroad. Its short-term foreign debt constituted about 20 percent of the bank's gross lending. However, DnB NOR did not suffer significantly from the counterparty risk and the lack of funds which characterised the market in the first quarter of 2008. The analyst argued that the international lenders considered it as highly unlikely that the Norwegian government would let DnB NOR experience liquidity problems. It is very difficult to measure whether the government as owner had any real impact on DnB NOR's ability to attract funds, although Ottar Ertzeid, Group Executive Vice President of DnB NOR Markets, stated in the same article that the bank benefitted from having stable owners. In its rating report of DnB NOR from April 2008, Standard & Poor's does not comment on the role of the state as owner at all. In the previous report, it does not factor any support to government ownership in its stand-alone ratings on DnB NOR, as the government is not involved in any way whatsoever in the daily management of DnB NOR (Standard & Poor's 13.04.2007). On the other hand, an incident which gained enormous media coverage during the crisis, was an alleged text message from the Prime Minister, Jens Stoltenberg, to the DnB NOR group chief executive, Rune Bjerke. The message supposedly contained inside information on the government's forthcoming rescue package, enabling DnB NOR to adjust its financial position in government bonds accordingly (Mathisen and Mæland 20.10.08). In the end, an investigation led by the Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime found the contact between the two as natural, but stated that the bank should not have traded on the information (Stenseng and Brockfield 18.02.10). Except for this incident, which is not necessarily related to the government's ownership, it seems as if the impact of government ownership on DnB NOR performance has more to do with stability than type of ownership.

Considering the huge impact of the financial crisis, it seems as if the Norwegian government was capable of dealing with the consequences and providing relief to the financial sector more or less

without favouring 'their own' bank. I would argue that this is a result of the distinct separation between the financial authorities and the Ownership Department, as described in section 3.4.2.1. Furthermore, as the Ownership Department is not directly involved in the board of directors, it has less scope for discriminatory intervention during crisis. The latter was also mentioned in Standard & Poor's rating report of 2007 as essential for its factoring out of government ownership in the rating procedure.

3.4.2.6 Does the government reach its objectives

It is obvious that DnB NOR focuses on the Norwegian market. The majority of its commitments are located in Norway, and its foreign endeavours are mainly within shipping, an industry where Norwegian businesses are very active. Seemingly, this goal is reached without compromising profitability, but does imply higher level of risk than if DnB NOR were to run a more diversified business. Moreover, the financial institution appears to respect the government's call for social responsibility. There has been some alleged incidents during the recent financial crisis which may be in conflict with what the theory describes as good government ownership. However, it is difficult to say whether interactions between the government and DnB NOR during the crisis is mainly due to the size, and consequent systemic importance, of DnB NOR, or whether it is related to the government's role as owner. Overall, it is fair to say that the government has been rather successful in exercising its ownership of DnB NOR as the rationale for ownership has support in observations.

Summary and concluding remarks

This thesis has aimed at understanding the issues pertinent to government ownership of banks and applying the theory on the subject to the case of the Norwegian government's ownership in DnB NOR. The debate on government ownership in general has changed from a high degree of confidence in state intervention post WWII, to low legitimacy of state intervention and focus on privatisation in 1970's and 1980's, ending up with a more nuanced perspective in more recent literature focusing on the effect of regulation on both private and public ownership. We have seen that type of ownership tends to rely on the distribution of wealth in a society, and that the room for state intervention could be greater in more modern economies where comparative advantage is less dependent on natural resources and the relative amounts of labour and capital within a country. State intervention will not work out very well unless government is able to make autonomous decisions which are embedded in society. Appropriate internal structure of government which avoids short-term politicising of intervention is essential for these mechanisms to function as intended.

In banking, there is a relatively high degree of government interference and ownership around the world. We have seen that the quality of legal systems and institutions are inversely related to government ownership in banking, but at the same time, these factors appear to be positively related to the efficiency of government ownership in banking. The main motivation for government intervention in the banking market is the considerable effect of this sector on the rest of the economy. However, government owned banks seem to underperform relative to private banks, although this is not true if we look exclusively at observations from developed countries, which are characterised by a better organised government, stronger institutions, and more elaborate legislation. The effect of government ownership can be tied to its rationale. The objectives of government intervention depends on the benevolence of the state, and its ability to recognise, and control for, certain pitfalls. We have seen that the internal organisation of government has some implications regarding the incentives of government officials and entities, and that the division of labour within government and the application of rules may alleviate some of the problems which are predicted to arise in situations with low-powered incentives and multiple tasks. Moreover, in exercising ownership, the government need to recognise the importance of good corporate governance, and apply such standards to its own administration of ownership.

As for the Norwegian case, the government has defined an elaborate ownership policy, leaving less

room for discretion, but at the same time reducing the probability of corruption and capture of the ownership entity by stakeholders and other interest groups. The organisation of ownership activities ensures independence, both from other government entities tied to the operations of DnB NOR, and short-term political pressure. Considerable experience with government ownership in Norway has been characterised by continuous revisions and improvements of policies related to ownership. The current ownership policy related to DnB NOR is based on a moderate rationale of keeping headquarters in Norway. However, there are some unforeseen effects, the majority of which have positive effects on DnB NOR's operations. Government ownership also implies pressure to adapt to government interests concerning social responsibility and management compensation. These issues may prove to be more in the interest of government than other owners.

The final verdict is that the Norwegian government's ownership in DnB NOR is rather successful. DnB NOR has located its headquarters in Norway, and focuses on the Norwegian market, both at home and abroad. Moreover, the financial institution produces quite good results compared with other large Scandinavian banks. Almost by a fluke, the low-powered managerial incentives implied by a general policy on compensation seems to fit well with theoretical prescriptions for optimal executive compensation in the banking industry. This could be the reason for the relatively low and stable risk profile of DnB NOR. Furthermore, the company appears to respect the government's insistence on social responsibility. In light of the recent financial crisis, some minor incidents seem to confirm that there are still some issues to be resolved. Considering the magnitude of the financial crisis however, the government seems to have done a good job as DnB NOR has benefitted mainly from having a large institutional investor, and not because it is the government that takes on this role.

Currently, the government has started working on a new proposition regarding government ownership (Norwegian Ministry of Trade and Industry 2010). I would therefore like to finish off with some policy advice. The Norwegian government has a considerable ownership in DnB NOR. Large ownership shares come with great responsibility. It is of utmost importance that the government continues to behave as an active owner, perhaps even intensifying its monitoring activities vis à vis DnB NOR. The other owners are smaller, and probably less motivated to follow up the company's performance. Moreover, banks are special institutions, implying that corporate governance policies should be adapted to the specific characteristics of banks. In particular, it is essential that the liability structure and the role and incentives of insured deposits are recognised and accounted for in the administration of ownership. If the government adjusts its ownership

policy accordingly, this author would predict that the government's ownership in DnB NOR continues to be successful, perhaps even more so.

Appendix

1. The Norwegian government's principles for corporate governance

1. Shareholders shall be treated equally.
2. There shall be transparency in relation to the state's ownership of the companies.
3. Decisions and resolutions by the owner shall be made/passed at the general meeting.
4. The state will, if applicable together with other owners, set performance objectives for the companies. The board of directors is responsible for the objectives being attained.
5. The capital structure in the companies shall be adapted to the objective of the ownership and the company's situation.
6. The composition of boards of directors shall be characterised by competence, capacity and diversity based on the distinctive nature of each company.
7. Remuneration and incentive arrangements should be designed so that they promote value creation in the companies and are perceived as being reasonable.
8. On behalf of the owners, the board of directors shall have an independent control function vis-à-vis the company's management.
9. The board should have a plan for its work and should work actively on building its own competence. The board's work shall be evaluated.
10. The company shall be conscious of its social responsibilities.

(The Norwegian Ministry of Trade and Industry 2008)

2. Main principles of The Norwegian government's guidelines for the remuneration of top executives in state-owned companies

1. The remuneration of leading personnel in companies under full or partial state ownership shall be competitive, but the companies shall not be wage leaders compared with other corresponding companies.
2. The chief element in compensation arrangements should be the fixed salary.
3. Compensation arrangements must be designed to ensure that unreasonable remuneration is not paid as a result of external factors that the company's management is not in a position to influence.
4. The individual elements in a pay package must be considered together, so that the fixed salary, any variable pay and other benefits, such as pensions and compensation on termination of employment, are seen as constituting a whole. The board of directors must have an overview of the overall value of the compensation stipulated for each individual executive.
5. It is the responsibility of the whole board to adopt the guidelines for the remuneration of leading personnel. The remuneration of the general manager shall be adopted by the board of directors.
6. The board must ensure that the remuneration of leading personnel does not have unfortunate effects for the company or undermine its reputation.
7. The remuneration for the work of the board of directors must not be performance based or variable.
8. Members of the company's management shall not receive special remuneration for holding office as board members in other companies in the same group.
9. Agreements made before these guidelines entered into force may continue to apply.

(The Norwegian Ministry of Trade and Industry 2008)

3. OECD Guidelines on Corporate Governance of State-owned Enterprises

I. Ensuring an Effective Legal and Regulatory Framework for State-Owned Enterprises

The legal and regulatory framework for state-owned enterprises should ensure a level-playing field in markets where state-owned enterprises and private sector companies compete in order to avoid market distortions. The framework should build on, and be fully compatible with, the OECD Principles of Corporate Governance.

II. The State Acting as an Owner

The state should act as an informed and active owner and establish a clear and consistent ownership policy, ensuring that the governance of state-owned enterprises is carried out in a transparent and accountable manner, with the necessary degree of professionalism and effectiveness.

III. Equitable Treatment of Shareholders

The state and state-owned enterprises should recognise the rights of all shareholders and in accordance with the OECD Principles of Corporate Governance ensure their equitable treatment and equal access to corporate information.

IV. Relations with Stakeholders

The state ownership policy should fully recognise the state-owned enterprises' responsibilities towards stakeholders and request that they report on their relations with stakeholders.

V. Transparency and Disclosure

State-owned enterprises should observe high standards of transparency in accordance with the OECD Principles of Corporate Governance.

VI. The Responsibilities of the Boards of State-Owned Enterprises

The boards of state-owned enterprises should have the necessary authority, competencies and objectivity to carry out their function of strategic guidance and monitoring of management. They should act with integrity and be held accountable for their actions.

(OECD publishing, 2005)

4. Explanation of Standard & Poor's credit ratings

Long-term issuer credit ratings

AAA: An obligor rated 'AAA' has extremely strong capacity to meet its financial commitments. 'AAA' is the highest issuer credit rating assigned by Standard & Poor's.

AA: An obligor rated 'AA' has very strong capacity to meet its financial commitments. It differs from the highest-rated obligors only to a small degree.

A: An obligor rated 'A' has strong capacity to meet its financial commitments but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligors in higher-rated categories.

BBB: An obligor rated 'BBB' has adequate capacity to meet its financial commitments. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitments.

BB, B, CCC, and CC: Obligors rated 'BB', 'B', 'CCC', and 'CC' are regarded as having significant speculative characteristics. 'BB' indicates the least degree of speculation and 'CC' the highest. While such obligors will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposures to adverse conditions.

BB: An obligor rated 'BB' is less vulnerable in the near term than other lower-rated obligors. However, it faces major ongoing uncertainties and exposure to adverse business, financial, or economic conditions, which could lead to the obligor's inadequate capacity to meet its financial commitments.

B: An obligor rated 'B' is more vulnerable than the obligors rated 'BB', but the obligor currently has the capacity to meet its financial commitments. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitments.

CCC: An obligor rated 'CCC' is currently vulnerable, and is dependent upon favorable business, financial, and economic conditions to meet its financial commitments.

CC: An obligor rated 'CC' is currently highly vulnerable.

R: An obligor rated 'R' is under regulatory supervision owing to its financial condition. During the pendency of the regulatory supervision, the regulators may have the power to favor one class of obligations over others or pay some obligations and not others. Please see Standard & Poor's issue credit ratings for a more detailed description of the effects of regulatory supervision on specific issues or classes of obligations.

SD and D: An obligor rated 'SD' (selective default) or 'D' has failed to pay one or more of its financial obligations (rated or unrated) when it came due. A 'D' rating is assigned when Standard & Poor's believes that the default will be a general default and that the obligor will fail to pay all or substantially all of its obligations as they come due.

(Standard and Poor's 2009)

References

- Altunbas, Yener, Lynne Evans and Philip Molyneux (2001). Bank Ownership and Efficiency. *Journal of Money, Credit and Banking*, Vol. 33, No. 4, p. 926-954.
- Andrews, Michael (2005). State-Owned Banks, Stability, Privatization, and Growth: Practical Policy Decisions in a World Without Empirical Proof. *IMF Working Paper*.
- Andrianova, Svetlana, Panicos Demetriades and Anja Shortland (2008). Government ownership of banks, institutions, and financial development. *Journal of Development Economics* 85, p. 218–252.
- Ashcraft, Adam B. (2005). Are Banks Really Special? New Evidence from the FDIC-Induced Failure of Healthy Banks. *The American Economic Review*, Vol. 95, No. 5. p. 1712-1730.
- Bartel, Ann P. and Ann E. Harrison (1999). Ownership Versus Environment: Why Are Public Sector Firms Inefficient?. Working Paper 7043, National Bureau of Economic Research, Cambridge.
- Barth, James, Gerard Caprio, Jr., and Ross Levine (1999). Banking systems around the globe: Do regulation and ownership affect performance and stability? *Mimeo, World Bank*.
- Barth, James R, Gerard Caprio Jr and Ross Levine (2004). Bank regulation and supervision: what works best?. *Journal of Financial Intermediation* 13, P. 205–248.
- Bebchuk, Lucian A., and Jesse M. Fried (2004). Pay without Performance: The Unfulfilled Promise of Executive Compensation. Harvard University Press. Cambridge and London.
- Beck, Thorsten, Ross Levine and Norman Loayza (2000). Finance and the sources of growth. *Journal of Financial Economics* Vol. 58, p. 261-300
- Beck, Thorsten, Asli Demirgüç-Kunt and Ross Levine (2003). Law and finance: why does legal origin matter?. *Journal of Comparative Economics*, Vol. 31, p. 653–675.
- Beck, Thosten, Asli Demirguc-Kunt and Ross Levine (2005). Law and Firms' Access to Finance. *World Bank Policy Research Working Paper No. 3194*.
- Bennedsen, Morten (1998). Political Ownership. *University of Aarhus CLS Working Paper No. 98-009*.
- Berger, Allen N., George R.G. Clarke, Robert Cull, Leora Klapper and Gregory F. Udell (2005). Corporate governance and bank performance: A joint analysis of the static, selection, and dynamic effects of domestic, foreign, and state ownership. *Journal of Banking & Finance* 29, p. 2179–2221.
- Berger, Allen N., Nathan H. Miller, Mitchell A. Petersen, Raghuram G. Rajan and Jeremy C. Steine (2005). Does function follow organizational form? Evidence from the lending practices of large and small banks. *Journal of Financial Economics*, Vol. 76, p. 237–269.
- Berger, Allen N., Qinglei Dai, Steven R. G. Ongena, and David C. Smith (2002). To what Extent will the Banking Industry be Globalized? A Study of Bank Nationality and Reach in 20 European Nations. *FEDS International Finance Discussion Paper No. 725*.

Bhide, Amar (1993). The Hidden Costs of Stock Market Liquidity. *Journal of Financial Economics*, Vol. 34, p. 31-52.

Bjerkan, Gøril (2009). Myndighetenes håndtering av finanskriser - hvorfor og hvordan? *Samfunnsøkonomen*, No. 4, p. 11-24.

Blanchard, Olivier J. (2008). The Crisis: Basic Mechanisms, and Appropriate Policies. *MIT Department of Economics Working Paper No. 09-01*. Available at SSRN: <http://ssrn.com/abstract=1324280>

Bonin, John P., Iftekhar Hasan and Paul Wachtel (2005). Bank performance, efficiency and ownership in transition countries. *Journal of Banking & Finance* 29, p. 31–53.

Burgess, Robin and Rohini Pande (2004). Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment. *CEPR Discussion Paper 4211, C.E.P.R. Discussion Papers*.

Caballero, Ricardo J. and Arvind Krishnamurthy (2009). Global Imbalances and Financial Fragility. *American Economic Review: Papers & Proceedings* 2009, 99:2, p. 584–588.

Cline, William (1987). Informatics and Development: Trade and Industrial Policy in Argentina, Brazil, and Mexico (study funded by IBM). Washington, D.C.: Economics International, Inc.

Coffee, John C. (1991). Liquidity versus Control: The Institutional Investor as Corporate Monitor. *Columbia Law Review*, Vol. 91, p. 1277-1368.

De la Torre, A., 2002. Reforming Development Banks: A Framework, presentation at the World Bank Staff Workshop on Reforming Public Sector Banks, December, Washington, DC.

Demirgüç-Kunt, Asli and Enrica Detragiache (2002). Does deposit insurance increase banking system stability? An empirical investigation. *Journal of Monetary Economics* Vol. 49, Issue 7, p. 1373-1406.

Demsetz, Harold and Kenneth Lehn (1985). The Structure of Corporate Ownership: Causes and Consequences. *The Journal of Political Economy*, Vol. 93, No. 6, p. 1155-1177.

Diamond, Douglas W., and Philip H. Dybvig (1983). Bank Runs, Deposit Insurance, and Liquidity. *The Journal of Political Economy*, Vol. 91, No. 3, p. 401-419.

Dinç, Serdar (2005). Politicians and banks: Political influences on government-owned banks in emerging markets. *Journal of Financial Economics* 77, p. 453–479.

Djankov, Simeon, Caralee McLiesh and Andrei Shleifer (2007). Private credit in 129 countries. *Journal of Financial Economics* Vol. 84, p. 299–329.

Ehrlich, Isaac, Georges Gallais-Hamonno, Zhiqiang Liu and Randall Lutter (1994) Productivity Growth and Firm Ownership: An Analytical and Empirical Investigation. *The Journal of Political Economy*, Vol. 102, No. 5, p. 1006-1038.

Evans, Peter (1995). Embedded autonomy: states and industrial transformation. Princeton University Press. Princeton, New Jersey

- Garcia-Marco, Teresa and M. Dolores Robles-Fernandez (2008). Risk-taking behaviour and ownership in the banking industry: The Spanish evidence. *Journal of Economics and Business*, Vol. 60, p. 332–354.
- Gerschenkron, Alexander (1962). *Economic Backwardness in Historical Perspective*. Harvard University Press, Cambridge, MA.
- Gleinsvik, Audun, Kjell Roland and Rolf Røtnes - Staten osm Eier av Næringsvirksomhet (2001). In: *Rikdommens Problem*. Edited by Kjell Roland, Victor D. Norman, and Torgeir Reve. Universitetsforlaget. Oslo.
- Hart, Oliver, Andrei Shleifer and Robert W. Vishny (1997). The Proper Scope of Government: Theory and an Application to Prisons. *The Quarterly Journal of Economics*, Vol. 112, No. 4, p. 1127-1161.
- Hendrikse, George (2003). *Economics and Management of Organizations: Co-ordination, Motivation and Strategy*. McGraw-Hill Education. Berkshire.
- Higgins, Matthew and Thomas Klitgaard (2007). Financial Globalization and the U.S. Current Account Deficit. *Current Issues in Economics and Finance*. Federal Reserve Bank of New York.
- Holmström, Bengt, and Paul Milgrom (1987). Aggregation and Linearity in the Provision of Intertemporal Incentives. *Econometrica*, Vol. 55, No. 2, p. 303-28.
- Holmström, B.R., and P. Milgrom (1991). Multitask Principal-Agent Analysis: Incentive Contracts, Asset Ownership, and Job Design. *Journal of Law, Economics, and Organization*, Vol. 7, p. 24-52.
- Holmström, Bengt (1982). *Managerial Incentive Problems: A Dynamic Perspective*. Essays in Economics and Management in Honor of Lars Wahlbeck. Swedish School of Economics. Helsinki.
- Iannotta, Giuliano, Giacomo Nocera and Andrea Sironi (2007). Ownership structure, risk and performance in the European banking industry. *Journal of Banking & Finance*, Vol. 31, p.2127–2149.
- James, Christopher (1987). Some Evidence on the Uniqueness of Bank Loans. *Journal of Financial Economics*, Vol. 19, p. 217-235.
- Jayaratne, Jith, and Philip E. Strahan (1996). The Finance-Growth Nexus: Evidence from Bank Branch Deregulation. *The Quarterly Journal of Economics*, Vol. 111, No. 3, p. 639-670.
- 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, p. 305-360.
- Jensen, Michael C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, Vol. 76, No. 2. *Papers and Proceedings of the Ninety-Eighth Annual Meeting of the American Economic Association*, p. 323-329.
- John, Teresa A. and Kose John (1993). Top-Management Compensation and Capital Structure. *The Journal of Finance*, Vol. 48, No. 3, *Papers and Proceedings of the Fifty-Third Annual Meeting of*

the American Finance Association: Anaheim, California January 5-7, 1993, p. 949-974.

John, Kose and Yiming Qian (2003). Incentive features in CEO compensation in the banking industry. *FRBNY Economic Policy Review* 9, 109-121.

Keeley, Michael C. (1990). Deposit Insurance, Risk, and Market Power in Banking. *The American Economic Review*, Vol. 80, No. 5, p. 1183-1200.

King, Robert G. and Ross Levine (1993). Finance and Growth: Schumpeter Might be Right. *The Quarterly Journal of Economics*, Vol. 108, No. 3, p. 717-737.

Knutsen, Sverre, Even Lange, and Helge W. Nordvik (1998). Mellom næringsliv og politikk. Universitetsforlaget. Oslo.

Kornai, János (1979). Resource-Constrained Versus Demand-Constrained Systems. *Econometrica*, Vol. 47, No. 4, p. 801-19.

Kornai, Janos, Eric Maskin and Gerard Roland (2003). Understanding the Soft Budget Constraint. *Journal of Economic Literature*, Vol. 41, No. 4, p. 1095-1136.

Landes, David (1998). The Wealth and Poverty of Nations. Abacus. London.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W. Vishny (1998). Law and Finance. *The Journal of Political Economy*, Vol. 106, No. 6, p. 1113-1155.

La Porta, Rafael, Florencio Lopez de Silanes and Andrei Shleifer (2002). Government Ownership of Banks. *The Journal of Finance*, Vol. 57, No. 1, pp. 265-301

Levine, Ross, and Sara Zervos (1998). Stock Markets, Banks, and Economic Growth. *The American Economic Review*, Vol. 88, No. 3, p. 537-558.

Levine, Ross (2004). The Corporate Governance of Banks: A Concise Discussion of Concepts and Evidence. *World Bank Policy Research Working Paper* 3404.

Macey, Jonathan R. and Maureen O'Hara (2003). The Corporate Governance of Banks. *Economic Policy Review*, Vol. 9, No. 1, p. 91-107.

Megginson, William L., Robert C. Nash, Matthias Van Randenborgh (1994). The Financial and Operating Performance of Newly Privatized Firms: An International Empirical Analysis. *The Journal of Finance*, Vol. 49, No. 2, p. 403-452.

Mueller, Dennis C. (2003). Public Choice III. Cambridge University Press. The Edinburgh Building, Cambridge.

Murphy, Kevin M., Andrei Shleifer and Robert W. Vishny (1989). Industrialization and the Big Push. *The Journal of Political Economy*, Vol. 97, No. 5, p. 1003-1026.

Porter, Michael E. (1990). The Competitive Advantage of Nations. New York: Free Press.

Porter, Michael E. (1992). Capital Disadvantage: America's Failing Capital Investment System.

Harvard Business Review, Vol. 70, p. 65-82.

Prowse, S. (1997). The corporate governance system in banking: What do we know?. *Banca del Lavoro Quarterly Review*, March, p. 11-40.

Przeworski, Adam (1990). *The State and the Economy Under Capitalism*. Reprinted in 2001 by Routledge. Oxon, Great Britain.

Rajan, Raghuram G., and Luigi Zingales (1998). Financial Dependence and Growth. *The American Economic Review*, Vol. 88, No. 3, p. 559-586.

Rosenstein-Rodan, Paul N (1943). Problems of Industrialisation of Eastern and South-eastern Europe. *The Economic Journal*, Vol. 53, No. 210/211, p. 202-211.

Roubini, Nouriel (2008). Ten Fundamental Issues in Reforming Financial Regulation and Supervision in a World of Financial Innovation and Globalization. *White paper, RGE monitor*.

Rousseau, Peter L. (1999). Finance, investment, and growth in Meiji-era Japan. *Japan and the World Economy*, Vol. 11, p. 185-198.

Rousseau, Peter L., and Paul Wachtel (1998). Financial Intermediation and Economic Performance: Historical Evidence from Five Industrialized Countries. *Journal of Money, Credit, and Banking*, Vol. 30, No. 4, p. 657-678.

Sapienza, Paola (2004). The effects of government ownership on bank lending. *Journal of Financial Economics* 72, 357–384.

Schaefer, Scott (1998). The Dependence of the Pay-Performance Sensitivity on the Size of the Firm. *Review of Economics and Statistics*, Vol. 80, p. 436-43.

Schumpeter, Joseph A., (1911). *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.

Sherif, Khaled, Michael Borish and Alexandra Gross (2003). *State-Owned Banks in the Transition: Origins, Evolution, and Policy Responses*. The International Bank for Reconstruction and Development / The World Bank. Washington.

Shleifer, Andrei and Robert W. Vishny (1994). Politicians and Firms. *The Quarterly Journal of Economics*, Vol. 109, No. 4, p. 995-1025.

Sloccock, Ben (2002). The Market Economy Investor Principle. *European Commission Competition Policy Newsletter*, No. 2, June 2002.

Stigler, George J. (1971). The Theory of Economic Regulation. *The Bell Journal of Economics and Management Science*, Vol. 2, No. 1, p. 3-21.

Stiglitz, Joseph E., Jaime Jaramillo-Vallejo, and Yung Chal Park (1993). The role of the state in financial markets. *World Bank Research Observer, Annual Conference on Development Economics Supplement* :19-61.

Thomsen, Steen and Torben Pedersen (2000). Ownership Structure and Economic Performance in the Largest European Companies. *Strategic Management Journal*, Vol. 21, No. 6, pp. 689-705.

Tirole, Jean (1994). The Internal Organization of Government. *Oxford Economic Papers*, New Series, Vol. 46, No. 1, p. 1-29.

Tirole, Jean (2006). The Theory of Corporate Finance. Princeton University Press. New Jersey.

Tranøy, Bent Sofus, Bård Jordfald, Espen Løken (2007). Krevende eierskap: Statlig eierskap mellom finansiell styring og industrielle ambisjoner. *Fafo-rapport 2007:20*.

Verbrugge, James A., William L. Megginson and Wanda L. Owens (1999). State Ownership and the Financial Performance of Privatized Banks: An Empirical Analysis. *Presented at the World Bank/Federal Reserve Bank of Dallas Conference on Banking Privatization, Washington, DC, March 15th & 16th, 1999*.

Von Weisäcker, Ernst Ulrich, Oran R. Young and Matthias Finger (2005). Limits to Privatization: How to Avoid too Much of a Good Thing. Earthscan, London, UK.

Yeyati, Eduardo Levy, Alejandro Micco and Ugo Panizza (2004). Should the Government Be in the Banking Business? The Role of State-Owned and Development Banks. *RES Working Papers 4379, Inter-American Development Bank, Research Department*.

Zarutskie, Rebecca (2006). Evidence on the effects of bank competition on firm borrowing and investment. *Journal of Financial Economics*, Vol. 81, p. 503–537.

Internet resources

About Finanstilsynet. Retrieved from The Financial Supervisory Authority of Norway web pages 3.06.2010.

Web site: <http://www.finanstilsynet.no/en/>

About the group. Retrieved from DnB NOR Web pages, 17.05.2010 and 31.05.2010.

Web site: https://www.dnbnor.com/about_the_group/desabout_the_group.html?LA=EN

About us. Retrieved from The Norwegian Banks' Guarantee Fund web pages 12.06.2010.

Web site: <http://www.bankenessikringsfond.no/en/Main/About-us/>

Emphasis on transparency. Retrieved from DnB NOR web pages 14.06.2010.

Web site: https://www.dnbnor.com/corporate_responsibility/transparency/transparancy.html

Facts and history. Retrieved for The Savings Bank Foundation DnB NOR web pages 09.06.2010.

Web site: <http://www.sparebankstiftelsen.no/id/1276.0>

Kort om banken: Historie. Retrieved from Fokus Bank web pages 31.05.2010.

Web site: <http://www.fokus.no/nb-no/om-fokus-bank/kort-om-banken/Pages/Historie.aspx>

Lov om tilsynet med finansinstitusjoner mv.. Retrieved from Lovdata web pages 3.06.2010.

Web site: <http://www.lovdata.no/all/hl-19561207-001.html>

Om Nordea: Christiania Bank og Kreditkasse. Retrieved from Nordea web pages 31.05.2010.

Web site:

<http://www.nordea.com/Om+Nordea/Oversikt/Nordeas+historie/Christiania+Bank+og+Kreditkasse/56862.html>

Promoting work-life balance and diversity. Retrieved from DnB NOR web pages 16.06.2010.

Web site:

https://www.dnbnor.com/corporate_responsibility/life_phases_and_diversity/life_phases_and_diversity.html

The Norwegian Banks' Guarantee Fund. Retrieved from Bankenes Sikringsfond web pages 11.06.2010.

Web Site: <http://www.bankenessikringsfond.no/en/Main/Home/>

Government documents

Kreditilsynet (2004). Act on Guarantee Schemes for Banks and Public Administration etc., of Financial Institutions (Guarantee Schemes Act).

Available at: http://www.finanstilsynet.no/archive/stab_pdf/01/01/20040075.pdf

The Norwegian Ministry of Trade and Industry (2006-2007). Stortingsmelding nr. 13: Et Aktivt og Langsiktig Eierskap. Web site: <http://www.regjeringen.no/en/dep/nhd/dok/regpubl/stmeld/2006-2007/Stmeld-nr-13-2006-2007-.html?id=441137>

Norwegian Ministry of Trade and Industry (2008). The Government's Ownership Policy. The Government's Ownership Policy on the internet: www.ownershippolicy.net

Norwegian Ministry of Trade and Industry (2009-2010). Proposition to the Storting no. 22 S. Available at: <http://www.regjeringen.no/nb/dep/nhd/dok/regpubl/prop/2009-2010/prop-22-s-2009-2010.html?id=581979>

Norwegian Ministry of Trade and Industry (2010). Ny stortingsmelding om statleg eigarskap. Available at: <http://www.regjeringen.no/en/dep/nhd/pressemeldinger/2010-2/Ny-stortingsmelding-om-statleg-eigarskap.html?id=607411>

The State Ownership Report 2008. Retrieved from Norwegian Ministry of Trade and Industry web pages 4.06.2010. Web site: <http://www.eierberetningen.nhd.no/2008/index.php?lang=english>

Reports

Danske Bank (2010). Annual Reports 2002-2009.

DBRS. Miscellaneous Rating Reports for DnB NOR Bank ASA. Available at DnB NOR web site: https://www.dnbnor.com/investor_relations/funding_and_ratings/deskfunding_and_ratings.html

DnB NOR (2010). Annual Reports 2002-2009.

Competition in Nordic Retail Banking (2006). *Report from the Nordic competition authorities*, No. 1, 2006.

Moody's. Miscellaneous Rating Reports for DnB NOR Bank ASA. Available at DnB NOR web site: https://www.dnbnor.com/investor_relations/funding_and_ratings/deskfunding_and_ratings.html

Nordea (2010). Annual Reports 2002-2009.

OECD Guidelines on Corporate Governance of State-owned enterprises (2005). OECD Publishing, Paris.

Standard & Poor's. Miscellaneous Rating Reports for DnB NOR Bank ASA. Available at DnB NOR web site:

https://www.dnbnor.com/investor_relations/funding_and_ratings/deskfunding_and_ratings.html

Standard & Poor's (2009). Understanding Standard & Poor's Rating Definitions.

Available at: <http://www.standardandpoors.com/ratings/understanding-ratings/en/us>

The Norwegian Code of Practice for Corporate Governance (2009). Norwegian Corporate Governance Board.

The World Bank and Oxford University Press (2001). Finance for Growth: Policy Choices in a Volatile World. Oxford University Press, Inc.. New York.

Newspaper articles

Bjørnstad, Sigurd (17.03.2008). Staten hjelper DnB NOR. *E24*.

Available at: <http://e24.no/naeringsliv/article2318506.ece>

Krekling, David Vojislav (22.01.2009). Staten må redde DnB NOR. *Nettavisen*.

Available at: <http://www.nettavisen.no/okonomi/article2511633.ece>

Mathisen, Ida and Kjetil Mæland (20.10.08). Dette visste DnB NOR. *Nettavisen*.

Available at: <http://www.nettavisen.no/okonomi/article2314602.ece>

Nordbø, Linda and David Vojislav Krekling (08.02.2009). Dette er bankpakken. *Nettavisen*.

Available at: <http://www.nettavisen.no/okonomi/article2532973.ece>

Stenseng, Sverre and Johan Brockfield (18.02.10). Økokrim: greit med sms-kontakt. *Aftenposten.no*

Available at: <http://www.aftenposten.no/okonomi/innland/article3523415.ece>