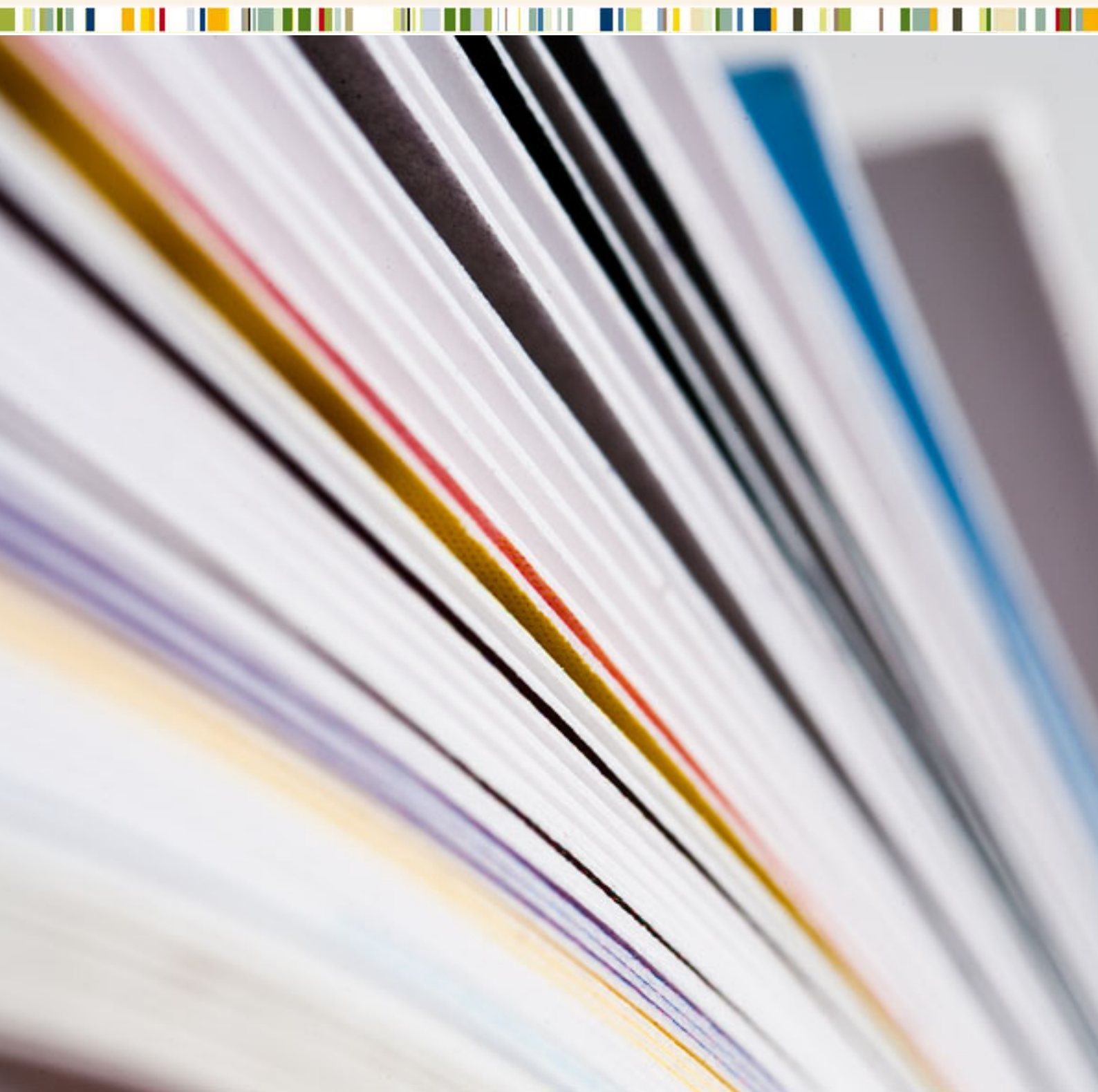


Ole Helby Petersen, Ulf Hjelmar, Karsten Vrangbæk & Lisa la Cour

Effects of contracting out public sector tasks

A research-based review of Danish and international studies from
2000-2011



The publication *Effects of contracting out public sector tasks – A research-based review of Danish and international studies from 2000-2011* can be downloaded from the www.akf.dk website.

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AKF works to produce new knowledge about important aspects of society. The primary emphasis is on research in work related to welfare and statutory duties in municipalities and regions. The general objective is to contribute to a better basis upon which to make decisions and develop practice in the public sector.

Ole Helby Petersen, Ulf Hjelmar, Karsten Vrangbæk & Lisa la Cour

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from 2000–2011

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2012

Preface

This report presents the results of a systematic review of the existing documentation of the consequences of contracting out public sector tasks to private providers. The study builds on a recognized research-based method and is the most comprehensive Danish review of the effects of contracting out to date as well as one of the largest in the international context since 2000. The primary aim of the report is to contribute to an overall understanding of the documented effects of contracting out in Denmark and abroad in order to contribute to the debate concerning the advantages and disadvantages of contracting out work that was previously carried out in the public sector.

The report investigates the existing documentation of the impact of contracting out on price and quality in providing services, differences in the impact on price and quality in technical areas and social services as well as the consequences for the employees who are directly affected by work being contracted out. One of the central points made in the report is that the calculation of the impact of contracting out – in addition to the economic effects – should also include parameters regarding quality, just as the consequences for the affected employees and other expenses in connection with negotiating and drafting contracts, monitoring, establishing competences and the stability of the supply or service provision should be included in the overall assessment of what happens when work is contracted out from the public sector.

In the period from January 2011–June 2011, AKF carried out a comprehensive survey of Danish, Swedish, Norwegian and English literature. The aim of the project has not merely been to describe the main conclusions of the respective studies but also to carry out a substantive qualitative assessment of each individual study and arrive at a general assessment of the degree to which the contracting out of work from the public sector has any consequences. The report builds on literature published in the period 2000–2011 and is limited to effect studies carried out in the Western World. In total, 3893 studies were gathered, 80 of which were selected for more thorough examination. Of these 80, 37 investigated Danish conditions while the 43 others investigated international conditions.

The report has been written by Associate Professor Ole Helby Petersen, Research Program Director Ulf Hjelmar and Director of Research Karsten Vrangbæk. Research Librarian Lisa la Cour has been responsible for researching the literature and following up on the thousands of references which were the result of the preliminary searches. Anders Hjelholt, an intern at AKF, has contributed to the screening and registration of the relevant literature.

The project has received financing from the Organisations of Public Employees – Denmark (OAO), The Danish Confederation of Trade Unions (LO) and The Confederation of Professionals in Denmark (FTF) and has been carried out by AKF as an independent research report with external peer review. The results of the study are presented in this main report, whereas the detailed examination and assessment of the quality of the 80 studies is presented in the appendix, which is only available in Danish.

Ole Helby Petersen, Ulf Hjelmar and Karsten Vrangbæk
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Summary

Currently, there is no up-to-date research review of the extent of the impact of contracting out public sector tasks. Previous research reviews were primarily based on English and American studies from the 1980s and early 1990s, with the main emphasis on technical sectors, such as waste management and cleaning. There is therefore a need for an updated assessment of the existing documentation on the effects of contracting out public sector services. This includes studies from several countries (including Denmark and the other Nordic countries) and studies covering both the technical and social service areas.

This report is based on a widely recognised research-based method of assessing the documented effects of contracting out public sector services. The method involves a comprehensive and systematic search of the literature (3,893 publications were identified) and, based on this, we selected the relevant studies published from 2000 onwards (80 studies in total), which were used in this research review. The same set of quality criteria was used to describe and assess all the studies and, on that basis, a transversal assessment was made to assess research-related evidence of the effects of contracting out public sector tasks. Three overall questions were formulated at the start of the project and the report is structured according to these:

- What are the documented effects on economy and quality when public sector tasks are outsourced to private players?
- What are the documented differences in the effects on technical and social service areas, respectively?
- What are the documented effects on employees affected by contracting out?

The report's main conclusions are summarised below.

Impacts on economy and quality

The first part of the project reviews and assesses the documented effects on price and quality when public sector tasks are contracted out. In general, the studies show that contracting out provides minor cost savings. The review also illustrates that, in general, there is greater focus on documenting the effects of contracting out in relation to price than in relation to quality. This leads to a series of provisos in relation to the reported savings, because many studies contain insufficient documentation on whether or not savings have been achieved at the expense of service quality. Any negative or positive change in quality must naturally be seen in relation to any saving or price increase and the general lack of studies adequately measuring the impact of contracting out on quality is thus a significant weakness in the existing documentation. The Danish literature only provides a limited degree of documentation to show that contracting out delivered savings where the level of quality remained unchanged. In the international literature, the documentation is generally better, but here too there is a significant lack of assessment of the impact on quality.

A second reservation is that many studies fail to adequately take into account the costs of preparing and carrying out the invitation to tender as well as following up on quality of the services provided. The administrative, legal and transaction costs may be considerable and should self-evidently be taken into account when assessing any costs savings in an area, but the research review shows that this is rarely the case. A third reservation is that the majority of studies only give a snapshot of the impact of the first round of contracting out (1st generation tenders). Studies analysing the financial advantages of contracting out over longer periods tend to show that the relative advantage of using private companies disappears over time. This may be because private companies' pricing becomes more realistic over time, but may also be due to an increase in public sector efficiency over time, perhaps especially after being subject to competition and contracting out. In doing so, the documented savings may decrease in the case of repeated invitations to tender in an area.

Many of the reviewed studies also indicate that it is not the private companies but the competitive situation itself that creates cost savings when lower prices from contracting out are achieved. In several cases, significant savings were also achieved by the in-house tender and studies show that the difference between the public sector and private sector alternatives diminishes over time. On this basis, we recommend that the public sector works more strategically with control tenders than is currently the case. At the same time, it is of key importance that genuine competition and a level playing field for competition between public and private providers are created, so that a public sector monopoly is not replaced by a private sector monopoly.

Impacts in the technical and social service areas, respectively

The second section of the project reviews the effects of quality and price in the technical and social service areas, including an assessment of the degree to which sector-specific factors make contracting out more attractive in some areas as compared to others. The review finds that, particularly in technical areas like waste management, cleaning and roads, there is documentation showing some cost savings. At the same time, there is less evidence of cost savings associated with the contracting out of social services (care of the elderly, nursing, childcare, education, employment), just as impact on quality in these areas is very poorly documented. This may be due to: 1) methodological difficulties in making such studies; 2) a longer tradition of contracting out in technical areas, resulting in more examples; 3) less market maturation in social service areas; 4) the relatively high transaction costs of calling for tenders, specifying and overseeing tasks in social service areas because the services are very complex; 5) social service areas are more labour intensive, which provides fewer options for efficiency improvements via technological investments by the private sector.

In Denmark, there is a great deal of focus on the contracting out of social services and a political desire for greater private sector involvement. This includes areas like old people's homes, senior care, nursing and day-care centres. There is no research-related justification for claiming that cost savings have generally been achieved by contracting out the social services, just as there is no documentation to show that contracting out leads to improved quality in the technical service or social service areas. In respect of the social service areas,

the conclusion partly reflects the fact that very few valid studies of the economic impact of contracting out have been made in these areas and that several of the earlier studies were based on a very limited number of cases, which limits the scope for broader generalisation. So there is a need for more studies in the area, including independent and more systematic and methodical analyses of public and private sector production within the social service areas.

Effects on employees affected by contracting out

The third section of the project reviews and assesses the consequences for employees who are affected by contracting out. International studies show that contracting out usually has a negative impact on wages and working conditions. Changes in employee make-up are another typical result. International studies based on surveys of employees' perceptions indicate a faster pace of working, lower job satisfaction, less job security, stress and burn-out. Two Swedish studies of the health care sector report a mixed impact.

The few Danish studies that report results are mainly based on employee surveys. They show that very few Danish municipalities insert a social clause in connection with invitations to tender and that employee make-up changes, so that private players tend to use younger, less experienced, less qualified employees. In total, ten Danish studies present examinations of employees' perceptions of the consequences of contracting out. Four studies report negative consequences in the form of stress, poorer physical working conditions, less security and general job dissatisfaction, linked to a faster working pace, while the other six studies report mixed findings. Moreover, it is noteworthy that the international articles are more unambiguously negative than the Danish (and Swedish) studies. In the case of contracting out, this may possibly indicate that, in Denmark, factors related to regulations and labour market agreements ensures that employees have better terms than in some other countries. Future studies in the area should examine this possible difference in employees' rights and working conditions in more detail.

In the light of the documented negative effects of contracting out on employees, it would be appropriate and warranted to include employee perspectives in future impact analyses of contracting out. Flexible wage determination and the option of changing working conditions, working hours and the location of the workplace are probably prerequisites for financial gains from a private-sector company perspective. From an employee perspective, though, the contrary is relatively well-documented; that contracting out can lead to lower job satisfaction, lower wages and poorer employment terms, and increasing stress and absenteeism. When a balance is drawn up of the total effects of contracting out, its advantages and disadvantages, it is crucial that long-term socioeconomic costs resulting from redundancies, physical deterioration, reduced job security, etc., are taken into consideration. Following on from the report's findings, we point out that it is important to give a complete and detailed balancing of the direct as well as indirect employee-related impacts of the contracting out of public sector tasks.

1 Introduction, research questions and method

1.1 Background and relevance

The Danish government's so-called Public-Private Collaboration (PPC) strategy from January 2011 led to renewed debate regarding the impact, advantages and disadvantages of contracting out and issuing requests for competitive tender in the public sector. The concrete proposals and initiatives are especially directed towards the municipal and regional sector, where much of the welfare services directly affecting citizens are provided. For example, municipalities and regions can be forced to issue requests for tender for 5–8 new areas annually, and it calls for the introduction of the private construction and operation of care centres and senior-appropriate housing (Danish Government 2011). The level for the exposure to competition has been repeatedly negotiated between Local Government Denmark (*Kommunernes Landsforening*–KL) and the government, which has announced that compulsory tendering can be considered in the future should the municipalities fail to expose a sufficient share of their work to competition via requests for tender. A tallying of the initiatives in the PPC strategy indicates that seven of the 21 points specifically target social services, including compulsory tendering, the division of home care in districts, the private operation of care centres and increased competition in the area of child care.

The recent proposal in the PPC strategy can also be seen in light of the general development in the competition for the work carried out in the public sector. Calculated in terms of the Private Supplier Indicator' (Privat Leverandør Indikator – PLI) and Indicator for Exposure to Competition (Indikator for Konkurrenceudsættelse – IKU), the Danish municipalities have increased the application of competitive tender from around 18 per cent in 2000 to more than 25 per cent in 2010. The agreement between Local Government Denmark and the government has previously been that after 2010, IKU is to have 26.5 per cent, which the municipalities did not entirely live up to at the end of 2010. In connection with the agreement regarding the finances of the Danish municipalities for 2012, the government and LGDK have reached a declaration of intent about how the use of competitive tender in the municipalities is to be increased by one percentage point annually so that the municipalities will on average be issuing requests for tender for 31.5 per cent of the work that lends itself to tendering by 2015 (Danish Government and Local Government Denmark 2011). Today, the Danish municipalities are issuing requests for tender for work amounting to DKK 61 billion annually, and this increase corresponds to the municipalities issuing requests for tender for a further DKK 2.4 billion of work annually, meaning that they will annually be tendering DKK 14 billion more work in 2015 than was the case in 2010.

The regional indicator for exposure to competition (RIKU) was first calculated in 2009 and displays relatively significant differences from region to region, while the state's indicator for exposure to competition (SIKU) has increased slightly in recent years and was 26.4 per cent in 2010 (Danish Competition and Consumer Authority 2011: 81). It is difficult to compare the indicators between different levels of the administration, however, due to the

different kinds of work carried out on each level, of which some can be contracted out while others cannot, as well as accounting differences. The debate on contracting out and competitive tendering has thus far focused primarily on the municipal level, where the Danish government has calculated that there are areas suited to competition amounting to roughly DKK 228 billion, of which the work that is most suited to tendering in the social services (main account 5 in the municipal accounts plan) is estimated to amount to DKK 125 billion. In terms of budget and accounts, social services is the largest single area of activity in Danish municipalities, but it is also an area with relatively limited tradition for contracting services out. Today, requests for tender are issued for approximately 22 per cent of the work related to social services – as compared to roughly 52 per cent in the utilities area, approximately 38 per cent in traffic and infrastructure and approximately 37 per cent in construction and the environment (Danish Government 2011).

Until recently, the Danish debate on the impact of contracting out has been marked by 3–4 investigations that are often referred to. The government council *Udbudsrådet* (The Tendering Council) has published an analysis of the nursing home area indicating potential savings in the range of 15–20 per cent if the operations could be contracted out (The Tendering Council 2009). The same potential is mentioned in the PPC report carried out by DI–The Confederation of Danish Industry, which primarily uses figures from the *Udbudsrådet's* case database (Confederation of Danish Industry 2010). But in a corresponding analysis of childcare institutions, the Tendering Council does not find any significant difference in the level of expenses in public and private childcare institutions, while a correction for unspecified overhead expenses produces a minor savings in favour of the private institutions (The Tendering Council 2011). Characteristic for all of these studies, however, is that they build upon selective case selection that is not necessarily representative, and the control for quality and the transaction costs¹ in connection with tendering is insufficient (see also the more detailed examination of these studies in Appendix 1). The only existing Danish examination of the documented effects of contracting out (The Tendering Council 2010) includes a relatively comprehensive collection of studies, but that study does not build upon a systematic method nor does it systematically consider the quality and validity of the collected studies, which include a large number of consulting reports and various kinds of government reports but few scientific papers and analyses. Hence, there is a need for more exhaustive and independent surveys of the area of contracting out.

¹ 'Transaction costs' refer to the administrative expenses in connection with carrying out and completing requests for tender together with the ongoing control and follow-up. This can be calculated in terms of the consumption of time in the public administration together with the purchase of external consultancy, judicial expertise etc. The consumption of time within the public administration in particular can be difficult to quantify, which likely explains many of the inadequacies in the studies we examined in relation to illustrating this theme sufficiently. It is also important to note that some of these expenses must only be paid once and/or are considerably cheaper in connection with so-called 'second-generation tender'. Furthermore, the calculation of transaction costs in connection with contracting out must also account for the administrative expenses in connection with public production. In other words, effects analysis should ideally include and measure the relative difference in transaction costs (see also section 1.4 and Chapter 5 for further discussion).

Contracting out has also been the object of individual impact studies in Danish research. Blom-Hansen (2003) has carried out an analysis of roads in which he concludes that the use of private suppliers leads to 1.5 per cent savings and unchanged quality levels if a municipality increases the operational work in the roads area attended to by private actors by 10 per cent. With respect to the cleaning of schools, Christoffersen, Paldam and Würtz (2007) find that contracting services out to private actors can provide savings of 30 per cent, even though it is an important point that there is considerable variation in the levels of costs within the public sector itself. Conversely, a recent study by Hansen (2010) finds that the impact of competition on home care has no significant differences in the level of expenses in the public and private sectors. Busck (2007) has investigated the consequences of contracting out for refuse collection and concluded that contracting out leads to poorer working conditions and quality. In a major study of employee satisfaction with contracting out, the former *Udlisteringsrådet* (The Danish Council for Contracting Out) has shown how there are variations in the satisfaction in different branches, but as a whole, the satisfaction of the affected employees is lower than was the case prior to the contracting out (The Danish Council for Contracting Out 2006). The results from the relatively few existing Danish studies of the effects of contracting out thus indicate that the effects are mixed and possibly depend on whether the focus is on technical areas (e.g. garbage collection, cleaning, snow removal, roads and parks) or social services (e.g. services for seniors, health and children) as well as the extent to which emphasis is placed on the employee perspective in the impact assessments.

International research has generally demonstrated the savings which can be achieved via contracting out, although there are also examples of more mixed results. Among the most oft-cited studies are Domberger and Jensen (1997), who conclude that contracting out can produce savings in the order of 20 per cent while providing a similar level of service. Corresponding savings are found in studies carried out by Borcherting, Pommerehne and Schneider (1982) in a review of more than 50 investigations from the US, Australia, Germany, Switzerland and Canada. Savas (1987) primarily examines empirical studies from the US and also finds considerable savings. Australian Professor Graeme Hodge finds somewhat more moderate effects in a comprehensive review of the literature in which he finds savings to the order of 6–12 per cent after accounting for the transaction costs (1998, 2000). However, Hodge also finds great variation in the different areas of work and concludes that the documentation is clearly strongest in the technical areas, such as refuse collection and cleaning, whereas the effects on other service areas are more doubtful (Hodge 1998: 105). On the background of these results, Hodge writes that “expecting contracting to be a panacea for all public services, though, would be foolish” (Hodge 2000: 246–247). In another frequently cited study, Boyne (1998) examines 40 studies from the UK and US, where he also finds savings on spending, even though he is quite critical towards the method and basic data in many of the studies under review and particularly critical towards their insufficient measurement of the impact of contracting out on quality.

The research reviews referred to in the above have primarily been based on studies of the conditions in the English and American contexts. The main emphasis has been on technical

services, such as refuse collection and cleaning, and the assessed literature was primarily published in the 1980s and early 1990s. There is therefore a need for a comprehensive and cross-cutting evaluation of the existing documentation of the impact of contracting out, including studies from several countries and with a greater focus on the distinction between technical areas and social services. At the same time, there is a need to update the existing knowledge, which is primarily based upon first-generation tender and to a lesser degree includes experiences with repeated requests for tender in the same area, which is very characteristic for the current situation with respect to tendering. In this light, the purpose of this research report is to conduct a systematic examination and assessment of the studies of the effects of the contracting out of work in the public sector in Danish, Swedish, Norwegian and English in the course of the last ten years.

1.2 Research questions

The study includes three research questions, which together contribute to casting light on a number of central aspects of the impact of contracting out on work in the public sector. These three questions are presented and discussed in the following.

Part 1: Impact on price and quality

The first part of the project presents a review of the existing documentation of the effects of contracting out work in the public sector in relation to price and quality. The price when signing the contract can represent a relevant measurement of the immediate cost/savings for the public authority when contracting out to a private supplier or contractor, but the price does not say anything about the quality of the service delivered. This necessitates a comprehensive assessment of the price and quality for a contracted-out service compared to the earlier price and quality when the same service was produced in the public sector. Nor does the price in connection with the signing of the contract say anything about any subsequent transaction costs, including how the request for tender is dealt with, negotiating and drafting the contract and follow-up quality control. Such expenses must therefore also be included in the assessment of the price of a contracted-out service.

The first part of the project is designed to provide a general overview of the existing documentation of the possible savings in connection with the contracting out of public services when including the quality of the provided service and transaction costs in connection with the contracting out.

Research Question 1: To what extent is there documentation for contracting out having led to an improved connection between price and quality compared with work carried out in the public sector?

Part 2: The differences in the consequences in the technical areas and social services

The second part of the project focuses on whether there are differences in the economic impact felt in technical areas and social services. 'Technical areas' are understood as services

such as roads/parks, refuse collection, utilities and work in the welfare sector that is not directly related to people, such as cleaning and transportation. 'Social services' are understood as person-related services typically involving personal contact between employee and citizen, such as care, childcare, education and employment services. We have also included administration together with social services, even though this area can be argued to represent a grey zone between the technical area and social services.

The technical areas are distinguished from the social services in terms of typically being services that can easily be formulated in a contract and where the service can subsequently be controlled more easily than is the case with social services. In the theoretical sense, one might therefore expect the transaction costs resulting from having to tender, describe and monitor work carried out in the social services to be greater due to the fact that the complexity of the services is significant and because there is a considerable element of subjective estimation in the services provided.²

The second part of the project aims to investigate the extent to which the existing studies of the effects of contracting out have documented the systematic differences between the technical areas and social services. This will include evaluation of whether there are unique conditions or problems associated with transferring conclusions about the effects from the one type of work to the other, such as differences in the character of the service, which render the work more or less suitable for tendering.

Research Question 2: To what extent is there documentation for specific factors rendering contracting out more or less advantageous with respect to social services than in technical areas?

Part 3: Examination and assessment of the consequences for the employees involved in contracting out

The third part of the project focuses on the consequences for the employees in the public sector who are directly affected by contracting out. The legislation regarding the transfer of businesses is often referred to as supposedly guaranteeing that employees in the public sector are assured fair working conditions when work is contracted out, but the consequences for the employees when work is tendered are relatively poorly documented in several of the most recent reviews of the effects of contracting out (e.g. The Tendering Council 2010; The Tendering Site 2011), although they are better documented in studies by The Danish Council for Contracting Out (2006) and Busck (2007).

The third part of the project examines the existing documentation of the consequences of contracting out for the involved employees, including whether contracting out affects the remuneration and working conditions of employees in the public sector, including tariffs and staffing, employment security and other documented conditions related to the physical and psychological working environment.

² This argument builds on transaction cost theory (e.g. Williamson, 1996).

Research Question 3: To what extent has it been documented whether employees in the public sector are offered the same conditions regarding remuneration, standards, working environment and other conditions relating to their employment as prior to the contracting out having taken place?

The three research questions are answered in chapters 2, 3 and 4, respectively, in this report, while Chapter 5 provides an overall conclusion and discussion of the results of the research review.

1.3 Definitions and delimitations

In the course of the collection and assessment of the Danish and international studies, we have chosen to focus on the effects of contracting out agreements. Contracting out refers to the decision whereby a public authority decides to enter into a contract which shifts the production of a service from the public to the private sector, while the financing and monitoring remain within the public sector (Andersen 1996: 18; Christensen & Petersen 2010). The rules for public procurement in the EU require that invitations for tender are issued when contracting out work and projects of a certain magnitude, that is, a number of different suppliers or producers are invited to submit a tender for a specific task or project (Busck 2007: 91). This creates a competitive situation between multiple suppliers regarding price and quality while at the same time the procurement, control and financing of the service remain the responsibility of the public sector (Ejersbo & Greve 2002: 5). With the exception of the exercise of authority (e.g. in connection with carrying out elections) and work which the law dictates must be carried out by the public sector itself (e.g. teaching in public schools), most work in the public sector can in principle be contracted out. In practice, however, the municipalities have primarily contracted out work in the technical areas, such as cleaning, refuse collection and road maintenance, while social services, such as elder care, rehabilitation and childcare, is primarily taken care of by the municipalities themselves (Local Government Denmark et al. 2007: 16–19).

The reason for choosing to consistently address contracting out in this report instead of competitive tender or PPC is primarily because contracting out – despite extensive talk about PPP, PPC and PPI – remains the primary form of cooperation between public authorities and private businesses regarding the solution of a broad range of tasks in technical areas as well as social services (see e.g. Danish Industry 2010). In this connection, it is of central importance to note how we have observed a gradual shift in the language used in the area in recent years whereby many of the advocates for contracting out now prefer to use the terms ‘competitive tender/exposure to competition’ (in Danish: *konkurrenceudsættelse*) or public-private cooperation (PPC) when referring to agreements which, strictly speaking, represent traditional contracting out. We therefore maintain the use of the ‘old fashioned’ term *contracting out* due to the fact that it remains the most precise term for the type of agreement whereby a public authority, after inviting requests for tender, enters into a contractual agreement involving payment to a private business for providing a specific service within an agreed and delimited period of time.

Fact Box 1: Definitions of different forms of public-private cooperation

- *Contracting out* is often used as a term for the process whereby a public authority, via a contract-based agreement, transfers the provision of services related to maintenance or operations to a private party, typically for a brief period of time (e.g. 3–4 years).
- *Functional tendering* is a form of tender where the public client does not provide a detailed description beforehand of how the related work is to be carried out, instead presenting a number of general functional requirements that the solution proposed by the potential supplier must fulfil.
- *Public-private partnership (PPP)* is an overall agreement between a public and a private actor about the planning, construction, operation, financing and maintenance of a given construction project over a longer contract period, typically 25–35 years.
- *Free choice* is the term used to describe a number of different models in which the receivers of a service can choose between public or private suppliers, who are competing in terms of quality but not price. Free choice has been introduced in Denmark in areas such as homecare, hospitals, childcare options, schools, upper secondary education programmes and general practicing physicians.
- *Public-private innovation partnerships (PPI)* is a form of cooperation in which the public sector and private businesses work together to develop innovative solutions, primarily with a focus on welfare areas. In contrast to contracting out, there is often talk of a form of cooperation without a contract.
- *Total tender* is a model whereby the public sector itself develops the project, after which it enters into an agreement with a private contractor concerning the establishment, maintenance and subsequent operation of the project. In contrast to PPP, the private party in total tender is not included in the planning phase (project design), and the financing is public.
- An *operating partnership* refers to a total agreement with a private party regarding maintenance and on-going operations. An operating partnership is occasionally also referred to as a service partnership and is one of the models most closely related to contracting out.
- In the *sale-and-lease-back model*, the public sector constructs buildings, sells them to a private actor, and subsequently rents them back over a previously agreed upon period of time. In that sense, the private party is included in the operations and maintenance phases, whereas the project design and actual execution of the project are carried out in the public sector.
- *Turnkey contract* or *partnering*, is when a private contractor engages in the design and completion of a public construction project. This form of involvement of private contractors is often used in traditional public building projects, as the public sector itself rarely carries out such construction work.

Sources: Helby Petersen 2007:12–13; Danish Construction and Building Authority 2009; The Tendering Council/Ernst & Young 2010.

At the same time, this delimitation means that the study is not casting light on the effects of a number of other public-private models of cooperation, including public-private partnerships (PPP), innovative public-private partnerships (PPI), operating partnerships, free choice, the sale-and-lease-back model etc. The differences in the form of organization, financing, responsibility for control and the time horizon for the agreement between these models is so great that the results obtained from the one form of cooperation cannot be transferred outright to the others. See, for example, Hodge and Greve (2007, 2009) and Pollock, Price and Player (2007) for effects studies of the PPP model, while case-based studies of PPI

ventures are found in, e.g., Weihe et al. (2010, 2011). For a comprehensive examination of experiences with privatization, see Hodge (2000) and KREVI (2011) for a review of free choice on the home care area. Also see the fact box for a definition of a number of central public-private forms of cooperation.

1.4 Method and the studies included

The research-based documentation of the effects of contracting out and competitive tendering systematically uncovers the accessible knowledge about an entire area of literature and is therefore suitable for carrying out a review and assessment of the effects, advantages and disadvantages related to contracting out. The strength of such an analysis is that it is possible to achieve a more certain and valid basis for an assessment of effects than is the case with individual investigations in which a number of unique conditions can play in and therefore be criticized for not being representative. Such a study obtains scientific status in a given area, e.g. the immediate effects of contracting out in technical areas or the social services, and consequences for the affected employees.

This requires that a research review makes use of explicit and recognized methods in order to be able to evaluate whether the correct search methods and quality criteria have been used. This project utilizes a method inspired by the EPPI Centre methodology (Gough 2004). The EPPI-Centre is a British research centre that has developed a means of carrying out research reviews with a broader focus than is the case with the more traditional research reviews (e.g. Cochrane or Campbell). This means that it is possible to include scientific research as well as non-scientific studies in the research review as well as both quantitative and qualitative investigations.

A research review can include a statistical meta-analysis, which means that new effects assessments are carried out on the background of the data included in the studies. However, this has not been possible in this research review, as it has included studies spanning from various types of methods (quantitative and qualitative studies) and different sectors with very different conditions for contracting out. A statistical meta-analysis is therefore unable to provide a meaningful image of the general effects of the contracting out of work in the public sector and therefore not chosen in this study.

In order to provide the best possible basis for a cross-evaluation, research literature in Danish, Swedish, Norwegian and English is included as well as non-research-based Danish studies published in the form of reports, notes, databases etc. This makes it possible to carry out a systematic and independent examination and quality assessment of the most relevant literature in the area, regardless of the form of publication.

Systematic research reviews basically follow the same steps (Gough 2004), as described in the following. This description also covers the challenges we have met and which solutions we have found in relation to the individual challenges.

a) Specification of research questions, including inclusion and exclusion criteria

The purpose here was to specify the project's research questions. This means that the inclusion and exclusion criteria must be specified with respect to areas such as operations (e.g. technical area), type of operations (form of exposure to competition), language and year of publication. This specification has further attempted to ensure that research questions are sufficiently delimited while at the same time possessing a high degree of relevance.

The inclusion criteria are: contracting out of the public area, procurement of public sector tasks, Danish-language, non-scientific and scientific studies together with scientific studies written in Swedish, Norwegian and English published from 2000 and until May 2011, where we stopped the collection of new studies. 'Scientific studies' are understood as peer-reviewed research in the form of articles in international scientific journals, which rules out books that have not been peer-reviewed according to the same procedures used by journals. Limiting the studies to those after 2000 is justified by the latest international research review of the consequences of contracting out, which was published in 2000 and primarily covered literature analysing examples of contracting out that were carried out from the late 1970s and until the 1990s (Hodge 2000). Prior to this report, there has therefore never been any interdisciplinary overview over the studies investigating the more recent consequences of contracting out.

The exclusion criteria are: non-Western national context, delimited studies with very little degree of generalization, PPP, PPI, free choice models, privatization and process analyses.

b) Screening of relevant studies

In this phase, all of the empirical effect studies are included which initially appear to address the research questions and fulfil the criteria for inclusion (but not the exclusion criteria). In addition to the primary studies, which use empirical data they collected themselves, we have also included existing systematic research reviews. English and Scandinavian peer-reviewed research that can be found in electronic databases is also included. As already mentioned above, reports, notes, databases and the like are also included, even though they have not been published as science as such but where there has either been conducted an independent collection and analysis of empirical matter in the area and/or a major analysis has been carried out on the basis of existing data, such that there is talk of an actual, independent study. Theses written for university master's degrees and PhD-dissertations are not systematically available from all Danish university departments and faculties and therefore not included in the research review.

The following databases have been used in the screening of the relevant studies:

Fact Box 2: Description of the database

Social Sciences Citation Index: International bibliographical database including references and abstracts from approximately 2500 scientific journals within the social sciences since 1956. Included as part of the Web of Science database.

Sociological Abstracts: International bibliographical database including abstracts and references from approximately 1800 social science journals, book reviews, books, sections in books, dissertations and conference papers since 1952. The base currently consists of approximately 900,000 references.

Social Services Abstracts: International bibliographical database including abstracts and references from approximately 1300 scientific journals, book reviews and dissertations dealing with social and welfare research since 1979. This base currently includes approximately 150,000 references.

ERIC (Education Resources Information Center): International database containing abstracts and references from scientific journals, conference papers, government documents, dissertations, reports, books etc within all aspects of education. The base covers the period since 1966 and currently consists of approximately 1.4 million references.

PILOTS Database: International bibliographic database featuring abstracts and references from scientific literature about post-traumatic stress and related illnesses, including the measures taken by public sector actors and the policy for doing so. The base covers the period from 1871 to the present and currently features 42,000 references.

Campbell Library: Database of ongoing and completed systematic research reviews about the effects of social measures.

Cochrane Library: Database covering the ongoing and completed systematic research reviews with health research.

DanBib: The common bibliographic database covering the Danish national bibliography (publications published in Denmark) and the total stock of all Danish research and public libraries.

The Danish National Research Database: Bibliographic database containing references to scientific articles, PhD dissertations, conference papers and other publications from researchers at Danish universities and research institutions.

SwePub: Bibliographic database containing references to scientific articles, PhD dissertations, conference papers and other publications from researchers at Swedish universities and colleges.

ForskDok: Bibliographic database containing references to scientific articles, PhD dissertations, conference papers and other publications from researchers at Norwegian universities and colleges.

The following English search words have been used in the English-language databases: Contracting, contracting out, outsourcing, tender, competitive tender, competitive bidding, marketisation/marketization and public. In the Danish-language databases (Danbib, The Danish National Research Database). The following search words have been used: *Udlisitering*, *udbud* and *private*, *konkurrenceudsættelse*, *outsourcing*, *licitation*, *markedsgørelse*, *kontrakter* and *private*, *private leverandører*, *frit valg* and *private* and *offentlig* or *kommune* or *stat* or *amt* or *region*. In the Swedish-language database (SwePub), the following search words were used: *Privatisering*, *privata leverantörer*, *privata entreprenörer*, *konkurrensutsättning/konkurrensutsättning*, *marknadsskapande*, *entreprenad*, *konkurrensupphandling*, *upphandling*, *förfrågningsunderlag*, *anbudsunderlag*, *anbudsgivare* and *utkontraktering*. In the Norwegian-language database

(ForskDok), the following search terms have been used: *Anbud, anbudskonkurranse, etablere konkurransemarked, kjøp etter avtale, konkurranseutsette, konkurranseutsetting, konkurranseutsettelse, konkurranseutsett, markedsutsett, outsourcing and privatisering*. Swedish and Norwegian search words have been arrived at in cooperation with Nordic researchers working with the same area in order to ensure that they are covered to the highest degree possible.

In order to ensure that the search has been comprehensive and covers all of the relevant literature, a number of Danish state agencies, consultancy firms, research institutions and the like were also contacted directly, which then had opportunity to name relevant supplementary literature. We have also examined the publication lists from ten administration researchers employed in Danish universities and business schools, persons we knew had previously published about contracting out in the public sector.

The screening resulted in 2778 international publications and 1115 Danish publications, 3893 publications in total. On the background of the screening, we examined the individual publications and conducted an assessment on the basis of the accessible information (including abstracts) about whether the publications in question answered at least one of the research questions and whether the publications lived up to the inclusion criteria and were not covered by the exclusion criteria. This resulted in 193 international studies and 74 Danish studies, 267 studies in total, being obtained in order to be scrutinized more closely.

c) Further identification of the relevant studies

In this phase, a more thorough examination of the literature was carried out and the relevant studies were selected. In order to do so, each of the studies found was compared in detail to the inclusion and exclusion criteria and critically assessed as to whether the publications answered the research questions directly. To be included, a study must have met all of the formulated inclusion criteria without 'fulfilling' any of the exclusion criteria. We have also ensured that the same study is not included more than once (e.g. as a paper, scientific article, book chapter). A total of 80 publications were ultimately selected in this phase and are thus included in the research review as relevant studies. The primary reasons why some of the studies were found not to be relevant were that it turned out that the studies were not about the effects of contracting out (but instead other forms of public-private cooperation), just as many studies did not include calculations of the effects, exclusively focusing instead on the process surrounding contracting out.

A complete list of these publications is presented in the following, divided in terms of the Danish (Table 1.1) and international (Table 1.2) literature included in the study:

Table 1.1 Review of the Danish literature on the effects of contracting out

No.	Organisation/author(s)	Year of publication	Title
1	Ministry of Business Affairs/COWI	2000	Veje til bedre udbud – Beskrivelse af krav og ydelser ved udbud: Vaskeriservice, kostpleje og ældrepleje (casestudier) (Paths to better tendering – Description of requirements and benefits with tendering: Laundry services, dietary care and elder care (case studies)).
2	Ministry of Finance/Rambøll	2000	Effektivitet gennem konkurrence. Udbud af velfærdsservice – hvad gør leverandøren anderledes? 1) (Efficiency through competition. Tendering of welfare services – what makes the supplier different?)
3	Rådgivende Sociologer/Det Kommunale Kartel	2000a	Arbejdsklimamåling blandt "udliciterede" medarbejdere (Working climate assessment among the 'contracted out' employees)
4	Rådgivende Sociologer/Det Kommunale Kartel	2000b	Arbejdsklimamåling blandt ansatte i den offentlige sektor (Working climate assessment among employees in the public sector)
5	Rådgivende Sociologer/Det Kommunale Kartel	2000c	Arbejdsklimamåling blandt ansatte som står over for at skulle udliciteres (Working climate assessment among employees who are facing being contracted out)
6	CASA, v. Inger-Marie Wiegman, Dorte Kira Nielsen, Jon Sundbo & Edvin Grinderslev	2001	Evaluering af udbud og udlicitering i Københavns Kommune (Assessment of tendering and contracting out in the City of Copenhagen)
7	Fag og Arbejde (FOA)/KLS	2001	Vi gør jo ikke rent mere (We don't clean anymore)
8	Local Government Denmark	2001a	Udbud og udlicitering i kommunerne – fakta og tendenser (Tendering and contracting out in the municipalities – facts and tendencies)
9	Local Government Denmark	2001b	Udbud og udlicitering på det tekniske område – omfang og erfaringer (Tendering and contracting out in the technical areas – the extent and experiences)
10	Rådgivende Sociologer	2001	Arbejdsklimaundersøgelse: ISS Hospitalsservice Hvidovre Hospital (Working climate study: ISS Hospital Service – Hvidovre Hospital)
11	Local Government Denmark/KL's Konsulentvirksomhed (KLK)	2002	Århus Kommune: Evaluering af forsøg med udbud (City of Aarhus: Assessment of trials with tendering)
12	Jens Blom-Hansen	2003	Is private delivery of public services really cheaper? Evidence from public road maintenance
13	Specialarbejderforbundet (SID)/Deloitte & Touche	2003	Effekter af udlicitering (Effects of contracting out)
14	CASA v. Inger-Marie Wiegman, Karin Mathiesen & DTU v. Peter Hasle	2004	Arbejdsmiljø ved udbud af busdrift (Working environment when tendering bus operations)
15	The Danish Economic Councils	2004	Effektivitet og kvalitet i den offentlige sektor (Efficiency and quality in the public sector)
16	The Danish Council for Contracting Out	2005	Drivkræfter og barrierer for udlicitering i kommunerne (Drivers and barriers for contracting out in the Danish municipalities)
17	The National Labour Market Authority/Rambøll	2006	Det første udbud af landsdækkende rammeaftaler – En analyse af resultater og effekter (The first tendering of national framework agreements – an analysis of results and effects)
18	Thomas Bredgaard & Flemming Larsen	2006	Udliciteringen af beskæftigelsespolitikken – Australien, Holland og Danmark (The contracting out of employment policy – Australia, the Netherlands and Denmark)

19	The Danish Council for Contracting Out	2006	Undersøgelse af medarbejdertilfredshed ved udlicitering (Investigation of employee satisfaction with contracting out)
20	Henrik Christoffersen, Martin Paldam & Allan Würtz	2007	Public versus private production and economies of scale
21	Ole Busck	2007	Skraldemænd er vel også en slags mennesker! – Markedsførelsen af kommunale serviceopgaver forårsager nedslidning (Garbagemen are people too! The marketization of municipal service functions wears people down)
22	The National Labour Market Authority/Deloitte	2008	Evaluering af brugen af anden aktør under Service- og LVU-udbuddene – Delrapport 1 og 2 (Assessment of the user and the other actor in the Service and LVU tenders – Parts 1 and 2)
23	CEPOS v. Henrik Christoffersen & Karsten Bo Larsen	2009	Omkostningsniveauet i offentlig og privat produktion af sygehusydelser (The level of expenses in the public and private production of hospital services)
24	Christine Nuppenau	2009	Marketizing municipal park management organisations in Denmark – A study of policymaking and organisational change in the period 1985–2005
25	FOA – Trade and Labour	2009	<i>Konkurrenceudsættelse og udgifter på det sociale område</i> (Competitive tendering and spending in the social services)
26	Henrik Christoffersen, Anders Milhøj & Thomas Westergaard-Kabelmann	2009	Det økonomiske potentiale ved øget udlicitering i de danske kommuner (The economic potential of increased contracting out in the Danish municipalities)
27	SFI v. Mette H. Skou, Søren C. Winter & Frederikke Beer	2009	Udlicitering af sagsbehandling (Contracting out casework)
28	The Tendering Council/Rambøll	2009	Effektanalyse af konkurrenceudsættelse af pleje- og omsorgsopgaver i kommunerne (Effect analysis of the competitive tendering of care work in the Danish municipalities)
29	AKF v. Eigil Boll Hansen & Leena Eskelinen	2010	Privat aktør i arbejdsmarkedsindsatsen (Private actor in the labour market effort)
30	Det Lokale Beskæftigelsesråd	2010	Om brugen af andre aktører i Jobcenter Århus (On the use of other actors in Jobcenter Aarhus)
31	Confederation of Danish Industry (DI)	2010	Offentlig-privat samarbejde – redegørelse 2010 (Public-private cooperation – review of 2010)
32	Morten Balle Hansen	2010	Marketization and Economic Performance
33	Ugebrevet A4	2010	Udliciteringer skaber papirbøvl i kommunerne – rundspørge blandt kommunaldirektører (Contracting out creates paperwork in the Danish municipalities – a survey of chief executives in Danish municipalities)
34	The Tendering Council	2010	Erfaringer med konkurrence om offentlige opgaver – overblik over eksisterende dokumentation af effekterne (Experience with competition and public work – overview of existing documentation of the effects)
35	The Organisation of Public Employees (Offentligt Ansattes Organisationer – OAO)	2011	Case database
36	The Tendering Portal	2011	Dokumentationsdatabasen (The documentation database – 88 cases)
37	The Tendering Council/Rambøll	2011	Konkurrence på daginstitutionsområdet – erfaringer, muligheder og effekter (Competition on the childcare area – experience, possibilities and effects)

Table 1.2 Review of the international literature on the effects of contracting out

No.	Organisation/author(s)	Year of publication	Title
38	Alam, Quamrul & John Pacher	2000	Impact of Compulsory Competitive Tendering on the Structure and Performance of Local Government Systems in the State of Victoria
39	Donohue, Julie M. & Richard G. Frank	2000	Medicaid Behavioral Health Carve-Outs: A New Generation of Privatization Decisions
40	Kavanagh, Ian & David Parker	2000	Managing the contract: A transaction cost analysis of externalization
41	Pinch, Philip L. & Alan Patterson	2000	Public Sector Restructuring and Regional Development: The Impact of Compulsory Competitive Tendering in the UK
42	Reeves, Eoin & Michael Barrow	2000	The Impact of Contracting Out on the Costs of Refuse Collection Services: The Case of Ireland
43	Harding, Richard	2001	Private Prisons
44	Kakabadse, Andrew & Nada Kakabadse	2001	Outsourcing in the Public Services: A Comparative Analysis of Practice, Capability and Impact
45	Keane, Christopher, John Marx & Edmund Ricci	2001	Perceived Outcomes of Public Health Privatization: A National Survey of Local Health Department Directors
46	McDavid, James C.	2001	Solid-Waste Contracting-Out, Competition, and Bidding Practices among Canadian Local Governments
47	Gustafsson, Ove & Tor Busch	2002	Konkurrenseutsetting i kommunal sektor: En kvalitativ analyse av endringer i en kommunal renovasjonsbedrift (Competitive tendering in the municipal sector: A qualitative analysis of changes in a municipal waste disposal company)
48	Camp, Scott D. & Gerald G. Gaes	2002	Growth and Quality of U.S. Private Prisons: Evidence from a National Survey
49	Oliver, Matthew N. I.	2002	Privatizing Medicaid-Funded Mental Health Services: Trading Old Political Challenges for New Ones
50	Dijkgraaf, Elbert & Raymond H.J.M. Gradus	2003	Cost Savings of Contracting Out Refuse Collection
51	Ohlsson, Henry	2003	Ownership and Production Costs: Choosing between Public Production and Contracting-Out in the Case of Swedish Refuse Collection
52	O'Toole, Laurence J. & Kenneth J. Meier	2004	Parkinson's Law and the New Public Management? Contracting Determinants and Service-Quality Consequences in Public Education
53	Park, Se-Jeong	2004	Contracting Out in Korean Local Governments: Current Situation and Challenges Ahead
54	Puig-Junoy, Jaume & Vicente Ortún	2004	Cost Efficiency in Primary Care Contracting: A Stochastic Frontier Cost Function Approach
55	Brudney, Jeffrey L., Sergio Fernandez, Jay Eungha Ryu & Deil S. Wright	2005	Exploring and Explaining Contracting Out: Patterns Among the American States
56	Gustafsson, Ove & Per Øystein Saksvik	2005	Outsourcing in the Public Refuse Collection Sector: Exploiting Old Certainties or Exploring New Possibilities?
57	Jensen, Paul H. & Robin E. Stonecash	2005	Incentives and the Efficiency of Public Sector-Outsourcing Contracts
58	Bel, Germá & Antón Costas	2006	Do Public Sector Reforms Get Rusty? Local Privatization in Spain
59	Fernandez, Sergio, Craig R. Smith & Jeffrey B. Wenger	2006	Employment, Privatization, and Managerial Choice: Does Contracting out Reduce Public Sector Employment?
60	Hebdon, Robert	2006	Contracting Public Services in New York State – Labour Effects
61	Pina, Vicente & Lourdes Torres	2006	Public-Private Efficiency in the Delivery of Services of General Economic Interest: The Case of Urban Transport

62	Dijkgraaf, Elbert & Raymond H.J.M. Gradus	2007	Fair Competition in the Refuse Collection Market?
63	Gilmer, Todd	2007	An Analysis of the Effects of Organization and Financing on the Utilization and Costs of Public Mental Health Services in San Diego County
64	Bel, Germá & Mildred Warner	2008	2) Does Privatization of Solid Waste and Water Services Reduce Costs? A Review of Empirical Studies
65	Davies, Steve	2008	Contracting out Employment Services to the Third and Private Sectors: A Critique
66	Falkenberg, Helena, Katharina Näswall & Magnus Sverke	2008	Personalens arbetsattityder och hälsa vid privatisering – en jämförelse mellan två svenska akutsjukhus (Attitudes to work among personnel and health privatisation – a comparison of two Swedish acute care hospitals)
67	Hansen, Niklas, Magnus Sverke & Katharina Näswall	2008	Utbrändhet i vården: Betydelsen av krav och resurser på tre sjukhus med olika driftsformer (Burnout in health care: the importance of requirements and resources in three hospitals with different modes of operation)
68	Kuhlmann, Sabine	2008	Reforming Local Public Services: Trends and Effects in Germany and France
69	Macinati, Manuela. S.	2008	Outsourcing in the Italian National Health Service: Findings from a National Survey
70	Sharaby, Nir & Yoram Shiftan	2008	The Economic Benefits from Competition in Bus Public Transport – The Israeli Case
71	Chong, Kar-Ming, Colin Dolley, Keith Houghton & Gary S. Monroe	2009	Effect of Outsourcing Public Sector Audits on Cost-Efficiency
72	Cunningham, Ian & Philip James	2009	The Outsourcing of Social Care in Britain: What Does it Mean for Voluntary Sector Workers?
73	Lundahl, Brad W., Chelsea Kunz, Cyndi Brownell, Norma Harris & Russ Van Vleet	2009	Prison Privatization: A Meta-analysis of Cost and Quality of Confinement Indicators
74	Purse, Kevin	2009	Outsourcing Myths and Workers' Compensation Claims Administration
75	Bae, Suho	2010	Public versus Private Delivery of Municipal Solid Waste Services: The Case of North Carolina
76	Bel, Germá, Xavier Fageda & Mildred E. Warner	2010	Is Private Production of Public Services Cheaper than Public Production? A Meta-Regression Analysis of Solid Waste and Water Services
77	Dube, Arindrajit & Ethan Kaplan	2010	Does Outsourcing Reduce Wages in the Low-Wage Service Occupations? Evidence from Janitors and Guards
78	Iseki, Hiroyuki	2010	Effects of Contracting on Cost Efficiency in US Fixed-Route Bus Transit Service
79	Longva, Frode & Oddgeir Osland	2010	Competition the Norwegian Way: The Effects of Tendering in Local Public Transport
80	Yang, Kaifeng & Anthony Kassekert	2010	Linking Management Reform with Employee Job Satisfaction: Evidence from Federal Agencies

d) Description of relevant studies

All of the studies included in the research review have been described with respect to 1) general information about the study, 2) the object of analysis, 3) the method applied, and 4) proven results. A complete examination and assessment of all of the publications included in the research review is presented in Appendix 1 (available in Danish only).

We have ensured that the studies have been systematically described according to the same principles, meaning that the descriptions can subsequently form the basis for a uniform assessment of the methods applied in the respective studies along with the quality of the data. In this description, the studies are coded according to sector (utilities, construction, education, health, seniors and the disabled, general social services, labour market services, administration), type of method (quantitative, qualitative) and design (systematic review, RCT, other experimental investigations, registry information, survey, case study). This has made it possible to subsequently establish a comprehensive database with this information about all of the studies which have proven valuable in the general interpretation of the results of the studies (further information about the material and coding procedure can be acquired from the authors).

e) The assessment of the quality of the relevant studies

The quality evaluation builds on a number of general criteria forming the basis for the evaluation of the quality of the individual studies and their relevance in relation to the research questions that are in focus in the research review. The general criteria for quality are based on the current standards for good scientific practice, which, among other things, have been developed in connection with research reviews (Gough 2004). These general criteria for quality are supplemented in the present research review with more specific criteria based on the special conditions that are important to take into account in effect analyses of competitive tender and the contracting out of work in the public sector (Helby Petersen & Olsen 2011). The general quality criteria used in the research review are:

1. Analysis design: The analyses ought to be based on the most well suited analysis design (systematic review, RCT, other experimental investigations, case studies) in relation to the object of analysis and the accessibility of the relevant data on the area. The analyses should also contain an exhaustive reason and documentation for which cases are included in the analysis and which cases are not included in the analysis, as well as the extent to which the delimitation of the population enables a generalization of the results from the analysis. In addition, the analysis should include all of the relevant and accessible data (e.g. budget and account figures from public and private suppliers, measures of quality, information about transaction costs, user and employee satisfaction).

2. Carrying out the studies: The studies ought to be carried out in a manner that lives up to the applicable standards – in quantitative studies, the basic data should make generalization possible; in qualitative studies, the basic data should be able to provide

adequate support for interpretations and the inclusion of other data (e.g. registry data) should be systematic and exhaustive as well as documented and justified.

3. The results and dissemination of the analyses: The conclusions in the analyses should be based on the most well suited methods for calculating the effect of contracting out (e.g. multivariate methods, estimation of lacking values in the data set) and include justifications for the choice of the method of calculation, including the strengths of the chosen methods as well as their weaknesses. The results of the analyses should also be scrutinized critically in terms of the robustness and generalizability of the results, including reference to the other relevant studies in the area. The discussion of the results ought to include considerations as to the extent to which transaction costs in connection with the tendering process are included in the effect estimation. Here, it is crucial to note that there can be expenses associated with the arrangement and follow-up on the completion of the work in both the public and private sectors. As such, it is the differences in the transaction costs with respect to public and private production that the studies should ideally be measuring and including in the total accounting of the economic consequences of contracting out.

The interpretation of the results should also include reflections regarding whether contracting out has had an impact on the quality of the service in question and the actual quality should be assessed to the extent possible, while user satisfaction can be used as a secondary indicator of quality in the cases where actual data for quality are not accessible. Similarly, the interpretation of the results (if the study is relevant in relation to the third research question) can include reflections as to whether contracting out has had an impact on the affected employees and their performance (e.g. staff turnover, illness absenteeism, job satisfaction, level of education and seniority, the organization of work). In conclusion, the results must be presented in such a manner so as to clarify how the results have been produced, including the limitations and reservations that must be considered with respect to sample size, bias in the case selection process and limited access to data.

All of the relevant studies have been assessed on the basis of a quality protocol in keeping with the pattern above. The following quality protocol has been used:

Table 1.3 Quality protocol used to evaluate the studies

No.	Criterion	Fulfilled?
1a	The analyses are based on the most well suited analysis design (systematic review, RCT, other experimental investigations, case studies) in relation to the object of the analysis and the accessibility of the relevant data.	
1b	The analyses include an exhaustive justification and documentation for which cases are included in the analysis and not, as well as the extent to which the delimitation of the population makes it possible to generalize the results from the analysis.	
1c	The analyses include all of the relevant and accessible data (e.g. budget and account figures from public and private suppliers, user and employee satisfaction).	
2a	The studies have been carried out in a manner living up to the existing standards – in surveys, the data must make it possible to make generalizations (sufficient response rate, valid questionnaire, high reliability).	
2b	The studies have been carried out in keeping with the current standards – in qualitative investigations, the data must be able to support interpretations to a sufficient degree.	
2c	The studies have been carried out in a manner living up to the current standards – in other types of investigations (e.g. registry data), the data must have been produced in a systematic and exhaustive manner.	
3a	The conclusions in the analysis build on the most well suited methods for calculating the effect of contracting out (e.g. multivariate methods, estimation of missing values in the data set) and include justifications for the choice of method.	
3b	There are qualifying assessments of whether special contextual conditions in the individual cases have possibly affected the measured effect of contracting out (e.g. past experience with contracting out, the level of expenses prior to contracting out, the composition of the group of citizens in question, areas that are suited to requests for tender, the current market situation).	
3c	The results of the analysis are subjected to a critical assessment of the robustness and generalizability of the results, including consideration of other relevant studies in the area .	
3d	The discussion of the results includes reflections regarding the extent to which the transaction costs in connection with the tender process are included in the calculations of the effect value.	
3e	The interpretation of the results includes well-reasoned and relevant information about whether contracting out has had an impact on the quality of the service in question.	
3f	The interpretation of the results includes reflections regarding whether contracting out has had an impact on the affected employees and their performance (e.g. employee production, illness absenteeism, job satisfaction, level of education and seniority and the organization of the work).	
3g	The results are presented in such a manner that it is clear how they have been produced.	

In the assessment of the individual studies, the research group has evaluated whether the quality criteria have been fulfilled '+', have been fulfilled to some extent, but some aspects are missing or weak '(+)', are not fulfilled '(–)' or are not relevant for the study in question '(IR)'. If a quality criterion is not relevant in relation to a given study, it can be deemed 'irrelevant' and thus be excluded from the total assessment. An example of this could be a study focusing on the effects of contracting out in relation to the economy and quality in which the employee working conditions are not included in the focus of the study. The final evaluation of the individual studies is based upon a holistic assessment of the qualitative parameters which are relevant for the study in question. The examination of the studies (Appendix 1) includes reference to the quality assessment for the criteria in the quality protocol which has been used in the assessment of each individual study.

On the background of the quality assessment of the criteria above, the studies are categorized as highly satisfactory, satisfactory or unsatisfactory studies. Highly satisfactory studies are those which have taken all of the relevant conditions from the quality protocol into account and which therefore ought to be attributed especially great weight in the

research review. Satisfactory studies have not included all of the relevant conditions in the quality protocol but nevertheless included enough of them to be included in the research review, albeit with less weight than the highly satisfactory studies. The unsatisfactory studies have failed to account for enough of the relevant conditions in the quality protocol and have therefore not been included in the research review because the results do not build upon a solid method and/or an exhaustive empirical data collection. In other words, there is talk of results that the research group – after detailed scrutiny – have assessed as being sufficiently supported in relation to documenting the effects of contracting out.

Table 1.4 below presents a review of the studies we have examined. The studies are distributed relatively evenly in relation to the three main questions in the research review. There are more than 60 studies addressing the impact in terms of economy and quality and effects on the technical areas and social services. The examined studies are distributed reasonably evenly in relation to sectors. At the same time, we see that very few studies have been assessed as being highly satisfactory (two studies), while most of the studies have been evaluated as satisfactory (56 studies) and roughly one-third (22 studies) as unsatisfactory.

f) Cross-analysis and interpretation of relevant studies

The cross-analysis aims at comparing the results from the studies included in the research review, so the conclusions are based on the studies considered as a whole. The method used in the analysis depends greatly on the type of study. Results are reported from both quantitative effects studies, which indicate a specific percentage of economic output via contracting out in a given area, and results are also reported from more qualitatively oriented studies and surveys in which the effects of contracting out are quantified in some cases while described in qualitative terms in others. In the cases where the systematic research reviews included in the study build upon primary studies that are also included in this study, we have attempted to take this into account in the overall interpretation of the results such that these primary studies do not weigh disproportionately on the study at hand.

The purpose of the cross-analysis has been to summarize the research-based knowledge in the area to provide a basis to be able to assess what there is (not) research-related evidence for in this area for drawing conclusions in relation to the effects of contracting out public services. The cross-analysis has placed emphasis on the studies that have been evaluated as being highly satisfactory or satisfactory, while no emphasis has been placed on the studies found to be unsatisfactory. However, the unsatisfactory studies are described in a separate section in chapters 3–5, as they are relevant in relation to the three research questions in the research review, and casting light and discussing the weaknesses in these studies has significance for research.

Table 1.4 Review of all of the studies in the research review

	Research question ³			Sektor ³	National kontekst ³		General assessment		
The examined studies	Impact on economics and quality:	Impact on technical areas and social services:	Consequences for employees:	Utilities: 35 studies ¹ Transport and urban development: 30 studies Education: 19 studies Health: 30 studies Seniors and the disabled: 29 studies Children and youth: 24 studies Employment: 27 studies Administration: 15 studies Other: 16 studies ²	Danish conditions:	International conditions:	Highly satisfactory studies:	Satisfactory studies:	Unsatisfactory studies:
	63 studies	63 studies	42 studies		37 studies	44 studies	2 studies	56 studies	22 studies

Notes: 1): Incl. refuse collection, 2): Incl. cleaning, prisons etc., 3): Does not sum the overall number of studies, as each study can be placed under multiple categories.

3 Economic consequences and impact on quality

Searching the literature, we have identified a total of 63 studies analysing the economic consequences and impact on quality when public services are contracted out. The literature is of a very mixed character – both in terms of method as well as content – and we have also found significant differences in terms of quality. Among the satisfactory studies are 16 Danish and 28 international studies dealing with economics and/or quality. Moreover, the unsatisfactory studies include 13 Danish and six international studies. In other words, almost half of the Danish studies do not have the necessary quality in terms of the method and/or data for the results to be characterized as satisfactory in relation to documenting the effects of contracting out. These studies have been weeded out due to a combination of inadequate case selection, inadequate data or important weaknesses in how the analyses were carried out, while the distribution of satisfactory and non-satisfactory studies is better for the international literature, even though quality differences are also found here.

In the following, the Danish studies of satisfactory quality are examined first (section 2.1), after which we examine the international studies of satisfactory quality (section 2.2). Finally, we review the Danish and international studies that have been found to be unsatisfactory (section 2.3). More detailed overviews of the literature on the economic consequences and impact on quality are gathered on a separate page towards the end of the chapter.

3.1 Results from Danish studies

None of the Danish studies have been classified as highly satisfactory. From the perspective of quality assessment, it is particularly the assessment of the impact on quality and calculation of transaction costs that are not clarified sufficiently, which leads to a number of reservations. Among the 16 Danish studies evaluated as being of satisfactory quality, there is a relatively broad span in the calculation of the economic consequences. The most positive studies find savings in the order of 20–30 percent (e.g. Ministry of Finance/Rambøll 2000; Blom-Hansen 2003; Christoffersen, Paldam & Würtz 2007), while the more negative studies arrive at extra costs to the order of 5–10 percent – and all of 36 per cent in one instance (CASA 2001; The Tendering Council/Rambøll 2009).

Five studies find that the economic consequences are unambiguously positive (Ministry of Finance/Rambøll 2000; LGDK 2001b; Blom-Hansen 2003; Christoffersen, Paldam & Würtz 2007; The National Labour Market Authority/Deloitte 2008/9), three studies find the economic effects to be mixed but with a preponderance of positive results (CASA 2001; LGDK 2002; The Tendering Council/Rambøll 2009), one study finds the economic effects to be negative (The Danish National Centre for Social Research – SFI 2009), while eight studies find the economic effects to be unchanged, mixed or immeasurable (Ministry of Business Affairs/COWI 2000; LGDK 2001a; The National Labour Market Authority/Rambøll 2006;

Bredgaard & Larsen 2006; AKF 2010; Det Lokale Beskæftigelsesråd Århus 2010; The Tendering Council/Rambøll 2011). The general picture produced by the review of the studies is that the economic effects are predominantly positive and there are particularly great economic gains to be found in the technical areas as well as road maintenance (Blom-Hansen 2003) and cleaning (Christoffersen, Paldam & Würtz 2007), while the calculation of the effects in the social services have a number of limitations with respect to the data and method applied. We discuss these differences between sectors further in Chapter 4.

In relation to the calculation of the impact on quality, the general picture, as described briefly in the above, is that many of the studies have many more weaknesses and generally illustrate the quality aspect in a less satisfactory manner than the economic aspect (see e.g. Christoffersen, Paldam & Würtz 2007; The Tendering Council/Rambøll 2011). Among the best studies in relation to quality assessment are Blom-Hansen's (2003) study of the welfare area, which indicates that economic savings are obtained without compromising quality, as well as the study of the operation of care centres carried out by The Tendering Council/Rambøll (2009). In both cases, however, the examination of the studies has given rise to reservations, as quality is either measured using a small sample of the investigated cases (Blom-Hansen 2003) or not measured in a uniform manner in all of the cases (The Tendering Council/Rambøll 2009). There are also a number of effect analyses focusing on the area of employment in which the quality dimension is presented relatively well. These analyses generally show that contracting out to private suppliers has had little or no consequence for the quality of the measures aimed at promoting employment (e.g. Bredgaard & Larsen 2006; The National Labour Market Authority/Deloitte 2008/9; SFI 2009; AKF 2010). These studies are marked by a difference, however, in that the three studies carried out by researchers reach either mixed or negative conclusions, whereas the studies conducted by consultancy firms for state institutions find positive, albeit weak, effects in relation to quality (compare publications by SFI 2009 with The National Labour Market Authority/Deloitte 2008 and 2009).

Carrying out an overall assessment of the economic effects of contracting out and the impact on quality on the background of the Danish studies is no easy task. This is partly due to the fact that the material is based on a combination of quantitative studies, surveys and qualitative (case-based) studies, where the economic effects are not quantified in all of the studies, described instead in qualitative terms. The challenge involved in calculating the overall effects in terms of the bottom line and quality also relates to the fact that many of the studies have considerable weaknesses and inadequacies in relation to the assessment of the impact on quality. Possible changes in the quality – either positive or negative – must naturally be seen in relation to any possible savings or expenses, and the general lack of studies measuring the impact on quality sufficiently must therefore be regarded as a significant weakness in the existing documentation of the effects of contracting out work from the public sector. This is also the case with respect to the inclusion of transaction costs, a matter which several studies do not cast enough light on – and which many studies not include at all in the total calculation of the economic consequences.

On the background of the relatively few Danish studies that are of satisfactory quality, the overall picture is that there is overwhelming documentation that contracting out has led to financial savings whereas it is generally more poorly documented whether these savings come at the cost of the quality. The character of the literature and the significant reservations in relation to quality and the transaction costs mean that it is not possible to carry out a meaningful calculation of a general figure for the effects of the contracting out work from the public sector. Most of the Danish studies find either mixed positive and negative or unchanged economic consequences. It is therefore important to add that savings are not documented in most of the studies we have examined, although only a single study documents unambiguously negative economic effects. Savings have thus been documented in selected sectors, such as road maintenance and cleaning in schools, while a significant number of other sectors are marked by considerable uncertainties regarding the documented economic consequences and impact on quality. It is particularly pivotal to note the differences in the documented effects on the technical areas and social services, including employment services and childcare institutions, where there is generally little or no documentation for positive effects in connection with contracting out to private actors. These differences in the documented effects between the technical areas and social services are further illuminated in Chapter 3.

3.2 Results from international studies

In the examination of the international studies, we have identified two studies as being highly satisfactory (Reeves & Barrow 2000; Bel & Costas 2006).³ Both studies deal with refuse collection and find economic savings in connection with contracting out of up to 45 per cent in the one study (Reeves & Barrow 2000), while the other study finds more mixed economic effects, as the savings would appear to fall over time (Bel & Costas 2006). Among the remaining 24 international studies, which were found to be of satisfactory quality, just like with the Danish studies, there is a relatively considerable spread in the calculation of the economic effects. There are 11 studies documenting economic savings (Kavanagh & Parker 2000; Reeves & Barrow 2000; McDavid 2001; Gustafsson & Busch 2002; Dijkgraaf & Gradus 2003; Park 2004; Jensen & Stonecash 2005; Pina & Torres 2006; Gilmer 2007; Iseki 2010; Longva & Osland 2010). These savings vary but calculated at roughly 5–20 per cent – and in one individual case up to roughly 50 per cent, although without the expenses related to issuing the invitation to tender, expenses with respect to the development of competencies, conversion expenses etc being included in the calculation of the economic consequences, for which reason the savings must be regarded as being somewhat lower (Gustafsson & Busch 2002; see also Appendix 1 for a more detailed assessment of this study). The Gustafsson and Busch (2002) study is also remarkable in as much as the control tender issued by the public sector provided a savings

³ These two highly satisfactory international studies also have results regarding the consequences for the employees and are therefore also drawn upon in response to the third research question. These two studies show how the savings obtained via the contracting out of refuse collection have come to some degree at the expense of poorer working conditions and poorer wages, but this is not the main explanation for the savings achieved (see also Chapter 4).

of more than 40 per cent in relation to the before-expenses, which would appear to indicate that it was primarily the competitive situation as opposed to the contracting out itself that produced the savings.

Five studies have also been identified that conclude that contracting out has had negative economic consequences. Of these, only two studies quantified the negative economic consequences, which Ohlsson (2003) finds amount to approximately 6 per cent in refuse collection, while O'Toole and Meier (2004) conclude in the area of education that a 1 per cent increase in the contracting out of service functions such as canteens, cleaning, building operations etc result in a 0.25 percent fall in the funds used on the teaching itself. The other three studies calculating the negative economic consequences do not actually put a number on them (Puig & Ortún 2004; Chong et al. 2009; Purse 2009). We have also identified four studies which find mixed economic consequences (Harding 2001; Keane, Marx & Ricci 2001; Brudney et al. 2005; Kuhlmann 2008). The mixed results emerge, e.g. because the selected cases display different effects; or in surveys with public managers, some of whom respond that contracting out has led to lower expenses, while other managers indicate that contracting out has had no impact on the expenses or actually increased them. The mixed results in these studies indicate that even within the same area of operations, contracting out can produce rather mixed results. Finally, five studies find no economic change (Dijkgraaf & Gradus 2007; Bel & Warner 2008; Davies 2008; Lundahl et al. 2009; Bae 2010), while two studies lack the data required to conclude whether contracting out had any economic consequences (Camp & Gaes 2002; Bel, Fageda & Warner 2010).

An overall assessment of the economic effects should obviously be seen in the light of the effects obtained in relation to quality, cf. the discussion in Chapter 1. The vast majority of the international studies find that contracting out has mixed effects or no impact on quality (e.g. Keane, Marx & Ricci 2001; Dijkgraaf & Gradus 2003; Pina & Torres 2006; Kuhlmann 2008; Longva & Osland 2010), although it must be noted that these studies generally document the impact on quality much more poorly, as quality effects were not measured in several cases, which must be regarded as a significant weakness in these studies (Kavanagh & Parker 2000; cf. Puig & Ortún 2004; Bae 2010; Iseki 2010). We have identified four studies that find the impact on quality to be primarily negative, although the negative effects are not specifically quantified (Camp & Gaes 2002; O'Toole & Meier 2004; Jensen & Stonecash 2005; Purse 2009), and three studies that find a positive impact on quality, again without specifically quantifying this effect (Park 2004; Brudney et al. 2005; Gilmer 2007).

On the background of the international studies, it is not possible to determine whether contracting out has a positive or negative impact or any impact at all on public services. This is due to the fact that in relation to the quality aspect, very mixed results are documented and many of the examined studies do not document the impact on quality enough to be able to draw unambiguous conclusions. In relation to an overall assessment of the economic effects and the impact on quality, there are thus only a few studies comparing the economics and quality in a total assessment of the consequences of contracting out. As previously mentioned, several of the best studies have been carried out in relation to refuse collection, where the general conclusion is that savings have been achieved while roughly maintaining

the same quality. Conversely, in a number of the other sectors, the social services in particular, where very few international studies have been conducted, the documentation is relatively poor as to whether any savings have been achieved and whether the level of quality remains the same or it has been improved or reduced (see Chapter 3 for more about this). While the literature would appear to document the opportunity to save money by contracting out in technical areas, there is still a general lack of documentation of the impact of contracting out on the quality of public services. The differences found in the documented effects in technical areas and the social services are relatively unambiguous and dealt with in greater detail in Chapter 3.

3.3 Inadequate studies

The studies that have been found to be of unsatisfactory quality include 13 Danish and six international investigations. It is thus particularly among the Danish studies (almost half), that there are such weaknesses in the method and/or data that the studies are assessed as being insufficiently supported to be included in a calculation of the documented effects of contracting out. The Danish studies are weeded out due to a combination of insufficient case selection (The Tendering Council 2010, OAO 2011; The Tendering Portal 2011), inadequate data (Specialarbejderforbundet (SID)/Deilotte & Touche 2003; CEPOS 2009) or considerable weaknesses in the design of the analysis and/or how the analysis was carried out (e.g. Danish Economic Councils 2004; Christoffersen, Milhøj & Westergaard-Kabelmann 2009; FOA 2009; Hansen 2010). A widespread weakness among the Danish studies is that they have no – or very poor – information about the impact on quality as well as the extent of the transaction costs and other related expenses (e.g. negotiating and drafting the contract, follow-up, developing competencies and the stability and security of the supply). Here, it is worth acknowledging that it is often both more complicated and time-consuming to measure the impact on quality than the economic consequences. Conversely, the most satisfactory Danish and international studies (regarding quality) indicate that it is actually possible to control for the impact on quality.

A central weakness in the method in many of the inadequate Danish studies examining the effects of contracting out is the failure to carry out a well justified and reflected case selection process, which in several cases results in analyses that are based on cases where the representativity is at best unknown and at worst biased. *The Tendering Portal* (2011) documentation database, for example, has a problem in that it builds upon a limited selection of the municipalities' self-reported experiences (the vast majority of which are positive) with contracting out, which cannot necessarily be generalized and transferred to other municipalities. Other studies, such as the Danish Industry PPC Report (2010, 2011) and The Tendering Council desk study (2010), which is i.a. based upon the cases in the documentation database, use these cases to calculate the general economic consequences of contracting out without taking sufficient reservations for the cases being primarily chosen and described as good examples of contracting out, just as the quality aspect and transaction costs are generally very poorly illuminated in the documentation database. The calculation of

the economic effects in these non-arbitrarily selected cases therefore ought to be considered with considerable reservations and cannot readily form the basis for drawing general conclusions regarding the effects of contracting out without accounting for possible bias in the case selection process (e.g. by including arbitrarily selected control cases), and obtaining supplementary data (e.g. on transaction costs and the impact on quality).

Other Danish studies, which are not included in the report's assessment of the documented effects of contracting out, include studies analysing the connection between the level of expenses and level of contracting out without controlling for the direction of the causality, transaction costs and actual level of quality (e.g., Danish Economic Councils 2004; Christoffersen, Milhøj & Westergaard-Kabelmann 2009; FOA 2009) as well as other studies in which the representativity of the cases is not stated and/or where the data is not exhaustive (e.g. Specialarbejderforbundet (SID)/Deloitte & Touche 2003; OAO 2011). The international studies are generally of higher quality, but there are considerable differences between them. The inadequate international studies are weeded out due to a combination of a lack of clarity regarding the research question and data (Alam & Pacher 2000; Kakabadse & Kakabadse 2001), weak method (Donohue & Frank 2000; Matthew 2002; Macinati 2008) and lack of discussion regarding the representativity and generalizability (Sharaby & Shiftan 2008). As with the Danish studies, insufficient or inadequate information regarding the impact on quality, transaction costs and other subsequent expenses (e.g. for negotiating and drafting contracts, follow-up, developing competencies and supply security) are significant weaknesses in the inadequate international studies.

Table 3.1 Review of Danish studies focusing on economic effects and impact on quality

	General assessment		Sector	Method			Year of publication		Ref.no.
Danish studies	Highly satisfactory studies:	Satisfactory studies:	Utilities: 3 studies ¹ Transport and urban development: 5 studies Education: 1 study Health: 2 studies Seniors and the disabled: 5 studies Children and youth: 3 studies Employment services: 6 studies Administration: 2 studies Other: 1 study ²	Quantitative studies:	Qualitative studies:	Literature studies:	2000–2005:	2006–2011:	16 studies total: 1, 2, 6, 8, 9, 11, 12, 17, 18, 20, 22, 27, 28, 29, 30, 37
	0 studies	16 studies		13 studies	10 studies	1 study	7 studies	9 studies	

Table 3.2 Review of international studies focusing on economic effects and impact on quality

	General assessment		Geography		Sector	Method			Year of publication		Ref.no.
International studies	Highly satisfactory studies:	Satisfactory studies:	Northern European studies:	Other Western studies:	Utilities: 15 studies ¹ Transport and urban development: 7 studies Education: 4 studies Health: 6 studies Seniors and the disabled: 3 studies Children and youth: 3 studies Employment services: 5 studies Administration: 5 studies Other: 7 studies ²	Quantitative studies:	Qualitative studies:	Desk study:	2000–2005:	2006–2011:	28 studies total: 40, 42–43, 45–48, 50–55, 57–58, 61–65, 68, 71, 73–76, 78–79
	2 studies	26 studies	14 studies	20 studies		19 studies	4 studies	9 studies	14 studies	14 studies	

Table 3.3 Review of inadequate studies with a focus on economic effects and impact on quality

	National context		Sector ³	Method ³			Year of publication		Ref.no.
Excluding studies	Danish studies:	International studies:	Utilities: 11 studies ¹ Transport and urban development: 12 studies Education: 11 studies Health: 15 studies Seniors and the disabled: 13 studies Children and youth: 12 studies Employment: 9 studies Administration: 5 studies Other: 3 studies ²	Quantitative studies:	Qualitative studies:	Desk studies:	2000–2005:	2006–2011:	19 studies total: 7, 13, 15–16, 23, 25–26, 31–36, 38–39, 44, 49, 69–70
	13 studies	6 studies		14 studies	5 studies	3 studies	8 studies	11 studies	

Notes: 1): Incl. refuse collection, 2): Incl. cleaning, prisons, 3): Does not sum the total number of studies, as each individual study can be placed in more than one category.

6 Impact on technical areas and social services

In the course of the searches, we have identified a total of 63 studies analysing the economic effects and impact on quality in technical areas and social services. The literature dealt with in this chapter is the same as in the studies examined in Chapter 2, but the focus in this chapter is on the differences in the documented effects in the technical areas and social services. Among the studies of satisfactory quality, there are thus 16 Danish and 28 international studies, while 19 studies are rejected due to quality-related issues.

The Danish studies include three studies that analyse technical areas, four studies analysing cases both technical areas and social services, and nine studies dealing only with social services. Of the nine studies dealing with social services, six focus on employment services (the use of another actor in efforts related to the labour market), which is thus the most often-analysed sector in the Danish studies. In the international literature, there is a clear overweight of studies dealing with technical areas. 18 studies focus on such areas, while five studies deal with both technical areas and social services, and three studies only deal with social services. Of the 18 studies examining technical areas, ten deal with refuse collection, which is the sector that is dealt with most often in the international literature. The studies of unsatisfactory quality include 13 Danish and six international studies.

In the following, we first examine the satisfactory Danish studies (section 3.1), after which we look at the satisfactory international studies (section 3.2). Finally, we examine the Danish and international studies that have been assessed as being of unsatisfactory quality (section 3.3). More detailed overviews of the literature on the impact on technical areas and social services are gathered on a separate page towards the end of the chapter.

6.1 Results from Danish studies

The examination of the Danish studies did not turn up any studies deemed highly satisfactory. However, 16 Danish studies were found to be satisfactory and, as described above, these include studies dealing with both technical areas and social services. The technical areas provide documentation for potential savings, particularly in areas such as cleaning, road maintenance and the operation of so-called green areas. At the same time, it appears as though the Danish literature does not provide the same evidence for potential savings in connection with contracting out related to social services (care, childcare, education, employment services).

Three Danish studies find that contracting out in technical areas saves money (LGDK 2001b; Blom-Hansen 2003; Christoffersen, Paldam & Würtz 2007). The savings in these studies are found in connection with a) operation and maintenance of green areas, streams and waste water treatment plants, b) municipal road maintenance, and c) cleaning in elementary schools. Generally speaking, these three studies do not find that contracting out has any noticeable effect on quality.

Of the Danish studies that analyse cases both in technical areas and social services, there is generally no unambiguous picture of the economic effects of contracting out (Ministry of Business Affairs/COWI 2000; CASA 2001; LGDK 2001a; LGDK 2002). In one of the studies (LGDK 2001a), however, there is a tendency towards the municipalities achieving savings to a slightly higher degree in technical areas than in social services. Contracting out is not generally found to have a significant effect on quality.

Nine Danish studies deal with social services (here, the labour market area), and contracting out generally produces mixed results in terms of the economic consequences (Ministry of Finance/Rambøll 2000; The National Labour Market Authority/Rambøll 2006; Bredgaard & Larsen 2006; The National Labour Market Authority/Deloitte 2008/9; SFI 2009; The Tendering Council/Rambøll 2009; AKF 2010; Det Lokale Beskæftigelsesråd Århus 2010; The Tendering Council/Rambøll 2011). Two of the studies (Ministry of Finance/Rambøll 2000; The National Labour Market Authority/Deloitte 2008/9) find savings on the area, but they are not calculated precisely and are relatively unspecified. A single study finds that contracting out has increased the cost of employment services (SFI 2009), but these extra costs are not accounted for in detail. The other Danish studies dealing with the social services typically find mixed results. For example, one study finds savings with respect to senior citizens of roughly 16–18 per cent while at the same time there is an individual case finding increased expenses in the food services area of roughly 5 per cent (The Tendering Council/Rambøll 2009).

The examination of the Danish studies dealing with the economic consequences of contracting out in technical areas and social services thus indicate some measure of documentation in the technical areas for economic savings, while the same effect is only weakly documented in the social services. This is possibly because the social services are more labour-intensive and there are therefore fewer opportunities for to make gains in terms of efficiency via investments in technology and economies of scale, which is indicated in several of the studies of the technical areas as explaining the obtained savings (see e.g. Blom-Hansen 2003; Christoffersen, Paldam & Würtz 2007).⁴ But this can also be due to the relatively high transaction costs related to issuing requests for tender, describing and monitoring work in the social services, as the complexity of the services is great, thus rendering it more difficult to use contracting out to save money in this area.

However, the differences in the documented effects in the technical areas and social services must be interpreted with some measure of care. There are lengthy traditions for contracting out in the technical areas, while there are still fewer systematic experiences and few Danish studies that have systematically calculated the economic effects of contracting out social services. At the same time, calculating the economic effects of contracting out social services has proven to be difficult, so the published results in the area have typically been marked by considerable uncertainty. For example, carrying out tendering processes and monitoring and controlling them requires considerable administrative and judicial resources,

⁴ The difference in labour-intensive and technology-intensive sectors is also referred to in economic theory as the Baumol Effect.

which ought to be included in the calculation of the total economic effects, but these costs are nevertheless excluded in many studies due, among other reasons, to the methodological problems related to such calculations. Correspondingly, methodological problems and inadequacies are also found in several Danish studies in relation to the measurement of the impact on quality in the social services. For example, several of the most comprehensive studies primarily make use of user satisfaction studies instead of actual quality studies, which in relation to the evaluation of the quality in the public and private sectors, respectively, has a number of considerable limitations (see e.g. The Tendering Council/Rambøll 2009 and The Tendering Council/Rambøll 2011). If the impact of contracting out on quality is to be better documented in the future, the necessary resources and time must be included in the arrangement and financing of the effects analysis for the actual impact on quality to be documented more systematically and exhaustively.

6.2 Results from international studies

Of the 28 included studies shedding light on the economic effects in connection with contracting out in the technical areas and social services, there are two studies that are deemed to be highly satisfactory and therefore ought to be attributed particular weight (Reeves & Barrow 2000; Bel & Costas 2006). Both studies are in a technical area (refuse collection). The Reeves and Barrow (2000) study deals with the collection of refuse from private households in Ireland in the period 1993–1995 and shows how contracting out in itself can lead to savings of 45 per cent – with the greatest effect in the municipalities in which the competition in connection with contracting out has been strongest. The study concludes that the refuse area – and technical areas in general – are easier to contract out, as the specification of the contracted service is relatively simple, demand is relatively stable, the market conditions are relatively transparent, and start-up costs are low. The Bel and Costa (2006) study also examines refuse collection from private households, although with cases from Spain in the period 2000–2002. On the background of the collection of data and examination of the literature in the study, contracting out is found to save money, although with a tendency to achieving more limited savings in the later studies. Considered together, these two highly satisfactory studies indicate that it is possible to document savings for refuse collection, although with a tendency to lower savings in the later studies.

26 international studies have been deemed satisfactory. There are 17 studies dealing with technical areas, while five studies deal with both technical areas and social services, and four studies only deal with social services. Ten of the 18 studies looking at technical areas deal with refuse collection, so there is a clear over-representation of this particular area in the international literature about the economic effects of contracting out. This relationship is further confirmed by how the two highly satisfactory studies examined above also dealt with refuse collection.

The 17 studies dealing with technical areas generally arrive at mixed results in relation to the economic consequences of contracting out (Kavanagh & Parker 2000; McDavid 2001; Gustafsson & Busch 2002; Dijkgraaf & Gradus 2003; Ohlsson 2003; O'Toole & Meier 2004;

Park 2004; Pina & Torre 2006; Dijkgraaf & Gradus 2007; Bel & Warner 2008; Chong et al. 2009; Purse 2009; Bae 2009; Lundahl et al. 2009; Bel, Fageda & Warner 2010; Iseki 2010; Longva & Osland 2010). Some studies, focusing on refuse collection, waterworks and bus transportation, find savings within a broad range of roughly 6–50 per cent (Kavanagh & Parker 2000; McDavid 2001; Gustafsson & Busch 2002; Dijkgraaf & Gradus 2003; Park 2004; Pina & Torres 2006; Iseki 2010, Longva & Osland 2010). Other studies examining refuse collection produce more mixed results and no clear effects (Dijkgraaf & Gradus 2007; Bel & Warner 2008; Bae 2009; Bel, Fageda & Warner 2010). Finally, a number of studies (Ohlsson 2003; O'Toole & Meier 2004; Chong et al. 2009; Purse 2009) find that contracting out leads to increased expenses (approximately 1–6 per cent). These studies cover different sectors (e.g. refuse collection, cleaning and workers' compensation cases). There is no documentation indicating that contracting out has clear positive economic consequences, but there is a preponderance of studies primarily documenting savings while maintaining a level of service which is either documented or assumed to be roughly unchanged after contracting out has taken place.

The five studies dealing with contracting out both technical areas and social services produce mixed results in relation to the economic consequences (Harding 2001; Camp & Gaes 2002; Brudney et al. 2005; Jensen & Stonecash 2005; Kuhlmann 2008). Among these studies, there is a desk study (Jensen & Stonecash 2005) which considers a long number of investigations in Western countries that have contracted out public services. This study shows that contracting out generally saves money, but the study does not provide any documentation that these savings are particularly found in the technical areas. The four studies dealing with social services also produce mixed results (Keane, Marx & Ricci 2001; Puig & Ortún 2004; Gilmer 2007; Davies 2008). The Keane, Marx and Ricci study as well as Davies' work reveal mixed or unchanged results, the Puig and Ortún study indicates increased costs after contracting out, while the Gilmer study finds savings of roughly 20 per cent. Three studies are from the health area, meaning that for most of the sub-areas in the social services, we did not identify any international studies documenting the economic and quality-related effects of contracting out.

With this reservation in mind, the results from the international studies indicate a general tendency for contracting out to achieve greater savings in the technical areas than in relation to social services. This tendency is also supported by how the two particularly remarkable studies regarding quality (Reeves & Barrow 2000; Bel & Costas 2006) point out how the contracting out of refuse collection leads to savings. In the big picture, however, there are many studies producing mixed results; and as mentioned above, there is a lack of effects studies in many of the social services, meaning that it is not possible to carry out a systematic comparison between the respective areas.

On the background of the examination of the international literature, it is therefore not possible to document economic gains from contracting out social services. Thus, it is not possible to conclude unambiguously that there is any systematic difference in terms of the economic effects of contracting out technical areas and social services.

6.3 Inadequate studies

There are 13 Danish and six international studies among those judged to be of unsatisfactory quality. As presented in section 2.3, which builds upon a review of the same literature, there is a particularly long list of weaknesses pertaining to method marking this literature, meaning that the results are not included in the overall picture presented in this report of the effects in connection with contracting out.

The methodological weaknesses are particularly prominent in the studies dealing with social services. Several of the studies have methodological weaknesses in relation to dealing with the quality of the contracted out services with sufficient precision, just as the transaction costs in the studies of social services are generally also inadequately illuminated. The same is somewhat the case in the studies of technical areas, although here the quality of the documentation is generally better than in the social services. The further development of the method applied to analysing the effects of contracting out will lead to more studies of the effects – particularly in the social services – being included in research reviews such as the one in hand, whereby the basis for the assessment of the economic effects and impact on quality will be broader and more solid than at present.

Table 6.1 Review of Danish studies focusing on the effects on technical areas and social services

	General assessment		Sector	Method			Year of publication		Ref. no.
Danish studies	Highly satisfactory studies:	Satisfactory studies:	Utilities: 3 studies ¹ Transport and urban development: 5 studies Education: 1 study Health: 2 studies Seniors and the disabled: 5 studies Children and youth: 3 studies Employment services: 6 studies Administration: 2 studies Others: 1 study ²	Quantitative studies:	Qualitative studies:	Desk studies:	2000–2005:	2006–2011:	In total 16 studies: 1, 2, 6, 8, 9, 11, 12, 17, 18, 20, 22, 27, 28, 29, 30, 37
	0 studies	16 studies		13 studies	10 studies	1 study	7 studies	9 studies	

Table 6.2 Review of international studies focusing on the effects on technical areas and social services

	General assessment		Geography		Sector	Method			Year of publication		Ref. no.
International studies	Highly satisfactory studies:	Satisfactory studies:	Northern European studies:	Other Western studies:	Utilities: 15 studies ¹ Transport and urban development: 7 studies Education: 4 studies Health: 6 studies Seniors and the disabled: 3 studies Children and youth: 3 studies Employment services: 5 studies Administration: 5 studies Others: 7 studies ²	Quantitative studies:	Qualitative studies:	Desk studies:	2000–2005:	2006–2011:	In total 28 studies: 40, 42–43, 45–48, 50–55, 57–58, 61–65, 68, 71, 73–76, 78–79
	2 studies	26 studies	14 studies	20 studies		19 studies	4 studies	9 studies	14 studies	14 studies	

Table 6.3 Review of inadequate studies focusing on the effects on technical areas and social services

	National context		Sektor ³	Method ³			Year of publication		Ref. no.
Excluding studies	Danish studies:	International studies:	Utilities: 11 studies ¹ Transport and urban development: 12 studies Education: 11 studies Health: 15 studies Seniors and the disabled: 13 studies Children and youth: 12 studies Employment services: 9 studies Administration: 5 studies Others: 3 studies ²	Quantitative studies:	Qualitative studies:	Desk studies:	2000–2005:	2006–2011:	In total 19 studies: 7, 13, 15–16, 23, 25–26, 31–36, 38–39, 44, 49, 69–70
	13 studies	6 studies		14 studies	5 studies	3 studies	8 studies	11 studies	

Notes: 1): Incl. refuse collection, 2): Incl. cleaning, prisons etc., 3): The studies do not sum up the total number of studies, as the individual studies can be placed under more than one category. Please note that tables 3.1–3.3 are identical with tables 2.1–2.7, as chapters 2 and 3 are based upon the same data.

9 The impact of contracting out on the employees

We have identified a total of 43 studies dealing with the consequences of contracting out work from the public sector for the affected employees. Among these, 13 Danish and 20 international studies have been found to be of satisfactory quality, while seven Danish and three international studies have been excluded from the research review due to significant weaknesses in their method and/or data. The methods applied in the studies are of a mixed character. Most of the 13 Danish studies build upon the employees' subjective perceptions, primarily reported in the form of questionnaires. In contrast, most of the 20 international studies are based on registry data, documents from the administration and questionnaires or interviews with managers and administrators. Two international and no Danish studies were assessed as having a highly satisfactory method. In the following, the Danish studies of satisfactory quality are looked at (section 4.1), after which we examine the international studies of satisfactory quality (section 4.2). In conclusion, we go through the Danish and international studies that have been found to be of unsatisfactory quality (section 4.3). More detailed overviews of the literature regarding the consequences of contracting out on employees are gathered in a separate page towards the end of the chapter.

9.1 Results from Danish studies

None of the Danish studies analysing the consequences for employees are found to be highly satisfactory. Few of the Danish studies report objective (as opposed to employee self-perceived) results and consequences. One study from Local Government Denmark finds that very few Danish municipalities use social requirements (clauses) in connection with requests for tender (4 per cent) (LGDK 2001a). Another study finds differences in the character of the employees in public and private employment service centres (job centres) in a municipality (AKF 2010). Employees in the private employment centres are generally younger and have less experience. The private actor has a bonus scheme, but it is unclear whether this leads to a wage gap. A recently published study of public and private childcare institutions (The Tendering Council/Rambøll 2011) indicates that public institutions have a significantly higher share of educated childcare professionals than do private institutions (63 per cent in the public sector, 50 per cent in the private sector).

Ten studies examine the employees' subjective perceptions of how contracting out affects them (primarily survey-based). Four studies find purely negative effects in the form of stress (Nuppenau 2009), poorer physical working conditions (Busck 2007), less job security (Busck 2007) and a general lack of job satisfaction (Rådgivende Sociologer 2001), which is associated with a higher tempo (CASA 2001; Busck 2007). Six studies find mixed results for how contracting out affects the employees (Ministry of Business Affairs 2000; Ministry of Finance 2000; LGDK 2001a; 2002; CASA/DTU 2004; The Danish Council for Contracting Out 2006). An example of a particularly thorough study (The Danish Council for Contracting

Out 2006) draws a distinction between the employees who keep their respective jobs with the same private actor after contracting out and employees who – for different reasons – do not keep their jobs after a period (roughly half). Among the former group, 74 per cent are roughly just as satisfied with their job and conditions of employment as they were prior to the contracting out. In the latter group, 46 per cent are ‘dissatisfied’ or ‘very dissatisfied’, and for this group there is talk of a clear deterioration in the employee satisfaction in connection with contracting out. When considering the changes in employee satisfaction in the total population of employees involved in contracting out and participating in the study carried out by The Danish Council for Contracting Out, the main conclusion then becomes that it is possible to document a clear drop in the employee satisfaction (see also Appendix 1, where the study is examined in greater detail).

There is a reasonable spread in the sectors studied. Four studies include both social services and technical areas (CASA 2001; LGDK 2001a, 2002; The Danish Council for Contracting Out 2006). Four studies only deal with social services (person-related services such as care, education and employment services), of which two studies deal with more than one sector (Ministry of Business Affairs 2000; Ministry of Finance 2000), whereas two studies focus on an individual sector (AKF 2010; The Tendering Council 2010). Five studies focus on technical areas, including non-person-related work in the social services, such as cleaning and transportation. Four of these studies investigate an individual sector (transportation, refuse collection, roads and parks) (Rådgivende Sociologer 2001; CASA/DTU 2004; Busck 2007; Nuppenau 2009), while one study includes more than one sector (LGDK 2001b).

The studies provide a mixed picture of the consequences for employees but with a preponderance of investigations predominantly reporting negative or slightly negative effects for the employees affected by contracting out. This interpretation is supported by *The Danish Council for Contracting Out* study, which is the most comprehensive Danish study of employee satisfaction with contracting out to date (The Danish Council for Contracting Out 2006). This study and most of the other studies examining employee satisfaction with contracting out are based on surveys of the employees’ own perceptions. This is a recognized and well-tested method for uncovering working environment problems. In relation to the assessment of general effects, however, it would be desirable if this method could be supplemented with more objective indicators of changes in working conditions, work-related health conditions, wages and salary and employment. Such a study could be based on, for example, registry studies of absenteeism and illness, wage statistics and employment contracts. Unfortunately, the investigated materials do not include enough studies for the effects in these areas to be quantified with a reasonable degree of certainty. Another problem is that most of the studies are carried out relatively shortly after the contracting out has taken place. Little consideration is thus granted to the effects over time, and it is possible that some of the observed effects are merely tied to the transition process as opposed to being lasting effects.

There are a number of methodological reservations that must be considered in the interpretation of the results, such as weak or inadequate justification for case selection and

inadequate discussion of generalizability and bias (see e.g. Ministry of Business Affairs/Cowi 2000 and Rådgivende Sociologer 2001). Nor are there satisfactory discussions of the advantages and disadvantages of using the employees' own assessments, which can be affected by the lack of certainty before and during the contracting out (CASA/DTU 2004). This could be addressed by studying the development in employment conditions over an extended period of time, just as there is a pronounced need for combining surveys measuring the consequences experienced by the employees themselves with more objective parameters, such as wage and salary development, illness absenteeism, work standards, work tempo and the employee composition. Finally, comparing results from different countries should be done with caution, as there are radical differences in terms of workplace regulation and the labour market organisation.

9.2 Results from international studies

Two of the studies (Reeves & Barrow 2000; Bel & Costas 2006) are deemed highly satisfactory, and these two studies are therefore attributed greater weight in the analysis than the other studies. These two studies investigate the consequences of the contracting out of refuse collection on the employees in Catalonia and Ireland. They find tendencies towards poorer wages (Bel & Costas 2006) and working conditions, worsened work safety conditions and the use of illegal labour (minors) in some municipalities (Reeves & Barrow 2000).

Generally speaking, the international studies display a clear tendency for contracting out to have negative consequences for the employees. As opposed to the Danish studies, most of the international studies build on objective (as opposed to self-experienced) effects. These studies indicate tendencies towards lower wages (Kavanagh & Parker 2000; Gustafsson & Busch 2002; O'Toole, Laurence & Meier 2004; Jensen & Stonecash 2005; Bel & Costas 2006; Cunningham & James 2009; Bae 2010; Dube & Kaplan 2010; Hiroyuki 2010), poorer working conditions, such as in connection with vacation and illness (Kavanagh & Parker 2000; Pinch & Patterson 2000; Reeves & Barrow 2000; Jensen & Stonecash 2005), firings (Kavanagh & Parker 2000; Gustafsson & Busch 2002), changes in the employee profile (lower seniority, more part-time employees) (Camp & Gaes 2002; Fernandez, Smith & Wenger 2006; Cunningham & James 2009), poorer health and increased illness absenteeism (Kavanagh & Parker 2000; Gustafsson & Saksvik 2005), poorer workplace safety, and the use of illegal labour (minors) (Reeves & Barrow 2000).

The rest of the international studies use surveys and studies based on qualitative interviews to uncover the employees' own perceptions of the impact of contracting out. They supplement the observations of negative effects presented above with conclusions regarding a higher work tempo (Cunningham & James 2009), lower job satisfaction (Park 2004; Yang & Kassekert 2010), insecure employment (Park 2004; Cunningham & James 2009) stress and burnout (Hansen, Sverke & Näswall 2008). Two studies found mixed effects (negative for some groups, unchanged for others (Falkenberg, Näswall & Sverke 2008)). Those with shorter educations (e.g. nurses and nurses' aids) have more negative experiences, while the

higher educated (e.g. physicians) find themselves with better working conditions and improved job security.

There is an overrepresentation of studies dealing with technical areas (incl. non-person-related work in the social services, e.g. cleaning and transport), and the two highly satisfactory studies (Reeves & Barrow 2000; Bel, Germá & Costas 2006) both deal with refuse collection (in Catalonia and Ireland). Six studies deal with social services: childcare institutions (The Tendering Council 2010), schools (incl. cleaning and the like) (O'Toole & Meier 2004), employment services (Fernandez, Smith & Wenger 2006), health (Falkenberg, Näswall & Sverke 2008; Hansen, Sverke & Näswall 2008) and the social area (Cunningham & James 2009).

As previously mentioned, most of the international studies are based on objective (non-self-experienced) data. Registry data, economy data, contract documents and surveys of managers are all used. The two highly satisfactory studies use a combination of sources of data (Reeves & Barrow 2000; Bel, Germá & Costas 2006). Both studies use surveys for authorities; Bel, Germá and Costas (2006) also use a literature review and registry data, while Reeves and Barrow (2000) supplement with structured interviews. The other studies of the consequences for the affected employees are of a satisfactory quality but marked by a range of different weaknesses. Similar to the Danish studies, many of the studies fail to grant adequate consideration to the effects over time (e.g. Hansen, Sverke & Näswall 2008). It is therefore possible that some of the experienced effects are tied to the transition process itself and not necessarily lasting effects. Some of the studies could also be more clear in relation to the criteria for case selection and discussion of generalizability (e.g. Park 2004; Cunningham & James 2009).

9.3 Inadequate studies

Ten studies dealing with the consequences for the employees have been excluded. Seven of these studies also dealt with the economic and qualitative aspects, and their methodological weaknesses have therefore been dealt with in section 2.3 (Alam & Pacher 2000; FOA/KLS 2001; Kakabadse & Kakabadse 2001; Specialarbejderforbundet (SID)/Deloitte & Touche 2003; Macinati, 2008; Christoffersen, Milhøj & Westergaard-Kabelmann 2009; OAO 2011). The last three studies have been excluded either because the criteria for the case selection was unclear, the description of the method applied was inadequate and the composition of the respondent group is unclear (Rådgivende Sociologer/Det Kommunale Kartel 2000a, 2000b and 2000c). These studies are examined in greater detail in Appendix 1.

Table 9.1 Review of Danish studies focusing on the consequences of contracting out for the affected employees

	General assessment		Sector ³	Method ³			Year of publication		Ref.no.
Danish studies	Highly satisfactory studies:	Satisfactory studies:	Utilities: 4 studies ¹ Transport and urban development: 6 studies Education: 1 study Health: 2 studies Seniors and the disabled: 5 studies Children and youth: 3 studies Employment services: 4 studies Administration: 2 studies Others: 1 study ²	Quantitative studies:	Qualitative studies:	Desk studies:	2000–2005:	2006–2011:	In total 13 studies: 1, 2, 6, 8, 9, 10, 11, 14, 19, 21, 24, 29, 37
	0 studies	13 studies		8 studies	11 studies	0 studies	8 studies	5 studies	

Table 9.2 Review of international studies focusing on the consequences of contracting out for the affected employees

	General assessment		Geography ³		Sector ³	Method ³			Year of publication		Ref.no.
International studies	Highly satisfactory studies:	Satisfactory studies:	Northern European studies:	Other Western studies:	Utilities: 11 studies ¹ Transport and urban development: 6 studies Education: 5 studies Health: 6 studies Seniors and the disabled: 5 studies Children and youth: 6 studies Employment services: 5 studies Administration: 4 studies Others: 7 studies ²	Quantitative studies:	Qualitative studies:	Desk studies:	2000–2005:	2006–2011:	In total 20 studies: 37, 40–42, 47–48, 52–53, 56–60, 66–67, 72, 75, 77–78, 80
	2 studies	18 studies	10 studies	11 studies		17 studies	5 studies	3 studies	9 studies	11 studies	

Table 9.3 Review of inadequate studies focusing on the consequences of contracting out for the affected employees

	National context		Sector ³	Method ³			Year of publication		Ref.no.
Inadequate studies	Danish studies:	International studies:	Utilities: 6 studies ¹ Transport and urban development: 6 studies Education: 5 studies Health: 8 studies Seniors and the disabled: 8 studies Children and youth: 7 studies Employment services: 4 studies Administration: 4 studies Others: 2 studies ²	Quantitative studies:	Qualitative studies:	Desk studies:	2000–2005:	2006–2011:	In total 10 studies: 3–5, 7, 13, 26, 35, 38, 44, 69
	7 studies	3 studies		8 studies	2 studies	1 study	7 studies	3 studies	

Notes: 1): Incl. refuse collection, 2): Incl. cleaning, prisons and the like, 3): the studies do not sum up the total number of studies, as each individual study can be placed under more than one category.

10 Conclusion and perspectives

The examination of the Danish and international literature regarding the consequences of contracting out reveals that the quality of the studies themselves varies considerably. There is a pronounced lack of Danish and international studies documenting the consequences of contracting out using a solid method towards the analysis of conditions such as economics, quality and working conditions. Most of the studies deal with the economic consequences, while in many cases little or no effort is made to determine whether the quality is better or worse in connection with contracting out. Some of the studies assume that the quality has remained unchanged, which must be regarded as extremely critical in an effect measurement perspective. These weaknesses in the existing documentation of the economic effects and impact on quality are a problem, because they open up for generalizations and opinion-based interpretations for which there is not necessarily basis in the documented effects. There are also few studies attempting to put a price on the so-called transaction costs related to contracting out, while many studies omit or cast very little light on the expenses incurred in connection with issuing requests for tender, negotiating and drafting contracts, follow-up and so on. Nevertheless, there would appear to be consensus in the literature that entering into and controlling contracts requires considerable administrative and judicial resources, which ought to be included in the total accounting of the economic consequences of contracting out.

The consequences for employees and the subsequent direct and indirect costs are only included in a limited number of studies. The expenses related to stress, illness absenteeism and attrition related to changes in working conditions should ideally be included in the calculation of the consequences for employees, just as the broader expenses for society in terms of unemployment insurance benefits and employment services should be considered when the total effects are assessed. The Danish studies that include the consequences for employees usually do so with the help of questionnaires enquiring as to self-experienced effects, while the international studies are more prone to document the consequences for employees on the basis of more objective criteria, such as wages, working hours, standards and vacation time. The consequences of contracting out for the employees are predominantly documented as negative in the literature, although the negative effects in the Danish literature are much more limited than in the international literature.

The general lack of good, nuanced studies is to be seen in the light of the many problems related to design and method associated with examining the effects of contracting out, particularly with respect to the quality aspect, transaction costs and the long-term and indirect costs of contracting out. It is also important to note that the competitive situation emerging around contracting out can also have positive long-term consequences if there is a transfer of learning and knowledge between the two sectors. In connection with the examination of the many studies, however, we have found investigations that systematically cast light on the more long-term and indirect effects of contracting out. A selection of issues is presented and discussed in the following, issues which have become clear in the course of

our examination. The first deal with the design of the investigations, which should ensure a reasonable basis for comparison between public and private production and the selection of a period of time that provides a reasonable basis for making an assessment. The next selection of issues deals with limitations and the choice of indicators for measurement. In conclusion, we tie a number of comments to the interpretation and presentation of the results of the measurement of the consequences of contracting out.

Are we measuring the same thing?

Ideally, the assessment of the effects should be carried out in such a manner such that it is possible to compare the private contractors and public bodies providing the exact same services and under the exact same organizational and regulatory conditions. However, this rarely occurs in practice. There can be differences in the extent of the services, the composition of the users and the work itself, legislation, for example pertaining to education, documentation and research, for example in the area of health. We often demand that our public organizations provide a broader range of services and we make demands regarding availability, a stable supply, an inclusive labour market and communication. There can also be differences in the infrastructure and localization. Public organizations are often obligated to service a given area, whereas private actors are better able to choose the localities which seem the most appropriate in relation to the arrangement of a specific task. The need for investments and expenses are another parameter which must be adjusted. For example, the operating costs in old, worn-down facilities cannot be directly compared with the operating expenses in new, optimally designed facilities without granting consideration to the accompanying expenses related to investments, depreciation and the like. This applies between public and private organizations as well as between different bodies and agencies within the public sector (e.g. the municipalities).

If it is not possible to compare directly the services from public and private organizations, the alternative in many cases is to compare the level of expenses before and after contracting out. However, this implies a number of independent methodological problems in relation to the time perspective and a dynamic adaptation.

Consequences over time and dynamic adaptation

When measuring the effects of contracting out, it is of crucial importance to measure the effects over a longer period of time than merely a year or two, which is regrettably the case in some of the examined studies. Furthermore, it is important to clarify whether dealing with the first contract period (first-generation tender) or repeated tender over time. This is because, firstly, the first contract period can be regarded as a learning period for both the public and private parties, where not least the transaction costs must be expected to be higher than is the case with the subsequent requests for tender. Another possibility that has been discussed, for example in connection with requests for tender related to cleaning work, is that the private party can be tempted or coerced in connection with the first tender to make a low offer in order to get a foot into the market – but that they are unable to maintain the level of service and can be forced to raise the price when negotiating the next contract. In that

case, the competitive situation in the individual sector (and possibly also the geographical area) will determine whether a public monopoly risks being replaced by a private monopoly, which in Denmark would appear to have occurred with respect to ambulance services.

Secondly, it is also important to take into account how the public organizations also develop over time. As such, it is not methodologically correct if a before-and-after study carries out an uncontrolled comparison of a private alternative with a public alternative without considering the development that might otherwise have taken place with respect to price and quality for the service in question in a corresponding public organization. In other words, it is important to avoid using an erroneous image of the public sector in the beginning as the basis for the subsequent comparison with the private sector after contracting out. One general point is that it is not necessarily the form of ownership but rather the competitive situation itself that creates positive effects, which was also a central conclusion in Hodge's research review (Hodge 2000). The real effects of contracting out must therefore include making the public sector more efficient, which the competitive situation itself would appear to be able to contribute to gradually.

How broadly are the effects to be assessed?

In addition to the design considerations presented above, any study of effects must also carry out a number of choices regarding the parameters. These choices are anything but trivial, but it would certainly not always be the case that an adequate discussion is carried out in this regard. In relation to the economic effects, it is important to find indicators capable of capturing both narrow and broad dimensions of expenses. Carrying out tendering processes and the ongoing monitoring and control requires extensive administrative and judicial resources, which ideally should be included in the calculation of the total economic effects. Including the transaction expenses would obviously appear necessary, but many studies fail to take them into account. As mentioned in Chapter 1, it is important to note that in the public and private sectors alike, there will be expenses associated with organizing and following up on the solution of any given task. This means that it is the *differences* in the transaction costs in public and private production which the studies ought to measure and include in the assessment of the total economic effects.

There are many other possible derivative costs to consider; for example, the costs involved in maintaining the public infrastructure for ensuring utilities and to attend to the cases from which the private actor can possibly opt out. This challenge is hardly unique for contracting out, which has been the focus of this report, as it can also be expected to be applicable in other areas marked by competition as well as areas characterized by free choice. There are also general issues in relation to the transfer of results from one locality to another, for example, a large urban municipality to a small rural municipality. A well functioning private market requires multiple actors competing for the available work. This is far from the case in all sectors, however, and in all parts of the country. Here, it is important to be cautious with respect to transferring results from urban to rural areas, where the infrastructure, population density and opportunities for recruiting are very different and

where it is therefore possible that there is a different structure of expenses for the public and private actors alike.

There are similar concerns with respect to the measurement of the impact on quality. But here there is an extra dimension – that quality can be measured in many different ways. The operation of prisons can provide an illustrative example. The Australian researcher Richard Harding points out a number of possible parameters of quality in his review article from 2001. As the primary responsibility of prisons is to take care of prisoners, a possible parameter for measuring quality could be the number of prison escapes. But for security purposes, it is also important to avoid prison riots and that the number of assaults on prisoners and the prison staff are kept to a minimum. Correspondingly, another relevant parameter of quality is the number of deaths and suicides, which should preferably be as few as possible. In addition to these aspects of security, one can take note of the prisoners' physical and psychological health, the reduction of substance abuse problems, that the prisoners are treated justly and that the appropriate activities take place. In a broader sense, quality can be further understood as the ability of the prison to assist with the re-socialization of the prisoners. Here, a possible measurement could be the rate of recidivism or the ability to keep a job after release. In other words, there are a number of possible dimensions of quality that can be used to assess the effects of contracting out. In order to deal with this multi-dimensionality, it is possible to develop composite measurements or a form of quality index. However, this raises the question of how to weight the individual elements; and not least how the economic consequences and impact on quality are to be balanced against one another.

The consequences for employees are particularly difficult to measure

The question regarding how contracting out affects employees also touches upon a number of questions pertaining to the choice of method. The first is about whether to use objective or subjective measures. Objective measures could include wage and employment conditions, the number of employees and the gender, age and level of education of the employees. Illness absenteeism and the number of occupational injuries and accidents are other possibilities. Examples of more subjective measures could include how the employees experience stress, burn-out or waning motivation. The sense of insecurity or poor working relationships are other possibilities. Regardless of whether objective or subjective measures are used, it is important to take dynamic developments into account. It is therefore important to consider how private and public organizations develop over time. Some effects (e.g. increased workload, performance-based pay and flexitime) can possibly be attributed to general tendencies in the labour market, while other effects in both private and public organizations are the result of changes in the organizations or contracting out. A dynamic approach is therefore also important in relation to the measurement of the consequences for employees, because some of the possible consequences (e.g. physical and psychological health) will typically first be possible to measure some time after the contracting out has been completed. Registry-based analyses and controlled experiments alike will be methods for systematically measuring the consequences for employees over longer periods of time.

Interpretation and presentation of results

It is good scientific practice that published investigations are to have the greatest possible degree of internal consistency between the analyses and the conclusions that are drawn on the background of the gathered empirical materials. The studies published in scientific journals have all been through a peer-review process, which assesses this and other things. The same does not apply to the same degree for the other studies, including the Danish reports, notes, chapters and databases that have been scrutinized in this study. Moreover, these reports are also often published by political/administrative actors, interest organizations and the like, which can have a vested interest in presenting certain results instead of others. There must therefore be a heightened awareness in relation to the reliability of these studies as well as how they are used in the public debate.

Research responds to this challenge by calling for more independent analyses characterized by sound methodology and data and more solid analysis of effects of contracting out, which would mean that political decision-makers would receive a more solid, clearer basis for future decisions about allowing public or private actors to solve different types of work for the public sector. On the background of the examination in this report, it is recommended that effects analyses of contracting out be carried out, analyses that: a) include transaction costs both before and after contracting out in the total calculation of the economic effects; b) utilize the relevant and adequate measures for the experienced quality as well as actual quality when work is carried out in both the public and private sectors; c) clearly distinguish between effects in technical areas as well as social services and attempt to explain why any possible differences come about; and d) measure short-term as well as long-term consequences for the employees affected by contracting out.

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Effects of contracting out public sector tasks

A research-based review of Danish and international studies from 2000-2011

This report presents the results of a systematic review of the existing documentation of the effects, advantages and disadvantages of contracting out public tasks. The study is based on a recognized research-based method and is the most comprehensive Danish review in this area to date. The report examines 1) the effects of contracting out in relation to price and quality, 2) differences in documented effects between technical and social service areas, and 3) the impact on employees affected by contracting out. The conclusions are that contracting out tasks within technical service areas leads to generally documented cost savings, but these savings are relatively small, and many studies have not sufficiently controlled for the quality level after contracting out. Existing studies of social services areas are generally of a lower quality and there is no general evidence here to say that private actors deliver the services cheaper or with a higher quality than the public sector itself does. The documented effects on employees are predominantly negative in both the Danish and international studies.