Procurement of Public-Private Partnerships: Does the procedure matter?

An analysis of public-private partnerships in Denmark and the role of procurement procedures

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ABSTRACT

The tendering of public-private partnership (PPP) is subject to public procurement law. The academic literature on PPP presents only limited research on the relation between procurement procedures and PPP. The motive of this thesis is to fill this knowledge gap and investigate in the legal and economic implication of different procurement procedures on PPP. The aim is to create a better understanding of the perceptions and mechanisms behind PPP and procurement and contribute to the improvement of PPP practise. The thesis will investigate how the public and private participants in the Danish PPP sector perceive the relation between the choice of procurement procedure and PPPs and to what extent the procurement procedure can be used as an instrument that contributes to PPPs with higher total welfare gains and lower total social costs. The analysis shows that central PPP aspects as risk allocation and standardization are perceived differently from the perspective of the public and the private sector. This difference might be explained by the different implied interest of the actors. However, this could also indicate a conflict within the Danish PPP sector which is interesting to investigate. In relation to procurement and PPP the findings indicate that the use of competitive dialogue results in better final PPP offers compared to restricted procedure. The dialogue between the private and the public actors ensures that the project proposals are aligned with expectation of the contracting authority. Even though competitive dialogue is resource demanding, among others because the public sector has to uphold legal principles such as equal treatment, the thesis findings indicate that the choice of procurement procedure do influence the PPP. The additional resources used in competitive dialogue may be well spend as the final offer better reflects the needs of the contracting authority, and thus expectantly would benefit society to a higher degree. An obstacle for the use of competitive dialogue in Denmark, is the Danish interpretation of the EU procurement directive, which is relatively strict and the risk of legal prosecution may restrain contracting authorities from further use of the procedure.

Keywords: Public-private partnerships; Procurement; Competitive dialogue; Public-private partnerships in Denmark
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Part I – Introduction

The level of state provided welfare have occupied governments and academia for decades, even centuries and at all times the private sector has, if allowed, taken over where the public service provision stopped and fulfilled the remaining needs. The latitude for private business activity has and still does, vary depending on the political tradition and dominance of the country. The nations in modern day Europe can generally be characterized as liberal democracies and despite that the scope of the state varies significantly across Europe, the division of labour between the private and the public sector, can to a large extent be argued to resemble each other, especially in the European Union, where member states are largely subject to the same regulation. In the 1990s the public-private partnership (PPP) was presented as a new instrument to challenge this strict division of labour between the public and the private sector and even though collaboration between governments and private actors had occurred for centuries, it was new to formally formulate a specific policy on the area. Since the beginning, PPPs have been subject to extensive academic and political studies and the question of how to formulate, structure and operate the partnerships most beneficially have occupied many. The puzzle of this thesis takes its point of departure in this question and strives to investigate deeper the underlining mechanisms of how to select a partner for the PPP. As the characteristics of each PPP is unique, so are the capabilities of each private company and thus it is not indifferent which company that the public authority chooses for the collaboration. The mechanisms behind this selection process are intriguing and it frames the research question of this thesis. When digging just beneath the surface of this process, it becomes clear that public authorities are bound by complex regulation when choosing the private partner.

The liberal EU democracy’s demand for transparency, non-discrimination and equal treatment of companies, have generated a complex legal framework to which the public procurement must apply. The selection of PPP partners is thus subject to a number of rules and as the nature of PPPs diverge from traditional public procurement, it is interesting to investigate how these procurement procedures influence the PPP and whether they can be used proactively in the process of creating better functioning PPPs with higher total welfare gains and lower total social cost. The academic literature on PPPs in Denmark is limited and so is the literature on the central Danish actors’ perception of the essential aspects of PPPs. The knowledge gap on the area and the lack of academic research in the legal and economic implication of the use of procurement procedure for PPPs, form the motivation of this thesis. The aim is to create a better understanding of the
perceptions and mechanisms behind PPP and procurement and to contribute to the improvement of PPP practice towards higher welfare gains and lower total social cost. To address the thesis’ motives and aims the research question is as follows:

*How do the public and private participants in the Danish PPP sector perceive the relation between the choice of procurement form and final PPP, and to what extent can the procurement form be used as an instrument that contributes to PPPs with higher total welfare gains and lower total social cost?*

The question is divided in two, where the first part is largely context specific and concerned with the Danish experience of PPP procurement, and the second is more normative and theoretically as it is concerned with how to secure better functioning PPPs based on the criteria of *total welfare gains* and *total social costs*. Many different criteria can be used to evaluate whether a PPP is well functioning and successful and this is to some extent a normative discussion. However, the criteria chosen for this thesis is concerned with PPPs influence on the whole of society for the entire lifespan of the project. In order to answer the research question, it is essential to investigate the different elements of the question and for this five sub-research questions (sub-RQ) can be formulated:

A. *Which aspects are described by academic theory to have influence on the formulation and function of PPP? (Answered in the theory chapter)*

B. *How is the Danish PPP sector constructed and what are the challenges? (Answered in the chapter on Danish PPP and procurement)*

C. *What procurement procedures are available for PPPs and what are their characteristics? (Answered in the chapter on Danish PPP and procurement)*

D. *To what extent does the choice of procurement form influence the final offers in a PPP procurement process? (Answered in the analysis)*

E. *Can procurement be used as instrument that contributes to PPPs with higher total welfare gains and lower total social costs? (Answered in the discussion)*

F. *What are the consequences of the thesis findings for the academic literature on PPP? (Answered in the discussion)*

The concepts addressed in the questions will be described thoroughly throughout the assignment, nevertheless, the central concept of PPP calls for a further introductory presentation: As described earlier PPP has been subject to academic research since its introduction in the 1990s. The UK experience has to a large extent been the point of departure for both academics and predominantly
studies have been concerned with the value of PPPs for governments. The academic writings on PPP have to a primarily been occupied with characterizing whether PPPs are good or bad and this has often lead to a normative ideological discussion on what the role of the public and the private sectors in society should be. Even though there has been extensive evaluation studies on specific PPP projects (Greve & Hodge, 2013a) the method of evaluation is to some extent inconsistent and this is challenged by various writers. This thesis wants to free itself from this ‘black/white’ approach to PPP and seek to more carefully investigate the underling mechanisms for the function of the PPPs. In detaching oneself from the much examined discussion of success, this may allow for new findings on the nature and interdependent elements of PPPs which could generate a further and deeper understanding of the concept. This delimitation is not an expression of neglecting the discussion of whether a PPP is a sound and successful tool, but it is necessary in order to reach a higher level of analysis. The delimitation may have consequences for the applicability of the findings of the analysis as the findings can only be applied in the context of this assignment and if generalized to the general PPP discussion, it may be criticized for neglecting the critics of the PPP. This thesis will thus not present arguments on whether PPP is good or bad, but depart from the understanding that PPP is a policy tool.

The global economic crisis which have influence growth rates and government budgets across the world since 2008, has also affected the practises and operation of PPPs. In relating the crisis to the initial comment of the division of labour between the state and the market, the crisis can be argued to have disturbed this as governments have ratified various relief policies to rescue defaulting private companies. With the new agenda of the economic crisis the puzzle of the thesis becomes even more essential. In many states the government has engaged in a new more conscious role with an increased focus on the areas where the government can influence economic growth and sustainable development. If the utilization of procurement procedures can show to ensure better functioning PPPs, then it could be argued to be educative for governments.

**Part II - Method**

This chapter will address the delimitations of the research question and shortly present the philosophy of science departure point of this thesis. Further the research design will be described by discussing the choice of theory and literature limitation. Subsequently the choices of the empirical data collection and the consequence of this method will be described, as well as the extent and limitation of the conducted interviews.
The research question and delimitations

The formulation of the research question was developed from an interest in the puzzle of how to establish a PPP, with higher total welfare gains and lower total social costs. As the research developed it became clear the legal restrictions on the area limits the latitude of the authorities and further the definition of the best suited private partner evidently differed according to which author or practitioner one approached. Thus in order to maintain a realistic approach to the dilemma of partner selection it became relevant to include procurement regulation and make this an aspects for investigation. It is however important to emphasize that this thesis is not destined for a legal purpose and the findings may not address all legal and jurisdictional aspects of comprehensive procurement law. The procurement regulation is more seen as a dependent variable which the public and private partners relate to and even though legal interpretations influence the PPP process, this assignment investigates the difference between procurement procedures in relation to the establishment of PPPs and not the legal technicalities and details of the different procurement form themselves.

The research question of this thesis is as follows:

*How do the public and private participants in the Danish PPP sector perceive the relation between the choice of procurement form and final PPP offer and to what extent can the procurement form be used as an instrument that contributes to PPPs with higher total welfare gains and lower total social costs?*

The question presents a number of concepts and the definition and understanding of these are important as it influence the applicability of the findings. The majority of the concepts will be elaborated throughout the thesis and the answering of the sub questions, it is however, important to make a short comment on the expression of better functioning PPPs. The academic contributions in relation to what constitutes a well-functioning PPP are many, but this thesis will define a well-functioning PPP as one that net-contributes to society as a whole, as described by Boardman and Vining (2010). This will be address further in the chapter on PPP theory. In order to investigate the research question fully it allows for the formulation of a number of sub research questions (sub RQ):

A. Which aspects are described in theory as influencing the formulation and function of PPP?

B. How is the Danish PPP sector constructed and what are the challenges?
C. What procurement procedures are available for PPPs and what are their characteristics?

D. To what extent does the choice of procurement form influence the final offers in a PPP procurement process?

E. Can procurement be used as instrument for securing better functioning PPPs?

As indicated in the above sub-questions, these will be answered in the chapters throughout the thesis. There are little academic writings concerned with procurement processes and PPPs. Further the research on the practical function and formulation of PPPs in Denmark is limited and thus the findings of the thesis will contribute by filling this gap in academic research. In addition, the research is driven by a desire to improve the practise surrounding PPPs and by investigating in how procurement processes influence these, the findings may contribute with a further understanding, which can be useful for all actors in the Danish PPP sector.

Philosophy of science

For this thesis, the philosophy of science will depart from scientific realism (Moses & Knutsen 2007), which can be seen as a mixture between the more renown constructivism and naturalism. The scientific realist approach assumes that there exist a definable reality, but actors are spun into different realities and thus the Real World can be difficult to identify and may be perceived differently depending on the observer. In relation to the thesis, this implies the recognition that a truth cannot be found between two opposing partners which both argue that they are right. It can thus only be recognized that a disagreement exist and the different arguments presented by the partners represent their individual worldview. From the interviews made for this study, this constructivist attitude is seen in relation to the appliance of the official PPP standard model published by the Danish Competition and Consumer Authority. From the private sector perspective it is argued that the contracting authorities do not follow the model consistently, but opposing the contracting authority perspective describes that the PPP standards Model is largely applied and promoted. The philosophy of science does not allow for a conclusion on which representative is right, and it is however also more interesting to illustrating that there exist a conflict and subsequently investigate the different underlining reasons for this conflict.

In order to answer the research question this thesis will make use of an exploratory study which consists of a review of literature followed by interviews with key persons from the Danish PPP sector. Through this method, the thesis wishes to generate a better understanding of the mechanisms
behind the PPP procurement process in Denmark and assess the related obstacles and potential mitigations. This deductive method, where theory is used as point of departure for accessing the empirical data, may limit the findings of the thesis, as entirely new aspects of PPP and procurement, not addressed in academic theory, may be difficult to detect and identify.

The academic point of departure is international political economy as taught on the B.Sc. and M.Sc. of International Business and Politics at Copenhagen Business School. This might be essential as academic approaches could be considered a product of one’s education which may favour specific academic fields and philosophy of science.

**Choice of theories and literature limitations**

The answer to the research question will be developed through the assessment of academic theories on PPP and procurement and analyse these in relation to the perspective from key persons in the Danish PPP sector. The choice of academic theories on PPPs was based on the author’s previous academic assignments on PPPs and guidance from the thesis supervisor Professor Carsten Greve. The presented theories were accessed most relevant and essential for the research question and the initial stages of PPP establishment. The choice of academic writings on procurement law was influenced by the level of accessibility as previous knowledge on legislative matter of procurement was limited. The information of PPP projects in Denmark was largely generated through publications and online information from the Danish Competition and Consumer Authority (DCCA), the public procurement portal (Udbudsportalen) and through interviews. During the research it became clear that a number of intriguing topics could have been interesting in further understanding procurement and PPPs, as e.g. the use of social clauses and the role of consultants in the procurement dialogue, but due to the scope of the assignment this was not possible and these could topics could thus be subjects of future research.

**Academic literature on Public-Private Partnerships**

The academic PPP literature is extensive and originates from many different academic fields. There exists no universal theory of PPP and the different academic fields and approaches thus investigate and try to explain the phenomenon from various directions. In their newly released book, *Rethinking Public-Private Partnerships*, Greve and Hodge (2013b) presents a model which describes the different dimensions of the PPPs Phenomenon, see table 1. In this figure the PPP phenomenon are divided into levels of specificity, where the inner circle represents considerations
on PPP as a single project and the outer circles represents the dimensions of PPP as a governance tool or style and context and culture characteristics (Greve & Hodge, 2013b, p. 4). In this assignment PPP should be seen as an organizational form or policy tool, but to fully understand the practise of procurement and PPP, it is relevant to drew from aspects of all PPP dimensions.

Table 1: Dimensions of the PPP Phenomenon

<table>
<thead>
<tr>
<th>Project</th>
<th>Organizational form</th>
<th>Policy/symbol of private sector role in economy</th>
<th>Governance tool or style</th>
<th>Context and culture</th>
</tr>
</thead>
</table>

Source: Greve & Hodge (2013) Rethinking Public-Private Partnerships, p. 4

The literature on PPP is not only found in the political economy approach, which this assignment also originates from, but also in the academic fields of engineering and law. In these fields the positivistic ontology is strong and the approach is often practical and technical, which leaves little room for reflections on structural influences. The positivistic influence on the PPP debate should therefore be kept in mind. This assignment will not go into details of the ontological differences of the PPP literature, but instead focus on the applicability and the practical consequences of the theoretical arguments. The mechanisms behind PPP are founded on economic rationalities, but in many empirical cases PPP are being used and placed in a different political context which might cause problems. In the different approaches the underlying assumptions for the PPP and the process of PPP are not the same, this may result in a conflict of interest and inconsistency in the direction of the PPP. The literature applied in this assignment could be argued to come from researchers and experts from the same academic circles and this could to a certain extent result in a somewhat one-sided picture of the PPP experience and theories. The key arguments behind the beneficial mechanisms of PPP stem from the neo-liberal school where the absolute efficiency of the market is seen as the answer to the problems of society. However as the critique of PPPs and the positivistic approach to PPPs, have risen from other academic fields, the PPP as a phenomenon, has to some
extent released itself from its neo liberal attachment. PPP is now being assessed and applied from many different theoretical and normative aspects and are by many seen as a useful policy tool and not an ideologically valued phenomenon. The consequence of this detachment could that the academic debate on PPP has moved from a mere mudslinging on ideology towards a more nuanced approach, with focus on best practices and action. However with the global economic crisis which has influence economies worldwide since the 2008, the role of the private sector has been challenged and this has also affected PPPs (Cuttaree & World Bank, 2011; Greve & Hodge, 2013b; Hodge, Greve, & Boardman, 2010a). This will be further addressed in the theory chapter on PPP.

Much of the PPP literature is presented or developed in relation to empirical experience and when accessing the literature, it becomes clear that the evaluation method and interpretation of the cases, differs from writer to writer. There has been conducted many evaluation studies on PPPs, but as these often are based on business case estimates of single cases, the statistic validity can be questioned and this should be kept in mind when addressing the literature (Hodge & Greve, 2009). The inconsistencies in the appliance of empirical cases and the lack of good evaluation methods, hinders a solid international PPP evaluation and the lack of extensive statistical research on efficiency and “whole life” results of PPPs and hinders further learning (Hodge & Greve, 2009). In this thesis PPP will be evaluated in relation to total welfare gains and total social cost.

**Policy framework for public-private partnerships in Denmark**

The literature applied in the chapter on PPPs in Denmark, is mainly based on publications from the Danish Competition and Consumer Authority (DCCA) and the report, *Experience with PPP in Denmark* and the online publication the PPP standard model (OPP standardmodel). It could be argued that this gives a limited and to some extent one sited insight to the sector, but as there only are little research and statistics on Danish PPP projects and the scope of this assignment did not allow for the conduction of such, this constituted the available information. It could also have been interesting to include material from and interviews with interest organizations such as pension funds, as these might have had a different approach to PPP compared to the public authority and the private partners. This would have contributed to the validity and applicability of the final research findings, but due to the scope and time limitation of the thesis this was not possible.
**Academic literature on procurement processes**

The literature applied in the section on public procurement and EU legislation is primary based on secondary legal sources. This was a deliberate choice as the main focus of this assignment is political economy and not law. The policies and official guidelines on procurement are primary sources, but the scope of this assignment did not allow for the research and analysis of primary prime legislative texts. This choice can influence the result of the final analysis and to some extent limit the applicability of the conclusion, as the interpretation of second source writers might disrupt the *real* meaning of the law. However, as the focus of the assignment is the *mechanisms and perceptions* of the relation between procurement and PPP and not the actual legal procedure, the second hand sources are in this case assumed sufficient.

**Empirical data generation**

The choice of method for empirical data generation has significant influences on the findings of the assignment and the validity and applicability of these. The aim of this assignment is to investigate the perceived relation between procurement processes and PPPs and in order to investigate this, there could have been applied many different research approaches. The gathering of empirical data is however subject to many constraints in relation to access to information and availability of key persons, as well as time limitation. Taken these limitations into consideration, the empirical data generation for this assignment, has been obtained through five semi-structured interviews with key persons in the Danish PPP sector. Two interviews were completed with PPP directors from two large Danish construction companies, which both have been active on the Danish PPP market since its beginning and who have also participated and won a number of PPP procurements. Further, three interviews were conducted with representatives from the Danish public sector. The first interview was made with a representative from the DCCA which is the PPP policy promoting organ in Denmark. The second interview included a project manager from the Danish Building and Property Agency, which function as an entrepreneur for central governmental organizations in mayor public building projects. The final interview was made with a representative from a local government which is significantly engaged in the using private partners for public services. The latter however, generated fewer details on procurement methods and dilemmas and is thus applied to a smaller degree in the analysis. The interviews lasted app. an hour and was digitally recorded, which could have limited the flow of the interviews, but this was only experienced to a limited extent. The interviewees are all an integrated part of the Danish PPP sector and thus must be assumed to,
consciously or unconsciously, have an interest of extending the sector and promote the application of PPP. Consequently they are less concerned with the critique of PPP and reject to some extent the academic critiques of field.

The choice of interviewees was made with regards to the role of the firm or organization in the PPP sector companies sees PPP as an important and strategic part of their business and they are conscious of taking part in the tenders. The interviewees were not found independently and unconsciously this selection may present a prioritizing of which actors are the most interesting. However the Danish PPP sector consists of relatively few key persons and thus a closed circle. The interviewees from the private sector were high level representatives. The comments and practices presented by them are founded in this context and if instead smaller companies had been interviewed, other key points may have been made. In other words, the findings of this assignment might not be applicable to smaller companies or employees of other levels or professions. Further it became clear that the interviewees did not hold a shared definition of PPP which could influence the findings as they argued from different grounds. However the analysis tries to address this and investigate the grounds for these different definition and perceptions of PPP. The actual interviews did not depart from one specific case, but reflected more general experiences and aspects of PPPs. Even though the interview questions addressed the same aspects of PPP, the fact that they were not based on one specific case, may diffuse the findings as the underlying assumptions for the interviewees’ answers could be different. This was however a conscious decision in order to capture the patterns of action and perception of the process, in a more general way.

The interviews are relatively few in number, but as the purpose of the thesis is to investigate the perceptions and understandings of the PPP procurement process, and not to undertake a quantitative survey, the limited number is found applicable. Further the interviews were made with some of the most central organisations in the Danish PPP sector and the number of interviews is thus not as essential as the fact that the most influential organisations have been consulted. The interview data is perceived as expressions of the actors’ understanding of PPP and procurement forms, and the writers understanding of these expressions will form the base of the analysis. With the purpose of the thesis in mind, the analysis will refer to the interview findings as e.g. the private sector’s perspective and the public sector’s perspective. However, an analysis with direct references to the interviews can be made available for examiners by request.
In evaluating the empirical data of the interview, it becomes clear that other methods also could have contributed to answering the research question. In aiming at making the findings more generalizable it could have contributed significantly if a larger survey had been conducted among a large number of the active partners in the Danish PPP sector. If the analysis had been made on a comprehensive survey on the experience of procurement practices with PPPs, the findings of the analysis may be more applicable and valid. This was however not possible due to time limitation and the scope of the assignment. Further the information given in a written survey may be less detailed compared to interviews, as the respondents may be less willing to give details on disagreements in written form. It could also have been interesting and useful to participate in an actual procurement dialogue phase to gain first hand observations on the behaviour of the partners. However again time was a limitation and it would most likely have been difficult to be allowed access to the dialogue meetings, as confidential material and negotiation methods may be valuable for the partners. Independent of the choice of research method, it is important to emphasize that all information is context specific and thus generalization to a large extent is difficult. The findings may not be applicable for others, beside the specific firms and authorities, but it is the hope that other actors can learn from the mapping of these perceptions of the relation between procurement and PPPs.

**Part III - Theories on public-private partnerships**

This chapter will present the academic theories on PPP and answer sub-RQ A: *Which aspects are described in theory as influencing the formulation and function of PPP?* This will be done by accessing the writings on the historical development of PPP, the contractual partnership and the actual collaboration. Further the theoretical writings in the political aspects of PPP and the concerns of evaluation will be described.

PPP is a widely described concept by politicians, academics and business. However, the actual meaning of the concept and what elements that are emphasized differ significantly depending on which actor presents the concept. There exist no universal definition of PPP and as different definitions are applied, it is difficult to generalize arguments and experiences on PPP, from field to field, country to country and scholar to scholar.

Loosely defined PPP is a *cooperative institutional arrangement between public and private sector actors* (Hodge, Greve, & Boardman, 2010b, p. 4). The language used in this definition are essential as the implicit meaning of the words can give negative or positive association which influence the
perception unconsciously (Discourse analysis, Neo-Gramscian theory (Thomsen & Andersen, 2000)). Some scholars argue that the use of the word cooperative or even partnerships is not applicable for most empirical PPPs as they cannot be categorized by trust and interdependency, which the word partnerships can be associated with. Some scholars therefore argue that the word mix is more describing of the factual interaction in most PPPs (Wettenhall, 2010, p. 21).

Another way to define a PPP is to categorize it as a brand, understood as a name, sign or symbol used to identify a good (Klijn, 2010, p. 69). A brand awakes emotions and has an implicit meaning or value for the people who dedicate themselves with the brand. This approach implies that the PPP brand must differ from country to country, as politicians frame it differently in order to reach and convince different populations, and thus generalization of PPP experience and research is difficult. This contributes to the academic confusions about the meaning of PPP (Klijn, 2010) and it show that the political definition and approach to PPP are important (Hodge et al., 2010b).

As PPP has gained recognition, many international organizations and political institutions have put forward more general definitions of a PPP and these include many of similar elements. The OECD characterize PPPs as “long term agreements between the government and a private partner whereby the private partner delivers and funds public services using a capital asset, sharing the associated risks “ (OECD, 2013). The OECD thus state that the effectiveness of the partnership depend on sufficient and appropriate transfer of risk to the private partners (OECD, 2012). The institutions of the European Union have also published considerations on PPP, but no general definition has been made on community level (Commission of the European Communities, 2004; Committee on the Internal Market and Consumer Protection, 2006). PPP is described in general terms as ”(F)orms of cooperation between public authorities and the world of business which aim to ensure the funding, construction, renovation, management or maintenance of an infrastructure or the provision of a service.” (Commission of the European Communities, 2004). It has been requested from the European Parliament that the Commission clarifies which procurement law applies for PPP, as the Commission have been associated PPPs with aims of fighting climate change and promoting renewable energy (European Parliament, 2010). The PPP considerations of the international institutions to large reflects extent the dilemma seen in the academic literature, where many of the same elements are figuring, but the priority of these elements differs.

The initial categorization of PPP has significant consequences for which arguments and critiques an actor finds applicable and this implies a risk of neglecting or overlooking certain aspects in the
literature, if categorizing PPP too narrowly. In recognizing the influence of the categorization of PPP, it is important kept in mind that large parts of the academic literature concerning PPP is founded in the infrastructure approach to PPP. However, it is important to look at PPP from different angles and be open towards literature from different fields in order to get a thorough understanding of the concept (Greve, Hodge, & Boardman, 2010). In this assignment PPP will be addressed as a policy tool, and it could be argued that one implicitly recognizes the underlining neo-liberal assumptions and thus disregards what could be the main reason for success or failure. This critique may be appropriate, but in order to reach a higher level of analysis and to reflect the research question of the assignment, this assumption is necessary. Further in the Danish political context, the support and devotion to PPP have clearly been outspoken in the last decade, both by liberal and social democratic governments and thus it can be argued that PPPs is, in the Danish context and present times, understood a policy tool, and not as an ideological instrument only used by certain political groups.

**Historical development and theoretical arguments behind PPP**

Cooperation between the public and private sector has existed since the formation of states and both the trading companies in colonial times and the private armies in early history, show that central public tasks have been conducted by private actors throughout history (Wettenhall, 2010). However in recent times the role of the state appear to have changed from being the dominating actor in a strong state centred system, towards being part of a *governance* structure, where both the private sector, the civil society and the state can influence legislation and shape the collaboration (Wettenhall, 2010). The PPP policy tool, which is known and applied today, emerged with the New Public Management (NPM) approach which rose in the 1980s. The advocates of NPM argued that the public sector could achieve significant efficiency gains from applying competitive market mechanisms, where efficiency is understood as “*the arrangement which provide most desired output for least input*” (de Bettignies & Ross, 2010, p. 138). From this position, public interest should be divided from the public services, so the state should focus on policy formation and leave implementation to firms and NGOs (Bovaird, 2010; Greve, 2002). By applying market mechanisms with competition and Value-for-Money (VfM) in focus, the public sector would increase efficiency and thus reduce government spending (Klijn, 2010). This approach was well received and integrated politically, especially in the United Kingdom (UK), where the neo-liberal Thatcherism of the 1980s followed the thoughts of Freidman and Hayek, and focused on a tight fiscal economic
policy by limiting role of the state (Heywood, 1992). In this period PPP became a widely applied tool for outsourcing public services and projects to the private sector. The UK became the frontrunner for the introduction of PPPs and the Private Finance Initiative (PFI), which is the UK infrastructure approach to PPP, has significantly influenced the international literature on PPP (Weihe, 2009). The PFI was used in nearly all aspects of infrastructure provisions such as roads, hospitals and schools and the working definition of PFI included privatization, which was also substantially applied by the UK government in 1990s (Corner, 2005).

Both academically and practically the PFI has been considered controversial and some argue that the approach was only introduced to cut savings and push infrastructure projects “off budgets”, too that future payments as the PFI did not have to figure as public debt (Hallowell, 2010). In late 1990s the Labour Party in the UK, led by Tony Blair, changed the rhetoric around PFI, towards a less conservative and pure privatization instrument, but many of the NPM arguments still shaped the debate (Greve, 2006; Wettenhall, 2010). As the PPP literature developed many have criticized PFI and argued that it cannot be categorized as a PPP, because there exist no co-management or responsibility sharing between the private and the public actor and that it is highly contract driven (Klijn & Teisman, 2005). The critique of PFI is based on its limited success, cost overruns and bad results, and this has been used to undermine and criticize the mechanisms behind NPM (Bovaird, 2010). More specifically the critique of NPM indicates that the narrow focus on the market and competition, neglects the qualitative and social cost of the PPP projects and this gives a wrong picture of the total project cost (Bovaird, 2010, p. 57). In 2011 the UK treasury initiated a thorough evaluation and assessment of the PFIs and the UK PPPs which resulted in a formulation and launch of a new approach to PPPs and the introduction of a new form of partnerships; the Private Finance 2 (PF2) (UK HM Treasury, 2012a). The reasons for the new approach was, besides the new economic situation after the economic crisis, that the PFI “(H)ad become tarnished by its waste, inflexibility and lack of transparency.” (UK HM Treasury, 2012b, p. 3). As the PFI, the PF2 aims at utilizing the effectiveness and finances of the private sector, the new approach however, presented stricter rules in relation to the process of establishment. E.g. may procurement processes from initializing public tender to the section of the preferred bidder only take 18 months (UK HM Treasury, 2012b).

When turning towards the empirical evidence in other countries it becomes clear that history and national administrative culture matters for the introduction and success of PPPs (Bovaird, 2010; Greve et al., 2010, p. 603; OECD, 2008). It is argued that the UK (Anglo-Saxon) influence on PPP towards NPM and that the rest of the EU and others focus on the trust and network aspects of PPP
Greve (2010) explains the national differences with Path Dependency, which emphasizes that the initial policy direction of a nation, will shape the future policies and it is difficult to diverge significantly from this cause. A consequence of this argument, is that PPP is not suitable and will develop equally in all countries, as the political history is different from nation to nation (Greve, 2010, p. 500).

The critique of PPP, especially understood as PFI, has been significant, but indifferently PPP as policy tools has been widely applied and promoted by governments. Weihe (2009) argues that a global idea of PPP has become prevalent in PPP literature and policy, the idea presents the introduction of PPP as a shift away from control and command form of governing, towards a horizontal trust based approach to public and private collaboration (Weihe, 2009, p. 3). This generalized conceptualization of PPP is supported by what Greve (2010) describes as the PPP industry. He identifies the raise of a PPP industry consisting of large consultant agencies and enterprises with international experience with PPPs and these may influence and drive public PPP reforms and projects, for own benefits. It is even argued that a Consultocracy, where consultants rule the PPP process, are emerging (Greve, 2010, p. 502). Independently of whether one believes a such situation has developed, it is clear that the state no longer has monopoly on regulation as private standard setting agencies introduce international standards which de facto function as regulation (Wettenhall, 2010, p. 27) and there is little knowledge about the influence of business on the PPP policy development (Greve, 2010, p. 499).

The discourse surrounding PPP, both politically and among populations has however changed with the global economic crisis and there has been a growing scepticism towards the practice of profit-driven private companies take on public interest and this has influenced the practice of PPP (Greve & Hodge, 2013b).

**The contractual partnerships**

The general discussions on PPP can be divided into considerations on Long-Term-Infrastructure-Contract (LTIC) and the partnership idea in general (Greve et al., 2010, p. 597). When defining PPP in relation to the infrastructure approach, it is understood as a project which handle elements of financing, design, construction, operation and maintenance of an asset or infrastructure service, which traditionally have been provided by the public sector (Evens & Bowman, 2005, p. 62). The bundling of tasks can lead to a more efficient and high social value of the PPP, as the PPP partners are responsible for the whole-life time of the project and thus have an incentive to plan better and
use high-quality and sustainable building materials (de Bettignies & Ross, 2010; Konkurrence- og Forbrugerstyrelsen, 2012). Infrastructure PPPs are seen as an alternative to traditional procurement, where each task is tendered separately (de Bettignies & Ross, 2010). The scope and the functions of the partnership are negotiated into a legally binding contract, which is the cornerstone of the partnership. From a legal perspective the aim of the PPP contract is to “reduce cost and price, to increase quality, reduce the risks and failures, and improve the coordination and share responsibility and capacity (Tvarnø, 2010, p. 216)”.

The contracts are often long term with binding obligations of payments and services for up to 25-30 years. The most applied forms of infrastructure partnerships are Build-Own-Operate-Transfer (BOOT) where the private partner is solely responsible for design, building, financing and operation of the infrastructure asset and at the termination of the contract the asset is transferred to the public sector for a negligible cost. To cover maintenance costs and cost of finance, the private partner receives either annual payments from the government or is allowed to generate revenue from user payments. Besides considerations of finance and duration, the contract has to include a detailed project description and project aims and a consideration on the allocation of risk (Greve, 2008).

The tendering process – the legal aspect

The selection of the right or best suited partner is essential for the success of infrastructure PPPs (Zhang, 2005). The definition of the right or best suited partner can be made from various criteria, and the choice and weighting of the criteria differ from actor to actor. This thesis focus on high total welfare gains and low total social costs, but different governments applies different practises and no universal practise is prevalent. The tendering process of the PPPs is covered by traditional public infrastructure procurement rules. The legal aspects of PPP are essential as they prescribe what in practice is legally possible and to a large extent, the legal ambiguity summarises the duality of PPP. From a legal perspective the PPP represents a clash between the philosophy of private contract law which promotes freedom in contract formation, and on the other side, public procurement law, which constrains freedom in public contracts as accountability and transparency towards the citizens are to be upheld (Greve et al., 2010, p. 601; Tvarnø, 2010).

Countries that are part of the European Union (EU) further have the concern of the Common Internal European market to encompass and the procurement directive, prescribes clear procedures from public provision. The aim of the EU procurement directive is to ensure an open public procurement market, which comply with the highest professional standards and uphold the market
mechanism and interest. Further the procedures should secure fairness and equal treatment of companies throughout the EU which would increase competition and lead to lower prices (Tvarnø, 2010, p. 218). The market mechanism is the foundation of the EU’s internal market and the base for its benefits and it is thus strongly defended by the EU’s institutions. As in academic literature, there exist no universal legal definition of PPP and to some extent this might be intentional as such definition automatically would exclude a number of partner setups and leave these external to the legislation. It could though be argued that the lack of a legal definition results in different national interpretations and thus increases transaction cost and confusion of the PPP concept (Tvarnø, 2010, p. 230).

Even through the EU commission have published guidelines and a Green Paper describing the characteristics of PPP this might not be sufficient (Tvarnø, 2010). Procurement law prescribe that only small changes are allowed in the tendering material after publishing and this is argued to constitute a problem for PPPs, as collaboration and negotiation aspects are necessary and essential in the establishment of a successful PPP (Tvarnø, 2010). Research has shown, that where PPPs in the tendering process allowed for evaluation of more social and relational aspects, the PPP has developed to have better collaboration and aligned interests, compared to traditional PPPs and this has resulted in more successful partnerships (SIBET procurement process (Weihe, 2009, p. 51)).

Even though the EU procurement directive prescribe a significant part of national legislation in the EU member states, Tvarnø (2010) argues that governments should take some action in the area. Governments should establish rules for the PPP contracts, with integrated incentive mechanisms, aims for improving quality and utilization of competencies, and the contract should include process based clauses, which relates results to payments (Tvarnø, 2010). It is expected that the EU will pass a new procurement directive in the fall of 2013. It is assumed that the new directive will allow for more dialogue and negotiation. The specific Danish context for public procurement will be further accounted for in the chapter Public procurement procedures for Public Private Partnerships.

**Contract negotiation**

Moving beyond the legal aspects of the contract, the process of negotiation also calls for investigation. In PPPs the private partner is often involved earlier in the decision making process, compared to traditional procurement (Klijn, 2010) and the contract is often more extensive. The bundling of tasks entails that the contract often is negotiated with a consortium or Special Purpose Vehicle (SPV), consisting of a number of private actors which, by joining expertise, can solve all
the different tasks integrated in the PPP (de Bettignies & Ross, 2010). The drafting and negotiation of the contract is a complex and resource demanding process and it is often argued that the private sector has an initial advantage as negotiation experience is more established in the private sector (Parker & Figueira, 2010, p. 513).

The theories of negotiation are comprehensive and the scope of this assignment does not justify a thorough review, however, a few comments on negotiations in relation to PPPs, will be necessary. When the partners meet to negotiate, the willingness to compromise depends on a number of things:

One element is the level of relation specific investments or asset specificity, e.g. the investments that are tied to the PPP and the negotiation and which cannot be used elsewhere if the negotiation ends. If the relation specific investments are perceived as high ex ante the contract signature, then the parts are assumed to be less willing to compromise. If renegotiation should occur ex post, and the partners have made large relation specific investments which cannot be disposed elsewhere, then it is assumed that the parties are more willing to compromise in order to uphold the collaboration (de Bettignies & Ross, 2010, p. 139). Another important element for the outcome of the negotiation is the property rights of the asset. If the PPP asset is of a nature so that it can be disposed outside the partnership, then the holder of the property rights has higher bargaining power. If the private firm ex ante expects to hold property rights and thus gain a high bargaining power, then the company is expected to engage in a higher amount of relation specific investments because of the prospect of higher bargaining power ex post (de Bettignies & Ross, 2010). A contract process will always leave doubt of the sincerity of the opposing part. The fear of Moral Hazard where e.g. the private part does not act accordingly with the PPP aim, is often strong and various incentive mechanisms needs to be incorporated into the contract to mitigate this (Monteiro, 2010; Parker & Figueira, 2010). The incentive mechanism can for instance be that the private partner does not get payment for the construction, before the asset is commissioned or that the annual payments are reduced if failure in quality or function appears. Competitive tendering may also help avoid adverse selection of partners, as private actors are assumed to act efficient when opposed to competitors. It is though important to recognize that competitive tendering, among others, is influenced by the possibility of renegotiation. If the private actor expects that the contract can be renegotiated later in the contract duration, then the final offer might be lower than originally expected, as eventual losses is expected to be covered later (Boardman & Vining, 2012, p. 8). Research has shown that renegotiation of elements in the PPP contract occurs on average after two years (Parker & Figueira, 2010, p. 534). In the renegotiation the private companies can “opt-out” if the renegotiations does
not match their requirements (Boardman & Vining, 2012; Parker & Figueira, 2010, p. 532) and some argue that this leaves the public sector with no actual sanction possibility (Shaoul, 2010). The negotiation process could further be distorted if the companies have bad cost-estimation skills or if corruptive conduct is applied, as the company then can bit lower than the market and thus get an advantage in the tendering process (Monteiro, 2010, p. 269).

Risk

Risk management and allocation also influence the contract and the actual PPP collaboration. Risk management is a comprehensive research field and this assignment only allows for a short introduction of risk theories in relation to PPPs. Briefly put, it is important to articulate that mapping, transferring, allocating and other forms of risk management, does not eliminate risk itself. Rather it creates new forms of uncertainty which may be hidden from the risk manager (Power, 2008). From a social welfare perspective, the gain of a risk transfer is zero, as the risk merely is transferred to another actor and not eliminated (Boardman & Vining, 2012, p. 12). The processes of defining and mapping risks, makes the PPP partners feel secure, but even with continuous reporting and monitoring of the risk objectives, the projects can fail and unforeseen risks can occur. In relation to PPP, this awareness should not result in an abandoning of risk considerations, but only that the parties should not blindly depend on the risk assessments and risk management plans. The awareness of the probability (certainty) of the risk estimates and the fact that business and public actors have different expectation and acceptance levels of risk, is important in the initial consideration about risk (Monteiro, 2010, p. 273).

Compared to normal business considerations about risk, PPP risk management is significantly different because it involves the public sector. Because of the traditional and historically founded faith in state and governments, the public sector has a high ability to absorb risk (Monteiro, 2010, p. 262). The conventional risk perception of infrastructure projects is that these have a high risk of overrunning cost and shortfall in profit. Other essential risks are: project error risk, construction risk, licensing risk, demand risk (Monteiro, 2010, p. 281). In PPPs however, the bundling of tasks creates an increased incentive for overcome these risks. Monteiro (2010) argues that the degree of efficiency depends on the degree and effect of the risk transfer to the private actor. He argues that the private sector only operates efficiently, if they have financial interests at stake and if the risks that are transferred to them are risks that they can handle. If private managers are protected from (financial) risk, they will consequently only manage for profit, not for the project success.
If the private actor is to manage the PPP efficiently, then the whole-life cost and financial risk need to be transferred to the private actor and this relates well to the arguments on the importance of private finance in PPPs. Besides the project related risks are political risk and relation risk significant in the PPP collaboration and risk assumptions have changed in recent years.

The global economic crisis has affected the understanding of risk management and challenged the traditions and perceptions of risk allocation. Connoly and Wall (2013) argue that as governments took on the financial obligations from private PPP partners who was in financial difficulties, the risk shifted towards the public sector again. In the long run this can have an essential effect of the negotiation of risk allocation in PPP contracts as the private sector might be willing to take on more risk as they know that government will step in if finance gets scarce. Transfer of risk can thus be overrated in the PPPs which are formulated in times of crisis (Connoly & Wall, 2013). If the functioning of the PPP is central to an important public service provision, then the government cannot allow for the PPP and the private partner to default, as the consequences politically and for the population would be too significant. The government is thus compelled to subsidize the private company or take over the financial or management obligation of the PPP, at large costs (Monteiro, 2010, p. 275). This creates a form of public-public partnerships which by no means fulfil the aims and efficiency incentives as a PPP (Greve, 2013). This can be related to the academic concern, described above, where the public sector in central public service PPPs, does not have a sanction option towards the private partner, as the public partner does not hold the expertise to function the PPP by them self. On the contrary some states have also failed to fulfil their payment obligations to a private partner since the economic crisis and even more severe, there are countries where the risk of nationalization or expropriating is present. Political risk can thus take many forms, and new environmental or employment legislation is highly relevant for current PPPs (Parker & Figueira, 2010). The initial political approach to PPP can also constitute a political risk. Flyvbjerg (2006) identifies that politicians often have an optimism bias, where policies are based on success cases and thereby not on average cases which results in overestimated revenues and underestimated costs (Flyvbjerg, 2006; Monteiro, 2010). If the framing of the project proposal follows this tendency, then the PPP is most likely to fail.

In addition to the political risk and the risk related to the private partner, are the perceptions of the other partner’s risk management skills, essential for the contract and the negotiation. The expectations about the other partner’s ability to cope with change and risk, influences the perception
of the sustainability of the partnership and thus influence the collaboration (Monteiro, 2010). If there exists a belief that the other partner is good at coping with change, then more trust is laid in the partnership and even though this can constitute a risk itself if perception is wrong, then it must be considered beneficial for the PPP that the partners believe in its success. The difference between the perceived and the actual skills and technical expertise of the different partners is also a central risk as dissimilarities in these perceptions can cause problems when change occur.

The collaboration

The coverage and the degree of detail in the contract, are by many believed to constitute the function of the partnership, but research has shown that these formal governance structures are not the sole determinant for the governance processes or actual functioning of the PPP (Weihe, 2009, p. 18). In order to better understand the different aspects of the collaboration, it is important to investigate further in the different relation set-ups in PPPs. The relationship established with a PPP have by some, been described through the Principle-Agent theory which is occupied with delegation of responsibilities (de Bettignies & Ross, 2010, p. 137; Klijn, 2010). Others regard PPPs through, the economic theories of resource dependency and transaction cost which underlines that tight, specified contracts and high dependency fosters better collaboration. In relation to PPPs, research from the Nederland however, show that there is no correlation between tight organization of the PPP and its outcome and success (Klijn, 2010). Instead it is indicated that outcome is related to management strategy (process) and that management efforts are more central for performance than organizational form (Klijn, 2010, p. 77). This supports Weihe’s argument that certain Governance structures does not automatically foster certain beneficial governance process (Weihe, 2009).

Interesting contributions to the understanding of the PPP relation can also be found in the Strategic Management approach to strategic business alliances. Here it is stressed that collaborative advantage and thus an efficient project, is secured if the collaboration is based on reliable governance structures and processes, relational contracting and trust (Bovaird, 2010, p. 59). This is a combination of the pure contractual tight cooperation and a more relational trust approach. The literature on strategic business alliances can be used to describe and understand the nature of PPP and the more social aspects of the collaboration (Weihe, 2010, 2005). It is however important to emphasize that PPPs and strategic alliances differ on significant aspects and this should be considered a limitation in the appliance of the theory. Firstly the strategic alliance is placed in a competitive setting, whereas the PPP is political and the aims of the public bureaucracy is
transparency and unbiased implementation for law and not efficiency and profit as in the private sector (Weihe, 2010, p. 514). The importance of trust in partnerships is recognized, but it is argued that the word trust has some normative implicit meanings, which are subjective. Instead of using trust in defining a good relation, the predictability of behaviour, should be considered essential and defining for the partnership (Skelcher, 2010, p. 299). With the global economic crisis, the trust level between the public and the private sector has changed as many sees the exaggerated strive for profit as one of the main reasons of the crisis. This has resulted in a decrease in the trust of the market mechanism and confidence in the efficiency of the private sector, by both populations and governments. There has risen a scepticism towards the motives of business and the private sector and this might have to be rebuild if PPPs are to function fully again (Greve & Hodge, 2013b).

Whether one is concerned with governance structures or governance processes, it is useful to dwell with the concept of governance in order to understand the different perception that the PPP parties holds. In relation to PPPs the concept of governance can be defined as; the process which prescribes who should be accountable for the conduct of the PPP and what way the conduct should be exercised (Skelcher, 2010, p. 293). Modern forms of public governance are concerned with stakeholder inclusion and the recognition that multiple goals are present in the process (Bovaird, 2010, p. 60). This is also the case in PPPs and this can complicate the governance of the project as the aim may differ between the partners. Further the aspect of democratic governance, where public organizations are required to account for their actions, can be difficult in PPP. It is democratically required that governments have transparency in all processes of government, including transparency in input, throughput and output stages of PPP. This contradicts however with business’ accountability principles, which often merely looks at the output and outcome stage (Skelcher, 2010). These contradictions in accountabilities can create problems for the PPP and for governments this can result in a problem of democratic deficit. In relation to PPPs this difference between the public governance and the private governance entail that the PPP organization becomes a multi-organization, with several governance expectation and institutional logics that respond differently to change (Skelcher, 2010, p. 301).

The concern that the private and public sector is fundamentally different and perhaps holds incompatible aims, is outspoken by many and it is questioned whether one can apply theories which are developed from and to the private sector, on public organizations. Allison (1983) claims that private and public organizations have more differences that similarities and subsequently, Flinders (2010) argues that the underlining values and principles of the modern state, does not align with the
logics behind PPP. To find the right governance balance between, the tight contract that protect public interest, and trust based and loose partnerships that secures innovation, is a challenge and this can create tension in the PPP negotiation (Skelcher, 2010, p. 303). Further it is important to recognize that there are a number of elements which are unique for each partnerships, as the surrounding environment and the commitment of the project managers etc. and research has shown that these elements are highly influential on the success of the project and the partners perception of the level of success (Weihe, 2009, p. 49). The above concerns of the relational character of the partnerships and the critique of the mechanisms behind PPP are to some extent normative considerations and this calls for a further explanation of the political and normative aspects and critiques of PPP.

Political aspects and critique

Traditionally the justification for engaging in PPPs lies in the neo-liberal ideas of the efficiency of the market and this has resulted in various critiques from opposing normative perspectives. The arguments behind the critique will be investigated in this section.

One critical argument of PPP is concerned with the role of the politicians advocating for PPP and their underlying motives. It is argued that politicians engage in PPPs because they can buy now and pay later, meaning providing infrastructure for current voters and pushing the payments to future taxpayers. By introducing PPPs, the politicians generate both popularity among votes and establish a close relationship to private finance institutions and businesses, where the politician might want a job in future (Greve et al., 2010). The politicians interest can be described as a political cycle approach, where no long term concerns exist and re-election and short-term value maximization is in focus (Monteiro, 2010, p. 264). The other actors that are involved in the PPP establishment and management have, as the politicians, subjective aims of the PPP engagement. The public bureaucrats, who formulate the tender material, might be concerned with their own career path, either within the public organization which largely depends on the goodwill of politicians and executives, or within the private sector where a good relationship with central private actors can become essential. The aim of the private sector is considered mostly to be profit and external consultants are interested in establishing more projects and to increase their monopoly of expertise so they become indispensable (Monteiro, 2010, p. 265). Indifferent of which career path is considered, the hidden agenda can result in a distortion of the reported progress and results of the PPP. The different PPP actors have different aims and these, to some extent conflicting aims, could
explain why some PPP fail. It is not that any of the conflicting interests are illegal, but as the different actors pursue their own goal, the public interest suffers and with the introduction of private finance and private sector mechanisms, the democratic accountability and transparency may disappear (Monteiro, 2010). From this public-choice theory perspective, the key problem of PPP is the lack of accountability among the actors involved. Especially the politicians’ accountability towards the citizens is important, as the real cost of the PPP should not be the responsibility of future taxpayers, but rather the politicians signing the contract (Monteiro, 2010, p. 267). The long term PPP contract binds both future politicians and taxpayers to payments and services which they did not vote for and this constitutes a democratic deficit and a policy lock in.

Another general critique that is raised towards PPP is the use of private capital, as governments historically can borrow cheaper than the private sector. The argument is that the introduction of private finance constitutes a higher cost for the PPP and thus private sector efficiency has to be significantly higher in order to compensate for this cost. If not then the actual efficiency difference between the PPP and traditional procurement is not significant. In response to this critique, some commentators though argue that public debt not is always cheaper than private debt. As the private partners that engage in PPPs often are large multinational consortiums, these can gain favourable financing agreements, which are very close to the level of the public sector. Further, if the financial risk is born by the public sector through public debt, then it is the taxpayers and not the private partner that bears the cost of possible bankruptcy. In other words, if private financing is used, then the company bears the cost of default (de Bettignies & Ross, 2010). This has nevertheless changed as the economic crisis resulted in governments taking over the debt obligation for private default threatened PPP partners (Connoly & Wall, 2013) and the tax payers have nevertheless ended up paying for the capital risk. Another argument for the use of private finance is that large public infrastructure investments are often based on an increase in public debt and if the national debtration reaches a critical level, then international credit agencies can degrade the credit rating of the economy. In light of the economic crisis, this has happened and resulted in significant consequences for the national economy of the affected countries (de Bettignies & Ross, 2010). Theoretically, it could also be argued that the origin of the finance is insignificant. The theory of Perfect Capital Markets (PCM) illustrates how the price of capital in an open economy is constant and that public debt is not cheaper than its private counterpart. The difference between the two interest rates, merely represents the amount of risk that are transferred to future taxpayers (Hallowell, 2010, p. 319). Academically the role of private finance in PPPs is prevailing considered essential and even
though the economic crisis has decreased the access to finance (Connoly & Wall, 2013), the newly published PF2 policy of the UK, still focus on private finance as an essential part of PPP (UK HM Treasury, 2012b).

One of the most significant critiques of PPP is that the government expenditure to the PPP, in the long run, is higher than the cost of a traditional procurement (Boardman & Vining, 2012, p. 14; Parker & Figueira, 2010). This critique is aimed at the underlining mechanisms of PPP, namely the market efficiencies and the increased VfM. Research show that the PFIs in the UK constitutes a mayor debt burden (Hallowell, 2010) and these initiatives does not clearly and consistently provide a better VfM compared to alternative procurement methods (National Audit Office, 2011a; Shaoul, 2010; UK HM Treasury, 2012b). The validity of the critique is closely related to the evaluation methods of PPPs and which aspects one includes in the evaluation. The aspects of evaluation will be address in the following section.

**Evaluation**

As described earlier, the establishment of a PPP is done on some fundamental normative assumptions about the added technical efficiency of the private sector and the bundling of tasks which increases efficiency and minimize the whole-life costs of the project (Boardman & Vining, 2010). These assumptions are often transferred and applied directly in the project appraisals and budgets, on which decisions are made. The instruments used to generate project appraisals, evaluation and budgets, are thus powerful as they can change the appearance and perception of the PPP by distorting the project value and the costs and benefits. This section will investigate the elements that are used in evaluating, describing and estimating PPP projects.

Initially many critics emphasize the problem that PPP reviews, evaluation and studies, often are made by organizations and institution, which have an interest in the promotion of PPP and thus may overemphasize the benefits of PPP (Hodge et al., 2010b, p. 8). This can lead to approval of PPP projects which, if evaluated unbiased, would not seem applicable and eventually this could result in more failed PPPs. Further, on a more general note, the term *evaluation* should be used with some caution as it is often used without any further explanation of whose criteria are applied in the evaluation or which stakeholder interest is used as benchmark for success (Hodge, 2010).

Historically the evaluation and review of PPPs have been influenced by the neo-liberal account of numerical and accountable indicators, which easily can be compared and used for statistics. *On-time* and *on-budget* is one of the most applied evaluation criteria, which measures whether the project...
has finished on time and to what extent it held the budget. The concerns for this ex post evaluation form, is that it only covers the construction phase the PPP project and neglects the incentives related to bundling of tasks. Further it does not relate to the size of the budget indicating that all projects can be successful if the budget is large enough (Boardman & Vining, 2010). An even more applied assessment form is the VfM method; there the value of outcome is measured against the value of inputs. The VfM evaluation assesses the PPP project against a fictive Public Sector Alternative (PSA), which represent the cost of the project if it had been a traditional procurement project. The use of a fictive benchmark can be considered problematic, as the actual cost of the PSA is difficult to estimate and thus the PPP project can appear better or worse, depending on the inadequacy of the PSA estimates.

Again, the bias of the author can influence the outcome of such evaluations. The actual comparison between the PPP and the PSA can also be questioned as the financial assumptions and risk considerations behind the two projects, are significantly different. When two entities of comparison are fundamentally different, then the applicability of the result may be poor. Further the VfM calculation is based on Net Present Values (NPV) of future payments and the size of the discount rate used for this calculation is essential, as a high discount rate makes the future payments appear smaller. PPPs often have a limited down payment and higher future payments compared to the PSA which have high initial investments and less future costs. In applying a higher discount rate the PPP appear cheaper than the PSA (Boardman & Vining, 2010, p. 166; Hodge, 2010; Moore, Boardman, Vining, Weimer, & Greenberg, 2004).

Boardman and Vining (2010) argue that governments in applying the above presented evaluation methods, distorts the actual cost of PPP, both with a too high discount rate and by neglecting the Total Social Cost of the PPP. The Total Social Cost (TSC) of a PPP project should include, not only construction costs, but also transaction costs, cost of negotiation and monitoring, and the potential cost of quality decline for the citizens. By accessing all these aspects, the government gains a more comprehensive and accurate picture of the actual costs, effects and externalities of the PPP project on the whole of society and thus they can make a more informed choice.

Besides the PSA, the evaluation should also be made in relation to a status quo scenario, where e.g. the new infrastructure project, was not established. In addressing all the above considerations Boardman and Vining present a Cost-Benefit analysis of PPP vs. PSA vs. the Status Quo scenario, with the attempt of illustrating the best way to evaluate which project is more suitable. In the
presented Cost-Benefit analysis the total welfare gains are calculated as a function of consumer surplus, producer surplus, government surplus and employees surplus and these should be weighted relatively in relation to their contribution to welfare (Boardman & Vining, 2010, p. 171, 2012). The main argument for including social costs or Net Social benefits when accessing PPPs, originates from political economy. By including aspects of the stakeholder motivation and behaviour, a more comprehensive understanding of the PPP is created and together with the audit focused evaluation instruments applied by government, this will create a more realistic review of the outcomes and externalities of the PPP project (Boardman & Vining, 2010, 2012, p. 3; Hodge, 2010). The economic crisis has also influenced the discussion on PPP evaluation and Boardman and Vining’s more inclusive approach is affirmed by Jeffares at.el (2013) who argues that the crisis has created a called for a more standardized evaluation method for PPPs as the VfM have shown to be incomplete and insufficient.

When concluding on which aspects that are described as influencing the formulation and function of PPP, a number of elements seem essential. It is clear that the political history and policy dedication influence the level of PPP but also is risk allocation and ownership of the asset, partial aspects of the contract negotiation are to be considered. Finally the method of evaluation influence the perception and appearance of PPPs, both in relation to the feasibility study ex ante and the mapping of success ex post.

**Part IV – Public-private partnerships in the Danish context**

This chapter will investigate the PPP tradition and experience in Denmark and answer the sub-RQ B concerning how is the Danish PPP sector constructed and what are the challenges.

The Danish PPP experience is limited compared to the UK and Australia and historically the government’s commitment towards the policy tool has been somewhat insignificant (Greve & Mörth, 2010, p. 440). The Danish society model differs significantly from the Anglo-Saxon one of the UK and in Denmark there is too a greater extent tradition for cooperation and negotiation between the public and the private sector. This might be one of the reasons why the initial PPP set up, inspired by the NPM approach, did not enter the Danish political agenda with conviction. The shift towards privatization and a limited role of the state did not consist with the political tradition and environment in Denmark (Greve & Mörth, 2010; Greve, 2010). It was first in the late 1990s that the government at the time, showed an interest for PPPs and it was not until 2004 that an *Action plan for PPPs* (*Handlingsplan for Offentlige-private Partnerskaber (OPP)*) was published
The action plan contained a number of initiatives that was intended to generate innovation, increase efficiency and utilize the resources of the Danish society (Regeringen, 2004). The policy was nevertheless not pioneering and lacked coherence between the suggested projects which led to confusion of responsibility between the authorities and resulted in a continued lack of dedication to PPP (Greve & Mörth, 2010, p. 441). In 2005 the National Authority for Enterprise and Construction assigned the consultant company KPMG to publish a report on the Danish PPP potential. They estimated the Danish PPP market had a value of 22-27 million DKK and with this report the PPP sector quickly gained more attention (KPMG, 2005). In the years after 2005 a number of PPP projects were established, but the projects were very different in type, scope and set-up and thus it was difficult to generalize on lessons learned.

Politically there has also established several initiatives to increase the awareness of PPP, among others, a PPP network for public and the private employees and managers dedicated to PPPs (Greve & Mörth, 2010; Konkurrence- og Forbrugerstyrelsen, 2013a). In January 2011 a new government policy on public and private collaboration was published with four focus areas which should lead to more effective competition and result in more growth and productivity (The Danish Government, 2011). The focus areas of the strategy is (1) more public projects in public procurement, (2) simpler rules and frameworks, (3) easier collaboration and (4) new solutions and collaboration forms.

The Danish PPP experience

In 2010 the responsibility for promoting and regulating PPPs was moved to the Danish Competition and Consumer Authority (DCCA) which resulted in a closer relation to procurement rules and competition concerns. By 2012 the PPP team in the DCCA was firmly established and a number of PPP initiatives as launched. In the fall 2012 the authority published a report gathering the experience of 13 Danish PPP project, see table 2.

Table 2: Danish PPP projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Contracting authority</th>
<th>Contract signing</th>
<th>Financing</th>
<th>Ownership after contract end</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking house in Randers</td>
<td>Region Midtjylland</td>
<td>June 2011</td>
<td>Private</td>
<td>Public</td>
</tr>
<tr>
<td>School in Frederikshavn</td>
<td>Frederikshavn Local Government</td>
<td>June 2011</td>
<td>Public</td>
<td>Public</td>
</tr>
<tr>
<td>Day-care centre in Hørning</td>
<td>Skanderborg local Government</td>
<td>April 2011</td>
<td>Private</td>
<td>Public</td>
</tr>
<tr>
<td>School (Ørstedskole) on Langeland</td>
<td>Langeland Local Government</td>
<td>August 2008</td>
<td>Private</td>
<td>Public</td>
</tr>
<tr>
<td>Activity function</td>
<td>Aalborg Local Government</td>
<td>May 2010</td>
<td>Private</td>
<td>Public</td>
</tr>
<tr>
<td>Parking facility in Aarhus</td>
<td>Aarhus University hospital</td>
<td>March 2010</td>
<td>Private</td>
<td>Public</td>
</tr>
<tr>
<td>School in Helsinge</td>
<td>Gribskov Local government</td>
<td>Oct. 2010</td>
<td>Public</td>
<td>Public</td>
</tr>
<tr>
<td>Highway Kliplev-Sønderborg</td>
<td>Road Authority (Vejdirektoratet)</td>
<td>Feb. 2010</td>
<td>Public</td>
<td>Public</td>
</tr>
<tr>
<td>National Archive</td>
<td>The Danish Building and Property Agency (Bygningsstyrelsen)</td>
<td>June 2007</td>
<td>Private</td>
<td>Public</td>
</tr>
<tr>
<td>Court of law</td>
<td>The Danish Building and Property Agency (Bygningsstyrelsen)</td>
<td>June 2010</td>
<td>Private</td>
<td>Public/Private (Public part has right, but no obligation to buy asset)</td>
</tr>
<tr>
<td>Danish registration Court</td>
<td>The Danish Building and Property Agency (Bygningsstyrelsen)</td>
<td>December 2007</td>
<td>Private</td>
<td>Private</td>
</tr>
<tr>
<td>Court in Roskilde</td>
<td>The Danish Building and Property Agency (Bygningsstyrelsen)</td>
<td>May 2012</td>
<td>Public</td>
<td>Public</td>
</tr>
</tbody>
</table>

Source: Danish Competition and Consumer Authority (2012) Experience from the Danish PPP projects

The report was based on a questionnaire made among the public contracting authority of the 13 PPP projects and the results were processed in collaboration with the consultant firm PwC. As presented in table 2 the projects shows a large variation in size, sector and implementation level. Some of the projects have been commissioned and are under operation and others are still in the construction or start-up phase (Konkurrence- og Forbrugerstyrelsen & PwC, 2012). It could be argued that this diversity among the cases would limited the applicability and validity of generalizing the experiences, but the DCCA argue that the report Experiences from the Danish PPP projects not is an evaluation study. The report merely gathers the lessons learned and thus it lies implicitly that generalizations of the experience is not applicable or useful in other contexts. The focus of the report was to investigate the relation between PPPs and total economic advantages, innovative solutions, increased quality, deadlines, procurement procedure, collaboration and risk sharing (Konkurrence- og Forbrugerstyrelsen & PwC, 2012, p. 2). The general conclusion was that the PPP projects to a large extent have been perceived successful and that whole-life economic optimization, understood as the ability to create incentive and room for long term cost saving solutions, has
occurred (Konkurrence- og Forbrugerstyrelsen & PwC, 2012, p. 8). Many of the projects have seen new and innovative solutions and the report emphasized that the formulation and degree of freedom in the performance requirements (funktionskrav) is essential for the level of innovation. Different from the activity requirements which are used in traditional procurement and describe precisely what activities that are expected of the tender, the Performance requirements describe which functions of the assets are to perform and this allows the private partner to use new and innovative solutions (Konkurrence- og Forbrugerstyrelsen & PwC, 2012). The report indicate that the quality was perceived to be higher for PPP projects compared to traditional procurement projects and the deadline for the projects were thus upheld. In relation to construction deadlines, it was emphasized that the payment mechanisms of the PPP is essential in order to increase the incentives for on-time delivery and quality. It was commonly applied, that if either the quality or performance of the asset did not live up to the contract, then a reduction in payment would occur. Further some PPP contracts had incorporated that payments from the contracting authority to the private partner, first was initiated when the asset was commissioned and this creates an incentive for the private partner to finish the project on time. In relation to the procurement process, the report indicated that the contracting authority found the PPP procurement process more resource demanding than expected, mainly because of the scope of the tendering material, the complexity of the contract and the underlining political decision making procedures. The 13 PPP projects described in the report had applied three different procurement models: two had used open procedure, three restricted procedure and eight had applied competitive dialog (Konkurrence- og Forbrugerstyrelsen & PwC, 2012, p. 14). The various PPP projects received only a limited number of tendering offers and this constituted some concern. There was an average of seven applicants to the pre-qualification for the restricted procedure and the competitive dialog, but only around four was pre-qualified and only 2,5 final offers was submitted on average. In two smaller cases there was only submitted one final offer. The contracting authorities assessed that the resource demanding tendering process was the reason for the defection of tenders. The collaboration between the contracting authority and the private partner after the signing of the PPP contract was described as good by most respondents and they were included as agreed in the management decision.

When comparing the Danish PPP experience to the UK, many of the same aspects are described as crucial, but the success of the PFI is to some extent more questionable. Both the UK HM treasury and the British National Audit Office (NAO) which is an audit body supporting the UK parliament have in the last years published studies on the success of PFIs and whether PFI provides better
value-for-money compared to traditional procurement methods is less clear (National Audit Office, 2011b; UK HM Treasury, 2012b). The NAO emphasizes that the public authority has to act as an intelligent consumer in order to utilize the benefits of PFI and among others they stress that the gathering of accurate data before deciding on procurement form as well as skills and experience with complex projects are vital for success.

The Danish report, Experience of Danish PPP projects, concludes opposing that that the Danish PPP experience to a large extent can be described as positive. However, there is one specific case of public and private collaboration, which has influenced the Danish PPP context and the general public perception of PPP: In the beginning of the 2000s, the local government of the municipality Farum engaged in a number of contracting-out or privatizing arrangements with private companies, after which they leased the asset back from the private company. This resulted in a large cost overrun for the local government and eventually the Mayor at the time, was suspended and litigated for breach of trust. The local government was put under administration of the Ministry of Interior and as result a law was introduced entailing that all local governments are obliged to deposit an amount in their budget equivalent to the private investment of any project tendered to the private sector. The money are released after 10 years and are gradually repaid in a period of 15 years (Greve & Mörth, 2010; Greve & Tvarnø, 2012; Konkurrence- og Forbrugerstyrelsen, 2012; Nielsen & Andreasen, 2012). The law in question, the Deposition rule (deponeringsreglen), has been criticized for disrupting one of the essential theoretical mechanisms behind PPP, namely the cost saving aspect, but the DCCA presents the rule as a framework condition for PPP in the Danish context, which secures that PPP not merely is seen as a financing model. “The rule (deponeringsreglen) secures that the contracting authority thinks more thoroughly before engaging in a PPP” (A representative from the regulatory perspective, 2013). To some extent this might be seen as contradicting the academic theory and the initial NPM approach in how PPPs must be focused on cost minimization. By making this strong argument against the importance of private finance, the DCCA might fail to attain and utilize the full benefits and potential of PPP.

**Recent developments**

In the past year the number of PPP projects has increased. In the beginning of 2013 over five new PPP projects call for tenders, and it has been suggested that a larger PPP pipeline is developing (KPMG, 2013). A more extensive PPP pipeline is argued to be one of the main conditions for the spread of PPP in Denmark. If companies are to invest in increased procurement competences for the
complex procurement process needed for PPPs, then they have to realize the large potential market. The current Danish government and parliament have shown increasing interest in extending the use of PPPs (Greve & Tvarnø, 2012) and the commitment has resulted in several initiatives. An example of this could be a recent PPP conference, arranged by KPMG and members of Danish Parliament with participants from both the private and the public sector (Altinget.dk, 2012; Jarlov, 2012). Further the DCCA has developed a PPP standard model, which is a thorough step-by-step guide to the establishment of PPPs. The guide is divided between new construction PPP and renovation PPPs and the PPP standard model is a hands-on guide for public authorities whom consider engaging in PPPs (Konkurrence- og Forbrugerstyrelsen, 2012). The model is developed by gathering Danish PPP experiences and lessons learned and the aim of the standards model is to increase the knowledge sharing across authorities and decrease the transaction cost associated with establishing a PPP. The PPP standard model aims at making it easier for local governments and other public authorities to engage in PPPs and consequently save resources on e.g. the use of consultants.

The standard model present three different PPP scenarios which are the most applied in Denmark. The approaches are: (1) PPP with private finance and possibility or duty of public ownership after the contract termination. (2) PPP with private finance and private ownership after contract termination. (3) PPP with public financing (Konkurrence- og Forbrugerstyrelsen, 2012). The standards model is very comprehensive and describes in details the procedure for decision making, divided in the following phases: (1) The decision on PPP, (2) Structuring of the project, (3) The tendering and contract process and finally (4) Construction and operation. Compared to the UK official HM Treasury guide Project governance: a guidance note for Public sector projects published in 2007, the Danish guide is structured on a more step-by-step base and is to some degree more detailed. The UK guide is presented as a framework that presents a number of aspects as timing, stakeholder inclusion and public sector issues as the need for transparency and accountability, which the public authority should consider (UK HM Treasury, 2007). The model/guide presents various examples of good practice, for instance on how to decide whether a project is suitable for PPP. When establishing a PPP, the contracting authority has to make a PPP project eligibility appraisal and preliminary PPP study (Konkurrence- og Forbrugerstyrelsen, 2012). The eligibility study is to estimate whether the project is suitable for PPP and this is often done through a total economic appraisal which is a technical calculation and comparison to the cost of an alternative procurement form. The cost of the alternative project, the reference project is made on
estimation of risk and costs (Konkurrence- og Forbrugerstyrelsen & PwC, 2012). The preliminary PPP study has to include a financial and a market analysis, which is made through interviews with selected potential partners (Konkurrence- og Forbrugerstyrelsen, 2012). The specific procurement methods and procedures will be presented in the section Public Procurement process for PPPs.

Specific Danish PPP projects

The first government facilitated PPP project in Denmark was the National archive placed in Copenhagen. The process of establishing the PPP was described as innovative and rewarding for both the contracting authority, the involved consultants and the end users (Jarlov, Petersen, Andersen, & Henriksen, 2006). The 30 year project contract was signed in 2007 and the building was commissioned in 2009 (Bygningstyrelsen, 2013). The project was established as a classical PPP with private finance. The procurement process applied for project was competitive dialogue and this allowed for a close dialogue between the private and the public partner which lead to innovative solution. This was the first time that competitive dialogue was used in Denmark and several essential leanings resulted from it, which have influenced the Danish PPP practise significantly. One key experiences was the importance of open function demands in the tender material so that the potential bidders are free to apply innovative solutions and further is showed essential to establish a sound dialogue on legal and economic matters to foster mutual understanding in e.g. risk allocation and other incentive mechanisms (Slots- og Ejendomsstyrelsen, 2008). One of the innovative solutions which were presented during the PPP process was the complex book cases, which was developed by the private partner and considered a novel and innovative solution to the archive’s needs.

One of the largest and remarkable PPP projects in Denmark is the highway between Kliplev and Sønderborg in Southern Jutland, which was commissioned by the Danish Road Authority (Vejdirektoratet). The project was procured through competitive dialogue and expressions of interest was to be submitted by November 2009 (Vejdirektoratet, 2009). Four consortiums applied for pre-qualification, and three were invited to participate in the dialogue. The dialogue lasted for 9 months and the main point of dispute was believed to be the financial aspects of the project, more specifically the extent of the guarantees for soil condition, a risk which the potential tenders were reluctant to take (Lange & Beyer, 2012; Vejdirektoratet, 2011). The final award was given to the Austrian consortium KMG Kliplev Motorway Group, which was constituted of the Austrian STRABAG SE and their Danish subsidiary the Züblin Scandinavia A/S from Aarhus in Denmark.
Because of the magnitude and complexity of the project, the potential tenders that participated in the dialogue, but were not awarded, received a significant economic compensation. The project included financing, construction, maintains and operation and the contract are to run for 26 years (Vejdirektoratet, 2011). It was the first time that such a significant road project was given to a foreign consortium. The company has explained that it was not crucial for them, that the project was a PPP. They saw the contract as a strategic decision as they wanted to be established and develop their business activities on the Scandinavian market. It was indicated that they, because of their strong financial position in their home country, had submitted an offer with lower profit margins, which they expected to earn back on future projects (Vejdirektoratet, 2011). Further the construction plan of the awarded consortium included novel innovation not previously seen on the Danish market and the highway was ready for commissioning long before the planned deadline.

By some the highway is described as a PPP-light as the ownership of the asset already were passed on to the public authority at the end of construction, after which the private partner only was responsible for maintenance and service (Lange & Beyer, 2012). Traditionally the financing of PPPs are done through an annual payment throughout the contract period, and the diverging from this, could be argued to influence the incentive mechanisms for the private partner, as the ownership advantages are moved to the state after construction.

In concluding on the structure of the Danish PPP sector and its challenges, it becomes clear that the lack of a broader pipeline of PPP projects appears to hinder the further development. The use of PPP has been limited in Denmark and even though the density of projects has increased in recent years, it is not considered enough to kick-start the industry. The DCCA have initiated a number of initiatives to reduce the transaction costs in the market and both the report on the experience and the PPP standard model may prove to be crucial.

**Part V - Public procurement procedures for public-private partnerships**

This section will describe the available procurement processes for PPPs in Denmark, with significant focus on competitive dialogue and answer sub-RQ C: concerning *what procurement procedures are available for PPPs and what their characteristics are.*

The procedures will be described from a Danish context, but as the EU procurement law is central for the Danish legislation, this will also be address shortly. The chapter will describe the open and
restricted procedure, which is considered the traditional procurement forms and this will be followed by a thorough description of competitive dialogue.

The Member states of the EU are subject to the EU public procurement legislation and the latest directive of 2004, the Public Sector Directive 2004/18/EC, governs most of public sector procurement (Treumer & Arrowsmith, 2012). The aim of the directive is to ensure free competition and a transparent market for public procurement, based on the corner stones of the internal market: Equal treatment, Non-discrimination and Transparency (Greve & Tvarnø, 2012; Savvides, 2011; Treumer & Arrowsmith, 2012). Previously, the EU public procurement law, had to some extent hindered the establishments of PPP, as these corner stones, hinders negotiation and close partnerships (Greve & Tvarnø, 2012, p. 9). However with the new directive of 2004, a new procurement form was introduced which allowed dialogue between partners, namely the competitive dialogue. In January 2011 the EU commission proclaimed that a new EU procurement Directive are to be established and adopted, in order to accommodate the increased interest of using public procurement as a mean to promote innovation, SMEs and EU’s other Environmental and Social policies (Burnett, 2011). The directive is expected to be approved in fall 2013 and from the contracting authority perspective it is expected that the use of competitive dialogue will increase as it will be allowed for more, less complex projects to partake.

In order for a project to be subject to the EU procurement directive, the project has to be commissioned by a public body, as a state, regional or local authority. The legislation applies for all works, services and supply contract, with a few exceptions on specific aspects of services (Part B services) (Treumer & Arrowsmith, 2012, p. 9). The project has to be of a significant size in order to interest tenders from other member states, so the directive applies only for work projects above Euro 4,845,000, service and supply contracts above Euro 125,000 for central and federal bodies and Euro 193,000 for other authorities (Treumer & Arrowsmith, 2012, p. 9). The directive leaves noteworthy room for member states to supplement the legislation with aspects which are considered relevant in the domestic context and thus the interpretation and applicability of the procurement procedures differ from country to country (Treumer & Arrowsmith, 2012, p. 12). As a result is difficult to standardize and generalize experiences between the EU countries and the case law of the different countries also show that the interpretations of the directive, diverge. Denmark has not made any commandments to the directive and has adopted it almost directly. Thus the law gives no guidance for interpretation and this has led to a significant amount of case law rulings where potential tenders claim that the contracting authorities misuse or misinterpret the directive (Treumer
& Arrowsmith, 2012, p. 340). The consequents of this strict interpretation will be discussed later in the section and in the analysis.

**The open procedure**

The open procedure for public procurement is perhaps the most widely applied procurement procedure. In the open procedure the contracting authority publishes a full description (tendering material) of the project or service in subject, with clear award criteria and sub-criteria and subsequently all interested actors can submit offers to the tender. The tendering procedure must be advertised in the Official Journal of the European Union (OJEU) which is a portal for all larger public procurement projects in the EU (Treumer & Arrowsmith, 2012, p. 11). The contracting authority selects the winner among the submitted offers, based on the award criteria. The open procedure is useful for projects where the contracting authority knows the exact specifications of the assignment and where there is no complex risk sharing. The open procedure can be resource demanding for the contracting authority, as all interested companies can submit their offer and thus many irrelevant or nonconforming offers can be received.

Prior to the publication of the tendering material, the contracting authority often calls for a technical dialog, where potential tenders and actors are invited to comment and suggest possible technical solutions for the project (Konkurrence- og Forbrugerstyrelsen, 2012; Treumer & Arrowsmith, 2012). The technical dialog is not a negotiation or the like, but merely a possibility for the contracting authority to investigate which solutions the market or sector, technically can provide. The technical dialog is a part of the preparation of the tender material and the practice can also be used in restricted procedure and competitive dialogue.

**Restricted procedure**

In restricted procedure the contracting authority calls for Expression of Interest from interested tenders, based on a tender note and a short project description. Contracts under restricted procedure also have to be advertised in the OJEU (Treumer & Arrowsmith, 2012, p. 11). The contracting authority then selects a number of companies, minimum three (The practise in Denmark is to prequalify five companies), which they consider suitable for the project. This selection is based on the tenders technical expertise, experience and financial record. After the selection, the pre-qualified tenders receive the full tender material and subsequently they submit their offer. A critique of restricted procedure may be that the contracting authority has to know all specification
Part V - Public procurement procedures for public-private partnerships

concerning the process before formulating the tender material and if the information sharing in the technical dialogue is limited, when the contracting authority might have difficulties in capturing the innovation of the market (Burnett, 2011, p. 4).

*Negotiation procedure*

The EU directive also gives room for a more direct procurement form, the negotiation procedure, but this is less applied in Denmark. The procedure allows for the contracting authority to consult the tender of their choice and negotiate directly with them. The negotiation procedure is divided in two: The negotiation procedure with a prior notice, where the contracting authority has to advertise the contract in the OJEU and consider all interested companies. The second form of negotiation process is negotiation without publication of a contract note. Here the contracting authority can negotiate directly with the actor of their choice without competition. In both processes the contracting authority has to strongly uphold the EU principles of transparency, equal treatment and non-discrimination and apply to detailed rules (Treumer & Arrowsmith, 2012, p. 12). In negotiation with a notice, the negotiation occur after the awarding and this can be a threat to the VfM aspect, as negotiation only occur with one tender and the lack of competition might decrease incentives for innovative and low-price solutions (Burnett, 2011). Independent, of which procurement procedure the contracting authority decides to follow, is the formation of award criteria and sub-criteria essential for the direction of the project as they are the foundation on which the contracting authority must select the final offer. The award criteria should be stated transparently and comprehensible in the initial tendering material, so that the potential tenders know which criteria they are being evaluated upon. The directive allows for projects to be awarded on either lowest price or most economic advantageous project. The award criteria have to be weighted, so that the potential tenders can see which criteria the contracting authority ranks the highest (Konkurrence- og Forbrugerstyrelsen, 2012; Treumer & Arrowsmith, 2012). The more the contracting authority know about the subject matter, the easier it can be to formulate the criteria and weight (Burnett, 2009).

*Competitive dialogue*

The open-, restricted- and the negotiation procedure have been and still are widely applied. However with the new directive in 2004, the EU found it necessary to adopt a new and more flexible procurement procedure for more complex projects, resulting in the competitive dialogue.
Both the open and the restricted procedure leaves little room for dialog between the contracting authority (Konkurrence- og Forbrugerstyrelsen, 2012) and it is required that the contracting authority can determine all aspects and specification for the project before the tendering procedure starts, which often is not possible for complex projects as e.g. PPPs projects (Greve & Tvarnø, 2012; Savvides, 2011). In recognizing that public procurement had become more complex, with aspects of outsourcing, long term contracting with the private sector and private finance, competitive dialogue was introduced to offer the necessary flexibility in public procurement (Savvides, 2011; Treumer & Arrowsmith, 2012, p. 16). The DCCA have published a guide to competitive dialogue and it provides a detailed plan for public authorities who want to engage in competitive dialogue. Further in their standard model for PPP they present competitive dialogue as the preferable procurement process for PPPs which must be assumed to represent the government’s official approach.

The use of competitive dialogue is restricted to complex projects, of which the contracting authority cannot define the solution or even the problem and specification which will respond to their needs and demands (Konkurrence- og Forbrugerstyrelsen, 2012). The Danish Building and Property Agency has used competitive dialogue twice for PPP. Due to as well the Agency's experience with PPP and the fact that many of their projects are to some extent similar in character, their assessment is that they are capable of defining the solutions and technical specification and are thus able to procure without applying competitive dialogue. At the same time the strict interpretation of the procurement directive means that they often don't consider competitive dialog as a legal option (Expressed by a representative from the Danish Building and Property Agency). Other EU member states are less strict in their interpretation of complex projects in relation to competitive dialogue and the consequences will be discussed later.

The process of competitive dialogue can be divided in three phases: the advertising stage; the dialogue phase; and the selection phase. In each of these specific rules are described for the contracting authority to follow. The procedure allows for a very open dialogue, but the principles of equal treatment, transparency and non-discrimination have to pervade the process and this can be a challenge. In order to control the procedure and secure equal treatment and information, some Danish contracting authorities has, with success, established project secretariats, where all communication is gathered (Lange & Beyer, 2012).
In the advertising stage the contracting authority is obliged to advertise the contract notice in OJEU, as in the open and restricted dialogue (Savvides, 2011; Treumer & Arrowsmith, 2012, p. 66). The contract notice has to include a short description of the project and express the award - and sub criteria. In competitive dialogue the contracting authority is obliged to award with regards to the most economic advantageous solution.

If the contracting authority makes any significant change to the contract notice subsequently to the publishing, then it is obliged to publish the revised version, so that interested tenders can respond to the new conditions. Whether changes in the award criteria or sub criteria also requires a new procedure, is a matter of interpretation and the practice differs among the EU member states. The Danish authorities direct that these cannot be changed freely after the publishing of the contract notice (Konkurrence- og Forbrugerstyrelsen, 2013b). It is often a challenging to formulate the contract notice sufficiently, as it has to describe the projects extensively enough to attract relevant tenders and apply with the legal requirements for contract notices, but still be flexible and leave room for adjustments in the dialogue (Treumer & Arrowsmith, 2012, p. 67). The DCCA recommend that the contract notice and the subsequent dialogue are formulated so the private actors can influence the conditions of the project solution, but the contracting authority should still direct and control the dialogue (Konkurrence- og Forbrugerstyrelsen, 2013b).

Subsequently to the publishing of the contract notice, interested tenders can submits their expression of interest, after a number of tenders are selected and invited to participate in the dialogue. The selection of the pre-qualified companies is based on criteria set by the procurement Directive and the private companies can, a mong others, be excluded on grounds of lack of experience, financial and technical capabilities (Treumer & Arrowsmith, 2012, pp. 68, 357). In this matter again the interpretation of the directive, differs from country to country and the number of companies invited to participate in the dialogue vary across Europe, from around twenty in Spain, to four in Poland (Treumer & Arrowsmith, 2012, p. 69). The usual number of participants is however around four as this is believed to be sufficient both in relation to upholding competition and to secure efficient use of procurement resources (Treumer & Arrowsmith, 2012, p. 69). After the pre-qualification and before the actual dialogue are initiated, the contracting authority can chose to hold a technical dialogue to ensure a reasonable formulation of the tender material which are send to the potential tenders before the dialogue is initiated (Savvides, 2011).
Dialogue phase

The aim of the dialogue phase is to determine “the best means of meeting the contracting authority’s requirements” (Treumer & Arrowsmith, 2012, p. 79) and the focus should be on the technical specification and the contract form (Savvides, 2011). Further elaborated, the dialogue is used to provide insights to the possible technical solutions which are within the economic possibilities of the contracting authority and these solutions economic and legal conditions (Konkurrence- og Forbrugerstyrelsen, 2013b). During the dialogue the partners can discuss all aspects of the contract, but is not a legal requirement and it is considered essential that the contracting authority structure and plan the dialogue (Konkurrence- og Forbrugerstyrelsen, 2013b; Treumer & Arrowsmith, 2012).

The DCCA’s guide to competitive dialogue presents a detailed plan for how to run the dialogue meetings. They recommend that the dialogue rounds are initiated with a collective meeting with all participants, where the tender material is presented in detail and the time schedule and themes for the dialogue is revealed (Konkurrence- og Forbrugerstyrelsen, 2013b). The guide proposes three individual dialogue meetings with each partner, but it is emphasized that there are no legal time deadline. The dialogue may continue until the contracting authority has identified a solution which fulfil its requirements and demands (Kommunernes Landsforening, 2013; Konkurrence- og Forbrugerstyrelsen, 2013b). The contracting authority has to distribute agendas for each meeting and the potential tenders are to submit a disposition prior to the meeting, which presents their approach to the themes of the agenda. In the dialogue meeting the contracting authority has to comment on the potential tenders approach and solution, so that they can optimize the proposal to the requirements of the authority (Konkurrence- og Forbrugerstyrelsen, 2013b). The dialogue is to be held paralleled with the invited tenders and the answers to general project questions has to be published to all partners in order to secure transparency and non-discrimination. After each dialogue meeting, the contracting authority sends minutes to the possible tenders, in the assurance that all offer related information should be kept confidential. “Cherry picking”, understood as taking the best part from the different solutions and placing them in the final tendering material, is not allowed in competitive dialogue and the fear of this, may reduce the openness of the potential tenders (Burnett, 2009; Treumer & Arrowsmith, 2012, p. 358). Agreements of disclosure can solve this problem and in some cases the potential tenders even allow sharing of information (Savvides, 2011). It is possible to eliminate potential tender during the dialogue, if the contracting authority finds that their suggested solution does not live up to the requirements, award criteria or sub criteria.
Part V - Public procurement procedures for public-private partnerships

This is, to some extent, applied in the Danish context (Treumer and Arrowsmith 2012) and it is also recommended by the Danish authority (Konkurrence- og Forbrugerstyrelsen 2013b). The continuous elimination of participants is reasonable with regards to resources, as the participation in the dialogue process is very resource demanding. However in relation to maintain competition throughout the process, it might have a negative effect on the outcome of the dialogue (Treumer & Arrowsmith, 2012, p. 84). When the contracting authority finds that the suggested solutions fulfil its demands and requirements, then the contracting authority closes the dialogue and the selection phase starts.

Selection phase

After the dialogue phase it should be possible for the contracting authority to send a revised and more detailed tender material to the potential partners, which in detail describes the technical demands for the project (Konkurrence- og Forbrugerstyrelsen, 2013b). With this revised tender material the final tender stage or selection phase begins and the potential tenders submit their offers to the contracting authority. After the tenders have submitted their final offer, there is only allowed for limited contact between the contracting authority and the potential tender. The tender may clarify, specify or fine-tune the offer on request of the contracting authority, but the potential bidder is not allowed to make significant changes to the offer as this would distort competition and have a discriminatory effect in relation to the other offers (Savvides, 2011, p. 9). The contract is awarded based on the award criteria and the sub criteria and as mentioned, the most economic advantageous offer. After the award the contracting authority and the winner of the contract meet to agree on technical details and the contractual matters (Konkurrence- og Forbrugerstyrelsen, 2013b). In some cases there have been practice of economic compensation for the non-awarded potential tenders, as the participating in the dialogue is significant resources demanding (Lange & Beyer, 2012; Treumer & Arrowsmith, 2012).

The Directive leaves little room for post-tender (after award) negotiation and the interpretation presented by the case law of the European Court of Justice presents serious doubt of the legality of this practice (Savvides, 2011). The final offer should include all necessary elements to realize the project and no significant change to the offer may be made after the award (Savvides, 2011). As mentioned, the potential tender may clarify, specify or fine-tune the offer and this could leave room for price or design adjustments, but not re-allocation of risk. It can thus be argued that it is
important to keep the dialogue open until the contraction authority are completely satisfied with the field of solutions (Savvides 2011). The limited possibilities for post-tender or ex post negotiations are criticized in relation to PPPs. Based on economic theory Tvarnø and Greve (2012) argues, that if there are no possibilities for an ex post negotiation, then the private PPP partner will be less willing to close an agreement. If there are possibilities of ex post negotiation, then the private partner will agree to lower conditions ex ante, as they believe the loses can be gained through future negotiation and implicit better conditions after a renegotiation (Greve & Tvarnø, 2012, p. 17). Greve and Tvarnø thus find that the legal possibility of ex post negotiations is essential for the signing of a contract in the first place and claims that it should be allowed to adopt frame agreements with the final tender, and then subsequently to the award, negotiate subpart and details of the contract. On the contrary, some argue that the experience from competitive dialogue procurement, show that when partners have time to discuss many aspects of the contract and project before the awarding, then the time span between the award and the final signing of the contract, is shorter than in traditional procurement (Burnett, 2011). Research of the Danish practice has shown that little post-tender negotiation has occurred, even though specifications of the contract has been made (Treumer & Arrowsmith, 2012, p. 364). The balance between reaching an agreement fast and securing competition is complex and widely discussed.

**Legal interpretation of competitive dialogue**

As mentioned in the beginning of this section, Denmark has adopted the EU Public procurement Directive, without significant any changes. In relation to competitive dialogue, this can be an advantage as it ensures a close linkage between the Danish interpretation and the EU sources of law. However this may effects the applicability of the directive, as the linkage to the subsequent Danish law is less obvious and aspects that could be relevant in the Danish context are not added (Treumer & Arrowsmith, 2012, p. 340). This mismatch can be detached when relating the guides to competitive dialogue published from the Danish authorities to the general writings and practices of competitive dialogue. There has developed an extensive Danish case law concerning competitive dialogue and this has provided a rather strict interpretation of the directive. The risk of legal prosecution might results in strict appliance from civil servants, and e.g. it can be argued that the interpretation of the legislation in relation to change in award or sub criteria, are very strictly understood in the Danish context (Treumer & Arrowsmith, 2012, p. 361). Theoretically it is argued that the contracting authority may change and refine the requirements during the dialogue, as long
as principles of equal treatment and transparency are taken into account (Savvides, 2011). Compared to other EU member states the Danish interpretation is rather strict and there is placed a high emphasis on equal treatment and transparency (Treumer & Arrowsmith, 2012, p. 341). When comparing the Danish approach to competitive dialogue with the UK guide to the procedure, the UK Treasury presents a number of specific recommendations to the process in their Review of Competitive dialogue (UK HM Treasury, 2011). They stress, among others, that expertise and education of procurement professionals are essential and that the competitive dialogue should not be used as a default procurement form, whenever a project is complex. Further they stress that the pre-procurement stage is the most important stage in competitive dialogue as the planning and framing of the dialogue is key (UK HM Treasury, 2011).

Competitive dialogue has been proclaimed to be the optimal solutions for complex public procurement projects and PPP, but the results and the applicability are also questioned by some: The advocates for competitive dialogue argued that the approach provides an improved possibility of including the market in the search for innovative solutions (Burnett, 2011; Kommunernes Landsforening, 2013). Further the extensive dialogue develops a clear understanding of the project specification and the mutual understanding and interpretation of central contract aspects may hinder unexpected disputes between the contracting authority and the private tender (Savvides, 2011) thereby providing better value for money (Burnett, 2011). The major drawback of competitive dialogue is the significant resources needed for the preparation and the process of dialogue (Burnett, 2011; Kommunernes Landsforening, 2013; Konkurrence- og Forbrugerstyrelsen, 2013b; Savvides, 2011; Treumer & Arrowsmith, 2012). Moreover, the legal risk of prosecution is significant as the interpretation of the legislation is still to be fully determined (Burnett, 2011; Lange & Beyer, 2012; Treumer & Arrowsmith, 2012). Especially in the Danish context, many legal cases have been raised against the contracting authorities based on claims of unequal treatment and misuse of the procedure and this might restrain some actors from engaging in the process (Treumer & Arrowsmith, 2012, p. 341). Before 2011, tenders could freely choose between trying their claims in ordinary courts or go to the Complain Board for Public Procurement. Since 2011 however, the Complaint Board has become the first-instance body for procurement disputes (Treumer & Arrowsmith, 2012, p. 341). The DCCA has in some cases functioned as an informal alternative dispute mediator and this has reduced the number of formal complaints (Treumer & Arrowsmith, 2012, p. 343). The amount of Danish case law on competitive dialogue is extensive, taken the novelty of the procedure and the size of the country into account, and this may hinder further usage.
Part VI - Analysis

The risk of legal challenges in competitive dialogue is extensive in Denmark and the rulings of the case law are not prevalingly consistent. This refrain some legal consultant of suggesting competitive dialogue to their clients as the legal risk is too high (Treumer & Arrowsmith, 2012, p. 351) and the guides provided by the DCCA is criticized for being superficial (Treumer & Arrowsmith, 2012, p. 352). It could be argued that contracting authorities not deliberately misinterpret the procurement rules, but because the procurement rules, in some cases, are unclear and because of limited legal resources in the authorities, the legal complaints will occur. Further it is detected that the public authorities reciprocally can disagree on how to interpret the legislation and as there has not been any case rulings on the area, the right practise cannot be determined. As the legal risk, the political risk can also influence the procurement process. The political demands for public projects may influence and hinder the process and the decision of which procurement procedure to choose, should be cleared with the politicians early in the process (Burnett, 2011; Lange & Beyer, 2012). The Danish experience with competitive dialogue has been largely positive and contracting authorities recommend the procedure and argue that it leads to more VfM. On the contrary, it has been argued that the extensive use of resources are a drawback (Jarlov et al., 2006; Treumer & Arrowsmith, 2012, p. 367). Competitive dialogue is a structured and controlled form of negotiation, but it is to some extent very inflexible which is a drawback (Savvides, 2011, p. 12)

In concluding which procurement procedures is available for PPPs and what their characteristics are, it is clear that the variation in the interpretation of the EU legislation is an obstacle, especially in the Danish context where a strict interpretation is applied. In relation to procurement methods, can it be argued that competitive dialogue is the procedure which allows the utilization of most PPP benefits and it may secure a better collaboration.

Part VI - Analysis

This chapter will analyse the theoretical aspects of PPP in relation to the empirical findings of the interviews and answer sub-RQ D which is concerned with the extent to which the choice of procurement form influence the final offers in a PPP procurement process. The departure for the analysis is the academic theories for PPP and procurement and the author’s perception and understanding of the interview data. The interview data is perceived as expressions of the interviewee’s understanding of and perspective on PPP and procurement forms and the writers understanding of these expressions will form the base of the analysis. For the purpose of intelligibility, the analysis will address the interview findings as respective the private sector
perspective and the public sector perspective. With the private sector perspective is implied the perspective of large Danish construction companies and the public sector perspective is, when necessary, divided in a contracting authority perspective, the regulatory perspective and the local government perspective, respectively.

The analysis will be divided into four sections: Academic PPP literature and the Danish PPP practise, Challenges in the Danish PPP sector, Procurement processes and the Danish PPP practises, and finally Competitive dialogue.

**Academic PPP literature and the Danish PPP practice**

One of the PPP benefits which are described in academic theory is that it allows for the public sector to capture the effectiveness and innovation in the market. By engaging contractually with the private sector, the public sector will find new solutions to their project which they themselves would not have developed. Whether this is an essential part of the attributes of PPP in Denmark, are though questioned in practice. From the perspective of the contracting authority it is indicated that the innovation aspect of the PPP is not the most central, as many higher level public projects are relatively similar office buildings with little variation in core facilities. Instead it is emphasized that the motivation for using PPP among others, is based on better risk allocation and management. The private sector perspective however describes how transfer of innovation is a central part of PPPs and an advantage. As an example is mentioned the National Archive where a complicated bookcase system was developed for the project, initiated by the private partner. Further the construction process and techniques applied in the Highway between Kliplev and Sønderborg were pioneering in Danish road construction history and such solution would most likely not have been developed without the introduction of the innovative private market. The discrepancy of the role of innovation could be founded in different nature and context of projects, but it could also be argued that even though many public projects are standard office buildings, the private marked might still have innovative solutions which could benefit the project. In standard projects there might be prospects of mainstreaming an innovation and thus it could be argued that innovation would occur just as much in standard projects. On the contrary it is important to recognize that the private sector has an interest in making themself indispensable for the public partners and thus might overstate the importance of innovation. PPP open a large new market for the private sector and they will of cause emphasize all arguments for their continued inclusion.
The underlining theoretical arguments for applying PPP are addressed in both the private and the public sector perspective and e.g. the benefits of bundling tasks and generating cost savings throughout the long term contract are described as essential. Further there exists a pronounced consciousness of the importance of considering the total life cost of the project. Whether the concern for total welfare gains, as described by Boardman and Vinning (2010) with inclusion of consumer, producer, government and employees surplus, occur in practise is difficult to determine. Formally the evaluation of whether to engage in PPP appears to solely be estimated against a PSA and this may leave little room for total welfare gains considerations.

One critique of PPP is that they in practise do not provide better on-time delivery and VfM, and this is also partially concluded by the UK treasury evaluation study. However, this concern does not seem to be prevalent in the Danish practical approaches to PPP and this confirms the findings of the DCCA report on Danish PPP experience. The public sector perspective perceives PPP projects, when established and managed correctly, to deliver better on-time and on-budget projects compared to traditional projects. This positive approach and assurance of the effect of PPP would to some extent be expected as the interviewed persons are fully integrated in the PPP sector. The same may be said of the private sector perspective which also predominantly focus on the positive attributes of PPP in general. This prevailing positive approach to PPP may also be founded in general political acceptance of PPP. As underlined earlier, the political and public acceptance of PPP is substantial in Denmark and unlike in other countries where PPP is negatively associated with privatization, PPPs in Denmark are to large extent met with support from across the political spectrum and this might be one of the reasons for the lack of substantial critique. Besides the Farum case which was not a real PPP matter, there have been no significant scandals around large PPP projects in Denmark and thus the public opinion on PPPs is also generally positive, compared to e.g. the UK where PPP scandals have resulted in critique and an increased demand for more transparency and better governance in the area. The positive approach towards PPPs’ attributes of providing VfM, on-time and on-budget, contradicts to some extent the new approach to PPPs which the UK treasury announced in late 2012. The new approach was initiated in response, amongst others, to, a critique of these exact aspects. It may be argued that the higher number of PPPs in the UK would, statistically result in more challenged projects and further the global economic crisis has influenced the British society more substantially compared to Denmark. This could explain why more critique and subsequently a new approach have been developed in the UK. Even though it is clear that the Danish PPP sector cannot be compared directly to the practices of the UK, it could be argued that
the Danish PPP practice could learn from the mistakes and new practices of the UK and to some extent leapfrog the development of PPP.

**Risk**

Another important aspect in the academic discussion on PPP is the sharing and allocation of risk. Optimally the risk should be held by the partner which bear the risk with least cost or who are closest to the risk and an eventual mitigation. The risk allocation is a central element of the public sector perspective which describes how the risk should be kept by the one closest to the risk, but it is subsequently acknowledged that the private partner charge a price for the risk taking. It is thus essential that a public authority does not transfer a risk to the private partner, which the private partner cannot influence as it would merely constitute a fee and not mitigate the risk. Further it is affirmed that the risk allocation often is a hurdle in the procurement of PPPs and the bidders often challenge the proposed risk allocation as it represents a large cost for them.

Risk allocation is also described as important for the private sector perspective. From this perspective risk allocation in PPP negotiation is however described more as a one-way transfer, where the public partner urge to shift as much risk towards the private partner as possible and simultaneously places strict payment reduction mechanisms for deviations from the project plan. This is not welcomed by the private sector and it is described as an obstacle in negotiations. This divergence between the public and the private sector’s perception of risk allocation would be some extent bee expected. On the one hand, it could indicate that even though the authority directs how the risk should be held by the most capable partner, then in reality the focus is on transferring as much risk as possible to the private part. On the contrary, the private sector perspective may also have an interest in presenting the practice as such, as the cost of barring risk is high.

Indifferently of how risk is actually allocated, it is interesting that the partners perceive the process differently. This indicates that the process of describing risks and defining “the most capable part” suited for bearing the risk is a matter of interpretation and the understanding may differ from the public and the private sector. The global academic theory on PPP argue that the global economic crisis has changed the practises of risk allocation as governments have taken on financial burdens of defaulting companies and thus disturb the risk allocation (Connoly & Wall, 2013). As a consequence of this, it could be argued that the private sector would be more willing to take on risk as they potentially will be bailed out, in cases of financial disturbance. However when relating this to the empirical statements from the Danish PPP sector, this does not appear to be the case and the
private PPP sector in Denmark is still reluctant to take on risk and the economic crisis might even have increased this reluctance. One reason for why the risk balance has not changed in Denmark could be that no large Danish PPP projects have been in danger of default and the Danish state has thus not rescued any failing PPP companies. The cases where governments have taken over the private partner obligation, have mainly been seen in the UK, and in this respect it can be questioned to what extent the UK experience influence the Danish practise and whether theories developed on these experiences is even applicable in a Danish context.

The volume of PPP varies significantly from country to country and the academic theories on PPP present a number of reasons for this. The political historical tack of governments is presented as a possible explanation (Greve, 2010) and this may reduce the applicability of comparison and transfer of practices. When relating this to the PPP practice in Denmark and the UK, this difference is clear. The public sector perspective describes that the Danish PPP practice differs from the international and especially the UK, experience, and there are no reason to believe that Denmark will reach the same PPP levels as the UK. This is also argued from the private sector perspective which describes that one reason for the difference between UK and Denmark could be that the Danish public sector has higher demands for quality in e.g. schools compared the UK. One private sector representative describes that a Danish PPP school project proposal once was presented to an experienced UK financier and the financier was surprised by the extent and quality of the Danish School project. This could indicate that the PPP school projects in the UK is less ambitious and expensive compared to Denmark and thus PPP can generate cheaper solution and appear more attractive in the UK. Another reason may be that the Danish PPP schools still are few in number and thus they become a trailblazer for the local governments and thus the demands for function and quality of the schools increase. It is argued from the private perspective that the PPP experience form the UK cannot be applied directly to Denmark because of differences in the business practice, e.g. in contract law. Instead there is argued for a comparison within Scandinavia, where a Nordic PPP model with a more pragmatic approach to PPP, should be prevalent.

**Role of finance**

Historically and for some academics, PPP has been seen as an instrument for relieving public budgets by substituting large public investment with annual future payments to the private sector. The argument of pushing government expenditures to future taxpayers through PPPs has largely been rejected theoretically as not contributing to sound PPPs. The role of private finance is however
still considered essential as it binds the PPP together and creates a significant performance incentive for the private partner. The Danish regulatory perspective expresses a critique of the sole focus on private capital and firmly states that PPP in the Danish context should not be considered a form of financing. Even though private finance plays a central part, it is argued that the long term contract and the bundling of task can create the same degree of incentive for the private company to perform better in the PPP. The PPP standard model published by the Danish Competition and Consumer Authority includes a PPP model with public finance and this emphasizes the limited focus on private finance. PPPs with public finance have been applied in a number of cases, among others the Kliplev-Sønderborg highway and it is argued from the regulatory perspective that if the contract is built properly, then the incentives for performance are present. From the private sector perspective it is agreed that PPP with public financing is a good setup, however it is emphasizes that the guarantee which in these cases create the incentive mechanisms, need to be fair and transparent. The contracting authority perspective also indicates that PPP is not all about financing of public assets and if an authority is only looking for cheap financing, then PPP is not the best solution. However, it is described that in some cases the management of the PPPs with public finance may be challenging as the PPP becomes a hybrid where aspects of ownership and responsibilities could be blurry. Further, it could be argued that PPPs with private financing in some cases have better risk allocation and incentive mechanisms as the private partners have banks and financial agents which constantly demands and pushes for performance and profit and this is essential for utilizing the potential of the PPP. On the contrary, if the ownership lies at the public partner then the public partner may be the only one pushing the private partner to perform, and this might not be enough. This supports Monterio’s (2010) argument of that the private partner needs to have “money at stake” in order to manage the partnership for performance and not just for profit. It could however by argued that the right incentive mechanisms could secure continued innovation and optimization throughout the contract length, as the private partner would strive for lowering the maintenance cost, but not the quality and standard of maintenance as this would result in a reduction in payments. One reason why the private sector welcomes PPPs with public finance could be that the global economic crisis has decreased access to finance and many large construction companies have experiences great loses in the last years.

The influence of the global economic crisis on the perception and use of PPP has been described theoretically, among others by Greve and Hodge (2013b) and the crisis has also influence the Danish PPP sector. The private sector perspective emphasize that the access to cheap finance has
decreased and financial agents are less willing to handle the project related risks, which they did in the beginning of the 2000s. The public sector perspective also recognize that there has been a shift since the economic crisis and the financial set up and interest rates from e.g. the National Archive in 2007 are unlikely to occur again. The insecurity in the financial markets has made the PPP sector attractive for large pension funds and in May 2013 five of Danish Pension funds published a report on the possibilities for PPPs in Denmark with finance from Pension funds (Ernst & Young, Eldrup, & Schütz, 2013). The pension funds are increasingly taking part in the Danish PPP consortiums and this is received positively from the contracting authority perspective which argued that if the PPP project is well functioning, it can be seen as a reliable state bond which explains the interest from the funds. The pension funds are by the contracting authority perspective described as a potentially better financial partner for the PPPs compared to traditional private finance, as the funds generally are concerned with long term profit as opposed to private banks which often have short term deadlines and repayment periods. This secures a combined long term interest for the financier and the PPP partners. Traditionally the pension funds have bought PPP bonds one or two years after the end of construction period, when the project had proved sustainable, but pension funds are a large part of almost all consortiums which apply for pre-qualification. From the private sector perspective the introduction of the pension funds has made financing easier, but it is argued that it still is challenging to find finance PPP projects.

**Challenges in the Danish PPP sector**

There seems to be an agreement among the interviewed persons regardless of sector, that the PPP sector in Denmark is in its initial stage and that the sector faces different challenges. One of the key challenges for PPP in Denmark, which is emphasized in both theory and practise, is the size of the market. The pipeline of PPP projects and the size of the projects are simply too small to constitute a well-functioning market and it is described as too expensive for the companies to participate in PPP procurement process compared to the gains of winning the contract. In addition, the limited PPP pipeline makes it difficult to attract foreign investors and contractors and this may hinder full utilization of the PPP potential as competition is limited. The construction standards are high in Denmark and the interpretation of the procurement law is strict and if foreign companies are to invest legal resources in learning the practices, then the number and size of PPP projects have to grow. Even though the competition in Denmark is strong, it is argued from the public sector perspective that competition can be even better and that further participation of foreign actors would
be beneficial. The limited PPP pipeline is also a concern for the private perspective and there has been appealed for bundling projects across local governments and an escalation of PPPs in infrastructure, both at government and municipal level.

One of the initiatives established to meet these challenges are the PPP standard model published by the DCCA. With this, the authority wishes to reduce transaction cost and increase knowledge sharing in the industry by standardizing the PPP process so that all Danish authorities, municipalities and central bodies, apply the same practice. The importance of standardization is also addressed in the contracting authority perspective which emphasizes that standards for contracts and tender material are essential and indications of convergence on the area is showing. From this perspective the introduction of PPP is compared to the introduction of the all-inclusive contracts which also caused frustration and had an expensive learning period, but now is perceived as an easy procurement form. If following this functionalistic view, the practice of PPP will become an integrated part of the public procurement after a number of years as practice will converge and the central players will agree on a standard. The contracting authority perspective emphasized that all public actors, state, municipalities and provisional government should apply to the PPP standard model to the degree it fits the project.

The call for more standardized PPP contracts and tender material is also strong from the private sector perspective and it is emphasize that the procurement process for PPP has to be improved. The private sector perspective indicates that the current practise is characterized by limited knowledge sharing and learning. Each new PPP project has a new contract formulation and as a result the contractors and their legal advisors have to use many resources on accessing the contract which is costly. The PPP standard model of the DCCA is welcomed by the private sector, as good and balanced, but not significantly advantageous for the private PPP partner. However in order to make the sector more accessible and to lower transaction cost, the private sector perspective calls for a more consistent use of the model by all public contracting authorities, which it is argued is not the case yet. The PPP standard model have only been published since the fall 2012 and the tool might be wider applied after a period of time, but still it is interesting that there to some extent exist conflicting perceptions of the use of the standard model.

The method and scope of this assignment does not allow for a determination of which practises of the standard model that are dominating and the more interesting finding is also that there exist conflict. The different views on the role of the contracting authority in promoting the
standardisation show a conflict in the PPP sector and this emphasizes the constructivist embedded challenge that actors have different perceptions of reality and their cognitive maps make them perceive the practise differently. The actors’ underlying interests form their perception and explanation of the practise. In this matter it may be important to emphasize that the standardization of PPP to a large extent is in the interest of the private sector. Even though the public authority may benefit from standardization, then the local governments might only tender one or two PPPs per decade and thus the benefit from economies of scale are largely realized in the private PPP companies. Greve’s theory of the PPP industry (2010), understood as the limited, but powerful number of companies and consultants that are active in promoting and extending the use of PPP, may be relevant here in order to understand why the private companies lobby for increased standardization.

A mechanism which is described by the private sector perspective to potentially make the Danish PPP sector more attractive is the aspect of compensation for submission of final offers. The current practice is that private companies receive an economic compensation, depending on the project, of approximately 150,000 DKK for the submission of a final offer in a procurement process. From the private sector perspective it is argued that an increase in compensations is a necessity for an escalation of the PPP industry. The current compensation is described as a slight insult as the compensation does not merely cover the expenses of the resources demanded for offer formulations. The perception is that the public authority would receive even better and toughly well-researched offers, if the companies were better compensated. This would benefit the projects and society as a whole as the eventual projects would be better. The perception of the private sector is that the contracting authorities are reluctant to talk about an increased compensation. This is to some extent affirmed in the contracting authority perspective which do not and do not plan to give higher compensation to companies who submit final offers. From the contracting authority perspective it is recognizes that new knowledge is gained through the procurement process and final offers, a knowledge which the contracting authority does not pay for. It is nevertheless seen as a part of the game in a competitive market and from the contracting authority perspective this is not considered a problem. If however e.g. competitive dialogue is prioritized higher in the new EU procurement directive, then it is recognized that a higher economic compensation might be necessary, in order to attract enough bidders to maintain competition in the resources demanding procurement process.

Another aspect which is argued to influence PPPs in Denmark is the Deposition Rule (deponeringsreglen). The regulator perspective indicates that the rule merely is a framework
condition in the Danish context, which emphasize that PPP is not a tool for financing. The private sector perspective describes however that the rule needs to be modified, as financing is a significant part of PPP and it hinders an escalation of the PPPs. This contrast in perceptions could be expected as the Disposition Rule, to some extent, is a debated political rule which from the public sector perspective is a necessity for the control of public budgets, but from the private sector perspective is an impediment for the growth of PPPs and profits. In May 2013 a working group under the Danish government published a report with a number of recommendations to bring the rules up to date (ØIM, 2013). To what extent the recommendation will be implemented and what the consequences remains to be seen, but nonetheless, the area is subject to political attention and future developments will be interesting to follow.

**Procurement processes and the Danish PPP practice**

Indifferent of which procurement process the public authority applies, many important decisions are made before the private partner is involved and the preparation of the tender material is essential for the process. Legally the selection of the final partner is made by relating the final offer to the award criteria of the tender material and the formulation of the award criteria is thus essential for a successful partner selection and the eventual partnerships. Public authorities thus need significant knowledge and awareness of their needs in order to formulate the award criteria and the regulatory perspective perceives this as a challenge. This is also emphasized by the private sector perspective which affirms the importance of the contracting authority’s procurement skills and ability to estimate whether the project is suitable for PPP. The UK HM Treasury’s review of competitive dialogue also characterise the pre-procurement stage as the most important stage in competitive dialogue and this is affirmed in the Danish context. If accepting that the partner selection is solely dependent on the award criteria and that the legal practise does not allow for any change in the award criteria, then the choice of procurement process could appear less important. As a consequence, it could be argued that the success of the partner selection and eventually the PPP, fully depend on the expertise of the civil servants or legal advisors who formulate the award criteria. If this is the case, then the research on how to establish successful PPPs should focus exclusively on the tender material formulation and the expertise of the public sectors. This would however undermine substantial parts of the theoretical writings on PPP and significant research would be needed to validate this point. The public authority may also have an interest in claiming
that the award criteria and thus the partner selection criteria is finalized before the engagement of any private actors, as this would imply that the public sector have full control over the process.

The academic writings on award criteria and tender material suggest that the Danish interpretation of the EU regulation is strict, especially on changing the award criteria after the initial publishing. The contracting authority perspective to some extent, affirms this: In some incidents the implicit meaning of the award criteria has been clarified during the procurement process, but if any significant changes are made, then the tender has to be re-published to avoid litigations. “There is a more strict interpretation of the procurement directive, as well as other EU-directives, in Denmark compared to many other Member States. As a large contracting authority we have a strong obligation not to bend the rules which sometimes can lead to an even stricter interpretation of the procurement directive.” (A representative from a contracting authority, 2013) This attitude is commonly experienced by the regulatory perspective which argue that the public servants of public authorities are conscious not to make mistakes in procurement cases, as eventual legal complaints would be a strike in their professional pride (Melsen, 2013). The strict legal interpretation is not described as a challenge from the private sector perspective, but as the Danish private sector is an integrated part of the PPP industry, this would be expected as they know the legal practises.

In both restricted procedure and competitive dialogue the public authority publishes a tender notice to call for pre-qualification application from the private companies. The content of the notice varies, but often limited information about the PPP project is included and from the private sector perspective this causes frustration. When the tender notice only contains the very general specifications on the project, then private companies have little information on which to decide whether to apply for pre-qualification. As a result it occur that companies apply for pre-qualification and then, when presented with the full tender material, decides not to submit a final offer and from the private sector perspective this is considered a waste of resources, both for the private and the public partner. From the contracting authority perspective the tender notice is perceived differently. From this perspective the tender notice should only have a short description on contract length, the procurement form and the overall project characteristics. Subsequently the private sector is to enlighten the authority on what they can offer after an eventual pre-qualification. E.g. what their experience is, who they work together with and how they plan to finance the project. By the contracting authority perspective it is affirmed that it can occur that companies withdrew after they have been pre-qualified, but it is not often.
In the restricted procurement process direct dialogue is not allowed, and instead there are often a question/answer session after the pre-qualified companies have received the final tender material. This question/answer session have to clarify specification and details regarding the project and practically this is done either by preparing a common meeting for all pre-qualified companies, or by distributing written materials. Either way, all questions and answers are to be distributed to all pre-qualified companies in order to comply with the principles of transparency, equal treatment and non-discrimination. There seems to be agreement among the interviewees, regardless of sector, that the usefulness of this question/answer session can be questioned. The contracting authority perceives the companies only to ask very general questions in fear of reveal their project ideas and generally, questions on technical details are avoided. This practice is noted with regret as the tender material is not challenging and the companies do not get the full explanation of the project. Consequently there are almost always a final bidder that fundamentally has misinterpreted the tender material and the project.

The frustration with the question/answer session is also address in the private sector. The private sector perspective recognize that the companies in some cases are self-inflicted in the unclear question/answer process, as they do not ask the detail question or wait on others to ask them. The private sector perceives the question/answer process as very resources demanding and even after the clarification, the public partner’s expectations might not be clear. As a consequence the company may restrain from submitting a final offer or end up submitting an offer which reconciles the wishes of the public actor. In the cases where the final submitted offer has misunderstood the wishes of the public actor, it is emphasized by the private sector perspective, that a significant amount of resources are wasted. The legal demands for equal treatment, non-discrimination and transparency do not allow for modification in this matter, and it could thus be argued that it is the private sector’s concern for confidentiality that hinders a more in-depth clarification of the tender material and this is to some extent also recognized theoretically. However, it could also be argued that if the public authority published a more thorough tender material, this obstacle could be limited. The argument of allowing ex post negotiation, in order to ease the contract negotiation, could also provide a solution to this problem, but as this would require a significant change in EU legislation this is a somewhat pervasive suggestion. The frustration of the lack of clarification of the tender material are clear in the restricted procedure and initially competitive dialogue could be seen as an answer to this.
Competitive dialogue

As described in the chapter on procurement processes, a project has to be characterized as complex before the legislation allows for the use of competitive dialogue and more specifically the public partner has to be unable to identify its specific needs and enclosed solutions. The interpretation of this legislation is strict in Denmark which to some extent affirms the contracting authority perspective. The contracting authority perspective perceives the characterization of projects as complex often as a legal deliberation and if the project is similar to a previous project, then it most likely cannot be characterized as complex. From this perspective competitive dialogue is as an exception, both because of the legal risk of wrong categorization and because the many public projects on e.g. the central government level are similar and often simpler office buildings. Competitive dialogue is thus seldom used not because the project is a PPP, but because the project itself, is of novel nature. E.g. when the four city court buildings, referred to in table 2, were commissioned in competitive dialogue, this was not done because it was a PPP, but because the specific authority had not before bundled four projects in the same tendering. The private sector perspective confirms that contracting authorities are reluctant to apply competitive dialogue, but as the majority of the public projects are simple, this is described as understandable. However the private sector perspective argues that if the public authority wants to capture the innovation in the market and encourage the private partner to think in new directions, then competitive dialogue may facilitate this better. From the regulatory perspective this is one of the key reasons for using competitive dialogue. This debate again returns to the concern of the interpretation of the EU legislation and the Danish case law. The Danish case law and the contracting authorities’ interpretation of the applicability of competitive dialogue can be considered stricter than in other EU member states and this clearly influence the frequency of competitive dialogue. The private sectors perspective on competitive dialogue is to a large extent positive and it is experienced that the comments from the private sector to the tender material during the dialogue, are taken into account. From the private sector perspective, it is nevertheless indicated, that the responsiveness from the local governments is higher compared to the government and region authorities. This could be argued to be because local governments often have fewer resources available for the formulation of procurement material and thus they welcome the input from the private partners.

Regardless of sector, there seems to be agreement among the interviewees, that the final offers submitted after a competitive dialogue are much better than the once submitted under the other forms of procurement. The offers developed through competitive dialogue are more worked-
through and to a higher degree reflects the wishes and needs of the authority as the dialogue meetings have allowed for further communication about these. When the final contract is signed, the private company is often further in the process of formulating and planning the project and the construction phase can begin earlier. From the private sector perspective it is emphasized that the dialogue gives the private company an opportunity to understand the needs of the contracting authority and through the meetings the project is developed so it fits the perceptions and expectation of the authority. As a result, competitive dialogue gives better projects for the contracting authority and thus implicit better projects for society.

The general theoretical concern with competitive dialogue is that the process is extremely resource demanding, far more than the open and the restricted procedure which was confirmed by the public and the private sector interviewees respectively. From the public sector perspective the concerns for equal treatment, non-discrimination and transparency makes the workload of the dialogue phase significant, as all general aspects which are discussed at the individual parallel dialogue meetings, have to be distributed to the other tenders. Experience show that companies may refrain or even withdraw their questions when told that the answers will be distributed to the other bidders and consequently, the concern for confidentiality may limit the dialogue. The process is also perceived as very resources demanding from the private sector perspective and again the considerations of a higher compensation for final offers are mentioned as a solution. “Experience show that, the once who benefits from competitive dialogue is: society, the contracting authority and the awarded bidder, the once who losses are the non-awarded companies” (A representative from the private sector, 2013).

As society benefits more from competitive dialogue, the argument from the private sector perspective is that it would be fair to compensate the companies for their efforts. If the companies were compensated better, then the contracting authority and implicit society would receive even better offers. The contracting authority perspective recognizes that the non-awarded companies lose a lot, as they are only symbolically compensated and from a socio-economic perspective, this may be problematic as enormous resources are wasted. From the contracting authority perspective the choice of procurement process is a weighting of cost and benefits and in competitive dialogue the benefits may not exceed the high costs. Further it is questioned whether there can be detected a difference in the final project depending on which procurement form have been applied and thus the extra resources used in competitive dialogue may be needless. This again challenges whether the choice of procurement process matter at all for the PPP and this could be argued to questions the
findings of this thesis. From the contracting authority perspective the dialogue is however described as a process of learning. Through the dialogue the tender material is tested and especially for new types of projects, this approach is described as very useful.

The quality of final tender material is higher after a competitive dialogue and the lessons learned can be used by the contracting authority in subsequent tenders. In this regard the dialogue process may be described as a nearly free counselling session where the private bidders improve and comment the work of the contracting authority. The argument set forward by Connoly and Wall (2013) describes that the number of months from the publishing of the tender to the final closure of the PPP, has increased during the economic crisis and when assessing procurement forms, this might be interesting. In relation to competitive dialogue the usage of this can be argued to have two consequences. On one hand the process is described as being very time- and resources demanding and as time is needed for preparation between the dialogue meetings, the dialogue process can take several months and this would extent the number of months between publishing and financial closure. Oppositely the final offers submitted and awarded in competitive dialogue are described as more comprehensive and finalized and thus the time after the award and the financial closure must assumingly be shorter. It is difficult to estimate which of the two mechanisms are most prevailing and a thorough study would be necessary to answer this.

The analysis show that many of the aspects presented as essential in the theories on PPP, also are recognized by the public and private sector perspectives respectively. The importance of finance, risk allocation and innovation are described by all representatives, but the level of importance and the perceptions of them differ among the private and the public partners. To what extent the choice of procurement form matters for the project and whether competitive dialogue is better suited for PPP compared to other procurement forms, depends on the observer. The analysis nevertheless, gives reason to several points of discussion.
Part VII - Discussion

The above analysis provides a number of interesting observations and to answer the sub-RQ D, the discussion will address to what extent procurement can be used as an instrument for securing better functioning PPPs. The discussion will be divided in four sections: The PPP – the Danish playing field, Standardization – towards a larger pipeline, The choice of competitive dialogue and The consequence of strict legal interpretation. Finally a section will address the theoretical consequences for the thesis findings and relate this to the more general PPP theory and debate.

The PPP – the Danish playing field

The analysis shows that both from the perspective of the private and public sector the attributes of PPP are many, both in relation to total life cost of the projects and in relation to VfM and on-time and on-budget delivery. It should be kept in mind that the interviewees to a large extent are fully integrated in the Danish PPP industry and thus might not be responsive to the critique of e.g. the VfM promise of PPP. Further the private sector perspective may have an interest in presenting PPP positively, as they would benefit from an increase in the appliance of PPP. Based on the choice of interviewees it would thus be expected that a general critique of PPP is not raised.

The analysis interestingly presents that there exists a divergence in the perceptions of central PPP elements. The aspect of risk assessment and allocation was perceived as central from both the private and the public sector perspective, but there was detected a disagreement in the perception of how fairly the risk was being allocated and whether the risk was placed at “the most capable part”. This disagreement might be expected as it is an expensive part of any contract and both partners will most likely strive to bear as little an expensive risk, as possible. However it is interesting that the private sector perspective describes how the public partners try to throw as much risk as possible on the private partner, indifferent or unaware of the costs. Even though the contracting authority acknowledge that the risk should be placed where it is cheapest to mitigate, this might be difficult to execute in practice. The reason for the quarrel could be that the risks are not defined collectively and it could be argued that a more thorough dialogue about the risk and its cost could be useful so that both parts understood the expenditures and characteristics of the risk. It could also be argued that the information put forward in such a dialogue would be biased depending on the presenter, but the merely open discussion of the subject might result in a mutual understanding and
acceptance. Consequently, in relation to the process of risk allocation in PPPs, a competitive dialogue would result in an outcome of greater mutual respect.

**Standardization – towards a large pipeline**

From the analysis it is clear that the size of the market is an obstacle for the further development of the PPPs in Denmark. The introduction of the PPP standard model may lower the transaction costs associated with the establishing and the procurement of PPPs, but to reach the wished effect, the public authorities have to apply the model strictly and without divergence. The analysis shows a mixed picture of the perception of appliance of the PPP standard model. The contracting authority perspective describes a favouring of standardization and fully appliance to the standard model. This is however to some extent questioned from the private sector perspective, who describes that contracting authorities to some extent apply their own practice which does not follow the standard model of the DCCA. The constructivist approach of this assignment does not allow for a classification of who are right or wrong and it may not be important. The public and the private sector, approach the issues from different perspectives and their cognitive maps and underlined motives influence the way they perceive the practise. The interesting finding is that there exist diverged perceptions of the model and its appliance which could limit the effects of the model.

If the model is not applied by all authorities the intended savings in transaction costs will be materialized. The practise could designate that the right policies for standardizing the Danish PPP market is established and formulated, but ratification and implementation of the policy into public authorities, have not occurred. The contracting authority perspective and the regulatory perspective can be perceived as having different perception of the standard model and this is also interesting as it illustrates a conflict of interest within public sector, which theoretically has been less outspoken. This might call for a redefinition of the mind-set around PPP, as it no longer can be characterized as an encounter of interests between the private and the public sector, but instead as a multi stakeholder policy instrument which is influenced differently from various public authorities as well as private actors. It should be kept in mind that the regulatory perspective represents a policy promoting role and is thus not a part of the practical PPP market. As the regulatory perspective’s perception of PPP standards are not based on hand-on experience, it could be argued that they have a smaller insight in the sector and thus guidance could be challenging. It should be noticed that the PPP standard model was published in the fall 2012, and it is thus still a novelty which the authorities must become familiar with and only time will show whether the model will be further
applied after a year or two of introduction. In this regard it may be too early to evaluate whether the PPP standards model will result in more standardization in the PPP sector and eventually more PPP projects. Further the appliance to the PPP standard model is not mandatory or legally required for public authorities and it can be argued that this may limit its effects and usage.

Even though the standard model might make it easier for the public authority to establish PPPs, it will not necessary generate larger PPP project which also is described as one of the obstacles for promoting PPPs in Denmark. It is argued that if projects were bundled into large PPPs, with e.g. three schools, it could potentially attract international construction companies and this would increase competition and eventually benefit society as lower costs would be expected.

The choice of Competitive dialogue

The analysis show that the different procurement procedures have different attributes and the choice of procurement must be done in accordance with the context specific nature of the project. However, when relating procurement forms and the important aspects of PPP, the analysis could indicate that competitive dialogue is a better procurement form for PPPs. The private and the public sector perspective agree that competitive dialogue leads to better final offers and project descriptions, and it could be argued that the transaction costs used in the expensive competitive dialogue are excited by the benefits of the more comprehensive final offer. After a dialogue, the final offers are more worked-through and seemingly the private partner understands the needs and project expectation of the public sector better, and this would ideally lead to a better project. The trend of having very long procurement processes, which were detected after the economic crisis might also be mitigated by using competitive dialogue as the projects proposals are more worked through in time of award. The crux of the matter, fall though on whether the benefits of a better final offer, overweighs the cost of the competitive dialogue and this might be difficult to access in practice.

The significant critic of competitive dialogue is that the process is extremely resource demanding for both partners. The writing and distribution of minutes and the continuous adjustment of the offers are time consuming, and the legal and technical expertise needed is costly. This is considered a significant obstacle for the public authority, who instead applies restricted dialogue to a larger extent. In evaluating on the total societal cost of the dilemma, it could be argued that even though the restricted process is cheaper than competitive dialogue, then the dialogue and communication about the tender material hinders costly misunderstandings. From both the private and the public
sector perspective it is indicated that as the question/answer process in restricted procedure is limited and it often occur that a company misunderstands the wishes of the public sector and consequently their final offer is useless.

If considering the whole procurement process as one societal economic interaction, then the restricted process might be just as costly as the competitive dialogue, taken the useless final offers into consideration. The resources used in formulating the useless final offers in restricted procedure, are lost for the society as it does not contribute to a high number of choices for the public partner. In the competitive dialogue the partners gain a better understanding of the wishes and needs of the public part and thus the once that decides to submit a final offer are more likely to match these. The competitive dialogue can be said to give better matching offers, compared to restricted procedure, and the higher number of acceptable final offers could be argued to present a significant value for the public sector as they have more solutions to choose from. On the contrary it could be argued that as long as the companies submit an offer, they contribute to competition and thus serve their value. Even if there is just one acceptable final offer, then this company believes that it has been subject to competition and the market mechanism of presenting the best project, at the best price, is triggered. Which of the two arguments presents the largest cost for society depends on the approach taken. If one is solely focused on resources, then the wasted resources in restricted procedure are unacceptable, but if on are focused on the mechanisms of competition, then restricted procedure serves its purpose and competitive dialogue becomes too expensive.

Whether the choice of procurement matters for the final commissioned project, is questioned in the analysis and there are two main arguments for this. The first crucial aspect is formulating the award criteria, which is done before the procurement process is initiated, and which solely depends on the knowledge and skills of the public Authority. From this perspective the success in partner selection and functioning of the PPP, can be traced back to the abilities of the public authority and thereby not be influenced by the choice of procurement. This would however limit the success of PPP to mainly be a result of the public partner, and based on the international practise and academic theory on PPP, be seen as inadequate. The other argument is that when accessing the final commissioned PPP project of restricted procedure and competitive dialogue, there can be seen no difference in quality and function. From the analysis of the thesis, it is difficult to conclude whether these arguments are valid and further research would be needed. However, the interviews showed that the offers made in competitive dialogue were perceived to be better and it could be argued that this, nonetheless, gives a better foundation on which to build the PPP and the long term collaboration.
As mentioned it is the use of competitive dialogue and PPP in general, still limited in Denmark and it may take time before the practises and processes are fully implemented and institutionalized.

**The consequence of strict legal interpretation**

The analysis clearly shows that the legal aspects of procurement influence the actors and the PPP process significantly and the legal institutions can be argued to have significant influence on procurement practises through their rulings. The latitude of the public authorities are limited by the EU procurement directive principles of equal treatment, non-discrimination and transparency and the risk of complaints and law suits because of noncompliance, occupies the mind of the public authorities. The risk of prosecution makes the procurement process somewhat inflexible and rigorous, but divergence from the law is of cause not possible. Variation in the interpretation of the law, is however possible, to the extent, where case law was not clarified the rules. The analysis confirms that the extensive Danish case law on procurement has interpreted the EU regulation strictly and the stringent interpretation from the contracting authorities may be seen as a consequence of this and the risk of further prosecution.

Both the practise of changing the award criteria in the tender material and process of defining projects as *complex* so they are allowed to engage in competitive dialogue, are interpreted strictly in practise and this may have consequences for the procurement of PPPs. As described above the competitive dialogue appears at best, to be a procurement form for PPPs and by the strict interpretation of *complex* projects, the latitude for authorities to use competitive dialogue is limited. Moreover, by not allowing adjustments in the award criteria, the authority might not be able to capture the full innovation of the market, as new solutions which are presented in the tender process, cannot be included. The extensive use of *function demands*, instead of *activity demands* might meet parts of this challenge, but the formulation of these have to be thorough and inclusive in order to mitigate them fully. It could be argued that in PPP cases, a more inclusive interpretation of e.g. *complex* projects, would allow for wide appliance of competitive dialogue, which would lead to better functioning PPPs. The above discussion is limited by the legal context which cannot be changed and thus it might be argued to be hypothetical. Opposing one might argue that it is important that the authorities are conscious about how their interpretation influences the formulation of PPPs through the inconsistent use of competitive dialogue. The contracting authority perspective describes that the contracting authorities interpret the regulation stricter than in the case law and this has consequences. Further in the areas where there have not yet been case law rulings,
the contracting authority’s strict interpretation might create a practice which is more strict than necessary.

**Theoretical consequences for the thesis findings**

The analytical findings and discussion of the thesis is largely context specific for the Danish PPP sector and the perceptions of the actors in the PPP sector, cannot necessarily be directly applied to the global PPP experience or the academic theories developed on this. However, it would be interesting to investigate whether there can be found an alternative explanation to the thesis findings and whether the findings have consequences for the academic PPP theory.

The analysis presents various explanations and mitigations suggestions for the limited PPP pipeline in Denmark, but another explanation could perhaps be found by addressing the theoretical concern that politicians may use PPPs to promote short term election gains. The regulatory perspective in Denmark stresses that private finance is not a central element for PPPs, and consequently it could be argued that the election gain of promoting PPPs thus is limited and that the concept is not widely applied in the Danish context. The reduced focus of private finance is to some extent, a political decision and if politicians at some point estimate that diminishing public finance becomes a problem, then it could be argued that the promotion of PPP and the use of private finance would be taken to a higher level. In the UK the public budgets are, by some argued to be under far more pressured compared to Denmark, and this could also be an explanation to the difference in PPP levels. Many of the problems and dilemmas in the Danish PPP sector could be argued to be related to the lack of political priority of PPPs and as long as the demand for services from the population does not exceed the financial capabilities of the governments, it could be argued that an increase in PPPs will not occur.

The analysis finds that the regulatory initiative to decrease the transaction cost and increase the PPP level in Denmark through the PPP standard model is perceived positive by both the private and the public sector. It is however important to recognize that all new reforms and policies need time to be implemented and institutionalized and if the PPP standard model is not allowed time to be implemented then the results may be limited. But how much time is needed to implement a policy as the PPP standard model is difficult to say. And how can politicians and public servants distinguish between the policy obstacles that are children diseases which need adjustment and problems which merely need longer time to be incorporated? It is difficult to determine and to some extent this is a risk faced by all new policies.
The location of the PPP policy administration within the central government may also have influence on the prioritization and promotion of PPPs. Some countries have established PPP units closely linked to the National Treasury (OECD, 2010) and some may argue that this can secure a higher impact of the policy promotion.

The analytical finding of diverging perceptions of the risk allocation process between the private and the public sector could be explained alternatively by the general PPP theory. From the private sector perspective the contracting authorities tries to transfer as much risk as possible to the private partner, but it could be argued that this is a natural reaction of the public sector. As the benefits of PPPs to a large extent is perceived and described theoretically to be related to the allocation of risk to the private sector, this would be expected. The historical legacy of New Public Management is clear in this respect and the belief that the private sector has higher efficiency compared to the public sector, could justify the desire to transfer the risk to the private sector. However after the global economic crisis, the academic PPP theory has recognized that the risk allocation has changed and governments should be reluctant to blindly transfer risk to the private sector. The analysis findings of this thesis argued that the global economic crisis has influenced the Danish PPP sector to a smaller degree, compared to e.g. the UK, but even though the non-Danish PPP projects have defaulted, it could be argued that the public sector perspective could learn from the international crisis learning.

The embedded interest of the different actors could also be seen as an explanation to the difference perception of risk allocation. The public sector has an interest in placing as much risk with the private sectors, as this would decrease the insecurity for the public sector. However it can be argued that, as the private sector is believed to charge a high fee for risks which they cannot mitigate, the public sector should only transfer risk to the private sector to the extent where the value of decreased insecurity is higher that the risk fees charged by the private sector. The private sector perspective argue that the public sector shifts as much risk as possible towards the private sector and simultaneously places strict reduction mechanisms in payments if the project plan are not upheld. From the perspective of the private sector, this is of cause not desirable as their interest is in profit generation and it could be argued that the companies face double expenses, through the cost of holding the risk, e.g. through a guarantee, and through a reduction in payments, if the risk is realized and delays occur. On the contrary it might serve the interest of the public sector well, as they are not to pay for risks before the commission day of the asset.
In relation to the strict interpretation of the EU directive on procurement, both by the legal institutions and the contracting authorities, this is not unique for procurement. The general perception is that Denmark interprets the EU legislation relatively strictly because of various reasons. The size of the country makes eventual litigation expensive and the Danish reservation may influence the structural power in the EU negatively and thus eventual litigations are preferably avoided. Alternatively the legal interpretation could be seen as a clear framework condition and thus the difference in interpretations is not the essence of the problem, but instead the problem should be found in the insufficient communication of the priorities and wishes of the public sector. Generally many of the disagreements between the private- and the public sector perspective could be found in the limited communication between the partners and lack of understanding of the opponent’s motives. The novelty of PPPs in Denmark could also be argued to be of essence here, as the private sector and the public sector only have limited experience with negotiating PPPs and thus the underlying motives and interest of the opposing part, is not realized.

**Part VIII - Conclusion**

This thesis took departure in a comment on the division of labour between the public and the private sector and the influence of PPP which at the time of introduction promised a significant change in this balance. Even though PPPs have developed significantly since its introduction in the 1990s, the Danish PPP practise shows that PPPs only to a limited extent have replaced public projects. The motive of this thesis was to fill a gap in the academic literature on the legal and economic implications of the use of procurement methods for PPPs. The aim is to create a better understanding of the perceptions and mechanisms behind PPP and procurement and contribute to the improvement of PPP practise towards higher welfare gains and lower total social cost. This was done by investigating the research question:

> How do the public and private participants in the Danish PPP sector perceive the relation between the choice of procurement form and final PPPs and to what extent can the procurement form be used as an instrument that contributes to PPPs with higher total welfare gains and lower total social costs?

The research question is answered through assessing the academic literature on PPP and procurement and analysing this in relation to the public policies and practises of PPPs in Denmark. In order to investigate the private and the public sector’s perceptions and understanding of PPPs and
procurement processes, a number of interviews were made for the thesis and the author’s understanding and perceptions of these interviews form the base of the analysis.

In answering sub-RQ A, the academic theories on PPP describe a number of aspects which influence the PPP formulation and function, and these are useful for understanding the mechanisms behind PPPs. A central argument is that the level of PPPs to a large extent depends on the political history and policy dedication to PPP and further is risk allocation and ownership of the asset, described as important aspects of the contract negotiation. Finally academic theory emphasise that the method of evaluation significantly influence the perception and appearance of PPPs, both in relation to the feasibility study ex-ante to the project establishment and the mapping of success ex-post to the project.

In assessing the structure of the Danish PPP sector and its challenges in relation to sub-RQ B, it has become clear that the lack of a broader pipeline of PPP projects has hindered further development. The use of PPP has been limited in Denmark and even though the density of projects has increased in recent years, it is not considered enough to kick-start the industry. The DCCA have initiated a number of initiatives to reduce the transaction costs in the market and the PPP standard model may with time, show to be crucial for the standardization of the industry.

In concluding on sub-RQ C which is concerned with the public procurement processes which are available for PPPs, it is clear that the variation in interpretation of the EU legislation is an obstacle, especially in the Danish context, where a strict interpretation is applied. In relation to procurement method, can it be argued that competitive dialogue is the procedure which allows for the utilization of most PPP benefits and it may secure a better collaboration.

The final analysis show that many of the aspects presented as essential in the academic theories on PPP, also occupy the actors in public and private sectors in the Danish PPP industry. The aspects of finance, risk allocation and innovation are described as central by both the public and the private sector perspective, but the level of importance and the perceptions of the aspects differ among the private and the public partners. To what extend the choice of procurement form influence the total welfare gains and total social cost of the PPP project, is difficult to determine through this study, but it is clear that the different procurement processes have different characteristics which influence the formulation of PPPs differently. When concluding on the analysis and sub-RQ D *(To what extent does the choice of procurement form influence the final offers in a PPP procurement process?)*, it appears that competitive dialogue is the procurement procedure which allows for the
utilization of most essential PPP aspects and develops the best PPP proposals. The dialogue leaves room for an extensive communication where the wishes and expectations of the public sector becomes clear to the private sector and thus the final submitted offers complies to a higher degree with the needs of the public sector. The critique of competitive dialogue is however that it is extremely resources demanding both for the private and the public sector and this is a significant draw back for the appliance of the procedure.

It could though be argued that the additional expenses of competitive dialogue are repaid through a better PPP proposal, a shorter period from contract awarding to construction start and arguably a PPP project for the society as it matches the wishes and needs of the public authority. There are though also limitations to the appliance of competitive dialogue and the Danish interpretation of the EU regulation on the area is strict. The EU directive only allows for the use of competitive dialogue in complex projects and in the Danish context complex is defined rather narrowly. As a result the procurement procedure is only applied to a limited degree and this could be argued to influence the full utilization of PPPs, as the misunderstandings of the tender material in restricted procedure and the wishes of the public sector may result in less useful and suitable PPP proposals. To what extent procurement can be used as instrument that contributes to PPPs with higher total welfare gains and lower total social cost, as asked in sub-RQ E, is difficult to answer as it depends on how the value and the cost of e.g. the dialogue is determined and further research in the area would be necessary to reach more specific conclusions.

The findings of this thesis are significantly context specific, as the analysis has been limited to the Danish PPP context and the perceptions of the Danish PPP actors. Further the number of interviews has been limited and this could be a point of critique as it could question the validity and applicability of the findings. However with the aim of the thesis in mind the analysis has proved applicable in creating a better understanding of the perceptions and mechanisms behind PPP and procurement in the Danish context.

In relating the thesis findings to the academic PPP theory, as described in sub-RQ F, it becomes clear that alternative explanations for the limited PPP pipeline and patterns in procurement practices can be found. The importance of the political prioritization of PPP and economic latitude in the public budgets may also influence the level of PPPs. Further the actors in the PPP sector understandably have different interests, motives and experience which could explain the differences in perspectives and understanding. The influence of the global economic crisis on PPPs is described
as significant by both academics and practitioners and the extent, to which the Danish national economy has been influence by the crisis, may show to have substantial influence on the future development of PPPs.

By compiling the answers of the sub-RQs it is clear that the thesis contributes to a higher understanding how the public and private participants in the Danish PPP sector perceive the relation between the choice of procurement form and final PPPs and the extent to which procurement form be used as an instrument that contributes to PPPs with higher total welfare gains and lower total social costs.

The findings of this thesis have contributed to a better understanding of the mechanisms behind PPP and procurement and contributed to filling the literature gap in this area. Besides the answer to the research question, the thesis identifies a number of areas where further research could be interesting.
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