



Trust and Contractual Governance

*Managing Relationships in the Offshore
Industry*



Delft University of Technology

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MSc Construction Management and Engineering

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Trust and Contractual Governance: Managing Relationships in the Offshore Industry

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EXECUTIVE SUMMARY

Contractual Governance, the extent to which roles, responsibilities, contingency adaptability and legal penalties are specified or well-detailed in formal agreements and Relational Governance, the extent to which trust and relational norms govern the relationship between parties are proposed by literature to function as complements (Poppo & Zenger, 2002; Zheng et al., 2008; Cao & Lumineau, 2015). It is suggested that by applying both forms of governance relationships are more effective: *‘contracts, trust, and relational norms jointly improve satisfaction and relationship performance and jointly reduce opportunism’* (Cao & Lumineau, 2015). Moreover, Relational Governance proves to be an important supplement of the incompleteness of contracts and an essential process when non standardized contracts are implemented. Contracts tend to be more effective with more adaptive clauses and a better risk allocation (Zaghoul & Hartman, 2003) while contract drafting and transaction costs of monitoring become less costly with the prevalence of trust (Pinto et al., 2009).

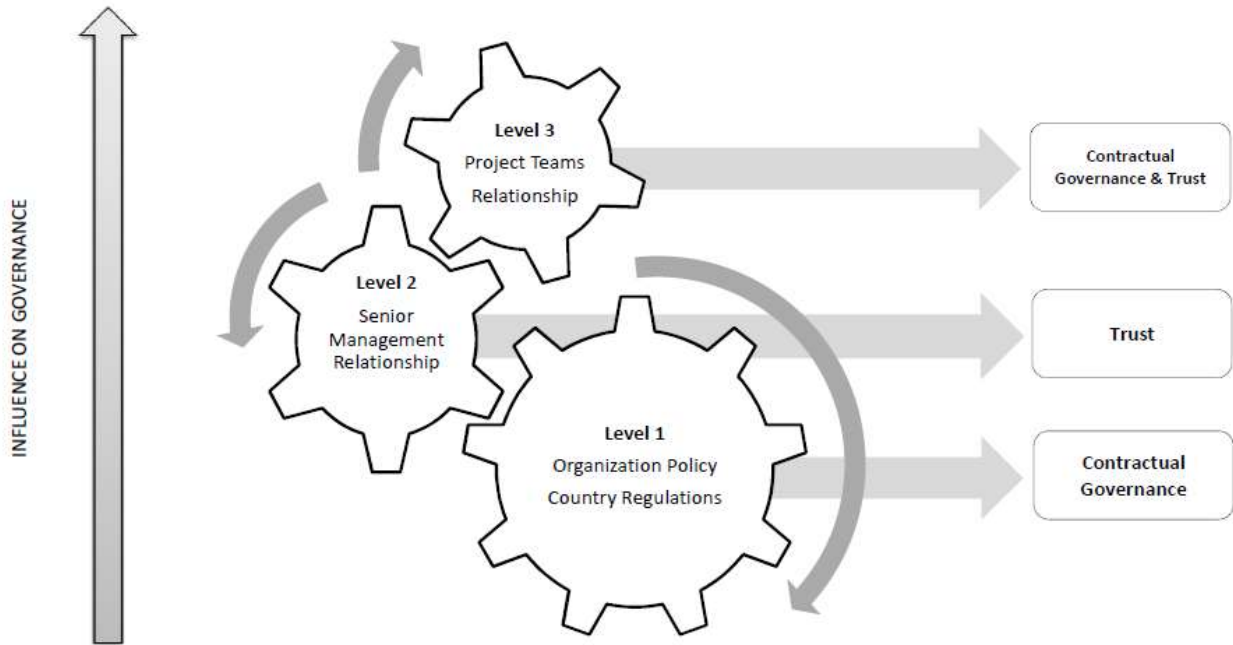
However, the dynamic interplay of both types of governance and the influence of their level over project development is still a research area that requires further elaboration. In particular, obscurity surrounds the relationship between a main contractor and a subcontractor in the supply chain in the offshore industry which is characterised by an environment of highly complex projects with immense liabilities towards the owners of the projects. Therefore, the following Research Question is formulated:

CRQ: How does Trust interrelate with Contractual Governance between a Main Contractor and Subcontractor during the negotiation and execution phase of a project in the Offshore Industry?

The research design selected in order to answer the aforementioned question comprises of initially a desk research where a thorough literature review on the main research variables of this study is conducted. The outcome of the desk research is not only the profound understanding of both types of governance but also the formulation of propositions whose validation is performed through conducting case studies in order to answer the main research question. The literature review contributes also to establish how to operationalize such concepts and thus create an

analysis template. This theoretical template includes the variables that are measured as well as how they are evaluated and according to which data sources. The second part of the research design includes a qualitative approach through conducting case studies. The case studies are selected according to predefined criteria in order to facilitate their comparison and preserve the validity of the final outcome. All cases are performed in the same company that functions as a subcontractor in the offshore industry. The analysis is conducted per case initially and is based on studying relevant documentation, which includes the contractual agreements among others, and assessing the main points highlighted during the interviews. Then, a cross-case analysis is performed which reveals the main patterns that govern the relationship of a main contractor and a subcontractor as well as significant factors that influence the development of both types of governance.

As it is concluded contractual governance serves as an indispensable safeguard of parties' collaboration. A concrete and well-detailed contract accompanied by formal procedures and standards provides a decent context during execution which can ensure that project development is not dependent on each project setting, the composition of project teams and individuals' approach and attitude. The subcontractor does not necessarily have to rely on the cooperativeness and good will of the other party and even if both parties' relationship is not retained as favorable throughout project cycle, both sides can be confident that their interests will be preserved. What influences to a great extent the magnitude of contractual governance is the organization policy of the main contractor as well as its country regulations that are reflected through contractual strictness. Moreover, the level of trust that is developed during contract negotiations may not be depicted and/or linked to execution phase provided that different actors are involved in both phases. What influences significantly trust during execution is the establishment or not of a concrete and specific contractual context along with formal procedures, distinct roles and standardized documentation. Previous collaboration as well as the familiarity between both parties can function either positively or negatively depending on the founded contractual context and project setting. The latter does not signify that the development of both types of governance is necessarily related to a specific project. In contrast, it seems to reflect the organization and the relationship that exists at a senior management level.



In particular, three levels are identified that influence the evolution of trust and the rigidity of the contractual context. Level 1 includes Organization’s policy in terms of contractual strategy as well as how this strategy is determined by country’s regulations. When this level is prevalent, a high level of contractual governance can be expected. Project teams are aware of procedures that must be followed, documentation is quite standardized and a specific contractual context is applied regardless of the project setting. If this level is not that dominant as it is the case of sister-companies where there is no clear policy and a predefined contractual strategy, the overall collaboration depends on lower levels and governance is formed accordingly. Level 2 that depicts the relationship at a senior management level contributes substantially to establish a good base for trust development among project team members and deter problems that rise due to different personal input from individuals who form Level 3. When the higher levels are not that prevailing, Project Managers and Contract Managers can regulate the level of governance in the absence of a company policy and enhance or deter the development of trust. In such case, both types of governance can be either positively or negatively influenced as the overall collaboration between both parties depends to a great extent on the flexibility, willingness and attitude of individuals.

Finally, based on the limitations of this research and in order to draw explicit conclusions on how governance of such projects is influenced by the personal input of different characters

involved at each project setting, it is recommended to measure trust for a single relationship both from the main contractor and subcontractor. Investigating the effects of the involvement of the same individuals during the whole project development, from contract negotiation till execution and completion, is also an additional topic that needs further research.

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CHAPTER 1.

INTRODUCTION

Relational and Contractual governance is a research area that has been widely investigated by the academic community. The research so far covers the relationships among parties in different industries, including the construction sector. The predominant conclusion is that both types of governance when applied properly and sufficiently can make parties' relationships better off (Cao & Lumineau, 2015).

This constitutes also a hypothesis for the offshore industry where trust is not anymore common among parties. Considering the peculiar characteristics of the industry, it is indispensable to thoroughly understand the evolution of relationships in this market. The objective of this research is therefore to detect the level of trust and contractual governance in the industry and how both types of governance evolve over time towards the optimum goal which is to restore trust among the players. The research is focusing further on the relationship established between a main contractor and subcontractor. The latter is not only an area that necessitates further research, but also an identified weakness in the EPC offshore contracting where subcontractors are requested to tie back to the extremely strict and rigid agreement signed between the main contractor and the client (Akintan & Morledge, 2013).

This research study includes a literature review (chapter 2 & 3) on the core concepts of the researched area. In chapter 3, the template based on which the analysis is performed is developed. The selection criteria as well as the project context and the description of the company in which case studies are performed are further elaborated in Chapter 4. The actual analysis of each case study follows in chapter 5 accompanied by a cross-case analysis which reveals the main findings of the research. Finally, Chapter 6 concludes the main results of this study by providing the answer to the Research Question and suggests recommendations for further research.

1.1 Problem Context

Governing complex and multi actor projects is a bilateral process that runs from project initiation till completion and delivery. All parties involved collaborate during the different phases of project development applying both contractual and relational governance for their Relationships (Poppo & Zenger, 2002; Zheng et al., 2008; Cao & Lumineau, 2015; Ke et al., 2015; Mellewig

et al., 2007; Luo, 2002). These two dimensions of governance reflect the informal part of collaboration and behavioral mechanisms that are developed between parties as well as the formal context defined through written agreements. As Cao & Lumineau (2015) state Contractual Governance refers to the extent to which roles, responsibilities, contingency adaptability and legal penalties are specified or well-detailed in formal agreements while Relational Governance depicts the extent to which trust and relational norms such as flexibility, solidarity, information exchange, fairness and informal rules and procedures govern the relationship between parties.

Existing literature indicates the significance of contractual governance as it can safeguard relationships against opportunism (Cao & Lumineau, 2015) and control exchange hazards (Poppo & Zenger, 2002). However, there are several limitations identified regarding the strict and explicit implementation of contracts. These limitations are basically the result of the by nature incompleteness of contracts, namely the fact that it is impossible to include provisions that correspond to any kind of contingency. As Pinto et al. (2009) mention, there is no practical way to forecast all the unanticipated events that may occur during the execution of a project. The latter reveals the deficiency of contracts to specify parties' behavior and responses in the case of unforeseen events. Even if parties try to define in advance a great number of unforeseen situations, which corresponds to a prohibitively expensive procedure, it may lead to rigid clauses, which is perceived as a sign of mistrust (Cao & Lumineau, 2015). The existence of strictly specified clauses regarding economic incentives and penalties may emphasize the "inequality" between parties, provoke vulnerability feelings between them which not only undermines trust but also encourages rather discourages opportunistic behavior (Pinto et al, 2009; Poppo & Zenger, 2002). Moreover, a contractual mismatch between different firms has been observed, since some use contracts more rigidly while others in a more flexible way. This contract applicability mismatch may be the cause of conflict rise and lack of cooperation (Cao & Lumineau, 2015).

On the other hand, relational governance as described by researchers refers mainly to trust and relational norms and corresponds to an informal type of governance that presupposes the self-enforcement of each party (Cao & Lumineau, 2015). Prior to contract signing, parties have the opportunity to develop relational norms and trust through continuous bargaining and informal

sense-making (Ring & van de Ven, 1994). Both elements of relational governance are considered a significant shield towards opportunism (Poppo & Zenger, 2002). In particular, the existence of a high level of trust has been identified as a significant behavioral factor in governing the relationships among parties in any kind of industry (Wong et al., 2008) and is considered as a prerequisite to develop the confidence that the other party will not take advantage of adverse situations. In this context, parties are more likely to respect each other's interests. However, as it is the case in contractual governance, there are some limitations identified in relational governance as well. The fact that it is an informal process based on behavioral mechanisms reveals its main weakness; extensive time and resources are needed in order to develop trust while on the other hand it can be easily destroyed. In addition, its ambiguous nature can be used in some cases for opportunistic reasons (Cao & Lumineau, 2015).

Considering both types of governance, their strengths and weaknesses, it is quite evident that as literature proposes contractual and relational governance function as complements (Poppo & Zenger, 2002; Zheng et al., 2008; Cao & Lumineau, 2015). Cao and Lumineau (2015) describe that by applying both forms of governance relationships are more effective: *'contracts, trust, and relational norms jointly improve satisfaction and relationship performance and jointly reduce opportunism'*. Relational governance proves to be an important supplement of the incompleteness of contracts and an essential process when non standardized contracts are implemented. Contracts tend to be more effective with more adaptive clauses and a better risk allocation (Zaghloul & Hartman, 2003) while contract drafting and transaction costs of monitoring become less costly with the prevalence of trust (Pinto et al., 2009).

Although these research studies provide a good picture of both types of governance, little is investigated regarding their dynamic interplay over project development and their dependence on the level of the supply chain. In particular, obscurity surrounds the relationship developed between a main contractor and a subcontractor since most research studies focus on the collaboration between the client and the main contractor. This relationship is further burdened by an environment of highly complex projects with immense liabilities towards the owners of the projects that characterize the offshore industry.

1.2 Research Question and Goals

The objective of this project is to investigate the interplay of relational and contractual governance in EPC contracts and their evolution from initiation phase till project completion. The research is narrowed down focusing mainly on trust regarding the relational part and contractual governance between the main contractor and subcontractors and how these parties govern their relationships under specific contractual terms and trust levels.

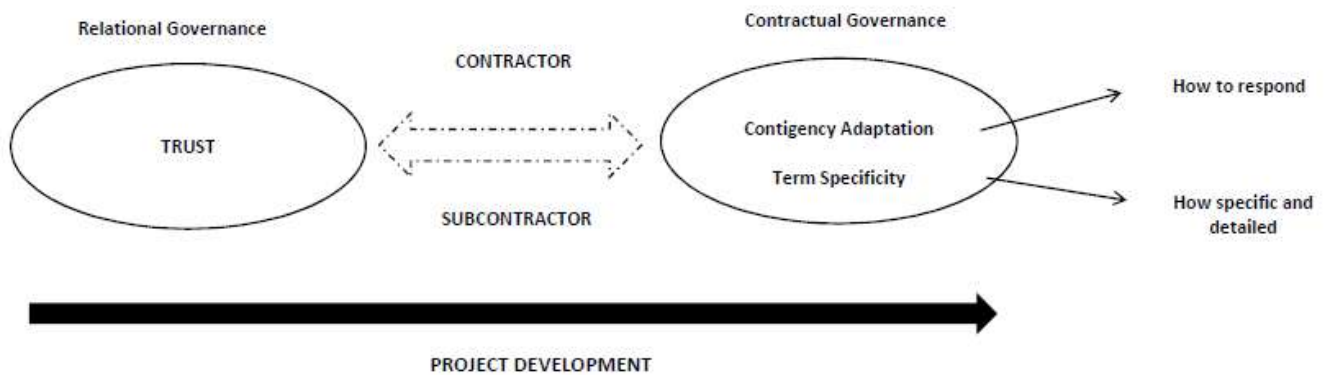


Figure 1.1 Research area and core concepts.

The investigation of level of trust and its relevant influence around which there is a perceived ambiguity by practitioners, is an area that needs further research (Suprpto et al., 2012) and is considered a fundamental part of this study in order to draw conclusions on the dynamic interplay. Thus, this research attempts to relate the level of trust and contractual governance in the under-researched area of EPC contracting in the offshore industry from the subcontractor point of view by answering the following research question:

RQ: How does Trust interrelate with Contractual Governance between the Main Contractor and Subcontractor during the negotiation and execution phase of a project in the Offshore Industry?

Determining how relationships are governed especially behind the client-main contractor level and enlightening the dynamic interplay of both types of governance are considered a fundamental step towards the improvement of parties' relationship in order to achieve less costly contracting and efficient project performance.

1.3 Research Approach and Strategy

The Research Strategy in this study includes two main parts. At first, a *desk research* is implemented through conducting an extensive literature review. The analysis of books, articles and conference proceedings, material and knowledge produced by other authors serves to study the core concepts in order to create the theoretical model that is used in the second phase of the research. In addition, this type of approach assists to operationalize the research process, namely to choose and accurately define indicators in order to measure the complex and abstract concepts (Verschuren & Doorewaard, 2010). This step is considered a significant part of the research since the outcome of the desk research is a theoretical framework used as a base model for the comparison of the characteristics and empirical findings from the cases used in this research (as described below).

The second part includes the *qualitative research*. An empirical approach through conducting case studies in Company X, an offshore contractor, serves to extract the knowledge needed in order to reveal the influence among the concepts' relationships. This approach presupposes that the researcher is involved into the field in person in order to make observations and gather relevant and important material (Verschuren & Doorewaard, 2010). By conducting interviews while studying different sort of documents, such as contracts, project reports etc, the author is able to gain a thorough insight into procedures and behavioral mechanisms and understand the reasons why they developed in a particular way instead of another. In addition, the selection of case studies as a research strategy ensures the in-depth investigation of the defined research area. As Verschuren and Doorewaard (2010) mention, case studies differ substantially from other research strategies such as surveys, since the freedom entailed can reveal a wide spectrum of information enabling the author to obtain enough knowledge on various aspects. In this way, it is expected that elements, aspects and relationships that couldn't probably be identified in the initial stage by the researcher can be recognized and further developed and thus contributing to the integrity and thoroughness of the research work.

During the qualitative research, each case study is first analyzed and reviewed as a separate case according to the established theoretical model. In order to achieve this, a case study protocol is formulated as an essential part of each case study analysis (Yin, 1994). The latter facilitates the

following step of the research which consists of the comparative analysis of the case studies. During this step, results from the analysis of each case study are used as an input for the comparison, analysis and drafting of conclusions.

As described in literature, the option of case studies as a research strategy has its own limitations regarding mainly the scientific generalization (external validity) and the feasibility of research as it is considered a time consuming process with multiple possible material sources. In order to tackle these issues, the author firstly ensures the use of different sources of evidence in order to achieve triangulation which increases construct validity (Yin, 1994). Moreover, the author meticulously defines the desired elements researched in the case studies and the formula of detecting and measuring them in order to come up with a concrete and transparent model of description and analysis of the case projects.

1.4 Research Methodology

In order to render this study replicable in other context and reassure its validity, a diverse range of data is collected. For each case study both contractual documents are examined and interviews are conducted. The contractual agreements as well as other project related documents are a concrete and complete source of information that the research can be based on. On the other hand, since trust is a vague and perception based variable that cannot be easily measured and identified in documents, interviews are meant to enlighten this relational part of the research area. In addition, the specific aspects of the contractual agreements that are investigated can be further explained and advanced through the interviews that constitute a simpler and more straightforward means of extracting information. In overall, the data sources that are used in this study are mentioned below and can reassure the triangulation process required as a validity criterion (Yin, 1994) in this research:

1. Contractual agreement: the main document that is analyzed in terms of its strictness/flexibility
2. Hand-over presentations: provide an overview of the project, its main technical and commercial characteristics
3. Interviews: semi-structured interviews accompanied by questionnaires.

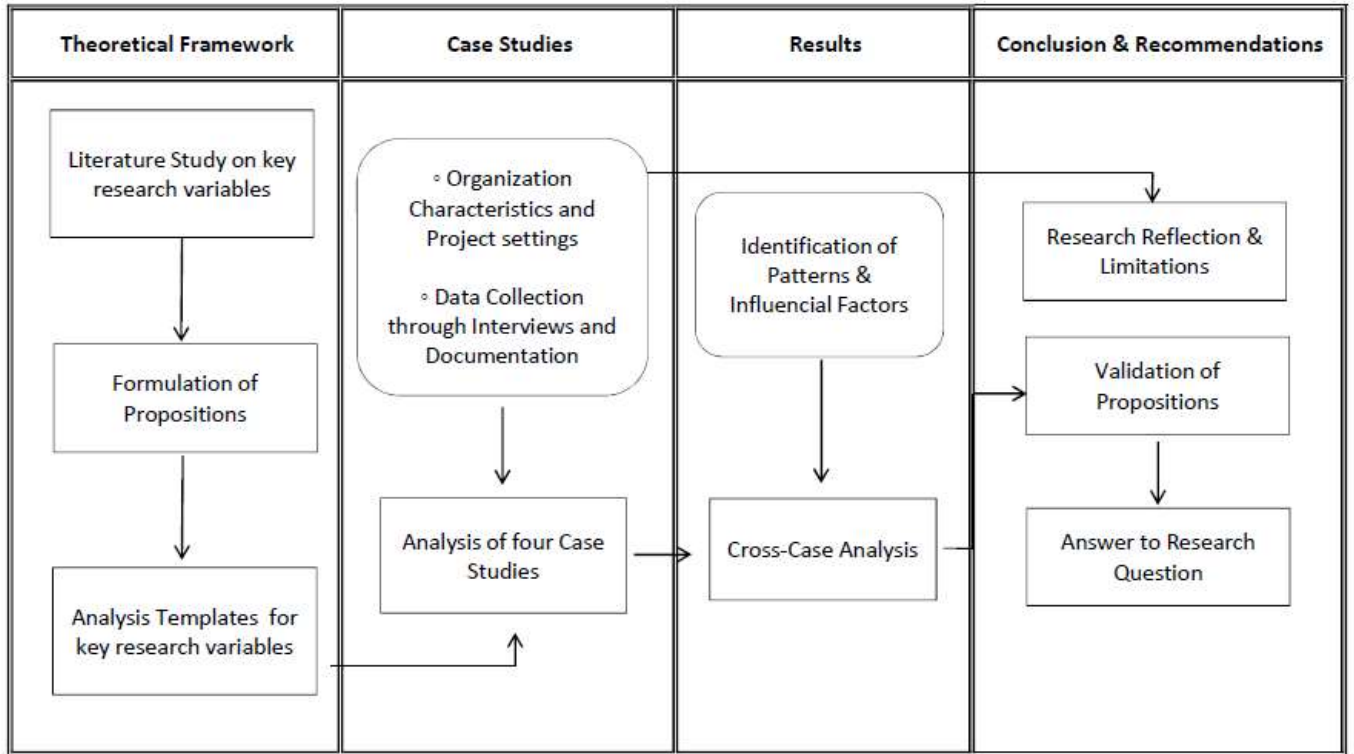


Figure 1.2 Research methodology steps.

The main procedure that is followed is depicted in Figure 1.2. After conducting a profound literature review on the key variables of the research area, propositions are formulated and templates based on the theoretical background are defined for the analysis of each case study. The latter presupposes the description of the organization in which case studies are conducted. The data collection includes documentation as described earlier as well as interviews. For each case study, the author gets acquainted with the project characteristics from the hand-over presentations. Following that, the contractual agreement can be studied according to the template analysis described in chapter 3. The interviews conducted meanwhile complement and further advance the analysis performed based on documentation. Therefore, the two main sources of data serve as complementary tools in order to analyze each case study. The result of the interviews is the creation of a report for each project where all the substantial information is logged. Then, each report is meticulously highlighted based on codes that are derived from the analysis templates. This procedure is of high importance for the next step which is the comparative analysis. Having determined the same codes/categories per case study, a cross-case analysis is performed. The result of this is the determination of patterns that are present in the

CHAPTER 1. INTRODUCTION

case studies and influential factors that were not initially defined but are of high significance for this study's results. Lastly, the comparative analysis of all cases provides the anticipated validation or not of the suggested propositions, enabling in this way the author to conclude with the final answer to the main research question.

CHAPTER 2.

OFFSHORE INDUSTRY

2.1 Project Complexity and Actors involved

Offshore Industry is one of the most complex and demanding markets since it is associated with large engineering projects, high contractor’s risks, market polarization, increased company specialization, huge capital investments, and multiple actors involved. The energy consumption worldwide is projected to grow by 40% in the next 10 years (Berends, 2007) which renders the development and implementation of Large Engineering Construction projects (LECPs) for oil and gas processing facilities indispensable. In parallel and despite the bottleneck that the Oil & Gas Industry is facing the last years, the booming Industry of Offshore Wind Farms is growing steadily. In 2013 the Dutch government introduced a highly challenging plan to tender a total amount of 3500MW of offshore wind energy projects over the course of merely five years (Jones, 2015). Regardless of the section of the Offshore Industry, projects are highly complex not only technically but also in terms of organization and actors involved from the initiation phase till completion and delivery. Problems and issues do exist especially regarding procurement, although not that much emphasized due to the small number of players and their need to preserve good reputation and goodwill among them (Mohammad & Price, 2003).

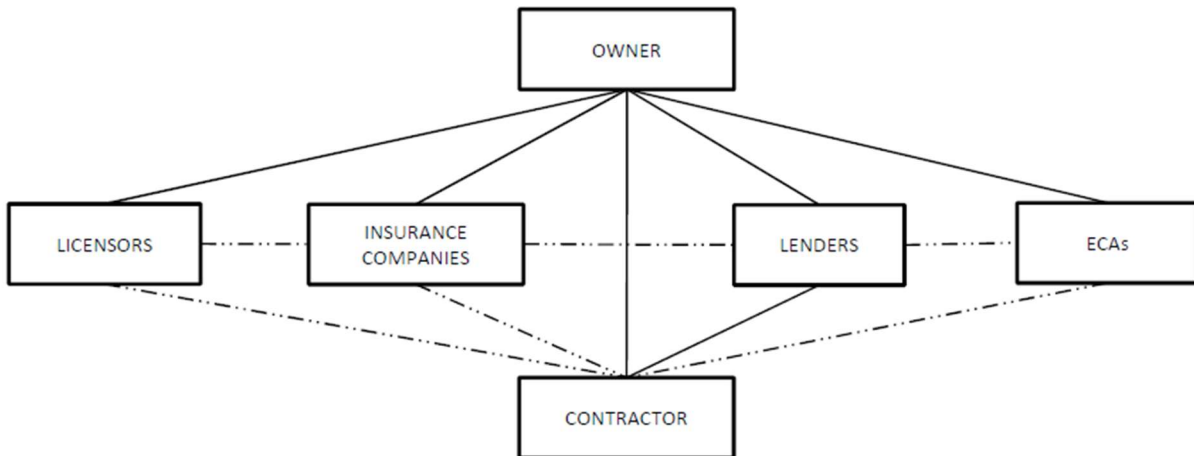


Figure 2.4 Stakeholders Scheme in Offshore Oil and Gas Industry (adapted from Berends (2007)).

A typical scheme of the stakeholders is depicted in Figure 2.1 where the relationships between them are highlighted as either a contractual agreement (constant line) or as existence of significant influence (dashed line). These actors can influence to a different extent each the

project development and the level of their involvement in the project can be seen in Figure 2.2. In general, the main stakeholders in the industry are: (i) the owner of the project and its shareholders, lenders, insurance companies, export credit agencies, (ii) the parties involved in the construction phase (from material and equipment suppliers and manufacturers to engineering contractors and construction contractors) and (iii) authorities both governmental and local as well as local communities and non-governmental organizations.

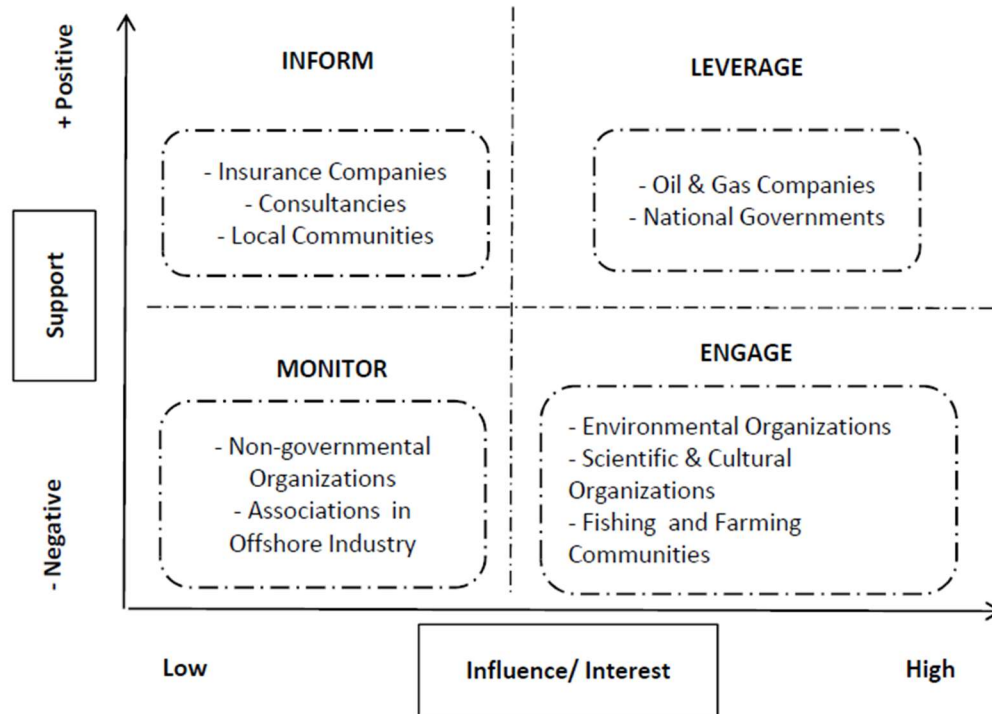


Figure 5.2 Stakeholders and their Power-Interest matrix (adapted from Offshore Engineering (2016)).

The relationships among them consist of the license agreement (between the owner and the licensor), the construction all-risk insurance (between the owner and the insurance companies), the Engineering, Procurement and Construction (EPC) contract (between the owner and the contractors), the loan agreement (between the owner and the lenders), the export credit agency guarantee and the direct agreement (between the lenders and the contractors). As Berends (2007) states project financing is a detrimental factor not only because of the high transaction costs embedded but also because of the fact that lenders can exert substantial influence on the contracting strategies and through the direct agreement with the contractor, they can even take

over the project in case of owner's default under the loan agreement. Contractors can be further restricted by the ECAs which are often involved in the project scheme in the case of high political risk and provide guarantees of loans, subject to goods and services that are purchased in the country where the project is executed.

2.2 Contracting Strategies

2.2.1 Contract types

The main contracting strategy used in the industry is Engineering, Procurement and Construction Contracts (EPC) and other similar types like EPCI, EPCm etc. The main characteristic of this "family" of contracts is that the owner conducts an agreement with a main contractor who is then subcontracting part or all scope of work to other contractors as well as engineering consultancies for the detailed engineering. Suppliers of materials and equipment are also related to the subcontractors and/or the main contractor providing all the necessary resources. Following the relationships developed in this contracting strategy depicted also in Figure 2.3, it is evident why supply chain management is a critical area in the industry that can determine to a great extent the successful outcome of the project. The vertical project organization reveals the high level of contractor's dependency on suppliers. As it is noted in literature, competitive tendering in the market has increased the degree of this dependency since the supply and procurement part of contracting should be adequately convincing for the client that the contractor will have access to sufficient and adequate resources on the right time at the right price (van der Horst, 2013).

In particular, EPC is a contracting strategy usually implemented in large and complex projects. The contractor as a single entity is assigned to design, execute and complete all works which equals a higher risk allocation compared to the traditional contracting approach. The latter presupposes that all parties contributing to the EPC objectives such as the main contractor, the designers, the vendors and the subcontractors are requested to form one project team from the client's perspective. The norms of EPC contracts that regulate the relationship of the main contractor with the involving parties derive from FIDIC and explicitly specify that a contractor should properly cooperate with the client, the upstream business partners (consultants, creditors etc.) and the downstream partners (suppliers, subcontractors etc) (Du et al., 2016).

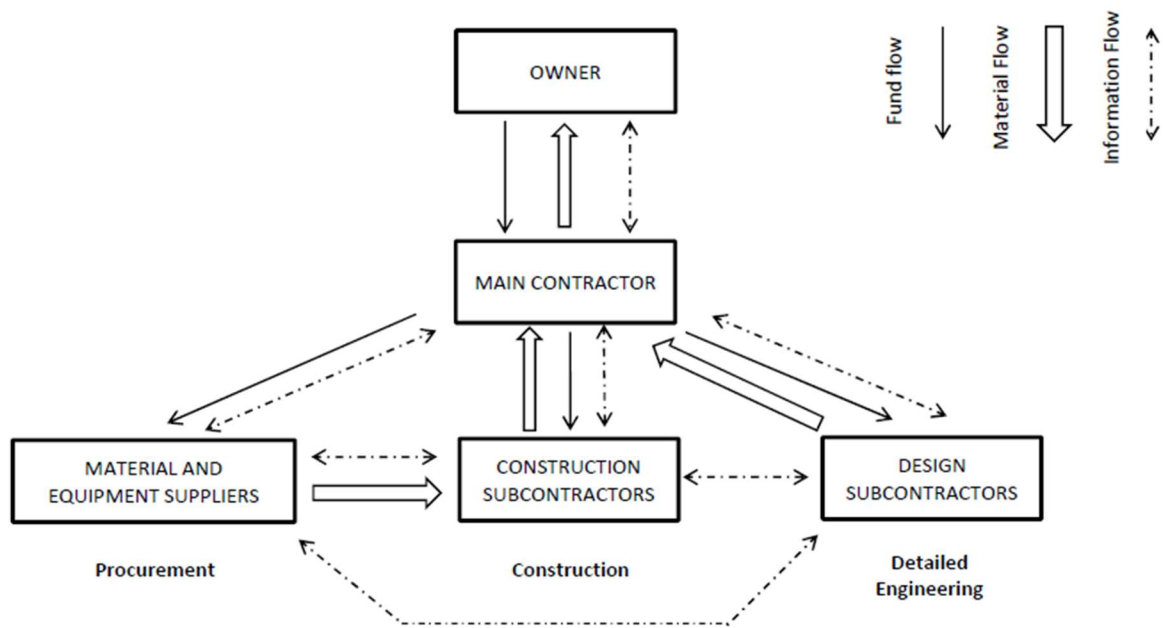


Figure 2.6 Funding, Material flow and Information exchange in EPC contracts (adapted from Ke et al., 2015).

In oil and gas contracting, different epc- acronyms are applied corresponding each time to the activities and scope of work provided by the contractor. The most common integrated scopes that are used in the industry are the following (van der Horst, 2013):

- *EPCm*, which includes the Engineering, Procurement and Construction Management scopes. In this contract type, the main contractor is responsible for the execution of engineering and procurement as well as manages the project on behalf of the client. However, the purchase orders and the selection of subcontractors are implemented by the client.
- *EPC*, which refers to Engineering, Procurement and Construction. The main contractor is entitled to deliver all three activities as an integrated scope.
- *EPCI*, standing for Engineering, Procurement, Construction and Installation. This is the most frequent contract form in the case of offshore platforms and wind turbines.
- *EPIC*, including Engineering, Procurement, Installation and Commissioning. This contract type is the most integrated as the main contractor is also assigned the

commissioning after installation which means that client can operating the project delivered immediately after delivery.

2.2.2 Remuneration schemes

The remuneration scheme is among others one of the parameters specified in contracts. The system of reimbursement along with roles, responsibilities, payment terms, risk allocation, dispute resolution are some of the aspects that are in detail defined in a contract (Suprpto et al., 2015). Regarding the remuneration scheme, two main categories can be distinguished: the *lump-sum* contracting and the *cost-reimbursable*.

In a lump-sum contract, the client pays a fixed price to the main contractor for the services provided. Any unforeseen costs are not strictly defined in such a contract type. As a result, the contractor is supposed to make some assumptions accordingly. This entails two extreme scenarios. The best –case scenario is that unforeseen risks do not occur and thus the contractor can benefit since there will be an additional margin on the top of the base price. In the worst-case scenario, these risks do occur and sometimes even exceed the contingencies initially estimated by the contractor, resulting to a loss for this party. In particular, it is noted that under this type of contracting, the largest amount of disputes between clients and contractors is developed. The price that a contractor offers in order to deliver the assigned scope, should not only cover contingencies but also guarantee that the project will be delivered on time and with all the defined by the owner requirements and quality standards (Galloway, 2009).

In a cost-reimbursable contract, the contractor is able to cover the costs within a contractually set-up and during project development. The costs that may occur most often include construction labour, materials, equipment, subcontractors and overhead (Galloway, 2009). The main difference between this contracting strategy and fixed-price contracts is that the implications of risks have a different financial magnitude based on the project development phase that they occur in a lump sum reimbursable scheme. For instance, a risk that may occur in an early phase under a lump sum contract may be moderated and have less crucial impact than if it would occur during project execution. In contrast, under a cost-reimbursable contract, the augmentation of risks is similar regardless of the project development phase that it may arise (Galloway, 2009).

2.2.3 Pre- and Post-award Phases

Contract award is the result of the tender phase. By inviting multiple contractors, suppliers etc to bid, competition is facilitated and a better control on the price and other benefits is achieved (Eriksson & Laan, 2007). Clients can select their preferred bidder, according to different criteria that include price, performance and other quality requirements specified by the owners. As it is mentioned in literature, even the number of bidders is an indicative element of the control that the client wants to exert on the process. In particular, negotiations with very few bidders indicate that the client is more interested in developing trust, authority and a collaborative relationship with the supplier towards successful future exchanges. On the other hand, numerous bidders is the case of a tender that the client initiates when the most important criteria is the price (Eriksson & Laan, 2007).

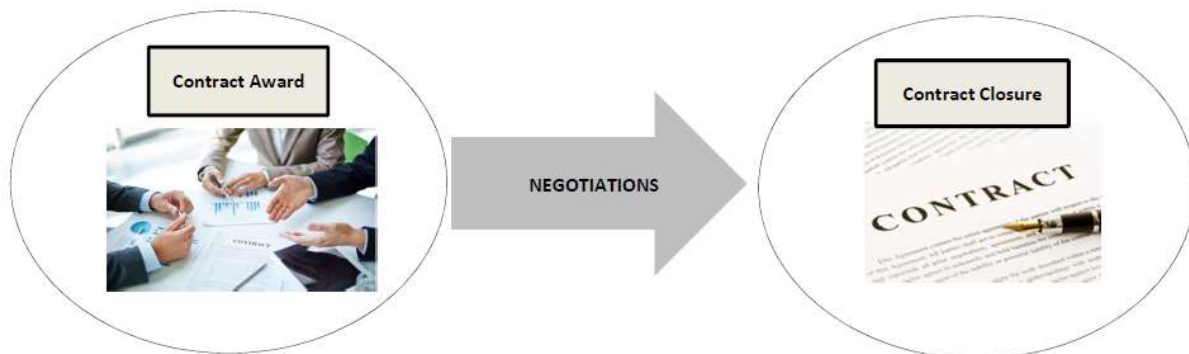


Figure 2.4 Illustration of Negotiation phase.

After the contract award, the negotiations on the final contractual agreement follow till the contract closure. This phase, mentioned as the *negotiation phase* in this research, involves only the preferred bidder and the client. The significance of the relationship of both parties during this phase is evident since the completeness of the contract depends on the negotiations. Complete contracts are more legally binding and can also facilitate the *execution phase* and determine project success since the more specific the clauses are, the easier it is to interpret and impose the contract in practice (Eriksson & Laan, 2007).

2.2.4 Market implications on Contracts

The contracts used so far in the Industry were based on standardized contracts (LOGIC) which were developed on the initiative of the British Government after the Piper Alpha incident in 1989 and were introduced in order to reduce costs, known as the CRINE initiative (Cost Reduction In the New Era) (LOGIC Oil & Gas UK, 2017). The CRINE organization, consisting of senior executives of Operators, Contractors and Suppliers of the UK offshore industry conducted the first approach to standard agreements and published the first edition of “General Terms and Conditions for Construction” in June 1997. Between the usual operators (oil companies), marine contractors and subcontractors, this standardized type of contract has been used for a long time and signed without many adaptations. Over the years, parties have started amending it for their own purposes and it is not often being used anymore in its original format. In this context, there have been several efforts especially by the International Marine Contractors Association (IMCA) which tries to advance principles and guidelines in order to improve relations and clarity, promote dialogue, enhance solutions for the contracting parties and finally lead to cost reduction as the ultimate goal in the industry (IMCA, 2015).

Two main factors have been observed the last years as being detrimental for the extensive amendment of standardized contracts. The first factor is related to the financial crisis of 2008 when many companies decreased dramatically in size and could not afford the huge financial burden of such projects. As a result, more actors had to join the project realization scheme such as financial institutions and investors, insurance companies etc. The other factor concerns the safety dimension of such projects and more specifically the fact that risk management in the industry changed drastically following the incidence of some serious accidents, leading to the immense increase of risk awareness on behalf of financial institutions and insurance companies and thus resulting in extremely expensive insurance and high risk transfer to contractors (IMCA, 2015). This last trend is substantial if one considers the by nature high risks in this industry. The main reasons behind the magnitude of such risks are (i) the fact that revenues generate only after implementation despite the large initial investments, (ii) the scope of work cannot be partially executed in case of contractors’ incapability due to the indivisible nature of the facilities constructed, (iii) likewise facilities cannot be transferred to another location and (iv) development and implementation periods are long (Berends, 2007).

The main result of these trends in the industry is the more frequent implementation of rigid contracts that are heavily amended, with extensive disclaimer clauses regarding risk allocation. On the one hand, the main Contractor has to hold the huge risk by signing the main agreement with the client while on the other hand Subcontractors are requested to deliver the anticipated scope of work by tying back to the strict and predefined provisions signed between the contractor and the owner through 'Back-to-Back subcontracts'.

Based on the aforementioned context, it is evident that the offshore industry nowadays is characterized by a stricter and less flexible environment, intricate project schemes with multiple stakeholders involved, complex contracts instead of standardized ones, high risk transfer to contractors and less trust between the involved parties. This renders the understanding and improvement of relationships among different parties crucial in order to achieve what the emphasized market target is, cost reduction, while ensuring high performance.

CHAPTER 3.

KEY RESEARCH VARIABLES

In order to thoroughly investigate the two main variables of the research area, it is essential to firstly analyze the core concepts by identifying their main elements. This procedure is based on the findings in existing literature and serves to not only explain definitions and understand their significance but also perform a “breakdown” description of their various dimensions. As a result, the reasoning behind the selection of the various elements is explained and a template, based on which analysis of case studies is performed, is created.

3.1 Trust

Trust is as already mentioned in the first chapter the core value of Relational Governance facilitating transactions and resulting in more effective contracts with a better risk allocation incorporated. As the main response to contractual incompleteness, trust is considered an indispensable part of parties’ relational development. However, trust is a complex and perception based concept that can lead to different interpretations depending on the party’s point of view and specific situations over time (Pinto et al., 2009). Even good performance and cooperation does not necessarily presuppose the existence of trust since compliance can be achieved through sufficient control among others. Thus, this section aims to analyze the nature of trust based on literature and provide an adequate illustration of the elements that indicate the existence or non-existence of trust.

Forms of Trust

There are several models that depict the nature, level and function of trust in literature developed by several authors described below.

Affect-based or *affective* trust is related to emotional bonds developed between parties bilaterally. As Wong et al. (2008) describe affect-based trust is a tie created in a sentimental level that connects individuals and evokes the development of mutual concern and thoughtfulness among them. This type of trust is considered significant in the work environment since it can enhance information exchange, improve performance and contribute to a great extent to the establishment of a strong team spirit.

Cognition-based or *cognitive* trust is based on the confidence of each party that the other party is able and has the required competences to succeed in terms of performance and mutual interest. This confidence is as described by Wong et al. (2008) a result of knowledge exchange between the parties through their consecutive cooperation and interplay.

Hartman (1999) has developed a model that includes three main dimensions of trust: competence trust, integrity trust and intuition trust. *Competence* trust reveals the belief of one party on the capabilities of the other party. As Pinto et al. (2009) mention this type of trust answers the question “Can you do the job?”. When high levels of competence trust exist, effective communication is expected to prevail parties’ relationship as both sides are convinced that a technical solution is feasible and project success is achievable. *Integrity* trust is the more ethical dimension of this model and basically answers the question “Will you consistently look after my interests?” (Pinto et al., 2009). This type of trust is the basis for an open and non-defensive behavior. As integrity perception increases between two parties, concerns are communicated openly, risks are being discussed and suggestions are made in a sincere and pleased manner. *Intuitive* trust is the third type of trust in Hartman’s model and answers the intricate question “Does it feel right?” (Pinto et al., 2009). Although this dimension of trust is slightly vaguer, it is believed that many managers are based to some extent to gut feeling during the process of decision making. According to Hartman (1999), this form of trust is the initial response when making a decision while in a later phase this decision is post-evaluated on the basis of competence trust and integrity trust. However, this evaluation takes place mainly in order to justify the initial decision which was fed by intuitive trust.

Another model of trust is the one developed by Rousseau et al. (1998) categorizing trust into calculus-based, relational and institution-based. *Calculus-based* trust is originated by economic incentives and self-interest since it is assumed that the party being trusted will act in a favorable and profitable way for the other party. *Relational* trust derives from direct personal interactions between parties that are repeated over time. These reciprocal actions lead to the establishment of a comfort environment surrounding both parties. The last form of trust in this model is *Institution-based* trust. This type of trust relates to the contextual environment that surrounds transactions and interactions among parties in terms of legal, cultural and societal norms. Legal institutions and cultural rules among others influence to a great extent whether and how trust is

endorsed in a project setting. Thus, this form of trust relies highly on the cultural characteristics of the country that a project is executed and/or the cultural background of the parties involved.

Another model developed by Lewicki and Bunker (1996) includes the following forms of trust: deterrence-based trust, knowledge-based trust and identification-based trust. *Deterrence-based* trust refers to the development of trust because of the aim of parties to avoid violation sanctions. The authors consider this form of trust as the first level that is developed. According to their analysis, this is the lowest form of trust that is developed in order to avoid the consequences arose by not keeping their word. The second level of trust, *Knowledge-based* trust, relies mainly on information rather than fear as motivator and is based on the fact that the involved parties know each other to such an extent that the way they behave can be well predicted. Lastly, the highest level identified by Lewicki and Bunker (1996) is *Identification-based* trust. This level of trust is achieved when each party has entirely incorporated other's preferences and mutual acceptance and appreciation of other's perspective is predominant.

Wong et al. (2008) focuses also on *System-based* trust that relies basically on formal procedures and not on personal issues. The purpose of these procedures is to boost communication and enhance trust. This form of trust is highly related to organization policy, contracts and agreements and is considered to be necessary for the development of organizational relationships.

3.2 Contractual Governance

3.2.1 Risk Allocation

Risks in the Offshore Industry alike the construction industry in general can be hardly eliminated. The main challenge therefore is to allocate them in a proper and reasonable manner among the parties involved in the project. This can be done by formulating specific contract clauses that define how risks are being transferred, a process known as risk allocation (Zhang et al., 2016).

However, risk allocation is not always balanced, which has always been one of the main issues of controversy among different parties. Improper risk allocation is identified often in many project settings. One reason for such a phenomenon is the social and behavioral surrounding that

may lead to massive risks transferred one-sided to some party. Other reasons include bargaining power or power imbalances, although in practice risks are usually transferred to the party that is least able to bear them because of low bargaining power (Zhang et al., 2016).

What is also pointed out by many authors is the different perception of risks adopted by each party (Loosemore & McCarthy, 2008; Zhang et al., 2016). The different interpretation of risks and the diverse perception according each time to the interested party involved is frequently the cause of many conflicts (Zhang et al., 2016). Loosemore & McCarthy (2008) have conducted an extensive research on the misperceived risks that dominate each level within the supply chain of a project setting. In particular, the misperceived risks from the point of view of a main contractor regarding his role and responsibilities are (i) safety, (ii) labor disputes, (iii) indemnification and hold harmless and (iv) actual quantities of work while the corresponding misperceived risks about the subcontractor are (i) labor and equipment productivity, (ii) defective material, (iii) labor disputes, (iv) labor, equipment and material availability. From the point of view of a subcontractor, the misperceived risks that govern contractor- subcontractor collaboration include mainly (i) labor disputes, (ii) defective engineering, (iii) third party delays, (iv) safety, (v) differing site conditions, (vi) site access regarding the risks allocated to the main contractor and (i) labor, equipment and material availability, (ii) labor and equipment productivity, (iii) labor disputes and (iv) contractor competence regarding the subcontractor. In overall, the misperceived risks for a subcontractor from the perspective of all actors involved in a project, such as client, main contractor, suppliers etc, are (i) labor and equipment productivity, (ii) labor, equipment and material availability, (iv) labor disputes, (v) defective material and (vi) quality of work.

According to the aforementioned research, the highest level of disagreement seems to enclose the main contractor-subcontractor relationship in terms of risk allocation, including mainly the following risks: *defective engineering, safety* and *3rd party delay*.

Identifying the most misperceived risks is a proper indication of where conflicts may arise during a project development. This is essential when taking into consideration the fact that despite the written agreements, people's interpretation of such issues can influence their belief on how risks should be allocated in practice. As a result, negotiations over risk allocation are notably affected by such perceptions.

3.2.2 Elements of Contractual Governance

Contractual Governance as already defined is the extent to which roles, responsibilities, contingency adaptability and legal penalties are specified or well-detailed in formal agreements. Based on this definition as well as on relevant research studies on this field in literature, the main elements that best describe this type of governance are contingency adaptability and term specificity. While term specificity refers to how specific and detailed the terms are, contingency adaptability relates more to how to respond to future changes, problems, conflicts etc (Luo et al., 2002).

By examining contingency adaptability, one can measure the extent to which a contract provides directions on how to respond to unanticipated contingencies. The main focus is whether a mutually defined ‘tolerance zone’ for encountering unanticipated events or principles and guidelines are provided in the contract. As Luo et al. (2002) mention these guidelines are included in the contract as either independent terms - regarding overcoming significant contingencies, doubts or hazards, handling conflicts and force majeure - or as part of clauses related to specific areas, such as market changes, governmental policies etc.

High term specificity is on the other hand very significant since the extent to which a contract is specified can affect favorably cooperation among parties. This element is of high importance since cooperation may be enhanced or hindered depending on how a contract is specified (Luo et al., 2002).

3.3 Research Propositions

Following the analysis of Trust and Contractual Governance as the main research variables, the advantages but also risks embedded in both types of governance, there are three propositions formulated whose validity is tested by conducting qualitative research with the case studies.

The foundations for these propositions are the following characteristics that form the context of the research area: (i) the interplay of different types of governance during project development and (ii) the relationship between the main contractor and subcontractor. In terms of timeliness, the first proposition refers to the first phase, negotiations, the second proposition to the second phase, execution and the third one provides the link between both phases. The main suggestions

from literature are included; namely the beneficial contribution of trust to contract effectiveness and flexibility (proposition 1), the rigidity of contracts that may lead to mistrust development (proposition 2) as well as the supplementary role of trust against contractual incompleteness and weakness to forecast every unanticipated events (proposition 3).

Proposition 1: The positive influence of trust during negotiation phase leads to less strict contractual clauses towards the subcontractor.

Proposition 2: High contractual governance as a result of rigid contractual clauses restricts the positive influence of trust during execution.

Proposition 3: A high level of trust developed during negotiations can contribute to manage unanticipated changes during execution provided flexible contractual adaptability exists.

The validation of those propositions will finally serve to answer the main Research Question:

How does Trust interrelate with Contractual Governance between a Main Contractor and Subcontractor during the negotiation and execution phase of a project in the Offshore Industry?

3.4 Analysis Template

In order to test the validity of the propositions as the fundamental step to answer the main research question, a template based on which analysis is performed is defined. This template aims to settle a common framework of analysis of each case study that facilitates not only the comparative analysis but also ensures that the main elements of the research area are investigated thoroughly in all cases. This template is defined for the two main variables, trust and contractual governance.

3.4.1 Trust

Trust as already discussed is a vague variable which makes its measurement quite intricate. In order to operationalize this variable, two methods are implemented: evaluation of statements developed based on literature analysis of trust and development of personal judgments during interviews and contractual evidence on the existence of trust. For both methods, an ordinal scale

of *high, medium, low* which is suggested in relevant research studies on social situation rates (Crano and Brewer, 2002) will be used in order to provide an indication of the level of this abstract variable in parties' relationship.

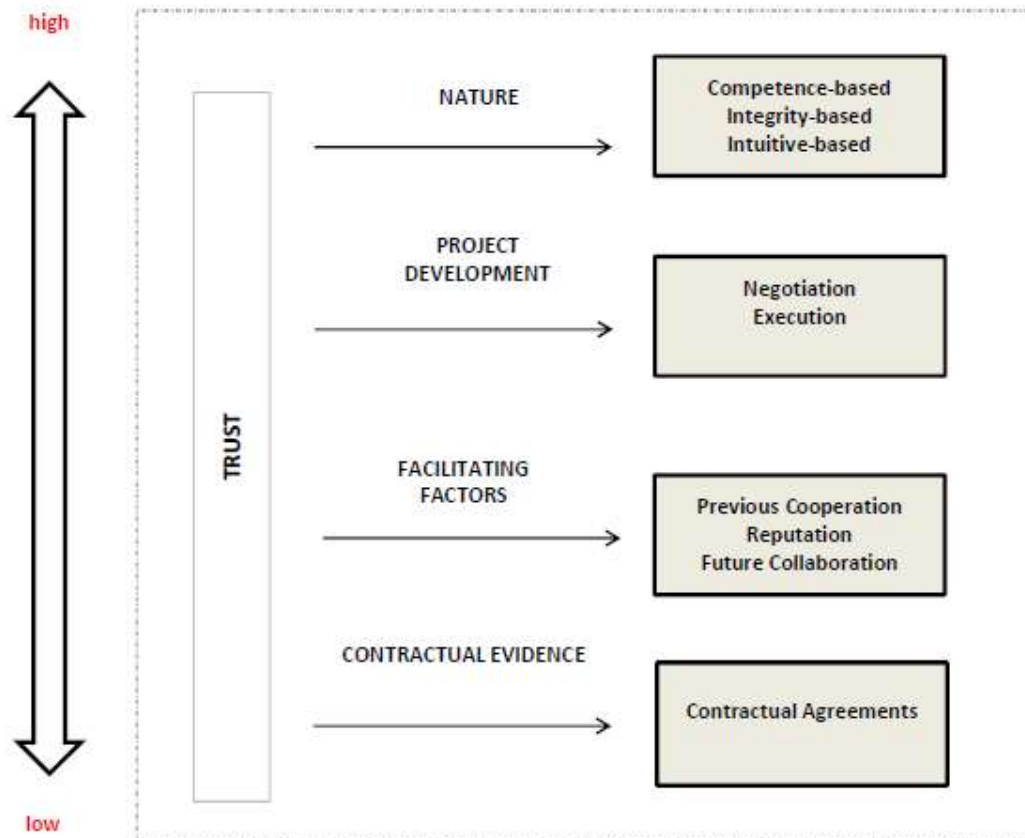


Figure 3.1 Analysis template for Trust variable.

In particular, the statements used in the interviews and which are analyzed in the Interview Protocol (Appendix A) are based on Hartman's model of integrity, competence and intuitive forms of trust. The main reason of selecting this model out of numerous models developed in literature is that according to Pinto et al. (2009) this model is less theoretical and can evaluate trust more adequately within a project setting.

Trust is also measured during the project development, whether it is more intense during negotiation phase or the execution of the project. Factors that facilitate the development of trust are also examined. According to Luo (2002) previous cooperation is an important indicator since

it can boost an atmosphere of openness both when drafting the contractual design and when problems arise.

Lastly, trust can be also evident in contractual clauses. As mentioned in literature, the existence of specific disclaimer clauses can be perceived as an indication of mistrust. According to Zaghoul and Hartman (2003) clauses regarding the *uncertainty of work conditions, delaying events, indemnification, liquidated damages* and *sufficiency of contract documents* are among others documentation proof of the level of trust developed during the negotiation phase. The authors support that the amount of premiums regarding disclaimer clauses and the level of trust between the parties involved in the contractual agreement are highly related. According to their conclusions, in the context of high trust environment, contractors tend to offer lower risk premiums with regards to disclaimer clauses due to the fact that their risk perception is significantly low. The latter serves as a complementary measurement of trust except for the indication derived from interviews, trying in this way to achieve an accurate and as much as valid illustration of this perception based variable.

3.4.2 Contractual Governance

Contractual Governance is evaluated in terms of contingency adaptability and term specificity as already described. For both elements, a combination of data from documentation and interviews is gathered in order to provide a complete and accurate picture of the rigidity of contracts.

In Particular, Contingency Adaptability is also measured in a scale of *low to high* in order to be comparable to trust measurement. Contractual documents and interviews reveal the level of this element not only by ranking statements generated from theory on contingency adaptability, further explained in Appendix A, but also by enlightening events and changes occurred during execution per project and how the actors involved responded to such challenges.

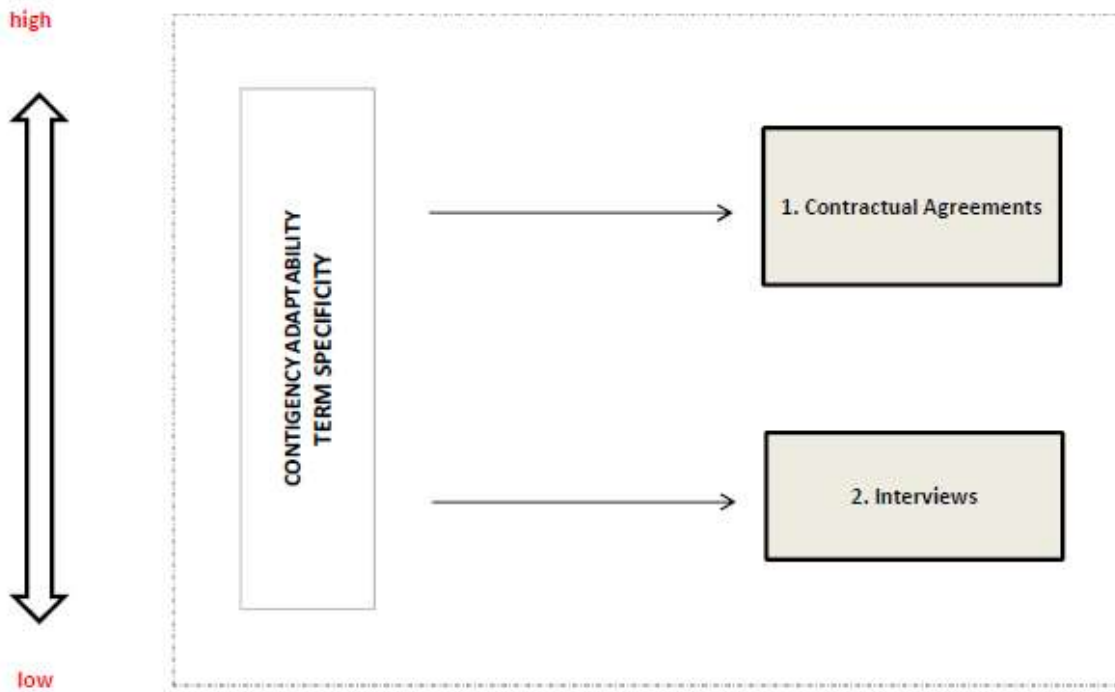


Figure 3.2 Analysis template for Contractual Governance variables.

The process of assessing term specificity is alike the one described for contingency adaptability. Both interviews and contractual documents comprise the key data sources. Term specificity is then based on the findings ranked as *low*, *medium* or *high*.

CHAPTER 4.

CASE STUDY PREPARATION

4.1 The Subcontractor and Project Context Description

4.1.1 Company Activities

Company X is an international offshore contractor with a wide range of hydraulic engineering and maritime construction activities such as cable installation, dredging etc. These activities relate both to the traditional Oil & Gas market and more recently to the booming Offshore Wind Industry. Although the aforementioned markets involve different stakeholders and the corresponding projects are technically completely different in overall, the activities of the Company which are specialized and concern subsea structures and foundation installations are similar in all type of projects. The latter means that the scope of work that the Company is assigned to in an offshore wind farm project is similar in a platform development project.

The Company is engaged in projects worldwide and thus there is much experience in cooperating with local authorities, different contractors and developing a partnering philosophy. Depending on the magnitude of the project and scope of work, Company X has so far executed projects either as the main contractor or as a subcontractor. Having already many years' experience in the industry and especially in one of the most significant region of the market, the North Sea, the Company has multiple times cooperated with specific clients and contractors.

4.1.2 Company Organization and Project Execution

The common procedure followed in the company during the whole project development is distinguished in two main parts. In the first stage, a tender team is responsible to develop and bid for a specific project. If project is awarded, negotiations on the contract follow. These activities are performed between the client (either the operator or the main contractor) and mainly the Tender Manager. The Tender Manager is responsible for the final submission of the tender, prepared by the tender engineers, as well as the contractual discussions assisted by legal support when needed. The final contractual agreement is also reviewed by the legal department in order to reassure its legal adequacy. In addition, legal advisors are also involved in the case of disputes and claims that may occur during project execution.

The second phase, which is mainly the execution of the project, is performed by the Project team. In practice, this phase begins when a hand-over meeting between the tender team and the

project team takes place while officially a kick-off meeting between the client and the Company is held shortly after signing the contract. A dedicated Project Management Team is assigned to each project in order to handle all services and resources necessary to engineer and execute the works. This team comprises of people mobilized to site as well as the Project Manager who supervises the execution phase, controls all the co-ordination aspects of the project and is in contact with the client in a regular basis on- and offshore. In some cases, there is also a Works Manager present on site who leads the works and is responsible for the management and control of the activities. When such is the case, the Works Manager reports to the Project Manager. Otherwise, the Project Manager is directly involved in the execution activities. Regular co-ordination meetings, safety meetings, risk assessment meetings and progress meetings are held during this phase as well as interface meetings with other associated parties if necessary.

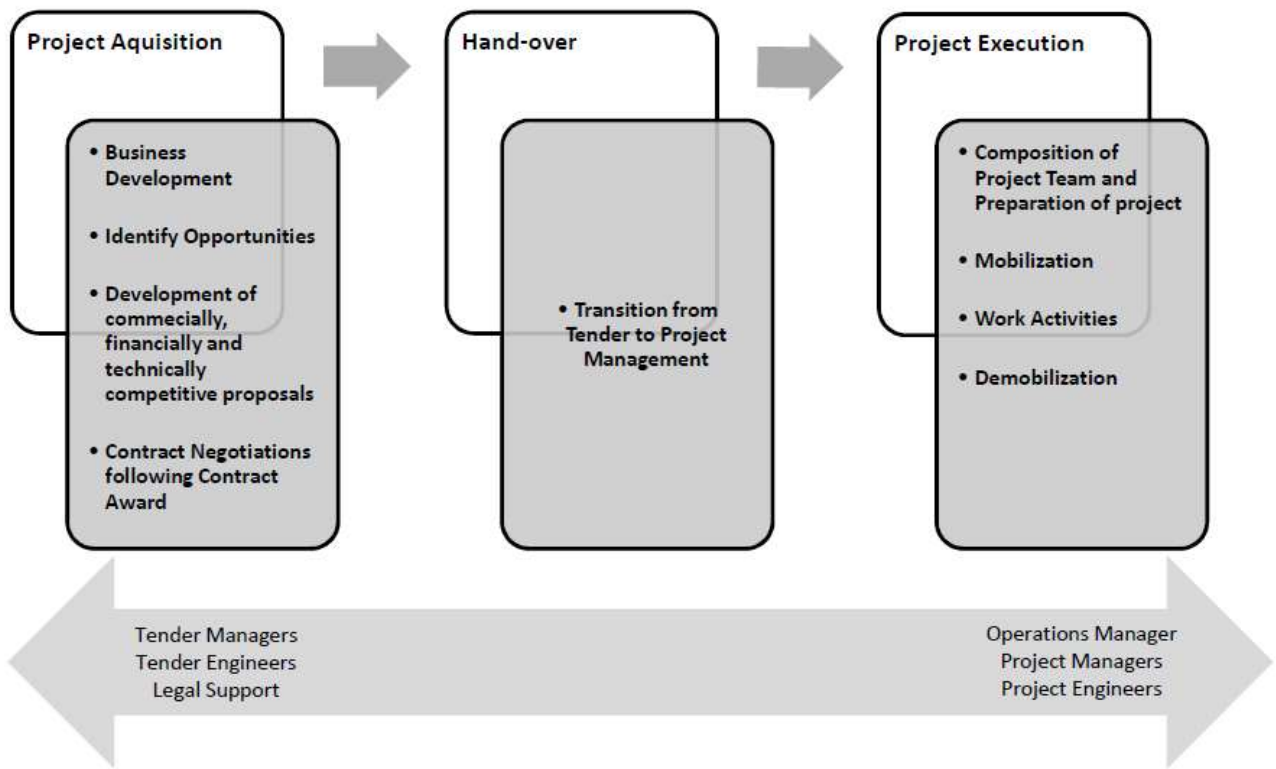


Figure 4.1 Project organization and execution in Company X.

4.2 Selection Criteria for Projects

Four cases studies are examined in order to reveal the practical side of contractual governance and its interplay with trust during the negotiation and execution phases. This number of cases enables the author to drive sufficient conclusions in this specific research area while at the same time the accurate investigation of each case is feasible taking into account the time constraints during this study. The goal is to disclose the practical side of trust, which is a perception-based concept and the implications of its high or low level in practice.

In order to come up with valid and concrete results, the selection of the cases should be meticulous. Thus, the below criteria are followed and are common in all case studies selected:

1. The projects examined are all related to the same activities in the Offshore Industry. The latter means that the scope of work is similar as well as the budget, complexity and duration of the projects.
2. The perspective of analyzing the relationships defined in this research is from the subcontractor point of view.
3. The projects have been already executed in the recent past so that the whole project development can be studied and important information can be disclosed by the people involved during the interviews.
4. A significant criterion is the availability of people involved in those projects, during the negotiation and execution phases, since it is quite common that many of them are not anymore in the same company.
5. In order to prevent other factors to influence the relationship between the main variables investigated in this study, the same greater area, the North Sea, is selected as project location for all four projects. In addition, it must be pointed out that all parties involved are companies that despite being active globally, they are settled in Western Europe. Therefore, any cultural differences occurred in the case of projects located in different areas worldwide with people from different backgrounds are restricted to a great extent.
6. The last criterion which is considered indispensable for the research of the interplay aspect of both types of governance is the occurrence of changes during execution. The main reason is that any change that is unexpected and takes place due to implications

during installation is an important indication of the level of contractual flexibility and of the actual level of trust and not the one perceived by the parties usually in the initial phase of the projects.

Based on the above criteria, all projects share a similar scope, namely activities related to the protection of cables and foundations of either platforms in the Oil & Gas industry or monopiles in offshore wind farms. The subcontractor is the same company in all projects from which data are gathered. Moreover, two projects with the same main contractor are selected. This enables a comparative analysis not only when the subcontractor cooperates with different companies but also with the same main contractor in different project settings. The budget and complexity of scope are similar for all cases while the location is in different sectors of the North Sea.

s/n	Project	Main Contractor	Subcontractor
1	Project A	Company S	Company X
2	Project B	Company S	Company X
3	Project C	Company I	Company X
4	Project D	Company G	Company X

Figure 4.2 Projects selected as case studies.

4.3 Selection of Interviewees

The analysis of the case studies is accompanied by conducting interviews with people involved in these projects. The intention was to perform interviews with at least three people from each project. In particular, the criteria for the selection of the interviews are the following:

1. The people interviewed should have had a significant role during the negotiation and the execution phase of the projects.
2. In order to be practically feasible to conduct the interviews, people selected should be still present in the company.

3. Among the three interviewees, some should have been involved in the activities performed on site and others worked mainly in the head office. The main reason is that it is substantial to gather data from all phases during project development – negotiation vs execution phase, in terms of time but also in terms of location. The perception of trust that is developed due to the different way of contacting the client-main contractor when working on site in contrast to working in the office may be diverse.

Based on the above criteria, the group of experts selected to be interviewed for each case study consists of:

1. *Project Manager*: The person who leads the project management team and is mainly involved during the execution. He/She takes over the project from the tender department and among his/her responsibilities is to arrange material supply, follow up on results, keep in contact with the vessel and the ongoing activities, monitor the financial status and attend regular meetings with the client to discuss progress and/or changes. The Project Manager is supervising the whole execution mainly from the head-office since many projects that are at the same time ongoing are under his/her attention.
2. *Project Engineer*: The person who is part of the project team and has to handle issues related both to the preparation of the execution as well as the ongoing activities. He/She may work at the head office or be on site to organize actual activities such as the loading of vessel and arrange the contact between the agency and the vessel. The Project Engineer reports to the Project Manager.
3. *Operations Manager*: The head of the department that undertakes the whole execution of projects. He/She has an overview of the execution of all ongoing projects, provides guidance to the Project Managers and is involved except for the preparation of execution also in the negotiations, before contract closure, especially in the case of large, complex projects.
4. *Tender Manager*: The head of the tender department that is involved during the bid-phase and the contract negotiations. He/She supervises the whole tender process and provides the approval of the final tender documents. After contract award, he/she undertakes the negotiations with the client till contract closure.

All projects are prepared and conducted by the same business unit within the Company since the scope is the same. This means that certain interviewees, namely the Operations Manager and Tender Manager that have an overview of all projects sharing the particular scope were the same for all cases. However, the project teams, consisting of Project Managers and Project Engineers appointed for each project were different. Therefore, an interview with each Project Manager was conducted. For Projects A and B, a Project Engineer joined also the Project Manager in the interview.

All interviews were conducted based on the Interview Protocol that had been previously designed by the author (Appendix A). During the meetings with the interviewees semi-structure questions were asked and a questionnaire was requested to be filled. The main themes that were discussed were the collaboration between the two companies in terms of procedures and communication, previous cooperation, the contractual documents, their completeness and detail as well as potential implications due to changes during execution. The ranking of the statements contributed also to focus and further elaborate special topics depending on the case. For instance, in project D information exchange and dependency on main contractor during execution were ranked with low score. Since the main reason for that was the poor previous collaboration, an elaboration on the established relationship due to the pre-history between both parties was requested.

4.4 Analysis Process

Following the desk research and the formulation of the propositions and theoretical template, the analysis of the case studies is separated in several steps based on the source of data available. The main sources are project documentation and the reports that are transcribed after interview completion. The process that is implemented comprises of the following steps:

Compiling and analysis of documentation: For each case study, the author gets acquainted with the project characteristics from the hand-over presentations and the contractual agreements that provide a good picture of the contractual context. The result is to be able to describe the contractual context per case study and make relevant observations on the main contractual principles that can be discussed during the interviews.

Carrying out Interviews: Interviews are performed with company’s employees as described in paragraph 4.3 whilst the confidentiality of participating individuals is assured. All interviews follow the protocol developed by the author (Appendix A) in order to focus on the predefined research elements and derive the desired information that can serve for the comparative analysis of the cases in following stages of the research.

Interviews Register and Coding: Reports are created per case study including all the information mentioned during the interviews. Each report is highlighted based on codes that derive from the analysis templates. For that purpose, the software program ATLAS.ti is used in order to apply coding and categorize the information available. For instance, in the abstract provided in Figure 4.3, *contractor’s cooperativeness* and the *level of contractual detail* are both codes in order to estimate parties’ relationship and contractual context respectively. Further to the predefined codes that were based on literature, additional elements that were revealed in particular projects and are identified as influential factors are also highlighted.

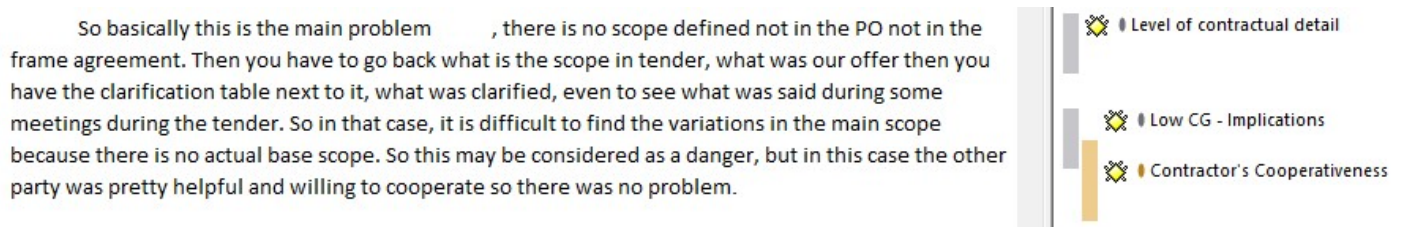


Figure 4.3 Coding information in ATLAS.ti.

Identifying levels of governance: For each case, a level for both trust and contractual governance is determined. Although contractual governance seems a more tangible concept in terms of measurement, trust as the main element of relational governance is more abstract. Following relevant research studies (Zheng, Roehrich, & Lewis, 2008) and suggestions on measurement of relational governance levels by Crano and Brewer (2002), an ordinal rule is chosen as the most appropriate method. According to the authors, this way of measuring is typically applied when social situations need to be rated. Therefore, the ordinal scale of low, medium, high is applied for both variables. The measurement is based on the findings and the ratings also from the questionnaires. Since the rating in the questionnaire includes 5 scores (strongly disagree, disagree, neutral, agree, strongly agree) and in order to facilitate the combination of all different

data sources, the scale that is eventually employed is *high, medium to high, medium, low to medium, low*. The final level is determined by the author by evaluating both the questionnaires and the statements during the interviews. The questionnaires are an indication of the level of several elements as well as a useful tool during the interviews but do not serve as the only source of measurement. It was observed that participants seemed cautious when ranking certain statements in the questionnaire. For instance, in projects A and B the elements of trust were not ranked with the highest score although all interviewees' statements during the interview were considerably positive. Therefore, the final level of both types of governance per case study is formulated according to author's judgments based on the overall information provided.

Conduct Comparative analysis: following the analysis per case, a comparative analysis is performed in order to reveal specific patterns among case studies. Such patterns contribute to draw conclusions regarding the relationship of both research variables that can be applicable in any project setting within this industry.

CHAPTER 5.

CASE STUDY RESULTS

5.1 Project A

5.1.1 Case Introduction

Project A is an Oil & Gas field development in the North Sea located in the UK sector which was executed in 2016. For the performance of the relevant scope a stand-alone contract between the Subcontractor and the main Contractor, Company S was signed. This main contractor is a company with which the Subcontractor has worked multiple times in the past. Although the project teams each time may vary, both companies are very familiar with each other and procedures are well known and followed by both parties. The element of familiarity and the effect of previous collaboration were not only noticeable in people's statements but also in the form of the contract which is further elaborated in paragraph 5.1.3.

5.1.2 Relational Governance and Cooperation

The collaboration with this contractor is identified by all interviewees as being always good, pleasant and without major disagreements. Both parties cooperate very often in several projects and thus the procedures and the "rules" that should be followed are known in both sides. Both parties have worked together many times in the past which has helped to establish a familiar and intimate context in which both sides cooperate. As ranked by the project managers, the project engineers of the contractor are perceived as highly competent and professional while trustworthiness during project development was high.

"Our cooperation was very good; it is always easy to work with them, no surprises"

A good established relationship in a company level was emphasized by all interviewees. In fact, this relationship was not influenced by the only remarkable incident that occurred during the project. More specifically, due to weather conditions the subcontractor could not complete survey operations at all defined points. Although this could be considered as an incomplete execution of the scope of work, the main contractor which was liable towards the client/owner of the project not only did not force the subcontractor to return on site and execute according to protocol the survey activities, but it even defended the subcontractor to the client. According to the project manager and project engineer this attitude was indicative of the good relationship that characterizes both parties even though in the case of a standalone subcontract the subcontractor

has contact only with the main contractor and cannot therefore report to the main client for any unanticipated changes and/or other issues. In overall, a successful previous cooperation is identified along with the good reputation of the main contractor, the belief of the subcontractor on the information exchange as well as its confidence that its cooperation with this particular party will always remain satisfying and without negative surprises. Regarding the correlation of disclaimer clauses and trust, the fact that the contract is a highly standardized one, including all the necessary clauses concerning liquidated damages and indemnification among others that is always used in the same format between those parties, cannot serve as an indication of trust development. Furthermore, the author had also to consider that all interviewees, despite the fact that they shared positive views and experience with this particular contractor, they did not rank with the highest level the statements regarding the development of trust in the questionnaires. Therefore, considering the positive relationship described above as well as the last remark, the level of trust in this case is therefore identified as *medium to high*.

5.1.3 Contractual Context

The contract with this main contractor is characterized as highly concrete, well-detailed and specific. In particular, it is a LOGIC-based contract. The main principle is that it is a standalone subcontract between the main contractor and the subcontractor consisting of two main parts, the first part referring to scope of work for the specific project and the second part with the terms and conditions. The remuneration scheme is lump sum and also well-defined in the contract. Five main milestones during the whole execution according to the progress of works are indicated in which the Subcontractor is entitled of issuing an invoice for payment. These milestones are respectively the delivery of all documents including planning, drawings, certificates etc, the approval of all suppliers involved, the procurement of materials, the completion of works and finally the as-built documentation.

All interviewees from the subcontractor side agree that this contract includes every minor detail, from critical issues till less significant paperwork details. Both contingency adaptability and term specificity are ranked in the questionnaires as *high*. As the project manager mentioned “*We do the project according to the contract by following it strictly*”. All meetings and procedures are set in the contract as well as details on possible variations during execution. In this particular project

there were no scope changes during execution. However, as it was noted by the project team in other projects that they cooperated with this contractor and where variations occurred, no disagreements or implications resulted. As it is mentioned, procedures and prices in case of variations are described in detail in the contract and in other projects it has worked fine for both parties. This contract setup may offer less freedom but according to the project managers it also entails less risk. It was emphasized that relationships among different parties are extremely vulnerable, not to mention that it is quite common that several people change during project development. As a result, a project may begin with an excellent relationship between the two parties but due to an event, a variation for example, or a change of people in the project team this relationship may not remain that favorable and pleasant. Thus, it was collectively agreed that a decent contractual context serves as a safeguard towards the vulnerability of parties' relationship. As it was in this case, during execution and provided the well-defined contract the subcontractor could always refer to the contract and be sure that its claims can be supported and eventually accepted. Therefore, taking into account the high specificity of the contract, the predefined procedures such as meetings that were followed as well as the well-detailed and customized documentation established between both parties, contractual governance in this case is considered *high*.

5.2 Project B

5.2.1 Case Introduction

Project B is an Oil & Gas field development in the North Sea located also in the UK sector which was executed in 2016. For this scope a stand-alone contract between the Subcontractor and the main Contractor, Company S was signed. This company is the same contractor as in project A. Therefore, what is interesting in this case is to investigate the contractual context and the relationships developed between both parties in a different project context.

5.2.2 Relational Governance and Cooperation

As it is mentioned also in project A, the cooperation with this specific main contractor is identified very positive also in this case. What should be noted is that although in this project the project teams were different in both sides than the ones involved in project A, the prevailing

working atmosphere shares the same features established in project A. Statements like “*I was confident that this partner would look after our interest throughout the project development*” and “*During the execution phase, I felt comfortable being dependent on the other party*” were ranked as high by the project team.

Although the project manager of the subcontractor had not worked previously with the specific project team from the main contractor he emphasized how smoothly the overall collaboration evolved as well as that every time he works with this specific contractor he feels that both parties’ interests are reassured. As the operations manager added, with this specific contractor it is always known what to expect and what is expected.

“We will definitely work together with this contractor in the future”

The well-established working atmosphere between the two companies as a result of the numerous successful previous collaborations along with the solid contractual context outweigh the fact that some people involved cooperated with each other for the first time. Besides, it is stated that every time that the subcontractor is working with this main contractor, teams are working very closely together and there is always a specific person in the main contractor that is the main contact for the project team from the subcontractor side. Therefore, the level of trust is identified as *medium to high*. Interviewees’ statements indicated that all elements that reflect trust feelings, such as reputation, previous collaboration, party’s integrity and competence were dominant. However, similarly to project B there is a reluctancy on behalf of the interviewees to display the highest score for trust level which explains the final assessment.

5.2.3 Contractual Context

The contractual context in Project B is the same as in project A. In fact, the contract drafted includes almost the same terms and conditions and a detailed description of scope of work for this specific project. This entails that engineers from the subcontractor are familiar with the clauses, are aware of the requirements of the specific contractor and can handle with great ease the contractual documents. Both project engineer and project manager agreed that the fact that the contractual documents retain always the same format and only limited and specific parts change for each project, it is not only convenient for them but also a much less time-consuming

process. Project teams can identify instantly the differences among the different projects and start working promptly on the scope and the complexities of the project without spending time and energy in interpreting and understanding the contractual context.

The contract specifies major principles and guidelines for handling unanticipated contingencies while contractual terms are well defined and specific. As mentioned by the project team, every paperwork, even every minor detail was written down and as a result the contract was strictly followed. Evaluating the two main contractual elements, both contingency adaptability and term specificity are high which is expected since this project shares the same contractual principles and procedures followed as in any other project where subcontractor collaborated with company S.

“Personally, I have the feeling that projects with decent and concrete contracts go better, less discussion.”

The interesting part in this project is the occurrence of changes during execution. In this case, variations did occur but no disputes arose because of that. In fact, the project team mentions that the contract includes such detailed guidelines for such cases that the subcontractor had only to refer to the contractual clauses when needed. By making references to the contract, a formal procedure is then followed which does not include unnecessary discussions. As it is stated, *“when you have everything written down, there is no discussion about it”*. Therefore, even if during execution unanticipated changes occurred, the project management had only to look back to the contract, scan it carefully and retrieve all the information needed. Thus, considering the high contingency adaptability and term specificity the level of contractual governance is defined as *high*.

5.3 Project C

5.3.1 Case Introduction

Project C is located in an Oil & Gas field in the Dutch sector of the North Sea. For this scope the subcontractor cooperates directly with the client, Company I. In particular, there is a frame agreement signed and effective between both parties. Therefore, in order to execute this scope

the client issues only a Purchase Order (PO) which ties back to the more general Frame Agreement.

5.3.2 Relational Governance and Cooperation

In principle, the relationship between the two parties in this project can be considered satisfying and pleasant with some minor evidence of doubt and uncertainty due to mainly the nature of the contractual context. The client seems to be very cooperative and with a good will according to the project team of the subcontractor. This enables the overall collaboration to develop smoothly and to establish a positive background for a future collaboration. In fact, the project manager stated that they will definitely work together with this client in the future.

The procedures followed are predefined but there is also a certain degree of freedom identified. There were bi-weekly meetings with specific agendas where all open topics were discussed focusing more on practical items like checking documentation etc. The people of the client's project team are regarded as highly competent people since most of them even if they have managerial positions are engineers. According to the project manager's statement "*they are actually more engineers for the project than real managers*". These people were assigned as the contact persons for the subcontractor in the PO and they were leading the meetings with the other party. The latter means that during those meetings there was no official project manager from the client side while the contract manager was usually on a call.

In overall, all interviewees characterized the client as an easy-going party, very cooperative and competent that demonstrated great flexibility during common meetings and high willingness to achieve a commonly accepted solution that would retain both parties' interests. However, the subcontractor did express discomfort feelings and a degree of uncertainty mainly because of the too vague contractual context which is elaborated in the next paragraph. Thus, the level of trust is defined as *medium*. It should be noted that in this case, the correlation of disclaimer clauses and trust is not applicable since the actual contractual document for the specific project is a PO without contractual clauses while the frame agreement, on which the PO is based, is negotiated regardless of the project setting and during different periods of time.

5.3.3 Contractual Context

The contractual context in this project was basically a Purchase Order (PO) under a frame agreement. The PO includes very limited information which constitutes a huge problem for the subcontractor. There is a small reference to payment schedule and invoices but this is restricted to 2-3 pages. In fact, in order to define and analyze the scope of work for this project, the subcontractor had to retrieve information from the tender documents. The frame agreement on the other hand, which is negotiated every 3-4 years, does contain the terms and conditions but it is not customized for this project. The particular scope of work had to fit a general agreement which creates several issues. One major consequence of the nature of such an agreement is the need for many variations. These issues had to be raised during meetings and to be discussed from the very beginning since the subcontractor could not make any reference to the contract as in other projects with other clients. According to the ratings from the project team, term specification was not adaptive for issues that were uncertain and could change in course of time.

The poorly detailed contractual documents were the main cause for miscommunication between both parties. The client had a different idea of the scope than the subcontractor and since this was not defined on the papers many rounds of discussion had to take place. The subcontractor had to retrieve information mainly through a clarification table in which information from the meetings was logged. However, despite this uncertain environment project development did run smoothly mainly because of the helpful and cooperative attitude of the client. According to the subcontractor, the client was always willing to discuss and to come to a mutually acceptable solution. This is where also risk is entailed according to the operations manager. In this particular case, the project team had to work with a really cooperative and flexible client which almost never referred to the frame agreement and did not stick to the contractual context. But this is not always the case. Thus, if the client was less supportive and stricter there would be definitely a huge problem for the subcontractor, not being able to confirm and request several elements in the context of no specific written agreement. Even in the same project, the subcontractor is aware of the fact that during project development a very willing client can easily turn to a non-willing client and that is why despite the pleasant working relationship there was always uncertainty and doubt in the subcontractor team. This is obvious from the way the project manager preferred to work during his transactions with the client. His preference was to adopt and follow a formal

procedure when variations did occur according to the guidelines provided in the frame agreement even though the client did not require it at all. Moreover, a proactive attitude is recognized from the side of the subcontractor since due to the absence of variation guidelines, the project manager was making a very clear variation register which he communicated always on time to the client to get approval for each single point in order to avoid ending up with discussions afterwards. This is a clear indication of the preference of the subcontractor to follow the contract in order to feel secure towards the client and any potential disagreements.

On the other hand, it should be pointed out that some degree of freedom is perceived as a facilitating factor also for the subcontractor. The flexibility that this contractual agreement offered corresponds to less time-consuming process for the subcontractor which does not have to change and adapt procedures, documentation and standards already followed and used in order to comply with the contract. Furthermore, such a contractual context enables the addition of scope by issuing just an extra PO instead of drafting a detailed contract. Apart from the practical issues, this contractual agreement offered room for negotiation during the whole project development as in this particular case there was no typical negotiation phase prior to contract award. In overall, the poorly detailed contractual document which resulted in miscommunication regarding the scope, the absence of a detailed customized agreement as well as the preference of the client not to follow the contractual context indicate a *medium to low* level of contractual governance.

5.4 Project D

5.4.1 Case Introduction

Project D is located in the German sector in the North Sea in which Company X was the subcontractor of Company G, the main contractor. The project was executed in 2016 under a lump sum remuneration scheme. The agreement signed between the main contractor and the subcontractor was a *Back-to-Back subcontract*. The main characteristic of this type of contractual agreement is that the main contractor is transferring all obligations and liabilities towards the owner/employer to the subcontractor. This type of contracting is implemented widely since from the owner perspective it is much convenient and desirable to establish only one legal arrangement and contractual relationship with the main participant who is held the unique party for all responsibilities. Likewise, the main contractor aims to pass all

responsibilities and liabilities to the subcontractors as predefined with the owner of the project so that no or minimal obligations and liabilities are allocated to this party, the main contractor.

The main contractor is a sister-company of the subcontractor. This affects to a great extent the procedures followed both during negotiations and execution since there is much familiarity in the relationships among people involved in both companies as both parties form subsidiaries of the same parent company and thus share common interests. As the project manager of this project stated, the back-to-back contract not only was an indispensable, positive and essential complement in the set-up of the project but also pointed out the implications of the absence of such a contract in other cases. In particular, it is very common in the majority of projects that Company X works with Company G without signing any contract at all. The main reason is that both companies supply their services under the umbrella of the mother company and thus one main contract exists and includes all scope of work. The latter did not occur in this particular project but sets up the history of the collaboration between those two partners having a serious impact on the trust that is developed between them as it will be further explained.

5.4.2 Relational Governance and Cooperation

The overall collaboration between the two entities is not characterized as very pleasant and smooth. This may seem paradoxical since both parties involved are subsidiaries of the same parent company but there are several fundamental reasons that led to this development. First of all, the main contractor, Company G, is a large company with many project teams. For this particular project, the project team of the subcontractor collaborated for the first time with the specific team from the main contractor. In addition, there were many changes of the project managers from the subcontractor side which is of course not desirable from the contractor point of view, although this fact did not influence the overall cooperation as per interviewees' statements. The working relationship was not characterized problematic but it was clear that there was no familiarity among the project teams. However, all people involved are aware of how cooperation between those parties normally is done which may have influenced the overall relationship in the background.

Mistrust feelings were recognized in project team member's statements that have as main origin the negative pre-history. In particular, the fact that in most projects there is no standalone

contract between the two parties evokes a number of consequences in the perception of participants. Each time, the cooperation depends on the good will of each project manager and contract manager since there is no fixed policy followed. Practical issues are often very common in many projects due to the absence of a contractual agreement. In fact, there are even cases where the contractor delays the payment to the subcontractor since no payment schedule exists, calling upon the payment schedule with the client. What is also important to mention is that there is a contradictory set-up of the cooperation between those two companies since in front of the client both sides function as one entity –this is the reason why the subcontractor had also direct contact with the client in contrast to the other cases – while in practice Company X operates as the subcontractor of Company G in the supply chain.

“Our communication was normally rather informal, daily telephone calls, no official meetings”

The previous cooperation with this contractor has influenced to a great extent the feelings developed in the project team about the other party. Although there were no incidents of miscommunication or major disagreements to mention, the dominant impression about their collaboration is that the subcontractor did not trust completely the main contractor and was quite suspicious during project development. Statements such as *“The project engineers of this partner are highly competent, professional and we always believed the information provided by them”* and *“We have worked with this contractor often in the past and it has always been fair in its negotiations with us”* were ranked with a relatively medium score. In addition, the subcontractor did participate in monthly meetings with the client together with the main contractor in order to provide their update on their scope of work. However, in general the main contractor is the party that had to report to the client which means that the subcontractor did not have the overall picture of the project progress although it was part of the general meetings and was allowed to a certain level to have a one-to-one conversation with the client. In fact, the project manager stated that he didn’t feel comfortable with how things could have been already communicated to the client through the main contractor and what he should have mentioned and to what extent during the general monthly meetings. A direct communication with the client and no intermediate chain in the communication is as identified much preferable and desired from the subcontractor point of view. Therefore, the poor previous collaboration and experience of “fights” within project teams, the preference to cooperate with a different contractor in the future as well as the evident

discomfort to depend on the other party regarding what is communicated to the client from a *low* level of trust.

5.4.3 Contractual Context

According to the interviewees, the contract does relatively specify major principles or guidelines for handling unanticipated contingencies. But it does not provide precisely alternative solutions for responding to various contingencies. An informal setup is also applied as it is the case when collaborating with this specific party. In this project, it is considered a unique case that a back-to-back contract is used. The prevailing opinion among the members of the project team is that a back-to-back contract is also not the ideal contractual background. The scope that the subcontractor executes is considered small compared to the overall magnitude of the project which means that the terms and conditions of the main contract are not applicable, at least the majority of them. Reading through all the terms and conditions and communicating to the main contractor what is applicable and what should be removed is a highly time-consuming process with many negotiations involved. From the contract manager point of view, it is preferable to have a separate contract that depicts the limited scope of work and the corresponding terms and conditions. Project teams also emphasized that the only partner with which the subcontractor deals should be the main contractor and that a clear and direct relationship under a concrete contractual frame is considered the ideal scenario.

“Working with this partner is very complicated. Every time our collaboration depends on the contract managers of each project team. We may have a contract with even more specifications commercially and technically than the main contract with which we have to comply or no contract at all. It is always a surprise which of the two extremes will happen.”

The subcontractor didn't have to follow strictly the contract. The informal procedures that exist normally between the two sister companies were applied also in this case. The project manager emphasized that no matter how cooperative the other team was, it was very important that the contract included a clear scope, the variation rates, the payment schedule, price details on what it is included and the liquidated damages. How detailed the contract is depends on the contract manager that is involved in each project. There are several contract managers in the main contractor that want to add their personal input in the contract while some project managers

prefer a simple PO since both parties know each other pretty well and drafting a contract while executing the required negotiations is very time-consuming. The simple and short contractual agreement combined with the informal setting that was adopted with this contractor defines a *medium to low* level of contractual governance.

5.5 Cross-Case Analysis

Based on the description and analysis of each case study an overview of the trust developed in each project and the rigidity of the corresponding contractual context is presented in Figure 5.1. Taking into consideration the peculiarities of each contractual environment, the characteristics of project settings as well as the influence of different actors involved in each case, it seems reasonable why the level of trust and contractual governance differ among the case studies, providing the fundamental evidence for deriving conclusions on the relationship of both variables and their influential factors.

Level	Project A	Project B	Project C	Project D
High	CG	CG		
	RG	RG		
Medium			RG	
			CG	CG
Low				RG

Figure 5.1 Comparison of level of trust (RG) and contractual governance (CG) among case studies during execution phase.

The main observation is that trust is considerably linked to the contractual context. In Project A and B where Contractual Governance are ranked as high, trust is also identified high whereas in projects C and D where the contractual context is not strictly defined and well-detailed, the level of trust is lower. As a consequence, it can be inferred that the contractual context stimulates the development of trust between parties. This relationship and origin of influence – trust dependency on contractual governance – concerns the execution phase where both types of governance are applicable and is consistent in all cases. According to the data, a concrete and well-defined contract regardless of its rigidity is a prerequisite for the establishment of a good cooperation and the development of trust.

A profound analysis of the compiled data reveals also the existence of certain patterns among the cases. These patterns are categorized and linked to key factors that were disclosed during the examination of each case and contribute to the determination of the main influences of the correlation of both research variables.

Elements	Project A	Project B	Project C	Project D
Trust	Medium to High	Medium to High	Medium	Low
Contractual Governance	High	High	Medium to Low	Medium to Low
Key Factors	<ul style="list-style-type: none"> ◦ Good relationship in high management level ◦ Standardized documentation & procedures ◦ Clear Company Policy 		<ul style="list-style-type: none"> ◦ Cooperative & Flexible Client ◦ Project Managers' Input outweighs Company Policies ◦ Ambiguity - continuous discussions 	<ul style="list-style-type: none"> ◦ Contractor- Subcontractor as one entity in front of Client ◦ Sister Companies - Informal Procedures ◦ Project Manager's Input outweighs Company Policies

Figure 5.2 Main findings per case study.

- ❖ *Contractual Governance as an indispensable safeguard of parties' collaboration:* Taking into account the positive views in projects A and B where contractual governance is high and the doubt and mistrust feelings in project C and D where contractual governance is lower, it can be concluded that a concrete contract is considered essential in order to reassure a smooth and efficient collaboration. The subcontractor is not dependent on the cooperative behavior and attitude of the various project members of the main contractor and less discussion is required. In addition, as it is recognized by the professionals in the industry, relationships are highly vulnerable and susceptible to changes over time. One single event can destroy the pleasant atmosphere in the cooperation built so far and restricts trust among parties. Therefore, a decent contractual context which includes well-detailed clauses and guidelines to adapt to unanticipated changes provides stability and the confidence to the subcontractor that project development evolves without implications and regardless of the interpersonal relationships. This finding is aligned with what literature proposes, namely the significance of contractual governance as a relationship safeguard against opportunism (Cao & Lumineau, 2015).
- ❖ *The degree of desired contractual rigidity depends on actors' experience and position:* There is a different perception of the necessity of rigid contracts according to the role of

the interviewee in the company. As it has been already explained, the members of the project team, project managers and project engineers, have expressed their preference towards concrete, well-detailed contracts where everything, even every minor detail is determined and little room for different interpretation of contractual clauses is allowed. Whereas, the operations manager and contract manager perceive the drafting of more flexible contracts as a challenge in order to evoke future discussions and manage to obtain eventually even better results than the ones agreed initially. Therefore, according to their perception, contractual governance is a variable that should depend on the type of project and the players in the game each time. Based on the project context, a different approach should be adopted accordingly. The client should be reconsidered and the rules in the playground should be known as well as the level till which they can be bended in order to achieve the highest return for the company. It should be mentioned though that the contractual context, its type and rigidity, depends to a great extent on the requirements and wishes of the main contractor. However, the subcontractor can still benefit from that flexibility, when applicable, and opt for the optimal outcome.

- ❖ *Contract negotiations and execution are acknowledged as two separate phases that do not necessarily affect each other:* The main reason is that the people involved in each phase are different. For instance, for a specific project, negotiations may have been a difficult procedure leading to a rigid contract. This challenging and demanding mood is not depicted in the execution of the project since the project team receives a contract and implements it by communicating with other people from the main contractor. Thus, execution wise, the existence of a difficult contract manager during negotiations has not major influence. It seems that it is more important for the actors involved the overall feeling about their cooperation with the contractor from previous collaborations rather the relationship developed during negotiations.
- ❖ *Good relationship in high management level can outweigh differences in project teams:* This constitutes one of the key factors that were revealed during the analysis and tends to influence to a great extent the outcome of parties collaboration. This influence is identified especially in projects A and B where the existence of a good relationship in a high level between the main contractor and the subcontractor was emphasized. This factor is considered of high importance since it can outweigh the involvement of different

characters each time and their influence. This particular finding, the importance of managing relationships over time at a senior level is also identified by Suprpto (2016). Although the latter refers to the relationship between the owner and the main contractor, this outcome seems to be dominant regardless of the industry, size of companies and relationship in the supply chain. On the other hand, in case D where there is a background of problematic collaboration and not a clear policy introduced by the senior level, frequently project teams experienced serious disagreements which ended up in disputes that had to be resolved in a high management level. As a result, apart from the time-consuming process and loss of energy that such occasions involve, a history of poor collaboration is settled. Thus, there are always potential disagreements, but what is important is the way the players manage to find solutions without destroying the basic relationship. A difficult contract manager during negotiations can render the whole process more “painful” but this doesn’t mean that the relationship between both parties is identified as a poor one.

- ❖ *Previous collaboration can affect either positively or negatively and to a great extent the relationships of both parties:* In the case of good previous cooperation combined with a solid contractual context (projects A and B), the subcontractor is familiar with procedures followed, contractual clauses, contractor’s policies and requirements which saves time and renders the overall performance much more effective. On the other hand, a history of misunderstandings, problematic collaboration, different contractual rigidity depending on the contract manager involved each time as in project D, creates an environment of uncertainty and restricts trust developed from the subcontractor side towards the main contractor even if their current collaboration evolves without any problems and implications.
- ❖ *The type and rigidity of contract depends basically on main contractor’s input and context:* This party imposes actually the contracting strategy and the subcontractor has to follow it. The client, its organization policy as well as country regulations and legal context determine to a great extent the final contractual result. Subcontractor is often requested to comply not only with client’s requirements but also with country’s regulations. As it is the case in UK for instance, there is a notable strictness with regulations. The LOGIC-based contracts that are applied by these clients are very detailed,

with a small part in which special conditions are amended. The presence of specific contract managers may render the negotiations more difficult and change the level of contract rigidity but is not considered the predominant influential factor for the level of the established contractual governance.

- ❖ *Familiarity among both parties does not necessarily signify low level of Contractual Governance:* It is not always a panacea for the establishment of a good relationship between a main contractor and a subcontractor as it cannot reassure that relationships are preserved and well retained. On the one hand, in the context of high contractual governance with key characteristic the standardized documentation and procedures as in cases A and B, project teams can work efficiently and handle with great ease complex contractual documents. On the other hand, cooperating with a sister-company which signifies mainly informal procedures may lead to low contractual governance due to absence of a precise organization policy and the freedom that exists within project team to form the contractual context according to project manager's approach and intentions. It is paradoxical that many team members from the subcontractor stated that they would prefer to cooperate with another main contractor rather than the one from the same parent company. Too much familiarity like working as subsidiaries of the same company may impose more problems than expected. No rules or contract agreements, people forcing their own wills leading to disputes and an overall informal working environment can be often detected. Moreover, the absence of a strict contractual context enforces the dependence of a relationship on the attitude and behavior adopted by different people. In such a case, a concrete contractual context is considered indispensable and the establishment of procedures and rules mandatory.
- ❖ *The development of both types of governance, relational and contractual, does not seem to be linked to a specific project setting:* It turns out that the level of governance is not related to projects but reflects the organization itself. Project A and B share same level of trust and contractual governance even though different project teams were involved and unanticipated changes occurred in one of two projects. This reveals the significance and power of a stable contractual context that is introduced and respected as an organization policy from the side of the main contractor, guiding in this way people and securing

project development even if there are numerous different points of views, disagreements and unanticipated events.

Following the main findings from the cases, three main levels can be identified as depicted in figure 5.3. The degree to which these levels are dominant during the collaboration of the two parties influences to a great extent the type and magnitude of governance that is developed.

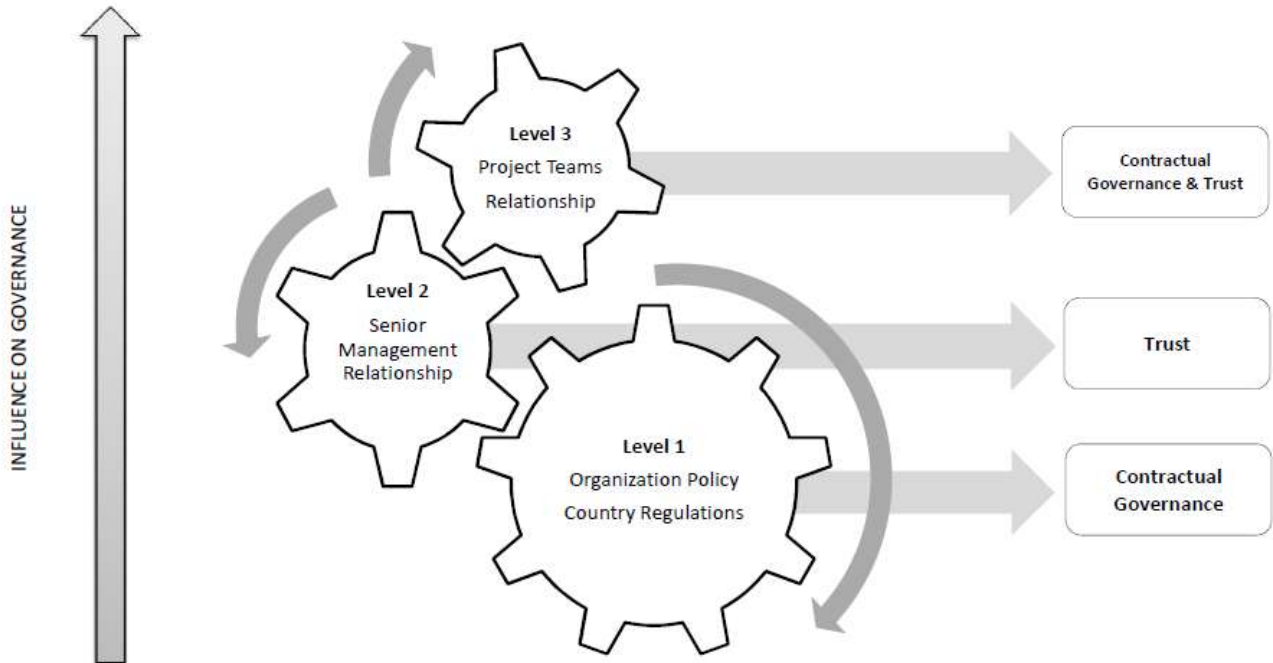


Figure 5.3 Levels of governance influence during project development.

In particular, Level 1 includes Organization's policy in terms of contractual strategy as well as how this strategy is determined by country's regulations. When this level is prevalent, a high level of contractual governance can be expected. Project teams are aware of procedures that must be followed, documentation is quite standardized and a specific contractual context is applied regardless of the project setting. Therefore, each party knows exactly its position in the supply chain, its room to act and its distinct role towards the owner of the project. A high level of contractual governance signifies less discussions and therefore little empowerment of people involved in the project teams. If this level is not that dominant as it is the case of sister-companies where there is no clear policy and strategy for a predefined contractual context, the overall collaboration depends on lower levels and governance is formed accordingly.

Level 2 depicts the relationship at a senior management level and how this influences the governance of project development. Following the analysis, a good relationship in this level contributes substantially to establish a good base for trust development among project team members. It is also crucial as it seems that such a good relationship can deter problems that rise due to different personal input from individuals who form Level 3. When the higher levels are not that prevailing, project team members become more important. Governance is mainly determined by the different characters that are involved in each project setting. Project Managers and Contract Managers can regulate the level of contractual governance in the absence of a company policy, enhance or deter the development of trust. In such a case, project outcome is vulnerable as it highly depends on the flexibility and willingness to cooperate of the other participants. Each character introduces its own input and according to the attitude and approach that it adopts, the contractual context can be more flexible and relational governance can be enhanced. The latter however constitutes also a risk in case parties' relationship is not retained as favorable as initially planned and anticipated.

5.6 Validation of Propositions

According to these findings, the propositions formulated earlier based on the literature study are evaluated below.

Proposition 1: The positive influence of trust during negotiation phase leads to less strict contractual clauses towards the subcontractor.

The contractual context that surrounds the collaboration between a main contractor and a subcontractor in the industry is mainly determined by the strategy adopted by the main contractor which also reflects its organization policy and the corresponding country regulations that form the legal background. The involvement of different characters each time influences undoubtedly the outcome of negotiations, however what is found to be the main factor of influence is contractor's main contracting strategy. This party's input defines to a great extent the rigidity of contractual agreements and the corresponding contingency adaptability. Furthermore, as it was detected, familiarity which is often a prerequisite for the establishment of trust can influence either positively or negatively the level of trust among parties. The key element for the result of such an influence is whether the context in which parties collaborate is based on a concrete

contractual framework or it is more related to informal procedures. It may be concluded that contractual rigidity is mainly influenced by policies and contractor's main strategy and secondarily by trust developed at an interpersonal level.

Proposition 2: High contractual governance as a result of rigid contractual clauses restricts the positive influence of trust during execution.

The analysis indicated that a high contractual governance level stimulates positive trust feelings among parties during execution. In fact, a strict and well-detailed contractual context arouses the development of trust, which basically occurs during execution where the contractual context is already defined and susceptible to minor changes. The main outcome is that concrete and highly specific contracts seem to be a significant safeguard at least from the point of view of the subcontractor. The fact that all procedures, technical and commercial details are predefined forms a fundamental basis for a smooth cooperation where it is known what both parties should expect, roles and responsibilities are distinct, enabling the development of trust feelings among them. On the other hand, a low level of contractual governance leads to further discussions and thus changes the execution phase to almost a negotiation phase where project teams are empowered to influence rules and procedures. In such case, actors seem more cautious and less willing to trust each other in the context of a vulnerable environment without any predefined concrete commitments.

Proposition 3: A high level of trust developed during negotiations can contribute to manage unanticipated changes during execution provided flexible contractual adaptability exists.

The main finding related to this proposition is that the negotiation and execution phase under the project setting and organization characteristics described in this study are two almost independent phases. The individuals that participate in each phase are different. As a result, the project team that undertakes the project during the execution phase receives the contractual agreement as a result of the negotiation phase. The prevailing atmosphere that was developed at an interpersonal level during negotiations is not reflected during execution. However, what can contribute to a great extent to manage unanticipated changes and any other unforeseen incidents

related to both parties' collaboration during execution is the basic relationship of both companies at a senior management level. Successful previous collaboration and good high management relationship can outweigh any minor disagreements in project team level and thus preserve cooperation during the vulnerable work environment of execution. Finally, the flexibility of contractual adaptability is perceived as a positive element according to the role and experience of individuals in the organization. In fact, according to project team members changes are better handled when contractual governance is higher and every minor detail is defined. While managers that participate also in negotiations, perceive flexible contractual adaptability and lower term specificity as more beneficial since a window of opportunity for a better final outcome for the company is offered. However, the latter entails also a risk and this is why this strategy is adopted after careful consideration of the client and the characteristics of each project setting. Thus, a predefined rigid contractual context seems to be the safest path and the preferable option although it might not lead to the highest return for the company as it is the case with continuous discussions on open topics throughout the whole project development.

CHAPTER 6.

CONCLUSION

6.1 Answer to Research Question

This research has investigated the relationship developed between a main contractor and a subcontractor in the offshore industry. This relationship comprises mainly of two parts, the contractual context that governs their collaboration and the relational part which reflects the extent to which trust is developed. Both types of governance are acknowledged by literature to be supplementary in order to achieve a successful collaboration, while many authors emphasize even more the positive contribution of the relational part in parties' relationship.

The analysis of data compiled from the side of a subcontractor in the industry has resulted in identifying several characteristics of how this relationship is formed over time and the main factors that influence its nature, whether the contractual part is more dominant than the relational part, and its magnitude.

CRQ: How does Trust interrelate with Contractual Governance between a Main Contractor and Subcontractor during the negotiation and execution phase of a project in the Offshore Industry?

The relationship between a main contractor and a subcontractor in this industry is prone to different influence during each project phase. The negotiation phase seems to be more affected by the policy adopted by the main contractor, reflecting its organization and country regulations that define the contractual context of the collaboration. Cooperation with a contractor whose clear policy is to adhere to a highly detailed and rigid contracts, offers little room to individual characters to impose their own approach. Standardized procedures and formal settings enhance trust feelings as both parties are confident that their interest and benefits are preserved. The result of this phase, namely the contractual agreement determines to a great extent the level of trust that exists between both parties during execution. Although both phases are acknowledged as two distinct phases with different people involved, the contractual outcome of negotiations defines the approach that project teams adopt during execution. High contractual governance is considered in many cases the preferable context during execution as it functions as a safeguard. On the other hand, incomplete, poor detailed and too flexible contractual context is perceived as a high risk since in such a case project development is greatly dependent on people's approach, cooperativeness and good will. Poor previous cooperation and informal settings, as it may be the

case also in sister companies, can limit substantially trust among project members and cause major disagreements at a project team level. Loss of energy and time is required at a higher management level to resolve disputes and restore the fundamental relationship settled between both parties.

In overall, there are three levels identified that influence which type of governance prevails in each phase and its magnitude. The highest level reflects mainly the organization of the main contractor itself and the regulations that correspond to that country. When this level is dominant, higher contractual governance and less empowerment to the lower levels can be expected. The second level that constitutes the senior management seems to influence more the degree of relational governance. A good established relationship of both companies at this level can contribute to a great extent to manage unanticipated changes and any other unforeseen incidents related to both parties' collaboration during execution. Minor disagreements in project team level can be outweighed, mistrust feelings and potential conflicts can be substantially restricted. When the two higher levels are not that prevailing, project teams that constitute the third level are empowered and can thus regulate governance levels. In this scenario, both types of governance are influenced and are dependent on individuals' input, requirements and approach.

6.2 Recommendations for Companies in the sector

Taking into consideration how relationships between a main contractor and subcontractor in the industry can evolve and the factors that have a major influence on them, the choice of the party with which a company enters into a contractual agreement and the strategy adopted are of high importance.

First of all, it is essential that each company is aware of how the other party operates. The policies that are being applied, the organization structure as well as the contractual strategy that is usually implemented are considered fundamental because they not only affect the contractual context established but also influence greatly the whole project development and thus the final outcome. By identifying which of the levels that influence the development of each type of governance is more dominant in each organization, a different strategy can be developed and implemented. The latter suggests that a flexible approach towards the clients should be adopted that varies according to the specific project setting and contractor's requirements.

The main risks identified are the potential discrepancies due to the different and conflicting individual approaches as well as a low level of established contractual governance. In such cases, a good relationship at a senior management/company level tends to be a powerful safeguard of both parties' collaboration. Such relationship, therefore, should be preserved and further enhanced when considering conducting future business with a specific party. Moreover, when a low level of contractual governance is recognized, the company should consider meticulously whether such collaboration should take place. If the level of governance is not considered forbidding, additional measures should be taken in order to reassure a smooth project development. Actions such as specifying all open topics as early as possible in the project, enhance monitoring of activities and logging of information can contribute to retain a better control. Furthermore, a proactive attitude by following strictly company's adopted procedures and even introducing new ones as well as adhering to a formal protocol despite the informal approach of the client is considered essential. Finally, the meticulous composition of project teams could serve as a shield towards potential development of conflicts at an interpersonal level.

6.3 Reflection and Limitations

The research is conducted from the perspective of the subcontractor. The author had the opportunity to work in the environment and have access to documentation of a Company which often works as a subcontractor in the offshore industry. All case studies selected are projects in which this company worked as a subcontractor under the owner/client of the project and the main contractor, executing a part of the total scope of work. This part includes basically activities that have to do with the protection of cables and foundations of platforms in the Oil & Gas industry or monopiles in offshore wind farms. Interviews were conducted only with project teams from the subcontractor as the main point of view in this study is this level in the supply chain.

The company has considerable experience in this specific industry and it is well known by the main players in the market. The fact that it has executed projects worldwide reveals its good reputation, high competencies and competitiveness as well as its openness to work in different

locations and markets. The latter is something that the author experienced herself through her presence in the company and the interaction with employees with different cultural backgrounds.

However, there are some limitations regarding the applicability of the results of this research since there are several characteristics that are influenced from this specific work environment and that may alter the results in a different company context:

- ❖ The location of all projects is in North Sea. This is one of the most important markets in the offshore industry. However, it should be noted that depending on the country and the client different regulations may apply. This has a huge impact on the contractual context and on the level of freedom that can be developed in participants' relationships. Therefore, the same company when operating in another area, for instance in the Gulf of Mexico, may encounter other difficulties and the results of a comparable study may be substantially different.
- ❖ In this company and more specifically in the projects chosen as case studies, there is a clear distinction between the tender team involved in negotiations and the project team involved in the execution. However, in other projects, it would be probable that the project team is also involved in negotiations. It is sometimes the case that project engineers join negotiation rounds in large and highly complex projects in order to get the pre-history, which can serve later on as an advantage for them. When being aware of certain scenarios that have been already discussed during negotiations, the project manager is capable of dealing with certain issues with better results during execution. If this is the case, then the results of the study would vary since the people that are mainly involved during execution are also influenced by the negotiation atmosphere and the corresponding relationship of both parties.
- ❖ The scope of work performed by this subcontractor is also a critical factor. The type of activities, the extent of the scope as well as the complexity play a huge role on the requirements of the client and its strict approach towards the subcontractor.
- ❖ The current set-up and procedures followed by the specific subcontractor may influence project development and the relationships among people involved. Thus, it is suggested that the results of this study can be reflected also in companies with similar set-up in company organization as described in paragraph 4.1.2.

- ❖ Finally, trust as one of the main research variables is a sensitive topic which is hard to talk about. Taking into account the fact that the case studies were all successful projects with no major problems occurred, the author was able to retrieve data from interviewees who were willing to disclose such information. However, it cannot be sure if all relevant incidents were revealed that could redirect the results of this study. Likewise, contractual governance may seem a more tangible topic but since it concerns mainly contractual clauses, subjectivity when legal text is being interpreted is entailed.

6.4 Recommendations for Further Research

Taking into consideration the findings of this research as well as the relevant limitations, there are several elements that influence to a great extent research results and need to be further investigated and elaborated.

- ❖ Trust is a perception based concept and a highly sensitive topic to disclose information about. In addition, although the main perspective in this study is from the point of view of a subcontractor in its collaboration with a main contractor, data was only collected from this party. Thus, considering also the subjectivity of individuals about their trust feelings, it is deemed very important to conduct such research when both sides can be interviewed and therefore trust developed in a single relationship can be measured based also on main contractor's perception.
- ❖ In this study, there is a clear distinction between the people involved during negotiations and execution. The latter explains why trust feelings developed during the first phase are not reflected during the second phase. Therefore, it is worth investigating the influence of the first phase on execution when the main project members are also participants in discussions around the negotiation table. The correlation of both types of governance could follow a different pattern than the one described in this study which is considered of high academic significance in order to complement this research.
- ❖ Another factor that was detrimental in this research is the size of the subcontractor and the people that are involved in the projects. More specifically, in several positions such as the contract manage role, there is mainly one individual who handles all related projects. The latter means that the perception of the subcontractor as a company about the various

CHAPTER 6. CONCLUSION

different main contractors is based on one individual who cooperates each time with different people from the other side. In contrast, in many contractors that also function as subcontractors there are several contract managers in each project team that provide their own perception of things. Thus, a similar investigation in such an organization that would include the perception developed by one functional role in the company but by multiple sources would probably highlight some aspects not only in a company level but also in an individual level.

CHAPTER 7.

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Appendix A – Interview Protocol

This protocol is designed in order to facilitate the procedure of conducting interviews as well as to enable the comparative analysis of the case studies. For this research work, a combination of statement formulation for evaluation by the interviewees as well as a set of semi-structured questions is considered the most adequate method of extracting the desirable data during the interviews. The main reason is that on the one hand the semi-structured questions guide the interviewee while providing him some space to expand his views and enlighten different aspects each time depending on the peculiarities of each project. On the other hand, the evaluation of the statements provided by the author can serve as a useful tool towards the measurement of all defined elements in this research, while at the same time facilitating the procedure of identifying the “weak” points in each project and thus allowing the author to go deeper whenever needed by asking additional specific questions. Therefore, it is considered meaningful that the questionnaire is filled in the first half of the interview so that depending on the answers the interviewer can focus on particular aspects in the second half with the semi-structured questions.

Based on this rationale, the interview is structured in two main parts and is intended to last around 45 minutes. At first, the author presents herself and provides a small introduction of the performed research work as well as the corresponding research objective. Then, the interviewee is asked to present himself/herself, his/her professional experience in general and specific involvement in the particular project. The latter will allow the author to estimate the interviewee’s perspective on the research topic. An introduction of the project characteristics as well as its particularities are discussed at this moment.

After this introductory part, the questionnaire is requested to be filled. This questionnaire consists of 13 concise and to the point statements in order to gather the required data in a comfortable and effective manner without stressing too much the interviewee. Once this stage is completed, a package of predefined questions is inquired. However, it must be pointed out that there is freedom to change the content and focus of these questions depending on the questionnaire responses. It is believed that by doing so, the interviewer can investigate in a deeper level each particular case study revealing aspects that were not evident at first glance.

s/n	Research Variable	Research Element	Statement	very low Strongly disagree (-)	low Disagree (-)	medium Neutral	high Agree (+)	very high Strongly Agree (++)
1	Form of trust	Competence-based trust	The project engineers of this partner are highly competent, professional and we always believed the information provided by them					
2		Integrity-based trust	I was confident that this partner would look after my interest throughout the project development					
3		Intuitive-based trust	My "gut feeling" did not drive me cautious when dealing with this partner					
4	Project phase of trust development	Timeliness	During the negotiation phase, I believed that the other party did not have any hidden agendas.					
5		Timeliness	During the execution phase, I felt comfortable being dependent on the other party					
6	Factors facilitating trust development	Previous Collaboration	We have worked with this contractor often in the past and it has always been fair in its negotiations with us					
7		Reputation	This party has a good reputation with high level of trustworthiness					
8		Expected future collaboration	We will definitely work together with this contractor in the future					
9	Contractual Governance	Contingency Adaptability	The contract specified major principles or guidelines for handling unanticipated contingencies					
10			The contract provided precisely alternative solutions for responding to various contingencies					
11		Term Specificity	Contractual terms with regard to risk allocation were to a great extent specific					
12	Contractual Complexity	Contractual Complexity	Term specification was considerably adaptive for issues that were uncertain and could change in course of time					
13			We have detailed, highly customized contractual agreements specifically designed with this partner					

Questionnaire: List of Statements provided during the interview (Cao & Lumineau, 2015; Ke et al., 2015; Poppa & Zenger, 2002; Zhang et al., 2016; Luo, 2002) .

The semi-structured questions comprising the second part of the interview are the following:

1. Have you worked with this partner in the past and did this influence your collaboration and the process followed? How would you describe your cooperation with the other party during each phase?
2. Did you experience moments of misunderstandings or miscommunication? What was the cause? Was there contradiction between what was told orally and what was later on requested?
3. Do you consider the contractual terms to be complete, clear and detailed? Do you prefer a rigid-strictly defined or a more flexible contract that presupposes a collaborative relationship among parties?
4. Where there any unanticipated changes during the execution phase for which the contractual terms were not specified or detailed enough? How did you encounter such situations?
5. Did you notice in overall any particular changes in your collaboration with the other party during the project development?

Appendix B – Overview of Questionnaires

s/n	Statements	Project A					Project B					Project C					Project D				
		Strongly disagree (--)	Disagree (-)	Neutral	Agree (+)	Strongly Agree (++)	Strongly disagree (--)	Disagree (-)	Neutral	Agree (+)	Strongly Agree (++)	Strongly disagree (--)	Disagree (-)	Neutral	Agree (+)	Strongly Agree (++)	Strongly disagree (--)	Disagree (-)	Neutral	Agree (+)	Strongly Agree (++)
1	The project engineers of this partner are highly competent, professional and we always believed the information provided by them				•				•					•				•			
2	I was confident that this partner would look after our interest throughout the project development				•				•					•					•		
3	My "gut feeling" did not drive me cautious when dealing with this partner				•				•				•						•		
4	During the negotiation phase, I believed that the other party did not have any hidden agendas.				•				•				•						•		
5	During the execution phase, I felt comfortable being dependent on the other party				•				•				•				•				
6	We have worked with this contractor often in the past and it has always been fair in its negotiations with us				•				•										•		
7	This party has a good reputation with high level of trustworthiness				•				•					•					•		
8	We will definitely work together with this contractor in the future				•				•							•			•		
9	The contract specified major principles or guidelines for handling unanticipated contingencies					•				•				•					•		
10	The contract provided precisely alternative solutions for responding to various contingencies				•				•					•				•			
11	Contractual terms with regard to risk allocation were to a great extent specific					•				•				•					•		
12	Term specification was considerably adaptive for issues that were uncertain and could change in course of time				•				•				•						•		
13	We have detailed, highly customized contractual agreements specifically designed with this partner					•				•			•					•			