

The private–public puzzle of a decentralised national health system

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To my parents, Marit and Ingolf Midttun

Preface

The work on this thesis took place from October 2003 to April 2007. During the first year, I combined PhD-related work with part-time work on various research projects at SINTEF Health Services Research. Throughout the entire period, I was affiliated with both SINTEF Health Services Research and the Department of Health Management and Health Economics, Faculty of Medicine at the University of Oslo. The PhD project was furthermore integrated in the Health Organisation Research Norway (HORN) programme, which is financed by the Norwegian Research Council (grant no. 153074/530). In addition to the funding received from the Norwegian Research Council, I gratefully acknowledge the financial support provided by SINTEF Health Services Research and the University of Oslo. I also wish to express my appreciation to Jon Magnussen, Kari Nyland, Jorid Kalseth and Britt Venner for their help in organising good working conditions for me at SINTEF. Moreover, I have been blessed with exceptional supervisors, and I thank Beate M. Huseby and Terje P. Hagen for having provided me with outstanding supervision, guidance and support during the entire process. Without their many wise ideas and insights, the thesis would not have been realised. Furthermore, I am grateful for all valuable inputs from my colleagues at the HORN programme, and not least from my co-workers at SINTEF Health Services research; a special mention goes to Birgitte Kalseth, Pål Martinussen and Johan Håkon Bjørngaard. I also wish to acknowledge the assistance from Hanne T. Kvam and Sidsel Thesen in handling administrative matters and providing library services, and the PhD students at the Department of Sociology and Political Science at NTNU for rewarding discussions and for putting up with all my health-related papers at the internal workshops. Of course, a special thank goes to Ola Listhaug for inviting me to the internal seminars, although I was no longer formally affiliated with NTNU. Finally, I wish to thank the Norwegian Medical Association for assisting me in the selection of physicians from their member list, and most importantly, I am extremely grateful and indebted to the medical specialists who responded in the survey. Without their help, the research would not have been possible.

Some of the data analysed in the publications were provided by Statistics Norway and the Norwegian Social Science Data Services' Commune Database. Needless to say,

neither Statistics Norway nor the Norwegian Social Science Data Services are in any way responsible for the analysis of the data or the interpretations provided in this dissertation. As for the collection and storage of survey data, this was handled in accordance with the standards outlined by the Norwegian Social Science Data Services.

On a more personal note, I am grateful to friends and family who have offered more support than any PhD student might expect or even hope for. Their understanding meant a lot to me and made it easier to prioritise my PhD work without it weighing on my conscience. I am particularly grateful to my dear Karl Peter! He has supported me through both disappointment and happy events, and has truly made an admirable effort to grasp the essence of my thesis. I will, as promised, not forget to mention his unique data-technical and mathematical advice and contributions. My thanks also to Karl Peter's closest relatives for their support. Last, but not least, I wish to express my gratitude to my parents (Marit and Ingolf), my siblings (Anita and John Olav) and the rest of my close family (Kristina, Thomas and Steve). They have shown incredible interest in both my well-being and my PhD project during these years, and their interest constantly reminded me of their great faith in me and in this project. Particular thanks go to my parents for always having supported me in both my professional and personal lives!

Trondheim, April 2007

Linda Midttun

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Chapter 1:

Introduction and summary

1. Introduction¹

This dissertation addresses the private–public mix within the Norwegian specialised healthcare system and the labour supply of medical specialists affiliated with the private and public sectors. Although the Norwegian healthcare system serves as a typical example of a Scandinavian welfare state model, based on public funding and ownership of the hospitals, the turn of the millennium introduced a significant private element into the supply structure. As the private supply of healthcare services over the years has increased, however, it is becoming increasingly puzzling that the comprehensive political debate over private versus public healthcare provision has not been accompanied by a corresponding increase in research on the topic. Hence, this dissertation aspires to add new knowledge about the private supply side of specialised healthcare by describing and explaining the private–public mix and comparing the vocational choices, decisions and behaviours of medical specialists with different sector affiliations. The aim of the thesis is three-fold: first, to describe the increase in, and geographical distribution of, private suppliers of specialised healthcare; second, to explain physicians’ choices of work between the private and the public sector; and, third, to account for physicians’ supply of labour both across and within the sectors.

During the past decade, the Nordic welfare model has been under pressure (e.g., Kuhnle, 2000), and as emphasised by, e.g., Christensen & Læg Reid (2003), there has been a growing awareness about other possible welfare providers besides the public sector. In particular, there has been an increased focus on market competition and the private sector’s potential to provide efficient service. The most immediate causes of this change in focus have been the increasing financial burden on governments, a wish to reduce the size and complexity of government, a desire for improved efficiency and a call for more freedom of choice for the users/consumers. The changes that have taken place, and which have partially taken the form of reforms of the entire service delivery systems, have commonly been termed New Public Management (NPM) reforms. Shared features of these reforms are the emphasis on increased competition, privatisation and consumer orientation (e.g., Hood, 1991; Mills & Broomberg, 1998).

¹ I am thankful to Professor Dr Terje P. Hagen for valuable comments on preliminary versions of this chapter. Dr Beate M. Huseby also provided helpful comments on a former draft. An earlier version of

The growing call for reorganisation within the Norwegian public sector is thus part of a larger reform wave sweeping across Western Europe. This wave has pointed to the private sector as the ideal when it comes to efficient service production, and privatisation strategies and market solutions have therefore been prescribed in the struggle to contain costs and produce more efficient services in the public sector.² One of the governing ideas behind this new market orientation has been the desire to clarify the roles and responsibilities within the sector, particularly with regard to the purchaser-provider split. To achieve this, tight state control and surveillance over service production have had to be sacrificed to some extent, and through the introduction of performance-related reward systems and delegation of profit responsibilities to semi- or fully privatised production and service units, central government has gradually channelled considerable authority to this group of relatively autonomous service providers (Tranøy & Østerud, 2001).

As the reform ideas gained momentum in Norway over the past decades, the public-sector's organisational structures became the target of pronounced alternations. By and large, there has been a steady change from traditional organisation in multipurpose administrative agencies within the county administration (characterised by strict hierarchical command and control structures) towards more organisation in single purpose units, such as trust companies, enterprises or private limited companies, which enjoy wide authority, a high degree of independence and considerable room to exercise discretion. The latter type of organisation naturally implies a much freer role for the operating units when it comes to choice of wage systems, regulation of working time, asset management and the overall running of the day-to-day activities. However, the controls employed by central government through laws, steering documents, circular letters and the like, have in fact proved to be relatively efficient, and compliance with centrally stated aims is therefore normally

the chapter was presented at the Nordic Workshop on Health Management and Organization, 6–8 December 2006, and the comments from Dr Karsten Vrangbæk were particularly appreciated.

² Studies comparing the relative efficiency of private and public organisations or enterprises have reached somewhat contradictory conclusions (e.g., Willner, 2000; Christensen, 2001; Christensen et al., 2001; Saltman & Figueras, 1997; Leu, 1986; Savas, 1982; Bennett, 1996; Walker, 1989; Iversen, 1987; Liu et al., 2006; Loevinsohn & Hardin, 2005; Øvretveit, 2001), but the reviews of the existing literature on the field have generally concluded that privatisation measures and contracting out of services do contain costs.

ensured. Within the literature, the types of controls applied are commonly referred to as “fire alarm” systems and “autopilot” systems, which both provide feedbacks to the elected politicians and their administrations (cf. Sørensen, 2005; Norwegian Official Report, 1999; McCubbins & Schwartz, 1984). Fire alarms are commonly triggered by self-interested third parties, and financial audits, appointments of various ombudsman institutions and the passing of statutory rules regarding inspections are examples of arrangements which make their alarm-activity possible. Autopilot types of controls encompass operation of e.g. constitutional standardised norms which protect fundamental rights of the population and the users/consumers, application of administrative supervision and implementation of various types of administrative reporting responsibilities (e.g. through “management by objectives” (MBO)-types of arrangements). For a more detailed outline of these and similar arrangements, consult McCubbins & Schwartz (1984) or Sørensen (2005).

In Norway, several large public units have recently been privatised or subject to other reorganisation in accordance with the methods described above. Some of these are the national telecommunication agency (Telenor), the Norwegian postal services (Posten Norge), the national railways (NSB), and the national oil and gas company (Statoil). The processes have taken rather different forms for the individual units, and while some of the former state agencies are now administered as public enterprises, others are organised as private limited companies with varying degrees of state share interest. For instance, the central government currently holds 54 per cent of the shares in the national telecommunication company, Telenor. As for the Norwegian health enterprises, which were established with the hospital reform of 2002, these are owned solely by the state with the five regional health authorities (RHAs) in charge of the administrative authority.

In the aftermath of the public-sector reforms, the management of and public influence over the state-owned companies and privatised enterprises have been the subject of much political controversy. This has not least been the case for the healthcare sector. Although the political debate on this and similar private–public issues has been relatively heated and the topic, from time to time, high on the political agenda, international research on the subject has not kept pace. According to, e.g., Bennett (1996), a considerable range of highly relevant research questions in the area of the

private–public mix of healthcare has been ignored and remains unexplored. A decade ago, she furthermore claimed that most of the published literature on the private–public mix of healthcare was limited to either theoretical works on the extent and form of market failure (e.g., Titmuss, 1963; Bennett, 1991) or to the production of typologies (e.g., Green, 1987; Berman, 1996). The remaining research was described as mainly descriptive. In addition to the groups mentioned by Bennett, several theoretical and empirical studies have, however, discussed private–public mix scenarios or assessed whether public, private or mixed healthcare models represent the best alternative under different, closer specified, conditions (e.g., Jofre-Bonet, 2000; Silverman, 1984; Marchand & Schroyen, 2005; Propper & Green, 1999; Leu, 1986; Chernichovsky, 2000; Barros & Martinez-Giralt, 2000; Crow et al., 2002). Other studies have addressed the interdependence between private and public healthcare (e.g., Cairns, 1986; Pryor, 1968, ch. IV), the relative efficiency of the two sectors (e.g., Judge, 1986; Sintonen, 1986), and the private–public mix in, and across, the different national healthcare systems (e.g., Rosenthal, 1992; Nicholl et al., 1989; Maynard, 2005; Poullier, 1986; Doyle & Bull, 2000; Banda & Simukonda, 1994; Besley & Gouveia, 1994; Roemer, 1984; Øvretveit, 2001).

When considering the Nordic case, the gap in the literature is, however, even more evident (e.g., Poullier, 1986), and the gradual privatisation of the Nordic countries' healthcare systems has not generated much attention from the respective countries' research communities. According to Øvretveit (2003), the scarcity of research on the private–public mix is therefore striking and apart from some research on co-payments, there is “no research which has documented and compared the trends, or considered the effects of changes” (Øvretveit, 2001: 13). Øvretveit furthermore describes the debate about the private sector as largely uninformed by facts about the extent and type of private-sector involvement that has taken place within the public sector. Nevertheless, a small selection of studies providing an overview of the role of the private sector within the Nordic or Scandinavian countries is available (e.g., Øvretveit, 2001, 2003; Møller Pedersen, 2005). The most significant messages of these studies are that there seems to be a common historical heritage for preferring public models for provision of basic services such as education, employment, healthcare and infrastructure in the Nordic countries, and that the knowledge about Nordic private healthcare in general is very limited. These studies do, however, seek

to remedy this absence by comparing the national private–public mixes and by describing the individual countries’ private shares in healthcare financing and provision.

A brief review of the existing literature on the Norwegian case largely supports Øvretveit’s observation of scarcity, as only a narrow range of issues is represented. In addition to the relatively limited number of studies on Norwegian primary care (e.g., Grytten et al., 2000; Sørensen & Grytten, 2000, 2003) there are broadly speaking three main groups of private providers that have been investigated: private contract specialists, private for-profit hospitals and private laboratories and X-ray institutes. The research topics can further be categorised into three groups: descriptive studies; theoretical studies; and studies combining theoretical and empirical analyses. Table 1 provides a schematic overview of the contributions within the abovementioned categories.

	Private contract specialists	Private for-profit hospitals	Private laboratory and X-ray services	Miscellaneous
Descriptive Financing Accessibility/interaction Localisation/scope	Iversen (2002); Brenne (2006) Husum et al. (2004) Eastern Regional Health Authority (2004); Northern Regional Health Authority (2005, 2006); Kjekshus and Jørgenvåg (2005); Jørgenvåg et al. (2000); Jørgenvåg & Kjekshus (2004); Aarseth (1998) Jørgenvåg (2006)		Hagen et al. (2005); Hagen et al. (2007)	Hofoss (1987)
Theoretical Financing/efficiency Waiting time Production	Iversen (1986); Hoel & Sæther (2000) Brekke & Sørsgard (2000)			Iversen (1987) Iversen (1997) ³
Theoretical/Empirical Competition Financing Physician choices/ practice combinations	Iversen & Kopperud (2002) Askildsen & Holmås (2004)			Andersen et al. (2006) Emblem (2003) Sæther (2005a, 2005b)

Table 1: Typology of the research literature on Norwegian private specialised healthcare according to type of study and segment of the private healthcare services investigated.

The first group represents *descriptive studies* and addresses aspects such as the financing of services, geographical location of private practices and the scope of private laboratory and X-ray services (Iversen, 2002; Brenne, 2006; Husum et al., 2004; Eastern Regional Health Authority, 2004; Northern Regional Health Authority, 2005, 2006; Kjekshus & Jørgenvåg, 2005; Jørgenvåg, 2006; Jørgenvåg et al., 2000; Jørgenvåg & Kjekshus, 2004; Aarseth, 1998; Hagen et al., 2005, 2007; Hofoss, 1987). These studies all provide important overviews of the distribution and extent of the various private healthcare services, but because of the recent changes in the private–public mix, their main challenge is the constant need to update the empirical information.

³ Although Iversen’s study does not address the Norwegian situation directly, the National Health Services (NHS) described in his theoretical model has evident similarities with the Norwegian healthcare system, and the study is therefore included in the typology.

The second group takes a rather *theoretical* approach and is concerned mainly with the private–public mix at the system level and how this affects other outcome variables such as the waiting time for treatment (Brekke & Sørsgard, 2000; Hoel & Sæther, 2000; Iversen, 1986, 1987, 1997). Because the Norwegian healthcare system historically has been largely public, both with regard to the financing and the provision of the services, these studies do not incorporate empirical analyses. Rather, theoretical models are outlined that predict how the private alternative and the interplay between private and public healthcare may affect various relevant outcome parameters. However, the recent increase in the number of new private for-profit hospitals has not generated many empirical studies to test the validity of the theoretical arguments set out in these works.

The third cluster of research contributions comprises empirical studies that *combine theoretical and empirical analyses* (Andersen et al., 2006; Askildsen & Holmås, 2004; Iversen & Kopperud, 2002; Sæther, 2005a, 2005b; Emblem, 2003). These address questions related to, for example, the introduction of market models in Norwegian healthcare (Andersen et al., 2006), financing of healthcare through health insurance (Emblem, 2003) and the physician’s choice of work between public and private hospitals (Askildsen & Holmås, 2004).

As seen from the matrix in Table 1, most of the studies performed so far are descriptive. Studies combining theoretical discussion with empirical analysis are, on the other hand, performed less frequently, and particularly rare are studies addressing the role of private for-profit hospitals. Among the theoretical and empirical analyses that have been performed, economic theories furthermore constitute the by far most frequent framework. This traditional dominance of economic theories within the healthcare literature is accompanied by a significant under-representation of other theoretical approaches. Given that several studies have found evidence of differences in variables such as the value orientation and the pecuniary versus non-pecuniary reward motivations of private and public-sector companies and employees (e.g., Le Grand & Robinson, 1989; Crewson, 1997; Brewer et al., 2000; Pratchett & Wingfield, 1996; Ahmed, 1996; Kernaghan, 2000; Wittmer, 1991; Rawls et al., 1975; Rainey, 1982; Gabris & Simo, 1995), research questions addressing also these aspects should

be investigated. Whereas economic theories have focused rather exclusively on pecuniary explanations of decision making and behaviour, the abovementioned studies suggest that also non-pecuniary explanations may be important. The combination of pecuniary and non-pecuniary explanatory models may therefore make the theoretical outline fit better with the real-world setting of the healthcare sector in general and the decision making by medical personnel in particular (cf. Frey, 1997).

When considering all facets of the private–public divide available for research, the scope of empirical studies performed to date is indisputably very limited. As the recent upswing in the private supply of healthcare services in Norway has broadened and diversified the labour market for physicians, the scant representation of empirical studies addressing the effects of this shift is quite striking. Especially striking is the lack of studies carried out on physicians’ sector-related choices. Moreover, physicians working in the private and public sectors have rarely been compared with each other to observe how they perform on interesting outcome variables such as labour supply, allocation of working time and the influence of contextual factors on their choices. The large spectrum of unanswered questions thus warrants more research on the topic.

This dissertation is made up of four essays that address the private–public divide in Norwegian specialised healthcare from different angles. More specifically, the geographic distribution of private and public specialised healthcare supply, the medical specialists’ sector choices and the effects of sector affiliation on allocation of working time and labour supply are assessed.⁴ The four research questions are specified as follows:

- (i) There are considerable differences in the use of private specialised care between the different geographic areas of Norway. How can differences in public and private healthcare supply between defined geographic localities be explained?
- (ii) Most Norwegian physicians are employed in the public sector, but lately the share of physicians taking full- or part-time jobs in the private sector has increased. What explains physicians’ sector choices? Is it primarily

pecuniary aspects, or are also non-pecuniary factors important? How do contextual factors contribute to the understanding of this particular type of job decision?

- (iii) Several studies have documented fundamental differences in the value orientation and motivation of private and public-sector employees, and those in the private sector are commonly found to be more highly motivated by extrinsic rewards than are their public-sector counterparts. However, most of the labour supply literature promotes only monetary explanations. How do pecuniary and non-pecuniary aspects relate to Norwegian medical specialists' labour supply, and are there sector-dependent differences?
- (iv) Internal organisation of work and available wage incentives are likely to vary between the private and the public sectors. These differences, together with the physicians' personal preferences and the demand factors in the surrounding populations, may affect allocation of available working time between patient-related work, administrative duties and research/educational job tasks. How does the internal organisation of work, wage incentives, personal preferences and demand-specific aspects relate to the relative time private and public medical specialists spend on the different job assignments?

A fuller outline of the research questions and the results obtained from the empirical analyses are found in Section 5 and Chapters 2–5.

The rest of this chapter continues as follows: First, in Section 2, the private element of Norwegian healthcare is discussed. Next, Section 3 outlines the theoretical approaches employed. Section 4 elaborates on topics related to the methods and data material, and Section 5 sums up the empirical evidence from the four essays. Finally, Section 6 concludes the chapter and presents some suggestions for future research.

⁴ This thesis focuses mainly on the supply side, and aspects of the demand side are therefore given a less central role.

2. The private sector

According to Saltman & Bergman (2005) the Swedish (and the Scandinavian) healthcare system is to a high degree characterised by the core social norms and values held by its citizenry, and first and foremost by equality and security values. Hence, the tax-based financing and the publicly operated hospitals characteristic for the Scandinavian countries may be seen as a reflection of the fundamental values deeply embedded in the countries' national character. As the Norwegian healthcare system traditionally has been a mainly public system, both with regards to the funding and the provision of specialised care, the most recent entry of private for-profit actors into the supply structure appears as somewhat of a novelty.⁵

Privatisation is a multifaceted concept and can take different meanings depending on the context in which it is applied. The long-lasting controversy associated with how the concept should be understood and defined is thus captured quite accurately by Morris (1999):

“The academic debate over privatization began in earnest some 25 years ago, and since that time scholars have searched for a conceptual framework that provides meaning to both academics and practitioners.” (Morris, 1999: 152)

Despite this debate over which aspects of change a privatisation term should cover, most researchers agree that it captures a range of service arrangements that may be used by public decision makers (e.g., Morris, 1999; Starr, 1988; Bach, 2000; Øvretveit, 2001, 2003; Braddon & Foster, 1996), and that represents a change “from an arrangement with high government involvement to one with less” (Savas, 1987: 88). Correspondingly, this means a change to an arrangement where the private sector plays a more dominant and active role. Due to this broad meaning of the privatisation concept, it has been applied to describe a diverse set of models (e.g., Øvretveit, 2001, 2003; Bennett, 1996; Berman, 1996; Maynard, 2005; Bach, 2000; Le Grand & Robinson, 1989), and over time numerous measures have, as a result, been embraced by the concept.

⁵ See the appendix for an account of the contextual and distinctive historical characteristics of the Norwegian healthcare system.

According to Iversen (1985), privatisation (and changes in privatisation) can be observed along at least three dimensions: financing, ownership and control. With regard to the financing of services, private elements incorporate arrangements such as out-of-pocket payments from the users/consumers and the purchase of private or company insurances. Ownershipwise the units providing services are most frequently organised as either fully publicly owned institutions, institutions owned by private non-profit or for-profit organisations or practices owned partially or fully by the personnel working there. Finally, the control exercised over private institutions by the central authorities may influence the degree of actual independence and autonomy enjoyed by the enterprises/practices. Iversen's privatisation dimensions are revisited and discussed more thoroughly in relation to the Norwegian specialised healthcare system in Sections 2.2 and 2.3.

2.1 Privatisation of healthcare

The private–public mix of provision and funding of healthcare services differs somewhat within the various healthcare models. For example, the American model is based heavily on private insurances paid either by the individuals themselves or by their employers, and except for Medicare and Medicaid arrangements, which provide free healthcare to elderly, disabled and indigent people, most of the provision of care takes place within private hospitals. The two most common healthcare models in Western Europe—the Beveridge and Bismarck models—involve less reliance on private solutions, and although the Organisation for Economic Co-operation and Development's (OECD's) overviews show that private funding (co-payments or payment of insurance premiums) is somewhat more common within the Bismarck than in the Beveridge model, the private element in the Bismarck–style systems is still very moderate (see Table 2). Furthermore, both Beveridge- and Bismarck-style models are known to have relatively extensive public safety nets for their populations.

Public–private mix	Country
Mainly public provision, public finance	Denmark, Finland, Greece, Iceland, Ireland, Italy, Norway, Portugal, Spain, Sweden, United Kingdom
Mixed provision, public finance	Australia, Austria, Belgium, France, Germany, Japan, Luxembourg, New Zealand
Mainly private provision, public finance	Canada
Mixed provision, mixed finance	Netherlands
Mainly private provision, private finance	Switzerland, United States

Table 2: Classification of countries by public–private mix of provision and finance in healthcare (Source: OECD classification reproduced in Propper & Green, 1999).

As can be seen from Table 2, most countries with Beveridge-style models have a predominantly public funding and provision regime.⁶ In contrast, countries with social health insurance (SHI) financing have a somewhat more mixed distribution of providers.⁷ In these countries it is for instance not uncommon for sickness funds to contract with private providers of specialised care.

In the Norwegian healthcare system, both funding and provision of services have historically been largely public. Although the overall financing of specialised healthcare still remains public, the traditional public delivery of services has been challenged in the past decade. The most pronounced change has involved the establishment of several private for-profit hospitals and the increased interest taken in the role of the private contract specialists (e.g., Northern Regional Health Authority, 2005, 2006; Eastern Regional Health Authority, 2004). Although the Norwegian healthcare system also includes other private actors, such as private specialists without contracts,⁸ private laboratories and X-ray institutes,⁹ hospitals owned by

⁶ For a more detailed description of the private–public mix in Scandinavian healthcare, see e.g. Møller Pedersen (2005).

⁷ Switzerland and The Netherlands have chosen somewhat atypical solutions, with mainly mixed or private providers. Consult Exter et al. (2004), Minder et al. (2000) and Saltman et al. (2004) for a more detailed outline.

⁸ Private specialists without contracts receive neither grants from the RHAs nor reimbursement from the National Insurance Scheme (NIS), and consequently they base their practices on income from out-of-pocket payments and reimbursements from private insurance companies. At present approximately 0.6 per cent of the Norwegian population is estimated to be covered by some sort of private insurance (special voluntary supplementary health insurance) (Møller Pedersen, 2005). The size of the patient fees and the payments from private insurance companies are naturally not subject to any comprehensive controls or regulations by central government (Iversen, 2002), and thus little statistics and information are available about these practices' income and activity.

⁹ The scope of activities and costs of private laboratories and X-ray institutes are quite substantial, and altogether private X-ray institutes produce approximately one third of the total services, while private laboratories perform approximately 17 per cent of all laboratory tests each year (Hagen et al., 2005). The division of work between the private and the public units are, however, rather uneven, as the

private non-profit organisations¹⁰, private general practitioners (GPs),¹¹ private physiotherapists, private pharmacies and private dentists,¹² the main focus henceforth in this thesis will be on private contract specialists and private for-profit hospitals, which at present represent the two perhaps most dominant private elements within the Norwegian specialised care provision.¹³

2.2 Private contract specialists

During the past decades, the number of contracts held by private specialists has been highly dependent upon the central and local legislation guiding their rights and duties. The arrangement with grants from the counties was established in 1984, before which time the private specialists were not subject to any direct public control. Furthermore, the specialists' financial incentives to enter contracts were largely absent until 1998, when all private specialists had to enter contracts with the counties to be entitled to reimbursements from the NIS. Consequently, the growth in the number of contract practices following this change in reality only reflected a desire for tighter central control over this group of specialists, and did not imply an increase in the number of private practices in real terms.

The entered contracts were differentiated according to size (20–100 per cent of an estimated man-labour year/full-time equivalent (FTE)) and categorised in different

private X-ray institutes are mainly concerned with mammography-, ultrasound-, computerised axial tomography (CAT)- and magnetic resonance imaging (MRI) examinations without the use of contrast fluid, and public hospitals are in charge of the more advanced consultations. As for the laboratory services, public laboratories naturally perform more acute testing than their private equivalents.

¹⁰ For a description of Norwegian somatic hospitals' ownership structure throughout the 1990s, see e.g. Hansen (2001).

¹¹ For more detailed information about the contract design of, and service provision by, Norwegian GPs, consult Sørensen & Grytten (2000, 2003) and Grytten et al. (2000).

¹² Private physiotherapy and dentistry are discussed more thoroughly by, e.g., Hofoss (1987) and Møller Pedersen (2005). Also see Møller Pedersen for an outline of the organisation of pharmacies.

¹³ Patients can be referred directly by their GP to a private contract specialist or a private for-profit hospital holding a contract. They may also choose themselves to be referred to a private practice or institution, or be transferred following consultation in a public hospital. However, for treatment to be covered by public financing arrangements, the patients should be referred by a hospital physician or a GP (cf. Eastern Regional Health Authority, 2004).

expense classes.¹⁴ The marked increase from 1997 to 1998 in the number of contracts and FTEs comprised by contracts is shown in Table 3.¹⁵

	1991	1997	1998	2001	2004
Internal medicine	54 (49)	48 (43)	99 (75)	98 (73)	87 (66)
Dermatovenereology	30 (28)	34 (31)	66 (53)	66 (54)	71 (55)
Paediatrics	20 (19)	18 (17)	44 (34)	43 (33)	42 (28)
Neurology	6 (5)	7 (6)	25 (15)	23 (14)	27 (14)
General surgery	5 (4)	6 (5)	34 (20)	27 (14)	21 (14)
Obstetrics-gynaecology	53 (49)	45 (43)	103 (85)	103 (87)	104 (88)
Rheumatology	4 (4)	4 (4)	16 (10)	16 (10)	15 (9)
Otorhinolaryngology	42 (41)	52 (47)	102 (71)	136 (91)	137 (91)
Ophthalmology	82 (79)	92 (86)	138 (109)	177 (137)	195 (152)
Other speciality	7 (6)	11 (10)	63 (34)	87 (42)	102 (53)
Total	303 (285)	317 (291)	690 (507)	776 (555)	801 (569)

Table 3: Number of contracts per speciality (FTEs in parentheses), 1991, 1997, 1998, 2001 and 2004. (Source: Statistics Norway).

The largest absolute increase in both the number of contracts and the FTEs throughout the period from 1991 to 2004 occurred for the otorhinolaryngology and ophthalmology specialities. Moreover, as shown in Figure 1, the total increase was larger for the number of contracts than for the number of FTEs, implying that a relatively high frequency of contracts cover less than 100 per cent of an estimated man-labour year.¹⁶

¹⁴ The contracts are placed in different categories (class 1–3) based on, i.e., the need for expensive equipment and assistant personnel and the costs of hiring the premises of the practice. The different classes qualify for unequally sized grants (The Norwegian Medical Association, 2005).

¹⁵ For a more detailed account of the institutional framework for private contract specialists, consult Middtun & Hagen (2006).

¹⁶ A 100 per cent practice contract is estimated to equal 37.5 hours a week of work during at least 44 weeks of the year. The lower limit for the size of the contracts is set at 20 per cent (The Norwegian Medical Association, 2005).

Number of private specialist contracts and FTEs 1991-2004

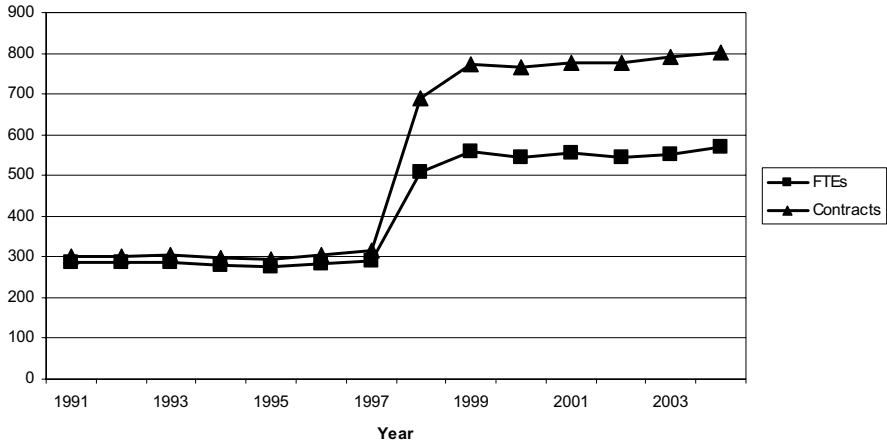


Figure 1: Number of private specialist contracts and FTEs, 1991–2001, excluding psychiatry. (Source: Statistics Norway).

Geographically, the private contract specialists are distributed relatively unevenly, and the Eastern RHA has entered the by far highest number of contracts within each field of speciality. The gaps with the other regions are most marked with respect to otorhinolaryngology, paediatrics, obstetrics-gynaecology and ophthalmology (cf. Table 4).

	East	South	West	Mid-Norway	North	Total
Internal medicine	48 (2.9)	21 (2.4)	7 (0.7)	7 (1.1)	4 (0.9)	87 (1.9)
Dermatovenereology	35 (2.1)	14 (1.6)	9 (1.0)	11 (1.7)	2 (0.4)	71 (1.6)
Paediatrics	31 (1.9)	3 (0.3)	1 (0.1)	6 (0.9)	1 (0.2)	42 (0.9)
Neurology	12 (0.7)	6 (0.7)	4 (0.4)	3 (0.5)	2 (0.4)	27 (0.6)
General surgery	9 (0.5)	5 (0.6)	3 (0.3)	3 (0.5)	1 (0.2)	21 (0.5)
Obstetrics-gynaecology	44 (2.7)	24 (2.7)	20 (2.1)	8 (1.2)	8 (1.7)	104 (2.3)
Rheumatology	7 (0.4)	3 (0.3)	4 (0.4)	0 (0.0)	1 (0.2)	15 (0.3)
Otorhinolaryngology	62 (3.8)	23 (2.6)	26 (2.8)	15 (2.3)	11 (2.4)	137 (3.0)
Ophthalmology	76 (4.6)	38 (4.3)	34 (3.6)	28 (4.4)	19 (4.1)	195 (4.3)
Other speciality	45 (2.7)	13 (1.5)	31 (3.3)	8 (1.2)	5 (1.1)	102 (2.2)
Total	369 (22.5)	150 (16.8)	139 (14.8)	89 (13.8)	54 (11.7)	801 (17.5)

Table 4: Number of contracts per speciality (contracts per 100,000 inhabitants in parentheses) for the Norwegian RHAs in 2004, excluding psychiatry. (Source: Statistics Norway).

The table shows further that the Eastern RHA has the highest number of contracts both in absolute figures and relative to its population size, with more than 20 contracts per 100,000 inhabitants. The Southern, Western and Mid-Norwegian RHAs have relatively similar rates of 17, 15 and 14 contracts per 100,000 inhabitants, respectively. Even when standardising the figures for population size, the Northern RHA's contract frequency is clearly lowest, and in this region, fewer than 12 contracts are entered per 100,000 inhabitants. Nevertheless, figures from the Northern RHA indicate that about 25 per cent of the somatic elective outpatient activities is provided by private contract specialists, and that as much as 73 per cent of the outpatient consultations performed within the field of ophthalmology, and 40 per cent within the otorhinolaryngology speciality, is conducted by private specialists (Northern Regional Health Authority, 2005; Jørgenvåg, 2006).

Table 4 moreover reveals that only the Eastern RHA has a total rate above the mean national rate. This suggests that the Eastern region is substantially overrepresented with regard to the scope of contracts entered.

If we inspect the private contract specialists using Iversen's (1985) three dimensions of privatisation—financing, ownership and control—we see that the specialists' main sources of *financing* are fee-for-service reimbursements from the NIS, operating

grants from the RHAs, activity-based financing (ABF) for day surgery (from 2001), co-payments from patients and full out-of-pocket payment by some of the patients. Co-payments from patients contribute, however, only marginally to the contract specialists' total incomes. As for the size of the operating grant this varies according to which of the three classes the practice is placed within and the size of the contract (20 to 100 per cent of an estimated man-labour year/FTE). The financing is therefore determined, to a high degree, by the RHAs and central government, which decide on the scope of the ABF-financed day surgical activity outsourced, the size of the private practice contracts and the generosity of the NIS tariffs.¹⁷

The *ownership* of the practices is defined as private (e.g., sole proprietorships, individual enterprises or limited companies), and the specialists are self-employed. When the specialist holding the contract approaches the age of retirement or for other reasons decides to sell the practice, the practice is transferred to a new specialist, who is often recommended by the previous owner. If the parties cannot agree upon a price, a publicly appointed committee settles the dispute. The RHAs are, however, responsible for the final decision about the transfer of the contract, and may even alter the location or the field of speciality for which the contract applies (The Norwegian Medical Association, 2005; Northern Regional Health Authority, 2005). The RHAs are also able to change or even cancel existing contracts.

Many of the contract practices' framework conditions—especially those related to funding—are *controlled* centrally. The overall conditions and juridical terms of the agreements are for instance initially negotiated between the Norwegian Medical Association and the RHAs, and documented in the central framework agreement. Next, individual contracts, negotiated within the framework of the abovementioned agreement, are outlined between the respective RHA and the individual contract specialist. The contracting process is thus subject to relatively strict control by the regional authorities and the Norwegian Medical Association, and until only recently the RHAs had the opportunity to, e.g., instruct contracted specialists to conduct up to eight hours of public work per week (The Norwegian Medical Association, 2005). The contract specialists have therefore been subject to significant public control and

¹⁷ For a more detailed elaboration of the financing arrangements for the Norwegian contract specialists,

the increased integration in the overall planning and co-ordination of the RHAs (e.g., Eastern Regional Health Authority, 2004; Northern Regional Health Authority, 2005, 2006) has to some extent contributed to a further curtailment of their autonomy. In summary, the private contract specialists are thus influenced rather heavily by central government and the RHAs, especially with regard to the financing and control exercised throughout the contracting process. Substantial interventions are also in place to control the ownership of the practices. Nevertheless, the ownership is private and the volume of their activity is not, and has not been, subject to any public restrictions. Consequently, the private contract specialists are regulated heavily within some realms of their practice, but enjoy more independence within others.

2.3 Private for-profit hospitals

The first Norwegian private for-profit hospital (Ringsenteret, later Volvat) was established in 1985 (Berg, 2006). Because the idea of commercial hospitals was quite new at the time, the pace of the establishing of this type of hospital was modest at first, and by 2001 only six private for-profit hospitals were authorised by the Ministry of Health. Gradually, however, the authorities embarked on a privatisation strategy, which accelerated the increase in the number of licensed private for-profit hospitals. One of the efforts making large-scale outsourcing of day surgical activities to the private sector possible was the 1999 resolution to integrate day surgery in the ABF system. Together with the Ministry of Health's pronounced increase in the number of authorisations, this led to a peak in the number of commercial hospitals. Boosted by the guidelines drawn up by the 2002 hospital reform, which emphasised the equal status of private and public healthcare providers in the quest towards achieving the specialised healthcare sector's goals, the use of private healthcare services expanded even further. By 2004, Norway therefore had 28 licensed private for-profit hospitals (see Table 5). Most of these were located in the largest cities and in the central eastern and southern parts of Norway, surrounding the capital city Oslo.

consult Midttun & Hagen (2006).

Hospitals	Location	Degree of centrality ¹⁸
Omnia sykehuset	Kristiansand	7
Omnia sykehuset	Bergen	7
Ishavsklinikken	Tromsø	7
Vestnorsk Ortopediske sykehus (Casperkollen)	Bergen	7
Haugesund Lasersenter a/s	Haugesund	7
Fana medisinske senter	Bergen	7
Rosenborg sportsklinikk a/s	Trondheim	7
Medisinske senter a/s	Telemark	Mean value Telemark county: 4
Volvat Medisinske senter	Oslo (Bergen, Fredrikstad, Hamar)	7
Volvat – enhet for spiseforstyrrelser, Vestfold	Tønsberg	5
Axess sykehus og spesialistklinikk	Oslo	7
Ringvoll Klinikken	Hobøl, Askim	5
Medi 3	Ålesund	6
Medi 3	Molde	6
Drammen private sykehus	Drammen	7
Klinikk Stokkan	Trondheim	7
Klinikk Stokkan	Tromsø	7
Colosseumklinikken	Oslo	7
Colosseumklinikken	Stavanger	5
Vestfjordklinikken	Bodø	6
Trondheim Spesialistlegesenter	Trondheim	7
Norsk Idrettsmedisinsk Institutt	Oslo (Haslum, Slemmestad, Beitostølen, Hønefoss)	7
Moxness Klinikken	Trondheim	7
Mjøs–kirurgene	Gjøvik, Lillehammer	5, 7
Idrettsklinikken a/s	Fredrikstad	5
Haugesund private sykehus	Haugesund	7
Klinikk Bergen/Bergen Ortopediske Sykehus	Bergen	7
Spesial-Helse-Senteret–MosseAkutten	Moss	5

Table 5: Norwegian authorised private for-profit somatic hospitals, 2004 (Source: Legekonsten, 2005^a).

As a result of the widespread authorisation of private for-profit hospitals and the subsequent contracting between some of these hospitals and the RHAs, the privately produced proportion of the total diagnosis-related group (DRG) production increased from 0.5 per cent in 1999 to 3.3 per cent in 2004. If looking at only the day surgical activity, which represents the greater part of the private for-profit hospital activity, private for-profit hospitals accounted for 45 per cent of the total increase from 2001 to 2004 (The Norwegian Patient Register, 2006).

¹⁸ The degree of centrality of the municipality in which the hospital's main location is, as specified by Statistics Norway's centrality index (see Norsk Offentlig Statistikk, 1993). The centrality index can vary from 1 to 7 and is based on the population density and the geographic position of the municipality in relation to a centre where a higher order of central functions is found (Midttun, 2007c; Norsk Offentlig Statistikk, 1993). The higher the value on the index, the more centrally located the municipality.

Analysing the privatisation represented by private for-profit hospitals along Iversen's (1985) key dimensions of privatisation (financing, ownership and control) shows that the enormous growth in the commercial hospitals' activity following the hospital reform should be viewed in relation to the RHAs' *financing* of a substantial part of this activity. In the wake of the reform, extensive contracts were namely entered between several private for-profit hospitals and the RHAs to reduce the waiting lists and waiting times for patient treatment and to remedy the problems caused by high occupancy rates at the public hospitals. Some of the contracts were limited to a certain number of consultations or admissions, whereas others only defined the economic terms (price per DRG) of the agreement (i.e., no upper limit for the private hospitals' production volume was specified). Frequently, the reimbursement size was given as a proportion of the DRG price for the current patient group, and the contracts usually lasted two to three years before new tenders were invited. In addition to the negotiated DRG prices, some of the private for-profit hospital's income is generated by co-payment from patients, but the scope of these payments is only minor and their proportion of the overall finances even decreased somewhat from 1990 to 2000 (cf. Møller Pedersen, 2005). However, some of the treatment provided at private for-profit hospitals is financed entirely by out-of-pocket payments by the patients (e.g., for plastic surgery performed mainly for cosmetic rather than medical purposes). Finally, the NIS has each year purchased specialised healthcare services from private for-profit hospitals for treatment of a number of wait-listed patients on sick leave.¹⁹

The *ownership* of the private for-profit hospitals is, naturally, in private hands, and the hospitals are organised, most frequently, as private limited companies with private shareholders. According to Øvretveit (2001), for-profit health organisations are "commercial businesses which exist to provide a return on the finance invested by shareholders" (Øvretveit, 2001: 30), and the ownership structure thus indicates that the private for-profit hospitals, as independent contractors, are under less central *control* than are the public hospitals. The independence of private for-profit hospitals is nevertheless limited by central authorities in many respects. First, because the

¹⁹ The private for-profit hospitals receive no basic grants from the central government and are not entitled to regular fee-for-service reimbursements from the NIS for outpatient consultations (Stortingsmelding nr. 5 (2003–2004)).

hospitals are not given ABF reimbursements for treatments other than those specified in the contracts with the RHAs (cf. Ministry of Health, 2002), the relative downscaling of the volume of the activities contracted out during the last bidding round led to severe financial problems for many commercial hospitals (cf. Legekunsten, 2005^b). Second, central government can exert significant control through their role as administrator of the hospital authorisation process. Third, in more principal issues, such as advertising regulations, the private for-profit hospitals' room to manoeuvre has been narrowed somewhat by the central authorities' legislation.

To summarise, the degree of "privateness" associated with the private for-profit hospitals is strongest with regard to the ownership structure. There is, on the other hand, substantial public intervention in the funding of the hospitals' activity. Furthermore, if compared with the private contract specialists, the contracting process has imposed much tighter control on the activity volume, and thereby on the public reimbursements these hospitals receive.

3. The theoretical approach

As outlined in the introductory section, the aims of this dissertation are to describe and analyse the private–public mix in Norwegian specialised healthcare and to study the vocational choices and labour supply of medical specialists with private or public-sector affiliation. These objectives are related to two analytical levels: the physician level and the local or regional contextual level, and theoretically as well as empirically, both economic and non-economic incentives of decision making and behaviour are considered. Although this may seem ambitious, the relatively wide scope of the aim mirrors the extremely complex nature of the issues at hand. Work values, context-dependent aspects, personal attributes, job-related factors and economic incentives are therefore considered combined when analysing and explaining the empirical material.

Throughout the empirical part of the dissertation, theoretical approaches related to rational choice theory are applied. In Sections 3.1 and 3.2 the explanatory mechanisms and characteristics of rational choice models are therefore briefly

accounted for. An outline of an “extended” model is discussed in more depth in Section 3.3.

3.1 Scientific explanations and explanatory mechanisms

When discussing what scientific explanations more fundamentally are, and which functions they should fulfil, the two extreme points of covering law and hermeneutics are often referred to. As regards the former, the covering law model is frequently termed “the deductive-nomological model” (Skog, 1998) and associated with the works of Carl G. Hempel (Hempel, 1966). Basically, the covering law model prescribes explanation of empirical observations by means of general laws, through statements such as “phenomenon B occurred because condition A was present, and because law L states that when this condition is present B will occur” (cf. Skog, 1998). The covering law model furthermore outlines relatively strict standards for calling an explanation a “scientific explanation”. For an explanation to fulfil these requirements, it should be a deduction of a statement (explanandum) where the premises (explanans) are scientific laws (Hempel, 1966). According to the covering law perspective, explanations are thus only to be accepted as scientific and valid in “deductive-nomological” respects if the premises on which they are based are true, i.e., the explanandum is a logical consequence of the explanans. Because of these relatively strict requirements, the covering law model is often described as highly mechanical and deterministic (cf. Hovi & Rasch, 1996). A less restrictive type of explanation is represented by the inductive-statistical model. The laws included in these models only need to be of a statistical character, i.e., expressing the *likelihood* of B resulting from the presence of A. According to Hempel, the magnitude of the probabilistic statements should, however, be high and the likelihoods preferably close to 1 (Hovi & Rasch, 1996).

The other extreme point when discussing explanations is represented by hermeneutics or phenomenology. According to the interpretive view promoted by this side, human behaviour cannot, and should not, be explained through application of the covering law principles. Rather, understanding the intentions and fundamental meanings guiding human behaviour and action is assumed to be the key, and no human action is

thus believed to follow *necessarily* or *logically* from some closer specified motives or incitements (cf. Hovi & Rasch, 1996).

Numerous objections have been put forward against both the covering law approach and the hermeneutic view, and the two respective sides probably represent each other's most eager opponents. A middle position is, however, offered by the "mechanism explanations", which does not seek to establish general psychological laws, but focuses instead on behavioural dispositions or tendencies. The most common and general explanatory principle applied within the mechanism perspective is furthermore the assumption of some sort of rational behaviour (Hovi & Rasch, 1996). The decisions that individuals arrive at are therefore assumed to be based on rational reasoning pursuant to the person's preferences, the information available, etc. When applying mechanism explanations, more loosely defined laws are thus applied instead of the traditional general laws prescribed by the covering law approach. Hence, statistical statements take the roles of explanans, with the inevitable consequence that the room for predictions and generalisations are limited accordingly. Hovi & Rasch (1996) explain mechanism explanations as follows:

"If the explanandum is an observed regularity, correlation or tendency etc. then this can be explained through law subsumption, even though the general laws in questions are in fact [only] of a statistical nature, i.e., expressions of propensities and tendencies. Strictly speaking, this means that the most relevant structure for explanations within disciplines such as political science is primarily the deductive-statistical one rather than the deductive-nomological. In both cases, the deductive element is, however, ensured (as opposed to in the inductive-statistical explanations): The explanandum phenomenon is to be expected on the basis of the premises given." (Hovi & Rasch, 1996: 56, my translation)

Within the social sciences most explanations are probably placed somewhere between the two extremes of covering law and hermeneutics, an observation highly congruent with the understanding communicated by Skog (1998). Skog states, namely, that the social sciences tend to explain events without presupposing that they necessarily had to take place, but with an assumption that they were *rational* given the preferences or opinions of the actors involved and the particular circumstances in which the incidents took place (Skog, 1998: 30). The empirical studies incorporated in this dissertation

offer neither explanations of a deductive-nomological character, nor do they surrender completely to phenomenological reasoning. Instead, the explanations follow the mechanism explanations approach and are, as in most social scientific works, of a more probabilistic style. The choices and decisions of the medical specialists are therefore, on the one hand, not assumed to be explained entirely by one or a few general law-like explanans, yet, on the other hand, they are neither believed to be without similarities within or across the different groups. The types of explanations offered in the empirical part is therefore highly similar to the mechanism approach and can, as a result, be placed somewhere between the extremes of covering law and hermeneutics.

3.2 A rational choice model of decision making

Rational choice theory is generally acknowledged as an economic theory, which gradually throughout the 1960s, became embedded in the social sciences. Originally associated with methodological individualism and a genuinely microeconomic approach, Olson's (1965) contribution, called "the logic of collective action", represented the first attempt to include social actors and the concept of collective rationality into the theory. This relatively controversial endeavour slowly extended the rational choice models to the fields of psychology and sociology.²⁰

According to classical rational choice theory, human behaviour is assumed to be directed by reason and guided by instrumentality, i.e., the best available means to pursue the desired ends is expected to be chosen (e.g., Elster, 1992). For a choice to be rational, it should furthermore be based on complete information and consistency in the ranking of preferences (the transitivity requirement). In the ideal model of rational choice, individuals are therefore thought to have complete information about all alternative courses of action available and to foresee all possible consequences of these actions, in particular with regard to their goal achievement potential. Based on this information, the actor is assumed to be able to range his or her preferences in a consistent, transitive manner and to reach a decision that maximises his or her utility.

²⁰ For a more thorough discussion of this and related topics, consult e.g. Zey (1998).

This traditional view of rational choice theory has, however, been discussed extensively and challenged. The criterion of transitivity has for instance frequently been accused of not necessarily condition rational decision making (Arrow, 1982; Miljkovic, 2005). In addition, Elster (1992) addressed some of the other aspects considered as major shortcomings of the classical version of the theory, and questioned i.a. the requirement of an absolute form of instrumental rationality. According to Elster, the assumption of instrumental rationality is namely utopian as individuals can only act rationally insofar as they decide in favour of the means that they *believe* to be most optimal. This implies that the chosen alternative is not necessarily the best option available per se, but the best option that the person has knowledge of. Elster (among others) also claimed that maximisation of expected utility always takes place within a particular contextual time and space, and that the time perspective within which the decision has to be reached may impose severe constraints upon the ability to arrive at optimal outcomes. In certain settings, it may therefore appear as more rational for an actor to make a relatively quick, but sub-optimal decision instead of a more time-consuming optimal choice. In the literature, the former type of suboptimal decision making has been termed “satisficing”, whereas the latter type is commonly called “optimising” (cf. March & Simon, 1958).

“(…) a further imperfection in human rationality—one which inevitably concerns all of us—is due to the fact that it may take too much time, energy, etc. to calculate the global maximum within the range of the present possibilities. Worse, often we do not even know how much time such a calculation would cost. In many cases we should therefore be satisfied with a local maximum (...) That is to say, since there is no instant rationality, we shall often have to opt for some local maximum. The theoretical concept of rationality as global maximum has to give in to the practical concept of satisficing rationality.” (Derksen, 1984: 556)

To an increasing extent, particularly within the social sciences, this type of bounded rationality is considered to fit better to the real life setting than the perfect (instrumental) rationality concept. Furthermore, the critique targeted at rational choice theory, which attacks the assumption of fully informed individuals, has led to the development of more complex game theoretical models, in which the challenges induced by uncertainty and asymmetric and imperfect information to some degree are met. The incorporation of information shortcomings is for instance dealt with through

the modelling of, e.g., games with multiple participants, participants with limited information, players with cooperative or non-cooperative strategies and games integrating dynamic elements. Some of the most well-known games are the “principal-agent games”, whose typical characteristics are the imperfect information held by one or both parties in the relationship. Other well-known games are the prisoner’s dilemma game, the chicken game and the tragedy of the commons.

As mentioned in the introduction, different conceptions of rationality can be found within the literature. Elster, for instance, makes a distinction between a “thin” and a “broad” theory of rational choice. Whereas the “thin” theory is characterised by “fixed preferences, cardinal utilities, subjectively construed probabilities, and conformity to appropriate axioms of choice” (Little, 1992: 1), the “broad” approach addresses also the deliberation of how preferences arise and potentially change over time. The broad approach moreover stresses the need for preferences to be based on autonomous and reflected reasoning to facilitate rational decision making (Hovi & Rasch, 1993). Although the main focus within neoclassical economy traditionally has been on the thin variant of rationality—with material costs-benefits trade offs and the economic logic of individuals (and firms or institutions) dominating—immaterial preferences, norms and rule following, and how these aspects influence rational decision making, are considered in other variants of rational choice models (e.g., Zey, 1998). Within the vocational behaviour literature, research on work values has for instance revealed that immaterial, non-pecuniary aspects may affect job-related decision making. Work values are therefore commonly seen as part of a person’s intrinsic motivational structure and assumed to be more stable and fundamental than other sources of motivation and highly changeable preferences. According to, e.g., Vroom (1995) and Lawler (1971), individuals are prone to maximise also their non-pecuniary values, a point highlighted in particular within the expectancy-valence theories. The expectancy-valence theory therefore prescribes investigation of not only the person’s values, but also the understanding the person has about the compatibility between his or her value structures and the different courses of actions available. I will return to a more extensive discussion of work values shortly (see Section 3.3).

In the article addressing the private–public mix within the counties (see Chapter 2), a basic rational choice model is applied, and, according to Hagen (1995), the demand

model is an archetype of rational choice models. In its basic form, the model is, however, relatively simple, specifying only that revenues generate expenses. Despite its simplicity, the model often provides a very useful starting point when investigating also rather complex research questions. In the abovementioned article, the counties were assumed to apply a rational, utility maximising strategy and, given the contextual horizon they operated within, to decide for the course of action that best optimised their gains. Furthermore, the model was expanded to incorporate elements documented to be important in similar studies. Features such as the political composition of the county council, the size and the age composition of the population and factors associated with the settlement pattern were thus included in the model.

In contrast to the relatively simple demand theoretical framework, the articles addressing medical specialists' decision making and behaviour allow more explicitly for inclusion of also non-economic arguments in the models. This is discussed in more detail throughout the next section.

3.3 Integrating work values into medical specialists' decision-making functions: non-economic explanations of physicians' behaviour and decision making

Although economic motives for job-related decision making are mentioned frequently in the literature, a growing interest in also non-economic explanations has developed gradually. While the economic theories have focused traditionally on motivation coming from outside of the person (extrinsic motivation), mainstream psychology emphasises motivation coming also from within the person (intrinsic motivation) (Frey & Jegen, 2001). This latter type of motivation is given special priority in the literature addressing work values (e.g., Dose, 1997; Krausz, 1982; Pryor, 1979).

Frey (1997) emphasised that the combination of psychological and economic perspectives facilitates simultaneous inspection of intrinsic and extrinsic motivation, and thereby makes possible an adjustment of the traditional economic theoretical outline. He furthermore described the rationale for combining economic and psychological approaches as follows:

“Human motivation is not restricted to monetary incentives. In addition to the *extrinsic motivation* induced from outside, *intrinsic motivation* is also crucially important. People do things by intrinsic motivation when they just enjoy doing them, such as playing cards with friends the whole night, jogging for miles, climbing high mountains, spending hours solving crossword puzzles, contributing anonymously to a charitable organization, or working without compensation in a developing country’s hospital. Intrinsic motivation goes, however, far beyond such partial examples (...). It is [therefore] inconceivable that people are motivated solely or even mainly by external incentives.” (Frey, 1997: ix)

Several studies of job-related decision making and behaviour of physicians have lately included non-pecuniary characteristics or combined economic and non-economic explanations in their explanatory models (e.g., Sønnebø-Kristiansen, 1996; Kankaanranta et al., 2006a; Kankaanranta et al., 2006b; Antonazzo et al., 2003; Eisenberg, 1986; Scott, 1997, 1999, 2001; Ubach et al., 2003; Woodward & Warren-Boulton, 1984; Farley, 1986). For instance, the studies performed by Sønnebø-Kristiansen (1996), Woodward & Warren-Boulton (1984) and Farley (1986) integrate arguments based on medical ethics to explain doctors’ behaviour. Similarly, Goodman & Wolinsky (1982) investigated how persons with high income in general make career decisions that offer greater non-pecuniary rewards than others.

Since the empirical evidence in the literature supports both pecuniary and non-pecuniary explanations of job-related behaviour and decision making, another question surfaces: Is the relative influence of economic and non-economic factors equal across the different sector groups? Within the vocational behaviour literature, several studies have found striking differences in the value orientation of individuals working in the private and public sectors (e.g., Le Grand & Robinson, 1989; Crewson, 1997; Brewer et al., 2000; Pratchett & Wingfield, 1996; Ahmed, 1996; Kernaghan, 2000; Bach, 2000; Nalbandian & Edwards, 1983; Wittmer, 1991). For instance, Pratchett & Wingfield (1996) found striking differences between the public sector and the other sectors of the economy with regard to the motivation of the persons working there. They ascribed the differences mainly to the recruiting of “a homogenous group of people that bring with them a set of values and attitudes towards public life (...) and who share common values” (Pratchett & Wingfield, 1996: 111). The people working in the public sector were consequently assumed to employ a particular set of values already before they start working there. This understanding is partially

congruent with the understanding communicated by Hall et al. (1970) and Vroom (1966), who argued that the selection of an organisational career is deeply embedded in some important facets of the person's identity. Hall et al. suggested, however, that the particular career-relevant aspects of the individual's identity is likely to be developed further relative to other parts of the identity when entering the particular job, and that a reciprocal exchange between the person's original values and the values encouraged and promoted in the job setting continues as a person's career develops. Hence, the work value literature does not provide any clear-cut, unambiguous answers about how work values origin or develop.

As for the question of sector-related discrepancies in work values, the published research literature has overall concluded that the main distinction is between the focus on service in the public sector as opposed to profit in the private sector. For instance, Pratchett & Wingfield (1996) find that the "not-for-profit" motive is considered the hallmark of the public service ethos among those employed in the sector. In a recent study, Brewer et al. (2000) provided further support for this view by categorising the conceptions of public service providers' motives into the four categories: "samaritan", "communitarian", "patriotic" and "humanitarian". Other studies investigating both private and public-sector employees also accentuate the contrast in motivation between the two groups (e.g., Crewson, 1997; Wittmer, 1991; Rawls et al., 1975): Whereas the public service motivation is described as highly influenced by intrinsic values, the private-sector motivation is reported to be characterised by aspects of a more extrinsic character. The studies by e.g. Rainey (1982), Baldwin (1987) and Gabris & Simo (1995), do, on the other hand, report less clear value- and motivational differences between the sectors.

In the articles of this thesis addressing sector choices (Chapter 3), labour supply (Chapter 4) and work time allocation among the medical specialists (Chapter 5), the rational choice models are expanded to include also non-economic explanatory factors. In the two former articles, the non-economic aspects are represented by a set of three work value indices, while other work-related preferences are included in the latter article. Although the work value concept has various meanings, the understanding of the concept in this thesis is that it represents values of a principal and intrinsic character, which are part of the individual's intrinsic value system. The

work values are furthermore assumed to be linked to work-related situations and to be enduring and stable over time (Midttun, 2007c). Consequently, work values are expected to be independent and significant incentives for the medical specialists' decision making and behaviour.

3.4 Central scientific debates and the private–public puzzle

Research within the social sciences is often described and categorised according to its position within the scientific debate on methodological perspectives and research designs. In Sections 3.4.1 and 3.4.2 two such central topics are discussed: the research approach (deductive versus inductive) and the methodological perspective (individualism versus collectivism), as applied in this dissertation.

3.4.1 Deductive and inductive research

Textbooks on scientific research traditions describe two main approaches to conducting scientific studies: the deductive and the inductive. The deductive or hypothetical deductive method is described as taking a theoretical starting point. Based on the initial theory, some empirically testable hypotheses are then derived. The theoretical claims are finally compared with the empirical evidence, and the results thereby either support or weaken the theory's position. Conversely, inductive research starts out with the empirical observations, and may eventually produce theories based on these mappings (e.g., Hellevik, 1991).

Both deductive and inductive research strategies were employed in the research processes behind the development of the four articles constituting the empirical part of this dissertation; with the deductive approach dominating. The essays all have a deductive build-up, with theoretical roots in for instance demand theory and work values theory, and the studies therefore generate new knowledge about the adequacy of the theoretical frameworks with reference to the empirical cases illuminated. Throughout the research processes, an inductive research strategy did, however, supplement the deductive approach.

3.4.2 Methodological individualism and collectivism

One of the most salient divisions within the social sciences is the distinction between actor-based and system-based theoretical models.²¹ Actor-based models (also known as micro-level models) build on methodological individualism and focus on the person executing the task, the consequences of the actions the person performs and the actor's view of the situation. Researchers applying micro-level models furthermore perceive social phenomena, like organisations and institutions, as aggregates of the actions taken by individuals. This perspective is fundamental for modern neoclassical economics and has Max Weber and Friedrich von Hayek amongst its most well-known supporters.

The system-based theoretical models (also known as macro-level models) build on a methodological collectivistic foundation and concentrate on macro-phenomena, such as societies and institutions at the higher aggregated levels (Grimen, 2004; Hovi & Rasch, 1996). Methodological collectivists furthermore ascribe high significance to individuals' contexts and advocate that both social phenomena and individuals' actions can be explained by social structures and the laws that apply to the social systems. Émile Durkheim and Arthur L. Stinchcombe are among the defenders of this school of thought.

In their archetypical forms, the two perspectives are generally incompatible. However, their more moderate variants approach each other as the representatives of the individualistic perspective recognise the relationships between individuals as important influences on actions, and moderates on the collectivist side acknowledge society as a construct of social phenomena that cannot be explained solely by other social systems, but also by the relationships between individuals. In this manner, the more moderate approaches combine elements from both methodological individualism and collectivism.

The approach applied in this thesis has most in common with methodological individualism. Although the actors undoubtedly are the main focus in the analyses, the

²¹ Hovi & Rasch (1996) argue, however, that there are no strong methodological contradictions between methodological individualism and –collectivism. See Hovi & Rasch (1996) for a further discussion of the topic.

contexts in which they act are, however, expected to impose some restrictions and conditions on their behaviour. The most important external aspects are captured either by including context-specific variables in the models through applying multilevel modelling techniques (see Section 4.1.) or—when the important contextual elements are sector specific—through separate modelling of the private, public and mixed subsamples. Consequently, predictions about individuals' decision making and actions are performed without marginalising the impact of the environment.

4. Data material and methods

The analyses in the articles take a quantitative approach and are based on two relatively large data sets; one comprising secondary data collected by Statistics Norway and the Norwegian Social Science Data Services, and the other based mainly on a survey conducted in April 2005 of 1,270 Norwegian private and public-sector working medical specialists. The units of analysis are the counties in the former data set, and the individual medical specialists in the latter. A variety of statistical analysis techniques is used, and a more thorough account of the specifics of the data material and the methods applied are found in the articles. The current section is therefore dedicated firstly to the not so well-known multilevel analysis technique applied in the articles addressing the sector choices and allocation of work time among the medical specialists, and secondly, to some methodological challenges associated with the data material and the statistical analyses.

4.1 Multilevel analysis

Health service researchers commonly find themselves investigating research problems involving data that is nested in hierarchical structures, such as patients admitted to hospital departments, which are part of a hospital or health enterprise, or like in the survey data obtained from the medical specialists: physicians located in municipalities, which are nested in counties, catchment areas and health regions. When research problems involve explanatory variables found at multiple analytical levels and the variance in the dependent variable is likely to be clustered at higher levels, disregarding the possibility of such complex structures may have serious

consequences or, in the worst case, lead to incorrect conclusions (cf. Groenewegen, 1997; Leyland & Groenewegen, 2002; Rice & Leyland, 1996).

One of the most severe effects stemming from neglecting the possibility of clustering at a higher analytical level is the violation of the premise of independence of observations and the subsequent assumption that the effective sample size is equal to the number of lower-level units. If this assumption turns out to be incorrect, the standard errors are underestimated, leading to bias of the t tests and incorrect identification of statistically significant outcomes. Multilevel analysis does, however, control for this, and facilitates also estimation of random slope models and incorporation of cross-level interactions between individual- and context level variables. Hence, through allowing one to assess the lower and higher level characteristics, and their interactions, simultaneously, multilevel analyses render possible dynamic predictions about how processes at different analytical levels interact with each other (cf. Groenewegen, 1997; Leyland & Groenewegen, 2002; Rice & Leyland, 1996; Hox, 2002).

In the analyses of the medical specialists' sector choices (see Chapter 3), the likelihood of working privately was found to vary significantly across both individual medical specialists and municipalities. After controlling for the degree of centrality of the municipality in which the physician was located, the between-municipality variation was furthermore reduced by 12 per cent, suggesting that the supply of (and possibly also the demand for) private specialised healthcare is peaking within the largest cities.²² This finding thus coincides with the observations of Kankaanranta et al. (2006a) in Finland. The random part of the model further revealed that one of the individual level variables' coefficients (political affiliation) varied significantly across the municipalities. The more substantial implications of the results are consequently that macro-level aspects affect how attractive and feasible a private-sector choice is for the individual medical specialist, and that characteristics of both the individual doctor and the environment in which he or she lives influences the propensity of working in the private sector. In the article addressing the working time allocation of medical specialists (see Chapter 5), multilevel modelling allowed for the combination

of physician-specific and catchment area (demand)-specific explanations in the same model.²³ However, the results indicated that the demand-side contributions were only marginal. Nevertheless, some interesting results concerning the GP rates were obtained.

Generally, job-related decisions, like sector choices and working time allocation, are often complex. This should be reflected also in the choice of explanatory model when investigating job-related behaviour, and conglomerates of explanations at different analytical levels should therefore be applied in the analyses.

4.2 Methodological challenges

Although the empirical part of the dissertation undoubtedly generates robust results and new knowledge about the private specialised healthcare services in Norway, some methodological reservations should be made when interpreting the outcomes.

First, the survey data, which constitute the empirical basis for three of the articles, has a response rate of 53 per cent. Even though this may seem low if compared to regular social scientific studies, the rate is actually quite high for a large sample postal survey conducted among physicians (cf. Cummings et al., 2001). Due to the aim of full anonymity for the respondents, additional information about the non-respondents is, however, lacking. Inspections of national statistics—for the variables where this was available—indicated that there hardly were any discrepancies between the sampled data and the national trends. Nevertheless, with regard to the dimensions for which we did not have information about the total population of physicians (e.g., the work value variables) there is some uncertainty regarding how the positions of the non-responders relate to the equivalent positions of the responders.

Second, as highlighted in the previous section, multilevel analyses are particularly well suited for analyses of health related research questions. Yet such analyses are

²² For a more general description of the geographic distribution of physicians in Norway, see Brenne (2006).

²³ In addition, different working time restrictions within the private and the public sectors could have been controlled for by including the sector as a second level in the analyses. In this particular study,

only performed in two of the articles. As regards the third article based on the same empirical material, multilevel analyses would have been applied if the specialists' institutional affiliation had been known.

Third, employing cross-sectional data makes dynamic analyses of causal relationships sometimes rather troublesome. A number of studies have, e.g., documented that individuals may adjust their values pragmatically in order to shrink the gaps between their values and their behaviour (e.g., Vroom, 1966, 1995), and particularly within the field of economy the relevancy of variables representing values for prediction of behaviour has been questioned. The issue is, however, part of an ongoing debate between the psychology and economy communities. In order to cope with this challenge in the studies employing survey data, pre-validated work value measures were employed where available (cf. Midttun, 2007a, 2007c), and all operationalisations of questions in the work value battery were performed to best capture values of a principal and intrinsic character, which, according to the literature, are part of the individual's intrinsic value system and enduring and stable over time (e.g., Dose, 1997; Rosenberg, 1957). The values are therefore assumed to predate the observed behaviour. Nevertheless, the reader should be aware that decision-making behaviour and values may influence each other in a reciprocal manner.

With regard to the generality of the conclusions reached, the findings are of course not unconditionally valid across time and space. As regards the time element, the medical profession is subject to constant development, both as a result of the need to ever so often adjust and adopt to reorganisations, restructuring and reforms, and due to the steadily licensing and integration of new doctors into the profession. Besides, the technological and research-based developments within the field of medicine require dynamic and progressive changes and responses. Hence, the results established in the current studies may not be possible to generalise neither a decade forward nor a decade back in time. As for the ability to generalise the findings beyond the Norwegian case, the available research from the other Scandinavian countries—although scarce—gives some indications of largely congruent patterns of healthcare organising. The outcomes from private–public analyses are thus likely to be relatively

separate sector-specific analyses with catchment areas as level two were however better fit for

similar across the borders. With regard to the other NHS systems, the fundamental organising principles do, however, deviate too much to allow for comprehensive generalisations without taking major reservations. Likewise, more general implications about the behaviour and actions of members of other professions (both within and outside of the medical arena) cannot unconditionally be drawn on the basis of the findings for the medical specialists. For instance, at least within the Norwegian context, managing physicians has been described as relatively challenging, and perhaps not even appropriate, a recognition naturally setting this group apart from most other professional groups which are otherwise comparable (Piene, 2003). Furthermore, the partial privatisation of the healthcare segment of public service delivery represents not only an introduction of a market orientation within the single largest public expenditure area within the former county administration, but also an attempt to partially privatise a segment which is very unique when it comes to the services produced (healthcare) and the consumers/users of the services (patients and their relatives). The manner in which the adjustments has taken place, and the empirical evidence provided via the current studies, is therefore highly unlikely to be representative of the changes that have taken place within other divisions of the non-healthcare parts of public sector's service system.

5. Summary of the essays

The four essays included in the dissertation address different aspects of the private element of Norwegian specialised healthcare. The empirical contents are divided into three main segments: first, the increase in, and geographical distribution of, private healthcare suppliers (see 5.1); second, physicians' choices of work between private and public sectors (see 5.2); and third, the differences in physicians' supply of labour across and within the sectors (see Sections 5.3 and 5.4).

5.1 The private–public mix of healthcare: evidence from a decentralised NHS country

As outlined in the review of the existing literature, few studies have analysed empirical data on the Norwegian private–public mix of healthcare (see Section 1).

investigating the research problems.

Knowing that the private healthcare supply is distributed very unevenly geographically the question about which factors affect the allocation becomes particularly interesting. The purpose of this paper is therefore to explain the geographic differences in the private–public mix of specialised healthcare by using data from the Norwegian counties over a period of 11 years (1991–2001). The effects of economic, socio-economic, political and structural factors on the number of public medical specialists per 100,000 inhabitants; the number of private contract specialists per 100,000 inhabitants; and the private–public mix (defined as the number of private contract specialists as a proportion of the total number of medical specialists) are analysed.

The starting point of the study is the observation that privatisation of public services is often driven by economic scarcity and changes in political leadership. The study used a demand theoretical framework to investigate the differences between counties and over time. In line with most international studies on the topic (e.g., van Doorslaer et al., 2004; Freed et al., 2004; Krishnan, 1992; Elesh & Schollaert, 1972; Dionne et al., 1987; Benham et al., 1968; Reskin & Campbell, 1974), a classical aggregated research design was applied.

Striking deviations in effects were found depending on which output parameter was considered. Although revenues were important for all three measures, the direction of the effect varied. Consistent with the initial expectation, high revenues increased the supply of public specialists, whereas low revenues forced the counties to be innovative and to use the private supply of services. Demographic aspects were most important in explaining the differences in the public supply of specialists, and the proportion of elderly individuals in the population had for instance a positive effect on the public supply rate. Neither population size nor individual income had any major effects. Given the universal, tax-based service provision within the Norwegian healthcare model, the lack of effects for the latter variable was, however, not surprising. The variable representing the political composition of the county councils (operationalised as the share of the representatives coming from a conservative party) impacted positively on the share of private specialists, whereas no corresponding effect was found for the two other dependent variables. Among the structural variables (population density, number of GPs per 1,000 inhabitants and presence of a

university hospital within the county), all results were consistent with the initial expectations.

The results revealed that the factors explaining geographic differences in healthcare supply had highly sector-dependent effects. Both economic scarcity and political leadership were furthermore found to be important to the private rates and proportions of specialists. With some minor exceptions, the findings of the study thus corresponded to the evidence in the international literature, and the few discrepancies resulted mainly from characteristics typical of the Norwegian healthcare model.

5.2 Private or public? An empirical analysis of the importance of work values for work sector choice among Norwegian medical specialists

Both the international and the Norwegian research literature on sector choices have been characterised by scarcity, and only a few studies have hitherto addressed the issue in a direct manner (e.g., Kankaanranta et al., 2006b; Blank, 1985). In 1995 Vroom described the research on sector choices in the following manner:

“Although a great deal of research has been conducted on the occupational choice process, comparatively little attention has been directed to factors affecting people’s choices among organizations (...) We remain pretty much in the dark concerning the variables affecting people’s decisions to work for the government, private industry, educational institutions, hospitals, or social agencies.” (Vroom, 1995: 59)

Since then, little has been done to meet the demand for research. The current study addresses individual and context-related influences on the private versus public-sector choices of Norwegian medical specialists.

In the aftermath of the 2002 hospital reform, the private supply of specialised healthcare increased substantially and offered more Norwegian medical specialists the opportunity to work part- or full-time in the private sector. This also actualised the question of which factors guide sector choice decisions. Building on work values theory, the influence of non-pecuniary characteristics, which are often overlooked within the dominating labour economics literature, are highlighted. According to Judge & Bretz (1992), work values are representative of enduring values of a

principal and intrinsic character that individuals hold and apply to work settings. Factor analysis was performed to trace the patterns in the medical specialists' responses to a battery of work value questions. Three categories were, as a result, singled out, and indices representing professional, payment and benefit, and autonomy values were derived. Both the likelihood of working in the private sector at all and the propensity for working full-time in the private sector were analysed. The distribution of variations in sector choices between the individual and location (municipality) levels was investigated via multilevel analysis.

The empirical analyses revealed that high valuation of autonomy in the work situation impacted positively on the likelihood of working in the private sector, whereas high appreciation of professional values had the opposite effect. In medical specialists working part- or full-time in the private sector, positive assessment of professional and payment and benefit values was strongly associated with combining private and public jobs rather than working full-time privately. Consequently, the sector choices were found to be strongly influenced by the medical specialists' work values. Further, also the physician's geographic context was established as important for the sector choice decisions. Although the question of causality between centrality and sector choice could not be answered completely on the basis of the available data, the degree of centrality within the physician's residential area (population density and geographic position in relation to a centre where a higher order of central functions is located) was found to be influential. This finding can furthermore be seen in conjunction with the different healthcare market situations within the urban and the more rural areas and the ability to attract private medical specialists within these areas. Hence, both individual and macro-level factors were documented to be important for the predicting of medical specialists' sector choices. Consequently, the job-related decisions medical specialists make are relatively complex, and future research should take this into account when choosing explanatory models and analytical approaches.

5.3 Labour supply among medical specialists in private and public sector:

Pecuniary and non-pecuniary explanations

Several studies have compared the motivation and job-related behaviour of people working in the private and the public sectors and found substantial sector-dependent differences. By and large, the documented dissimilarities mirror a high preoccupation with monetary incentives among employees in the private sector, whereas their public-sector counterparts tend to be more inspired by non-pecuniary motives and impetuses. However, a brief review of the voluminous labour supply literature reveals that pecuniary explanations have dominated, while non-pecuniary aspects have been given limited attention. In the current study, both economic and non-economic explanations of physicians' behaviour are incorporated, and data on the private and public-sector working medical specialists are analysed separately.

Labour supply is measured as the physicians' mean number of weekly work hours, and the model initially follows standard labour economics. Consequently, measures of income, non-labour income and individual characteristics are incorporated in the utility function. The new contribution to the model is a vector representing the work values. The results suggest that both pecuniary and non-pecuniary aspects are important and that the outcomes for physicians working solely in either the private or the public sector are largely coinciding. Contrary to the results for these two groups, the estimates for physicians combining work in both sectors (the mixed sector group) indicated that valuation of payment and benefit factors was positively associated with the number of hours worked per week. These results thereby suggest that the effects of work values vary primarily according to whether the medical specialists hold one or multiple jobs. In line with the conclusions drawn by Smith Conway & Kimmel (1998) and Shisko & Rostker (1976), combining jobs thus seems to allow for an adjustment of the labour supply that optimises the outcomes of materialistic benefits.

The overall conclusion of the study is that the traditional labour economics models may benefit from integrating both the private–public dimension and non-pecuniary measures into the analytical framework.

5.4 Medical specialists' allocation of working time

The international literature provides important knowledge about how the time allocation of GPs and medical specialists relate to aspects such as type of reimbursement system, patient demand and supply characteristics (e.g., Groenewegen et al., 1992; de Jong et al., 2006; Groenewegen & Hutten, 1995; Freiman & Marder, 1984; Mechanic, 1975; Calnan et al., 1992). In Norway, research on this topic is scant and limited mainly to descriptive studies. Knowing that the Norwegian healthcare system is characterised by a relatively low input of physician work hours combined with a high quality of the services provided (Sæther, 2005a; Midttun, 2007a; OECD, 2006; Norwegian Official Report, 1997; van den Noord et al., 1998), it is however likely that one possible key to this highly desirable balance is to be found in the organisation and allocation of physicians' working time. Thus, the central research question within this article was how Norwegian medical specialists allocate their working time, described as the relative time spent on patient work and administrative work, and the likelihood of allocating time to research/educational tasks. A model incorporating four sets of explanatory variables—internal organising of work, wage incentives, personal preferences and demand factors in the population—was used to investigate the question. Some of the values of the variables coincide broadly with the private–public divide in Norwegian healthcare.

One of the main results of the analyses was that physicians working in the private sector and physicians combining private and public-sector work spend relatively more time on patient assignments than publicly employed physicians do. Public physicians, on the other hand, allocate more time to administrative and research/educational tasks. This finding thereby supports the proposition that work time allocations mirror the differences in on-call commitments, wage incentives and the division of labour between the sectors. Moreover, also other aspects associated with the internal organising of work and the physicians' preferences exerted highly significant effects on the dependent variables across the sectors. The demand-specific set of variables, on the other hand, contributed only moderately to the explanation of work time allocations.

The introduction of the European Union's (EU) Working Time Directive has led many European healthcare administrators and healthcare politicians to be faced with the challenge of rescheduling the work shift system while also having to ensure specialised emergency arrangements and the quality of the services. Based on the Norwegian experience, it seems that public, tax-based healthcare systems obtain some increase in the overall share of the working time spent on patient-related assignments if outsourcing some closely specified work tasks to the private sector. However, some reservations should be made with regards to how the division of labour between the private and the public sectors is to begin with and how the overall private–public mix within the system is. It is for instance likely that the marginal effect of increasing the private provision of healthcare services in systems that already have a widespread private supply differs quite substantially from the effects obtained in mainly public healthcare systems, like Norway.

Future European studies on allocation of physician working time should pay special attention to the private–public dimension as this parameter is likely to influence how physicians' work is organised, which payment incentives prevail and how the demand for specialised healthcare services in the population is addressed.

6. Discussion

Overall, four main conclusions can be drawn from the empirical studies:

- At the aggregated (county) level, there are striking differences in the effects of the explanatory factors representing revenues, demographic aspects and political features according to whether the public or the private supply of specialised healthcare is considered. This finding can be seen in conjunction with the discovery that the centrality (urban versus rural location) of the area in which the medical specialist lives influences the choice of work sector.
- Contextual variables are important for sector choices and for allocation of working time.
- Work values are important for medical specialists' sector choices and to some extent for determining the amount of time they spend working each

week. As regards the association between work values and labour supply, differences were detected between the group of physicians combining private and public sector jobs and the two other groups (physicians working solely in one of the sectors).

- Relatively salient dissimilarities in the allocation of working time were found depending on which sector the medical specialist was affiliated with.

The main implications of these findings are four-fold. First, the studies document that economic explanations may contribute significantly to the understanding of geographic differences in private–public mixes. However, when dealing with the complex motivational patterns, job-related decision making and behaviour of highly dedicated physicians, these explanations are insufficient if not combined with additional approaches and perspectives. This conclusion is also supported by the existing literature on physicians and other high-income professionals, which reports only weak effects of economic variables on job-related outputs, such as labour supply (e.g., Sæther, 2005b; Sloan, 1974; Goodman & Wolinsky, 1982).

Second, the contextual effects should not be disregarded as both the analysis of the counties' private–public mixes and the analysis of the individual physicians' sector choices point to the higher rates of private specialists and higher likelihood of private-sector choices in the central, most densely populated areas where the number of potential private patients is also likely to be higher.

Third, as outlined above, the geographic distribution of private contract specialists was unequal throughout the 1991–2001 period. If private specialists provide services that are perfect substitutes for outpatient services offered at public hospitals, this accumulation of private practices in only a few geographic areas may simply reflect compensation for correspondingly lower rates of public supply in that area. If, on the other hand, private healthcare services represent something genuinely different from the public hospital services, or the private institutions mostly are located in the same areas as the university hospitals (which currently seems to be the case), this geographically skewed distribution has important health political implications. For the patients, the geographic dissimilarities in accessibility signify a breach of the principal

health political aim of equal supply and provision of healthcare services regardless of the patient's place of residence (Ministry of Health and Social Affairs, 2001; Iversen & Kopperud, 2002). For the physicians, the uneven distributions—both in terms of the geographic allocation and the distribution of contracts between the different medical specialities—may have important consequences for their career-related opportunities and freedom of choice.²⁴ From the central government's point of view, these patterns may well reflect a trade-off between the goal of equality in access to healthcare and efficiency concerns.

Forth, the findings establish that sector affiliation does matter. Although physicians in the private and public sector do not always behave differently, their work time allocations and labour supply deviated somewhat across the different sectors. The results thereby suggest that the recent upswing in the private supply of healthcare services may mark the start of a new trend in the provision of specialised healthcare in Norway. Valuable new knowledge may therefore be gained by incorporating the private–public dimension into the traditional explanatory models applied within health services research.

In addition to the implications mentioned above, Øvretveit (2001) outlines four more general implications of the increased private representation, which may be relevant for the Nordic governments. First, is the need for the governments to gather more reliable information about the private sector in order to make better-informed decisions. Second, is the importance of clarifying the governments' policies towards the different types of private-sector financing and provision. Third, Øvretveit calls for a review of the current regulations regarding private healthcare, and finally he accentuates the governments' need to learn from their neighbouring countries' experiences in the field of private healthcare. For a more extensive discussion of these and similar implications, consult Øvretveit (2001).

In light of the ongoing health political debate over private versus public delivery of healthcare services, the implications cited above should encourage more research on these issues. Some main points from the debate are briefly discussed in Section 6.1.

²⁴ For a more detailed outline of policies affecting the geographical distribution of physicians, see

6.1 Suggestions for future research

Public healthcare provision is still dominating the Scandinavian healthcare scene, and at least in Norway, the political climate suggests that this will continue to be the case also in the immediate future. However, the Scandinavian model does not exist in a vacuum, and international trends—inspired by NPM and privatisation—are therefore likely to remain influential also in the years to come.

The past decade's change in the private–public mix has induced a high demand for knowledge on this topic (e.g., Øvretveit, 2001, 2003; Midttun & Hagen, 2006), and for healthcare politicians and healthcare administrators it should be imperative to know more about the differences between the private and the public sectors. Relevant questions in this regard are: What can be expected when embarking privatisation strategies? What facilitates and what impedes private and public healthcare providers' abilities to do the jobs that the healthcare politicians and –administrators expect them to do? Are there areas in which both the public and the private providers could benefit from supplementing each other? In which areas do the physicians working in the private and the public sectors behave similarly and differently? From a theoretical point of view, it would furthermore be interesting to know what other approaches, such as the profession-theoretical and the transaction cost economic ones, would add to the debate about these questions.

Future research on the Norwegian case should also investigate deeper the privatisation that already has taken place. Given the strong position of the public authorities in the contractual relationship and the gradual development of very detailed terms and conditions in the contract documents, it may be timely to discuss whether the private contractors represent something other than simply an extension of the public hospitals' elective or out-patient departments during the limited time for which the contracts apply. If the public authorities' dominance is too strong, the efficiency gains and clarification of responsibilities that the privatisation efforts were supposed to bring about may turn out to be only minor or may simply not appear at all. Building on the results from reflections on these issues, healthcare politicians may want to

debate more extensively what they primarily seek to obtain by contracting with private suppliers, and which role the central and regional health authorities should take in order to attain the specified goals. Consequently, there is a pressing need to explore what the differences between the private and the public sectors imply for the various healthcare outputs and the general goal achievement within the Norwegian NHS.

This dissertation has shown clearly that there still is a need for research on the private–public mix of healthcare. The past decade’s increase in the private supply of healthcare services has furthermore put new questions about the private–public divide on the political agenda. The all-party support for private healthcare—in the comprehensive effort to reduce waiting times for treatment and occupation rates at public hospitals at the turn of the millennium—seems to be withering away as the goals are now within reach. Consequently, the future division of labour between the private and the public sectors is likely to become the target of continuous political debate, and a policy area in which the political parties may take the opportunity to distance themselves from their political opponents. As a result, the political debate on the private–public puzzle in Norwegian healthcare is about to consolidate as one of today’s most important political issues, and the political tug of war on the topic is therefore likely to affect physicians, patients, as well as the public at large, also in the years to come.

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Appendix

A 1 The Norwegian healthcare system — in context and detail

Healthcare systems are normally categorised according to the organisation of the financing and provision of services. Although several typologies are available (e.g., Besley & Gouveia, 1994, Propper & Green, 1999; Roemer, 1985; Chernichovsky, 2000; Donaldson et al., 2005), healthcare systems in Western European countries are usually categorised as either a Bismarck-style or a Beveridge-style system (e.g., Saltman & Figueras, 1998; Roemer, 1984). Occasionally, some systems may be classified as mixed (e.g., France, Greece, Ireland and Portugal), but Table A1 categorises these countries according to which of the two main system styles their system resembles the most.²⁵

Healthcare system	Main financing type	Examples of countries
Bismarck style	SHI	Austria, Belgium, Germany, The Netherlands, Switzerland, France, Luxembourg, Hungary
Beveridge style	Taxes	UK, Finland, Sweden, Norway, Iceland, Denmark, Ireland, Italy, Greece, Portugal, Spain

Table A1: Classification of healthcare systems (Source: Saltman & Figueras, 1998).

The origin of the Bismarck-style funding model can be traced back to the 19th century Germany ruled under Bismarck. At first, health insurance was established to cover only low-income workers and was financed partially by contributions from the employer (one-third) and partially by premiums paid by the employees (two-thirds) (Marrée & Groenewegen, 1997). Gradually, this SHI-based system was expanded to become a statutory arrangement covering the entire population, and slowly the health insurance part became equally important as the protection against loss of income because of illness. At the same time, the role of the central government changed from merely passive towards taking a more active role. In the beginning, the administration of the sickness funds took place at arm's length from the government, but with time

²⁵ In fact, Williams (1990) argues that all countries have mixed systems (either the system is predominantly public with smaller private systems operating alongside the public organisations, or the system is predominantly private with smaller public systems that care for those who cannot afford

the strategy became increasingly intervening (Marrée & Groenewegen, 1997). For instance, to contain costs and maintain equity, government could put a ceiling on the insurance premiums (Saltman & Figueras, 1998).

Today, the insurances in SHI systems are funded mainly through state subsidy, employer payments (compulsory payroll contributions) and contributions from employees (premiums)²⁶, and premiums are usually collected directly by sickness funds/central state-run funds (Saltman et al., 2004). The funds enter collective contracts with providers of healthcare to guarantee a stable supply of the necessary services. However, the countries have chosen somewhat different solutions with regards to the organising of the provision. For instance, in Germany and The Netherlands, relatively wealthy persons may choose, or are required to, opt out from the public system and buy private health insurance. Moreover, during the 1990s, most SHI systems were restructured comprehensively as they became subject to several government-initiated reforms. Two of the main intentions of these reforms were to introduce more freedom of choice for the insured and to induce more competition between the insurance funds (Saltman et al., 2004). The latter effort was expected to spur improvements in efficiency and quality in the provision of healthcare (Saltman et al., 2004), and, as part of this new focus on competition, the degree of risk bearing for the individual funds was naturally increased. Simultaneously, complex mechanisms were introduced to adjust the revenues available for each fund.²⁷

The Beveridge-style system originated in the UK in 1948 with the establishment of the NHS. The centralised and state-subsidised NHS was founded in response to the proposals of the Beveridge report, and this report's name was therefore to refer to state-funded healthcare systems with universal provision of services in the years to come (Marrée & Groenewegen, 1997). Beveridge-style systems are furthermore known particularly for their equitable geographic distribution of resources, their mainly tax-based funding and for relying heavily on public provision of services

private care) and that only the relative *size* of the two sectors and the division of work between them vary.

²⁶ The premiums paid are typically linked to the income of the member and commonly defined as a percentage of the person's wage (Saltman et al., 2004).

²⁷ For a more thorough description of SHI-based healthcare systems and the reforms introduced during the 1990s, see e.g. Saltman et al. (2004).

(Saltman & Figueras, 1998). Moreover, the hospital facilities are predominantly state owned and the physicians working there salaried.

The Scandinavian welfare state model is in a way “a model within the Beveridge model” with its distinct focus on the state and the public sector, or as Kuhnle (2000: 386) put it:²⁸

“(…) the Scandinavian (or more precisely the ‘Nordic’) welfare states share a number of common characteristics, such that researchers tend to group them into one specific category of ‘welfare regime’ (Esping-Andersen 1990), ‘model’ (Leibfried 1993), ‘family of nations’ (Castles 1993), or ‘type of welfare state’.” (Ferrera, 1997; Kuhnle & Alestalo, 2000)

Although the healthcare system in the Scandinavian countries is similar to systems in other countries that have adopted the Beveridge model, the Scandinavian countries have taken the role of the state as a welfare provider a step further. First, central government has a very predominant role in both the formation and implementation of welfare policies. The public sector and the state are therefore involved in financing and organising of the welfare benefits to a far greater extent than in most other European countries (Royal Danish Ministry of Foreign Affairs, 2002). Second, the higher proportion of government employment in the Scandinavian countries than in Continental Europe is exceptional. For example, in 1995, the rest of Western Europe had a government employment rate equal to 18.8 per cent, while the corresponding figure for the Nordic countries was no less than 29.4 per cent (Kuhnle, 2000). Third, the Scandinavian countries practice an absolute and invariable form of universalism in the provision of healthcare services and guarantee all citizens free access to care if ill. The equitability principle, which is strongly related to the principle of universalism, is practised equally absolutely and is to ensure that services are allocated according to needs, irrespective of wealth, social status or geographic location. The combination of strong focus on the goals of universalism and equitability, together with the strong role of the state, has furthermore imposed a relatively heavy tax burden on the respective nations’ populations and has contributed to a significant financial redistribution effect. Compared with other Western European countries, relatively

egalitarian-styled societies have therefore developed in the Scandinavian countries. Forth, the Scandinavian countries all have a strong tradition of decentralisation of the welfare state's responsibilities to local county or municipality institutions.

As one of the countries embracing the Scandinavian welfare state model, Norway subscribes to the "Scandinavian way" of organising, financing and providing social services. The next paragraphs discuss the historical and current organisation of Norwegian healthcare services, with special attention on the fourth aspect mentioned above: decentralisation of responsibility.

A.1.1 The Norwegian healthcare system before the 2002 hospital reform: a decentralised model

Decentralisation may take many forms and may be defined according to a range of theoretical dimensions (e.g., Saltman & Bankauskaite, 2006; Pollitt et al., 1998; Bach, 2000). According to Saltman et al. (2006), a widely accepted definition of decentralisation is "the transfer of authority and power in public planning, management and decision making from higher to lower levels of government or typically from national to subnational levels" (Saltman et al., 2006: 2). Magnussen et al. (2006) used the term in a similar manner and, in reference to Oates (1999), stated that decentralisation implies a shift in the financial or political power from a central to a less central institution, and that this process is commonly defended on the grounds of fiscal federalism, which promotes local production of public goods that are to be consumed locally. Saltman et al. (2006) and Saltman & Figueras (1998) introduced an even more refined definition of the concept, which, although building on the similar principles as the two abovementioned definitions, incorporates privatisation as a separate form of decentralisation. According to this definition, privatisation can be seen as a process where the government transfers functions to a private company, organisation or other unit. The encouragement of competition and focus on the customer or client that follows from the privatisation is furthermore expected to ensure and strengthen the consumers' voice and position.

²⁸ For more information about the respective Scandinavian countries' healthcare profiles, consult e.g. Glenngård et al. (2005), Vallgård et al. (2001), Järvelin (2002) or Johansen (2006).

Inspired by Saltman & Bankauskaite (2006), the Norwegian NHS has been analysed along three dimensions of decentralisation—political, administrative and fiscal—before and after the hospital reform.²⁹

As noted introductorily, the Norwegian healthcare system is often described as decentralised. Because the ownership of the Norwegian somatic hospitals was distributed between the municipalities, central government, private non-profit organisations and the counties before 1970, strong local autonomy was established early on. The significant element of *political decentralisation* continued after the Hospital Act of 1970, when the counties formally took over principal responsibility for the hospitals.³⁰ The central argument justifying the Hospital Act was that democratic values would be best ensured under locally elected control and that the ability to make local adjustments would generate more equal accessibility to healthcare services, more efficient resource allocation and, eventually, lead to better fulfilment of the local population's needs (Vareide, 2001). Although the counties were formally in charge of the hospitals from 1970 to 2002, the central government did, in practice, often intervene in the control. For instance, partial ABF and free hospital choice for patients were introduced by central government in 1997 and 2001, respectively (see Section A.1.2 for a more detailed outline of the two arrangements). The degree of political decentralisation in the period before 2002 was consequently shifting, and signs of political centralisation were present during the later years of the period.

The degree of *administrative decentralisation* in the Norwegian healthcare system throughout the period should largely be seen in conjunction with the degree of fiscal decentralisation. From 1980 to 1997, some of the primary administrative responsibilities were namely associated with the distribution of the annual block grants and with the prioritisation decisions concerning patient treatment. These responsibilities were often delegated from the county politicians to hospital managers and hospital physicians, who, as a result, enjoyed relatively significant room to exercise discretion. Through the last decade with county ownership of the hospitals

²⁹ Saltman & Bankauskaite's typology is based on Wolman (1990). For a more extensive elaboration of the decentralisation concepts, consult Saltman & Bankauskaite (2006).

the administrative procedures were, however, gradually centralised, and a top-down relationship based on command and control became more and more predominant. Moreover, the introduction of ABF and legislation granting patients more rights contributed heavily to the curtailment of the local public servants' autonomy.

As noted earlier, the degree of *fiscal* decentralisation has been shifting. From 1970 to 1980, hospital funding was based on an arrangement where the hospitals were reimbursed by the NIS for 75 per cent of their expenses. The reimbursements (fixed grants) were based on estimated costs per bed-day (Nerland, 2001). In 1980, a more decentralised arrangement was introduced that gave block grants to the counties based on criteria such as demographic aspects (Saltman & Figueras, 1997). Although the block grants improved the central cost control, the new fiscal arrangement first and foremost represented a decentralisation, and the counties were now assigned the overall responsibility for distributing resources between the various tasks. During the 1990s, however, central government's dissatisfaction with the block grant system resulted in a centralisation of the financing system, and eventually the introduction of partial ABF financing.

A.1.2 Radical challenges within the NHS: moving towards a semi-centralised model

The predominant role of the counties continued during the 1990s, but healthcare politicians and hospital administrators were faced with increasing challenges as the demand for specialised healthcare grew and the supply of services could not keep pace. Throughout this period, the waiting lists and waiting times for elective treatment accelerated, and the hospitals' budget deficits peaked. In response to criticism by the political opposition in the Parliament (the Storting), the media and, gradually, the public at large, a set of overarching legal and structural changes were therefore initiated. Among these was the introduction of a priority system, which, by 1990, developed into a guarantee arrangement for wait-listed patients (Norwegian Official

³⁰ During the seven years from 1963 to 1970 as many as 44 somatic hospitals were transferred from full or partial local municipality ownership to county ownership.

Report, 1987).³¹ Later on, this arrangement was replaced by the “right to necessary healthcare” (cf. Ministry of Health, 2003).

Patients’ rights were in general placed high on the political agenda, and one of the contributions to improve these rights was the introduction of the free hospital choice arrangement in 2001. At the onset, however, this arrangement was not discussed as a means of empowering patients, but was instead seen as a measure to remedy the hospitals’ problems with long waiting times for treatment. Following a successful experiment with the arrangement in two health regions during 1994–1996, the process was implemented that led to the final nationwide introduction of the Patient Rights Act, of which free hospital choice was a part (Vrangbæk & Østergren, 2006). Finally, the introduction of the free hospital choice arrangement in 2001 meant that all patients waiting for elective treatment were given the opportunity to choose for themselves which hospital to be admitted to.³²

The financing system was also centre of much political debate. From 1980 to 1997, the financing of somatic hospitals was based on prospective budgeting and block grants distributed by the counties — a system incorporating few incentives for efficiency improvements. The length of the waiting lists was therefore occasionally used as an argument for demanding increased grants in the following budget period (e.g., Iversen, 1993; Carlsen, 1994). Because of inadequacies like this, the financing system gradually became the target of considerable criticism. Finally, throughout the 1990s, the prioritisation and efficiency debate resulted in an initiative to alter the financing system entirely (e.g., Stortingsmelding nr. 44 (1995–1996); Stortingsmelding nr. 24 (1996–1997)). The result was the implementation of a service-based payment system, ABF, in 1997, whose main function was to increase the activity and efficiency within the hospitals. From July 1997, a fraction of the

³¹ The guaranty was issued to elective patients who were defined as in need of specialised healthcare services, and the necessary treatment was guaranteed to be provided to the patient within six months. As the years went by, the issued guarantees were, however, frequently broken, and in 1995 10 per cent of the issued guarantees was reported to be breached.

³² In December 2003, the Parliament (the Storting) amended the Patient Rights Act and further strengthened the patient’s freedom of choice (Ministry of Health, 2003). Henceforth, private for-profit hospitals holding contracts with an RHA were included in the pool of institutions from which the patients could choose. According to Saltman & Figueras (1997) and Møller Pedersen (2005), the increased focus on patients’ rights and, in particular, the right to choose care providers was part of a European and Scandinavian (NPM) trend at the time.

block grant was thus replaced by an activity-based reimbursement, where the size of the compensation was dependent upon the DRG category of each patient admission. The share of the finances channelled through ABF varied from 30 to 60 per cent during the subsequent years.

Parallel with the changes in the financing model, more profound changes comprising the entire model of organising was in offing. Politicians and the public were asking whether the healthcare system had developed into a massive game between hospitals, county politicians and the central government. Finally, in January 2002, the difficulties associated with the unclear distribution of responsibilities culminated in the implementation of the hospital reform. The process is described as follows by Hagen & Kaarbøe (2006):

“This reform process represents the latest attempt by the central government to resolve what are viewed as major problems in the Norwegian health care system: namely long waiting lists for elective treatment, lack of equity in the supply of hospital services, and a lack of financial responsibility and transparency that led to a blaming game between the counties, as the former owners and the central government.” (Hagen & Kaarbøe, 2006: 320)

A.1.3 The post-reform Norwegian NHS: centralisation and reorientation

By Norwegian standards, the hospital reform, which encompassed 100,000 employees and 40 billion Norwegian Kroner, is one of the most comprehensive public reorganisations that have ever taken place (Martinussen & Paulsen, 2004). The reform incorporated two main elements: Ownership of the hospitals was transferred from the counties to the central government, and the hospitals were to be operated as health enterprises (Ministry of Health and Social Affairs, 2001). Hence, the hospitals were incorporated into five RHAs, and each health region was made responsible for the population residing within its geographic borders. The Ministry of Health appointed boards for the enterprises.³³

³³ After the change in government from conservative to social-democratic control in 2005, it was decided that political representatives appointed by the central government were to serve on the boards of the hospital enterprises.

The reform simultaneously represented both a centralisation and a decentralisation of the healthcare system. *Politically*, central government now took over the responsibility for the hospitals, and thereby introduced strong central control at the sacrifice of the county councils. Consequently, ownership and the principal responsibility for financing and control all rested with the state. Central government's strategic leadership was to be exercised through laws, steering documents, instructions, circular letters, general meetings, etc., whereas detailed control was to be avoided (cf. Opedal & Stigen, 2002). Parallel with this political centralisation, an *administrative* decentralisation took place, as the RHAs were given relatively independent roles in their organising of the specialised healthcare services.³⁴ *Financially*, the basic grants were to be allocated by the Parliament (the Storting) to the respective RHAs, which then were to distribute the resources between the hospitals (health enterprises) as they saw fit. This change represented a centralisation since the role previously played by the counties was now centralised to the five regional units, and because the activity-based share of the funding increased somewhat.³⁵

Although there have been some signs of administrative decentralisation, the development outlined above by and large represents a centralisation of the Norwegian NHS. As observed by Hagen & Kaarbøe (2006) and Magnussen et al. (2006), the model changed from being highly decentralised to becoming more semi-centralised,³⁶ and in similar manner, Saltman & Bankauskaite (2006) describe the development as “sequential stages of decentralization and now re-centralization” (Saltman & Bankauskaite, 2006: 137). Along with the centralisation, integration of private service provision into the specialised healthcare system became a crucial element. In Odelsting Proposition number 66 (Ministry of Health and Social Affairs, 2001) outsourcing of specialised healthcare services to actors in the private market is furthermore emphasised as an important means for the RHAs to pursue their main goals (increased efficiency, reduction in waiting time for treatment and reduced occupation rates at public hospitals):

³⁴ In practice, however, the RHAs' autonomy was repeatedly challenged through interventions by the Ministry of Health (e.g., Danielsen et al, 2004; Grund, 2005).

³⁵ While the activity-based reimbursement share during the pre-reform period (1997–2001) had been 30–50 per cent, the corresponding figure for the post-reform period was 40–60 per cent.

“(…) The RHAs have a responsibility for providing healthcare services of the best possible quality, and in accordance with the needs in the population. The RHAs can fulfil this task either by providing the services themselves or by contracting out services to other healthcare service providers, such as private health care institutions, private laboratories and X-ray institutes, and private specialists.” (Ministry of Health and Social Affairs, 2001, my translation)

These national guidelines are also stated in concrete terms in the regional steering documents, where the equal status of the private and the public providers is further emphasised (e.g., Steering document 2004 for the Northern Regional Health Authority, 2003). The regional units are actively encouraged to enter public–private partnerships to fulfil their provider responsibilities, and the private and public healthcare providers are, as far as possible, to be given equal status. Following the hospital reform, public–private partnerships and the use of private for-profit hospital services therefore mushroomed, and each year since 2002, these hospitals’ share of the increases in outpatient and day surgical admissions increased dramatically. From 2001 to 2004 for-profit hospitals contributed, for instance, to 45 per cent of the total increase in day case procedures (The Norwegian Patient Register, 2006). A more detailed outline of the Norwegian private healthcare sector is given in Section 2.

³⁶ The responsibility for primary care still rests with the municipalities, and a centralisation of the entire healthcare system can therefore not be said to have taken place.

