

Contractual - and Relational Governance Structures

- a Qualitative Study of Regional Differences in Contract Type and
Contract Formalization within the Drilling and Well industry

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*This Master's Thesis is carried out as a part of the education at the
University of Agder and is therefore approved as a part of this
education. However, this does not imply that the University answers
for the methods that are used or the conclusions that are drawn.*

PREFACE

This thesis marks the end of a long journey towards a Master degree in business administration from the University of Agder. It has been some challenging years with a transatlantic move, new job, promotions, young kids and a new house, but it is all coming to an end now. And it feels right.

First, I want to thank my wonderful wife Ellen who has sacrificed so much for letting me complete this work. I could never have completed this without your continuous support and encouragement. I can't wait to spend more time with you, and watch Noah and Liam discover new things every day. I love you.

Second, I want to thank my supervisor Otto Andersen for his continuous support on this journey. Your positive attitude, direction and focus on efficient and effective presentation of the material have brought this thesis to a higher level.

Third, I want to thank my competent legal support, good colleagues, striving contractors and professional network for all your input.

Houston, May 20th 2011

Preben Enger

ABSTRACT

With rig-operation rates of a million dollars a day it is absolutely necessary to ensure that all drilling and well contractors perform satisfactory and deliver according to contract. There are many ways to organize the related transactions and potential associated relations to ensure efficient governance structures. In this thesis, I have analyzed actual contracts and interviewed a range of industry professionals concerning contractual - and relational governance. The findings indicate that the formal governance is mostly neoclassical, but that it is complemented with informal relational contracts, and when a relationship is well established this relational governance sometimes supersedes what is agreed to in the formal contracts. The results further indicate that formal contracts on the Norwegian Continental Shelf appear to have a higher degree of formalization than those of Gulf of Mexico, and that the main factors that impacts the degree of formalization are the market conditions, security of supply, and risk mitigation.

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1 Introduction

1.1 Background

The offshore drilling - and well services industry is characterized by global competition, complex services, exposed working conditions, and high costs. New markets, increasing competition, and stricter regulation are consolidating the industry through mergers and acquisitions. The “easy oil” has been produced, and the more complex, riskier and costly well operations are therefore now required for the production of oil.

With this in mind, oil and gas companies aim to obtain safe and efficient drilling operations at the lowest possible cost. The way the industry is structured today, the oil and gas companies cannot drill a well by them selves. Actually, 95 – 98 percent of the cost of drilling a well comes from contracted services, and approximately 30 percent of these are related to drilling and well services. The complexity of the work, and the high degree of value creation performed by contractors, necessitates a close relationship between buyer and seller, and a comprehensive control system.

In Norway, drilling and well services are contracted through rather detailed long term exclusive agreements with duration of 3-4 years, with a firm scope, technical specifications and associated compensation. In the US Gulf of Mexico, on the other hand, most companies have evergreen agreed-upon terms and conditions without a firm scope, and they quote individual jobs on a much more frequent basis.

The focus point for this thesis is the documentation of the current governance structures and reason for any regional difference in these. Therefore, much time has been spent studying relevant governance mechanisms and criteria for choosing governance that is fit for purpose. Fundamental and applicable publications and theories from leading scholars is in this respect, amongst others; “Nature of the firm” by Ronald Coase (1937), “The Economic Institutions of Capitalism” by Oliver E. Williamson (1985) and Ian MacNeil’s “The Many Future of Contracts” (1974) and “The New Social Contract” (1980).

The importance of proper management of contractors has in the past year become evident due to the Macondo accident in the Gulf of Mexico. The accident led to the loss of 11 lives and the biggest oil spill in US history. The operator, BP, has now sued its contractors Transocean, Halliburton and Cameron for 40 billion dollars for being negligent and/or for

concealing information. Could such an accident have been prevented if there had been different governance structures that facilitated better communication between the parties, rather than lengthy contracts filled with penalties? It is too early to answer this question, but the way contractual relationships are structured is clearly relevant and applicable as an area of investigation.

The motivation for addressing contractual - and relational governance structures, and regional differences between the Norwegian Continental Shelf and the US Gulf of Mexico, comes mainly from the perception about comprehensiveness of the US law, and complexity in US contracts. Having somewhat of a knowledge about contracts for the Norwegian Continental Shelf and evaluating this up against the US contracting practices sounded interesting considering the continuous globalization of the drilling and well industry and the increased focus on supplier/client relationship management.

1.2 **Problem description**

This thesis seeks to identify current governance structures, and explain the difference in governance structures between the Norwegian Shelf and the Gulf of Mexico by answering the following four questions:

- 1) What types of contracts are used for drilling and well services on the Norwegian Continental Shelf and the US Gulf of Mexico?
- 2) Are there any differences in the degree of formalization (content and structure) in contracts applicable for the Norwegian Continental Shelf and the US Gulf of Mexico, and if so what are these differences?
- 3) What factors may have impacted the degree of formalization?
- 4) Does the type of contract and degree of formalization change over time? If so, how does it change?

1.3 **Delimitations**

Cost drivers and risk picture are very different between onshore and offshore drilling operations. Contracts are therefore also different. It is therefore important to emphasize that this thesis focuses on drilling and well services contracts for offshore operations only.

1.4 **Disposition**

This master thesis consists of eight chapters and two appendices. Chapter 1 is this introduction. Chapter 2 provides the theoretical framework. Chapter 3 gives a brief overview of the relevant business context. Chapter 4 describes the methodology for data acquisition and the use of the collected data. Chapter 5 contains the results and findings from the data acquisition. Chapter 6 provides the discussion and argumentation, chapter 7 contains the conclusion, and chapter 8 lists the references used. The appendices give further information on key theoretical aspects related to relational contracts, and include the interview guide.

2 Theoretical Framework

2.1 Introduction

The theoretical framework is meant to give an overview of the theories relevant for this thesis, and later be the academic basis in discussions and rationale for conclusions. First I will touch upon the basic economic organization. Following this I will take a closer look at transaction cost economics and analysis (TCA), the relevance of TCA, and its important behavioral assumptions.

The latter part of this framework focuses on contract theory, from discrete to alliance contracts with a focus on relational contracting theory (RCT). This section will end up in a discussion on contract types and which ones that are relevant for this thesis. Finally, an attempt at a definition for degree of formalization, and elements impacting degree of formalization.

2.2 The Economic Organization

Milgrom and Roberts (1992, p. 19) defines the economic organization as “*created entities within and through which people interact to reach individual and collective economic goals*”. Such organization can either be the economy as a whole or the independent firm or corporation, which this thesis concerns. The key characteristic of an organization at this level is that it is considered a separate legal entity with the right to enter into contracts, try it out in court and doing so in the name of the organization and not the individual belonging to the organization (Milgrom and Roberts, 1992).

The ability to enter into binding contracts is not only critical for one of the major economic analysis of organizations, but also for the impact of human behavior which will be thoroughly elaborated on later in this chapter.

Transaction cost theory tells us that the basic unit for analysis of the economic organization is the transaction of goods and services, and how this is organized within the organization (Williamson, 1985 and Milgrom and Roberts, 1992). Unless we are talking about a monopoly situation, it is assumed that that an organization would seek efficiency in organizing these transactions. Efficiency as a term is widely used in organizational and economic theory, but for the matter of this thesis we will define efficiency as doing the things right as opposed to doing the right things (Drucker, 1973).

2.3 Transaction Cost Theory

2.3.1. History of Transaction Cost Theory

The term transaction cost economics surfaced about 40 years ago, but originates as far back as the 1930's and is a micro analytical approach to studying the economic organization. This approach focuses on the transaction and the effects such transactions have on the organization, however not only concerning the economic aspect, but also relating to organizational theory and law (Williamson, 1985).

The legal aspect was attended to by Karl Llewellyn in 1931 where he addressed the need to interpret contracts with the original purpose and to think of them more as framework which in hindsight almost never depicted the actual working situation. At the time, focus was on interpreting the actual letters and words (legalistic approach) in the actual contracts which usually won through both in law and economics at the time (Williamson, 1985 and Williamson and Masten, 1999).

Chester Barnard's "The Function of the Executive" (1938) addressed the importance of organizational processes and cooperation versus organizational principles which had been the focus of organizational theorist at the time. Barnard emphasized the importance of the informal organization (focus on communication, self-integrity, personal relationships, etc.) within the formal organization. He also called attention to intended rationality, later renamed to bounded rationality, a key term in transaction cost economics which will be re-visited more thoroughly later (Williamson, 1985 and Williamson and Masten, 1999).

Frank Knight, John Commons and Ronald Coase did all make significant contributions to the study of transaction cost economics in the early 1900. Knight (1965, in Williamson, 1985) focused on the importance of human mind and behavior, and how organization should be aware of opportunism. Commons (1934, in Williamson, 1985) attempted to show that the purpose of economic organization was to enable trade through continuous relationships and customized governance structure, instead of letting such relations fail by pure market contracting. Commons was also the one who, in 1934 introduced the transaction, the transfer of goods and services from one individual to another, as the basic unit of analysis (Williamson, 1985 and Williamson and Masten, 1999).

Ronald Coase's "The Nature of the Firm" (1937) is known to be the path breaking contribution to transaction cost economics. Coase did not use the term transaction cost at the time, but the cost of using the price mechanism or market as we would say it today. In his article Coase tried to explain why we have organizations (or firms) running the economy instead of numerous self-employed individuals who have entered into contracts with one another trying to achieve the same purpose. Without organizing this in a firm under one management, you would have very high number of exchanges just to produce simple products. Imagine if every step of the assembly line was a new company and all the associated cost would have to be passed on to the finished product. The costs of these market transactions are just too high compared to the cost of internal co-ordination under one management (Douma and Schreuder, 1999). In his article, Coase (1937) further looked at when an organization would emerge and under what conditions one would hire instead of contracting out.

2.3.2. **Transaction Cost**

Transaction costs are costs associated with a transaction or a range of transactions between two or more parties. A transaction therefore indicates some kind of contractual relationship between the parties from the simplest form, in the way of a strict purchase (buying a Coke-a-Cola over the counter) to the more complex form in the way of a long lasting relationship (tendering, contract negotiations and contract administration). More specific, transaction costs are often divided into what is known as ex-ante (prior) and ex-post (after) transaction cost depending on a cost bearing activity related to the transaction itself that takes place before or after the agreement has commenced (Williamson, 1985).

In short, transaction cost analysis focuses on the cost of running the system. If this cost is so high that it offsets the production benefits in the market then it should be organized internally (Rindfleish and Heide, 1997).

2.3.3. **Transaction Cost Economics and Behavioral Assumptions**

Understanding the behavioral assumptions to transaction cost economics is essential, not only to obtain a better understanding about transaction cost economics itself, but also for the relationship between transaction cost economics and contracting. It is in the process of entering into a contractual relationship (ex-ante) or in the contract period itself (ex-post)

where these behavioral assumptions will make a difference and must be dealt with. Oliver Williamson puts this in perspective:

Any attempt to deal seriously with the study of economic organization must come to the terms with the combined ramification of bounded rationality and opportunism in conjunction with a condition of asset specificity.

(Williamson, 1985, p. 42)

2.3.3.1. *Bounded Rationality*

The assumption of bounded rationality, introduced by Herbert Simon in the mid 1900s, holds that humans intend to act rationally, but have limited ability to do so (Williamson, 1985).

This basically means that we as human beings cannot understand or comprehend all possible outcomes or consequences from all possible options in a given situations (Kolltveit and Reve, 2006). In other words, bounded rationality is the difference between complete knowledge and actual knowledge about a given situation. It is not a chosen delta, but due to our limited ability to access, remember and process information. Without this delta we would be able to conduct complete contracting, and thereby significantly reduce ex-post transaction costs/contractual issues (Williamson, 1985). A complete contract is defined as a “*hypothetical contract that describes what action is to be taken and payments made in every possible contingency*” (Milgrom and Roberts, 2006, p. 597). It is given that trying to compile large complete EPCI (Engineering, Procurement, Construction and Installation) or service contracts would entail enormous transaction costs just in writing the scope of work. Complete contracts, however, rarely appears in other than “purchase” transaction where product delivery, payment and consumption occurs at the time of order, for example when you buy a gum over the counter.

As for more complex business related contracts we are left with incomplete contracts, due to the presence of bounded rationality. This may leave room for greater ex-post cost, which may include:

- 1) Process cost associated with re-aligning a business relationship
- 2) Actual cost to realign the ex-post misalignments
- 3) Arbitration costs or sometimes even court proceedings

As a result of not being able to word out all possible contingencies, companies establish “*safeguards*” to protect against opportunistic behavior from the other party (Williamson 1985).

2.3.3.2. *Opportunism*

Williamson (1985, p. 47) defines opportunism as “self-interest seeking with guile”. In more practical terms behaving opportunistic would mean intentionally twist, distort or withhold information to confuse or mislead the other party. Without the risk of opportunistic behavior a contract would be able to govern all behavior. This risk is real, and present in most business related agreements. It often arises due to private or asymmetric information. Williamson (1985) further emphasizes that you cannot know for sure who will act opportunistic and certain ex-ante and ex-post safeguards should therefore be established.

Private information, although also important post contract, is often considered as basis for pre-contractual opportunism. From the insurance industry we recognize this as adverse selection where the people who are buying insurance do so because they perceive themselves to obtain an above average benefit under the insurance policy (Milgrom and Roberts, 2006). Milgrom and Roberts points to the examples of a pregnant woman who in the US may buy health insurance knowing that she is pregnant, or the car buyer who buys extended warranties because he knows that he will put the car into rough use. Both of these are examples of people who have private information that is not shared with the other party.

In the business world an example of pre-contractual opportunism can be someone who bids in low quality equipment or materials if he knows that there are no contract penalties for equipment and materials that does not meet specifications. There are of course ways to work around this and Milgrom and Roberts (2006) presents signaling and screening as methods that the buyer can use:

- ❖ **Signaling** – A method where the seller may seek accreditation or renown certification to prove to the seller that the business holds a certain standard or that the equipment meet specific requirements. Such accreditation or certification may separate a company from competition. This signals to the buyer that the seller holds a certain standard of quality and less effort may go into further qualification of the business or the equipment/materials in question.

- ❖ Screening – A method where the seller undertake an exercise to screen a number of available suppliers. A long list becomes a short list through evaluation of these suppliers against sufficient qualification criteria, both on paper and through actual site visits. The screening may be performed on a product, process, quality or company level, however most evaluations are according to Van Weele (2005) limited to the two first levels.

Risk of opportunistic behavior is also present after the contract has been entered into. Before going deeper into this a reference is made to the insurance industry, this time referencing Moral Hazard. As opposed to adverse selection, we are now discussing a situation where a party actually has insurance, and on that basis changes behaviors that leads to larger claims against the insurance companies (Milgrom and Roberts, 2006).

A direct link can be drawn to a business relationship. We are discussing post contractual opportunism where a party chooses to act a certain way because he sees an opportunity to obtain larger profits on account of the other party. Post contractual opportunism may come in the form of:

- Strategic Pricing – where the seller has won a contract on an artificial low price level and may now scale up the price because the buyer did not put sufficient efforts into evaluating the buyer's offer (Kolltveit and Reve, 2002 and Van Weele, 2005).
 - Were all required items priced according to instructions?
 - Does the equipment meet specifications?
 - Are the specifications complete or should additional work be expected?
 - Did the seller have any exceptions to the terms of the contract?
- Hold Up Problems – where an asset specific investment has been made by a party in a co-specialized contract relationship and the other party forces lower rates upon the first party. The initial party is by definition *held up* because of larger asset specific investments that will lose significant value unless use as intended (Milgrom and Roberts, 2006).

If all information was out in the open it would not been necessary to assume an opportunistic behavior, and the added transaction cost of establishing safeguards could be avoided.

Williamson (1985) does however emphasize that he does not assume all people to behave opportunistic. The problem is however that lack of ex-ante transparency limits the parties' ability to trust one another. The answer to this is upfront screening and safeguards that govern the contractual relationship. Williamson (1985) states that ex-post opportunism may be significantly reduced if ex-ante safeguards are instituted, and argues that such safeguards can take one or more of three forms:

- 1) Use of incentives and penalties or remuneration for termination
- 2) Use of contractual governance mechanisms for dispute resolution, such as arbitration in case of disagreement that cannot be solved between the contracting parties
- 3) Use of "trading regularities" to extend trade between the parties through reciprocity requirements

More practically this would include building contract frameworks through relational contracting. This framework does not try to foresee and distribute risk for all possible contingencies, but governs what criteria apply in unforeseen situations, and this subject will be touched upon shortly.

There is somewhat of an agreement to that bounded rationality is an appropriate behavioral assumption when describing the economic organization, but there are some critics to the use of opportunism for the same. Maria Moschandreas (1997) argues that opportunism is too narrow to describe human behavior, while Klein (2006) argues that Williamson's use of opportunism is purely instrumental.

Williamson (1985) himself does not reference specific critics, but responds to this criticism by looking at a contracting world without the behavioral assumptions of transaction cost economics. He divides this into four possible options: (1) A world without opportunism and bounded rationality, in theory, sounds really nice, but is close to none existing. This would mean that everyone knows everything, from the past, in the present and in the future, and through this, opportunism impossible. (2) Absence of bounded rationality will require an enormous amount of work in order to capture all contingencies, because all future possible outcomes or situations needs to be described (3) Absence of opportunism is a place where general clauses protects against incomplete contracting, instead of today where there are specific clauses included in the contract to prevent opportunistic behavior (i.e. agree on unit pricing for variation orders to avoid hold up/lock in problems). (4) Presence of both bounded

rationality and opportunism is a place or scenario that describes reality. This is summarized in the table 1 below:

Table 1 - Contracting in absence of Opportunism and Bounded Rationality

		Condition of Bounded Rationality	
		Absent	Admitted
Condition of Opportunism	Absent	(1) Bliss	(3) “General Clause Contracting”
	Admitted	(2) Comprehensive Contracting	(4) Serious Contractual Difficulties

Note. From *The Economic Institution of Capitalism*, p.67, by O. E. Williamson, 1985, New York: The Free Press.

2.3.4. Dimensions of Transactions

How a transaction is organized within an organization depends on its dimensions. For example, if a transaction is complex, an organization may require a more comprehensive procurement process and thereby spending more money selecting a vendor. Williamson (1985) introduced three such dimensions; asset specificity, uncertainty and frequency, which later has been a point for discussion in many publications, amongst others Kolltveit and Reve (2002) and Milgrom and Roberts (1992).

2.3.4.1. Asset Specificity

A transaction has a degree of asset specificity if a party has project specific investments that would be of lower value or no value to this party unless used for the specific project (Williamson, 1985). Buying a Coka-a-Cola over the counter has very low degree of asset specificity because limited upfront cost was required to make the transaction. On the other side, if a ship yard has to be built in order to receive an order for a new drilling rig, then the transaction has a higher degree of asset specificity. The yard owner, which has invested in property, cranes, equipment, infrastructure, expert personnel can’t, without additional

investments, easily use the yard for other profitable purposes. Williamson (1985) divides asset specificity in four:

- Site specificity – If the yard is built at a special geographical location, it is hard, if not impossible to move it.
- Physical asset specificity – Investments in technology customized IT-equipment.
- Human asset specificity – relates to cost of recruiting and training new employees, even though much training may be used for other purposes as well without loss of significant value (Kolltveit and Reve, 2002).
- Dedicated asset - a purpose build ship yard crane to facilitate a new generation drilling rigs.

Asset specificity is very important in a contracting view. With low asset specificity it could be most efficient to conduct spot purchases because of the low transaction cost. However, when you have high asset specificity and a certain frequency it will be more feasible to avoid daily negotiations on the price for the next day. Seller and buyer can therefore either agree to merge or enter into a long term contractual relationship for supply and use of a certain good (Douma and Schreuder, 2002). This is often what is referred to as either neoclassical or relational contracting which we will cover later.

2.3.4.2. *Uncertainty*

Uncertainty is a key component in various economic theories, including transaction cost economics. In this setting, uncertainty mainly relates to the complexity of describing the situation encompassing and interfacing with the transaction ex-ante as well as the difficulty of verifying, monitoring and controlling the potential opportunistic behavior ex-post (Williamson, 1985).

2.3.4.3. *Frequency*

Basic organizational theory tells us that unique time limited work should be organized in a project, while routine / every - day work should be not. Grey and Larson (2006, p. 5) defines a project as “*a complex, non routine, one-time effort limited by time, budget, resources, and performance specifications designed to meet customer needs*”. A specialized governance structure, like a project, is associated with relatively higher cost and the question is whether it

can be justified (Williamson, 1985). On the other side, where transactions happen frequently over time, and where the frame conditions are known, people tend to automate or somehow make the transaction more efficient and thereby reducing transaction costs (Milgrom and Roberts, 1992).

You also have items that fall between the standard routine work and a full blown project. Williamson (1985, p. 60) elaborates “*Where frequency is low but the needs for nuanced governance are great, the possibility of aggregating the demands of similar but independent transactions is suggested.*” An example is Transocean, the world’s largest offshore drilling rig owner, who orders two to four drilling rigs at the time. Here, after construction starts on the first rig, the organization has a great amount of learning that can be applied for the remaining drilling rigs and thereby reducing production cost and potentially also transaction costs. There are however limited research available on transaction cost and scale economics to make any clear statements (Williamson 1985 and Kolltveit and Reve, 2006).

2.3.5. **Transaction Costs - Summary**

This section has in brief covered transaction cost economics, behavioral assumptions, dimension and limitations. The key things to take away from this section are 1) the importance of the behavioral assumptions, 2) the role of dimensions when organizing the transactions (market or vertical integration) and least 3) an understanding of the relationship between transaction cost economics and contracts.

2.4 **The Theory of Contract and Relational Contracting**

The following section gives an introduction to basic contract theory, assumptions, and implications. Further, in order to fully understand relational contracting I go into depth on the extremes; - discrete and relational contracts. Towards the end of the section, I touch upon contract norms followed by a section describing the various contract types available. Finally I present and discuss degree of formalization.

2.4.1. **Basic Contract theory**

Ian Macneil (1974, p. 696), the well-known father of relational contracts, describes four essentials or foundations (“*primal roots of Contract*”) upon which a contract is based¹.

¹ There is also a fifth root, language, but it is considered given.

1) Specialization of Labor and Exchange

MacNeil (1974) points to that primary needs forces conscious human beings to exchange in a world of specialized labor. This makes co-ordination of economic decisions necessary, and can be done through the mechanism of the market or within the organization (Douma and Schreuder, 1992).

2) Sense of Choice

Freedom of will and the ability to choose from a range of alternatives are required to obtain a competitive market.

3) Conscious Awareness of Past, Present and Future

Here MacNeil (1974) points to that people must know the past and present in order to describe and know what will happen in the future. This is the time element of the primal roots as will be discussed later. The time element plays an essential part in choice of contract strategy and format.

4) The Social Matrix

The above “roots” of contract cannot be established in a vacuum, only in a social context. Without a social context there is no need for a contract.

With this in mind, we can look at possible definitions of a contract. There are several definitions available, some are more precise than other. What often distinguishes the various definitions is the focus of the author(s) and his/her school/background. A few definitions are listed below:

A contract is a promise or a set of promises for the breach of which the law gives a remedy, or the performance of which the law in some way recognizes as a duty.

American Law Institute, 1981, (§ 1)

Or; *A contract is a formal agreement between two parties wherein one party (the contractor) obligates itself to perform a service and the other party (the client) obligates itself to do something in return, usually in the form of payment to contractor.*

Gray and Larson, 2006, (p.405)

Or;*the relations among parties to the process of projecting exchange into the future.*

MacNeil, 1980 (p.36)

It is not the intent to provide or agree on one definition, but to show the width of definition available for “Contract”.

2.4.2. **Discrete Contracts and Contractual Relations**

Ian Macneil (1980, p. 10) defines a discrete contract as “*one in which no relation exists between the parties apart from the simple exchange of goods*”. At the same time, Macneil (1980) states that there are however practically no contracts without any kind of relations, and in some cases these relations exist apart from the exchange of goods itself. Eisenberg (2000, p. 816) goes as far as saying that: “*discrete contracts are almost as imaginary as unicorns*”. The use of discrete contracts is however theoretically important to understand the ultimate range of contracts.

To further explain the differences between discrete and relational contracts I have chosen to base this on Ian MacNeil’s approach to the same in one of his most famous works, “*The New Social Contract*” from 1980. However, I have modified the structure somewhat to avoid having to continuously point back to the various elements that is to be discussed. In addition, MacNeil (1980, p. 10) distinguishes between primitive and modern relations, where primitive relations “*exist in a community that has the characteristics of having an independent economy with relatively little specialization, relative stability and little fundamental change*”. I have chosen to eliminate this part of the analysis due to its limited relevance to the research questions and also the scope of a master thesis.

He defines modern relations as follows:

[Modern relations] *exist in a community that has the characteristics of being fully interconnected with a larger society of great complexity, involving elaborate specialization, and subject to constant change.*

(MacNeil, 1980, p. 10):

The analysis is based on the following assumptions 1) a means of communications between the parties exist, 2) a system of order is established to prevent chaos, 3) a money system is in place and 4) a scheme to enforce promises is present (MacNeil, 1980).

There are a few challenges with the above, such as 1) humans will tend to think both discrete and relational at the same time, and 2) a discrete transaction will by definition only affect a minor part of a society while MacNeil compares this to the entire society (MacNeil, 1980).

There are also somewhat unusual approaches or assumptions analyzing modern contractual relations. Due to the extreme specialization, the relations are very diverse in these modern communities, and people may ask whether all this can be gathered into the same analysis. With a little exception regarding smaller and larger contractual relations MacNeil is however firm that it does make sense, and that focusing on these somewhat unrealistic parameters may still be a good way to start understanding the theory of relational contracts (MacNeil, 1980).

The analysis is based on twelve factors.

(1) *Personal Relations*. The theory of relational contracting deems personal relations as primary relations (MacNeil, 1980). Primary relations are characterized by 1) participants interacting as distinctive and whole individuals, allowing the presence of feelings in the interaction, 2) profound and extensive communication and 3) significant elements of non-economical personal satisfaction, due to possibilities of personal development (MacNeil, 1974). Primary personal relations are a key characteristic for modern contractual relations, and a picture that is often used is the marriage or employment relations (MacNeil, 1974, 1980). In primary relations, the individuals are recognized for who they are and not as a means for exchanging goods and services.

On the other hand, you have the discrete transactions which are non-primary relations. These are limited in scope or limited to specific topics, they are transferrable and not unique, the communication is limited and not meant to disclose any personal details, and they are often public and usually formal (if verbal communications take place at all). The communication is not the primary focus, but rather the exchange of goods or services (MacNeil, 1974, 1980).

(2) *Number of parties involved*. While “*the ideal discrete transaction only has two parties*” (MacNeil, 1980, p. 13) you will find that a large amount of people is often

involved when it comes to modern contractual relations. These relations may also last for a very long time. New people are added, while others leave, however the relations still continues (MacNeil, 1974). Increased number of participants will also naturally increase the number and complexity of primary relations (MacNeil, 1980 and Kolltveit and Reve, 2002).

(3) *Measurement and Specificity*. In a discrete transaction, such as buying a Coke-a-Cola at a gas station, the product will be going one way and the equal in value of money going the other way (payment). Under modern contractual relations it will be found that careful measurement of money on one side and goods and services on the other side is considered normal. Much of this is made possible through the information technology available to conduct such advanced measurements. The information systems actually demand these extreme levels of specification. This leads the exchange under modern contractual relations to an extreme level of specificity.

It should be noted that there are challenges related to specificity in measurement under modern relations. This would include elements such as prestige and personal power as well as other human aspect in the social exchange. These are, to a certain degree immeasurable (MacNeil, 1974).

(4) *Sources of contractual solidarity*. At a minimum, contractual solidarity is the element that makes two parties choosing mutual exchange over killing and stealing from one another. However, in a discrete transaction, except for these basic social requirements, no such solidarity exists apart from the immediate gains each party has from the exchange itself (MacNeil, 1980). For contractual relations the source for contractual solidarity is found in the current and future relation. The internal support that is generated in a contractual relationship, but remote or non-existing in the discrete transaction, is one of the most important distinctions between these two types of exchanges (MacNeil, 1974).

(5) *Commencement, duration and termination*. A discrete transaction is, as earlier discussed, identified by short duration between payment and consumption/ performance, and “*agreement is accomplished within the minimum length of contact between the parties*” (MacNeil, 1974, p. 748). A discrete transaction has also a clear commencement and termination and MacNeil (1974, p. 750) refers to it as “*Sharp in, sharp out*”. This is vastly different from modern contractual relations where there is

no clear commencement or termination. Most people would agree that signing an agreement or termination of an agreement could constitute clear cuts, but MacNeil's (1974) point is that there are elements leading up to each of these events that makes this milestone less defined. For the sake of commencement, there almost always will be activities and events leading up to signing of agreements. For termination, similar conclusions can be drawn. As opposed to discrete transaction, modern relations may have a very long duration that commenced a long time ago and where termination is an undefined time in the future. Elements and participants in the relationship will come and go throughout this time, but the relations continue (MacNeil, 1980).

(6) *Planning*. The complexity and importance of planning is evident when looking at the amount of space provided for this subject in both "Many Futures of Contracts" (MacNeil, 1974) and "The New Social Contract" (MacNeil, 1980). As in MacNeil's works, additional space is provided for planning below.

Planning activities for a discrete transaction is "*complete and specific and binding.*" (MacNeil, 1980, p. 16) Reciprocal blessings are obtained early, and assumed whole. Looking at modern contractual relations, they're planned in gauged and explicit terms (MacNeil, 1980). To go into further detail, and also to portray the differences, a direct comparison between discrete transaction and modern contractual relations will be made, highlighting the following five elements; (a) primary focus, (b) completeness and specificity, (c) tacit assumptions (d) sources and form, and (e) bindingness.

(a) *Primary Focus*. Discrete transactions are all about the core of the exchange, money, or price, in one hand and goods and services in the other. Planning is therefore also focused towards this. There may be some related process planning in the form of agreeing on regulation handling issues with the transaction, but then this is more included as a necessity or requirement, and does not constitute the primary focus.

The same focus on substance can be found under some modern contractual relations but only when the actual exchange is taking place at time of planning. While this is not the case the primary focus will be on the structures and process to govern future exchange and distribution of power (MacNeil, 1974).

(b) *Completeness and Specificity.* As mentioned above, planning in discrete contracts are considered whole, specific and complete at the time of transaction, at least in theory. In practice there is also an element of the unforeseen that cannot be taken into account at the time of the transaction. Planning in modern contractual relations is not complete. There will always be elements of tentativeness due to the nature of relations, as they change, grow and develop. The effect of this may often be that it is not possible to obtain the degree of specificity and completeness desired.

MacNeil (1974) also points out that as markets have become more complex, so have the requirements for planning. This has led to relations being a more dominant form of economic activity and planning in our society. “*Transactions alone cannot serve adequately the planning need of a technologically complex and heavily capitalized society.*” (MacNeil, 1974, p. 763). Discrete transactions simply don’t have the required capacities to take account for the growth and change that relations can, especially in the presence of bounded rationality, and limited ability to predict the future.

(c) *Tacit Assumptions.* MacNeil (1974) references Fuller and Eisenberg (1972) when discussing tacit assumption, characterizing this as something unspoken, which is taken for granted by one or several parties. There is no room for such assumptions in the discrete transaction, but they play a vital role in modern contractual relations, such as trust.

(d) *Sources and form.* With planning in discrete transaction, being complete and whole, further planning or variation appears to be unwarranted. In relations, this is not the case. Relations are, by nature characterized by heavy post commencement adjustments and related planning. The planning ranges from being specific, to not specific at all depending on what the actual adjustment concerns (MacNeil, 1974).

(e) *Bindingness.* Planning in discrete transactions is as described above binding, and planning in modern contractual relations is in some ways the same (MacNeil, 1980). However, relations are often subject to change, and the parties are aware of this. We often therefore see that change and its effect and distribution of burdens and benefits are laid out in the regulations governing the relationship.

This summarizes the planning section and I will move on to cover the remaining five elements.

- (7) *Future Cooperation.* A discrete transaction ends upon payment and it has limited to no relational dimension. There is therefore no requirement or desire for future cooperation (MacNeil, 1980). In a contractual relation however, a need for future cooperation does exist and may to some degree be a prerequisite for a trade to even occur in the first place (Kolltveit and Reve, 2002). Future cooperation is not only required to perform the planned activities, but also for future planning. Continuous iterative planning after signing of contract is a key characteristic for relations (MacNeil, 1974).
- (8) *Sharing and dividing benefits and burdens.* In a discrete transaction, there is no sharing of benefits and/or burdens; it is all created or left with the individual parties. In modern contractual relations there will be clear separation of benefits and burdens, but at the same time there will also be sharing (MacNeil, 1980).
- (9) *Obligations.* MacNeil (1980) claims that obligations assumed differs in three ways: “*sources of content, sources of obligation and specificity*” (p. 17). For a discrete transaction the content originates from the assurances provided during the transaction, i.e. clearly expressed and communicated promises (MacNeil, 1974), while the obligation comes from one another’s instinct or push to oblige. This leads to greater specificity compared to the contractual relations where both content and obligations are sourced out of the relation itself. This is also true for modern contractual relations. When it comes to content, MacNeil (1980) points to obligations that come from promises made and from the relation itself. Sources of obligations come from both the relation itself, but also from the external society.
- (10) *Transferability.* MacNeil (1980) writes that trade forms wealth and therefore trade will happen unless something hinders it. From this, you may derive that the transfer of rights and obligations in a discrete transaction will occur. The only exception to this is the responsibility for lack of performance. Looking into modern contractual relations it is found that non-transferability is often the case in smaller contractual relations, meaning relations with individual A just is not the same as relations with individual B. However, when one studies larger modern contractual relations, the individual focuses loose importance and is replaced by business relations that may be

transferred between legal entities. This may impact those involved, but the relations are still transferrable (MacNeil, 1980).

(11) *Attitudes*. MacNeil (1980) divides this section about attitudes toward the transaction or relation into four subjects; (a) awareness of conflict of interest, (b) unity, (c) time and (d) expectations about trouble.

a) *Awareness of conflict of interest*. With the low presence of long term relations in a discrete transaction, and the fact that these types of transactions have zero-sum aspects, you will find that the parties are self-focused with an intention to maximize their own utility. Under long term modern contractual relations, the focus is not so individualistic, but more on cohesive and cooperative aspects which thereby lower the potential risk for conflict of interest. Also, if such conflict should occur, there will be actions taken to control this (MacNeil, 1980). There will be a higher degree of planning, more comprehensive measurement of performance and a relatively clear distribution of burdens and benefits. All these elements contribute to a greater awareness of conflict of interest under modern contractual relations (MacNeil, 1980).

b) *Unity*. As it has become clearer throughout this elaboration on discrete transaction and contractual relations no unity exists under a discrete transaction. It was shown earlier that the need for future cooperation is one characteristic of modern contractual relations. This need, by default, calls for greater unity under these types of relations. In general, interdependence between i.e. two companies, creates a sense of unity. Also, the awareness around conflict of interest is actually one of the main contributing factors to greater unity under modern contractual relations (MacNeil, 1980).

c) *Time*. As stated above, in a discrete transaction, planning is complete at the time of commencement. The only way to achieve this is to bring the past and the future into the present (MacNeil, 1974). This is what MacNeil refers to as presentiation, which is a key element in most of his work on this subject. Under modern contractual relations some elements are considered presentiated and others not. Parts of the relation may be planned and measured in such a detailed way that they are to be considered to have occurred long before it they have. On the other side, two parties may build framework for how to deal with certain

issues should they come up in the future, i.e. arbitration regulations. Presentiated or not, under modern contractual relations, the parties are always aware that things may change in the future for the better or worse for each of the parties (MacNeil, 1974) and therefore make contractual provisions to accommodate this.

d) *Trouble*. The nature of a discrete transaction; the planning that is complete, or the presentiation, assumes that trouble would be non-existing, or at least taken into account for in the pricing agreed to (MacNeil, 1974). In a modern relation, trouble is a part of life and expected to occur. However, today's planning capabilities enables extensive planning to be conducted when trouble arises (MacNeil, 1974).

(12) *Power, Hierarchy, and Command*. MacNeil (1980) is with *Power* referring to the ability to influence others, even if they don't want it to. He mentions that it is the relative balance in power between two parties that creates the ability to command and create formal and informal hierarchies. One of the keys in this balance is dependence, which correlates negatively with increased power. MacNeil (1980) uses a worker as an example and how his negotiation power towards his employer shifts upward when being in a union, meaning he is less dependent.

Referencing a purchase of bad meat over the counter, MacNeil (1980) points to the unilateral power that exists in discrete transactions between the time of purchase and consumption. This is independent of the theoretical removal of power due to presentiation.

The balance of dependence in contractual relations is not a static phenomenon which is assumed in a discrete transaction, but rather dynamic. Power relations shift as a project progresses coupled with shifting dependence due to internal hierarchies and commands. This makes power a substantial attribute under contractual relations (MacNeil, 1974).

After focusing on the various characteristics of the discrete transactions and contractual relations, I will now focus on norms and behaviors under these extremes to further characterize contractual relations.

2.4.3. Contractual Norms

Barthelemy and Quentin (2006) state that there is a formal side and an informal side to an exchange. The formal side is represented by the contract and the informal side is represented by relational norms and trust.

Due to incompleteness of most contracts, norms have the potential to be alternative and complimentary governance mechanism of the relation (Sunde, 2007).

Understanding norms and their implication on governance is important as it relates to establishment of governance structures that 1) are effective and efficient, 2) safeguards the exchange and 3) maximizes the benefits of the involved parties (Cannon et al, 2000).

Contract norms can be presented in a many ways, but also here I choose to base this on MacNeil's "The New Social Contract" from 1980. There are other sources available, i.e. Kolltveit and Reve, (2002), but they appear to base their findings off MacNeil's work as well. MacNeil still focuses on the differences between discrete contracts and contractual relations. This adds value to the exercise of mapping and explaining what relational contract theory is while also describing what it is and what it is not.

First I will present norms that are common for all contracts, then later present what is specific for relational contracts. I have chosen not to elaborate further on norms specific for discrete transaction as that is not the primary focus of this thesis.

2.4.3.1. Common Norms

MacNeil (1980) divides the common norms in nine segments

1) *Role Integrity* – Northcraft and Neal (1994, p. 236) says that "*roles define the set of behaviors appropriate to particular positions occupied by individuals in a group. Roles also specify the authority relationships within a group, including who has the right to call meetings, set agendas, and assign tasks to group members.* Looking at discrete transactions alone, you may question if roles are applicable, however, as we have seen earlier, this is a zero-sum "game" area where isolated profit maximization is the focus for each party. The role as a negotiator or trader is therefore very important.

To limit the scope of this rather comprehensive subject we can focus on consistency, conflict and complexity (MacNeil, 1980):

A role must be *consistent* in many different ways to earn some credibility amongst other people, and this credibility is based on law or predefined preferences and opinions in the public, or even closer, as in a contractual relationship. The credibility or role as the environmentalist does not fit well together with a job in a polluting industry (unless his position is to improve the environmental footprint). Similarly, there are often only a number of hats or roles you can hold in a given situation, and some of these hats or roles may not be held at the same time due to ethical dilemmas (MacNeil, 1980).

We touched upon role *conflict* earlier, and will touch upon it again under contract solidarity. Even though the subject or role conflict is much greater than contract solidarity alone we will limit it to say that the norm would be to solve these based on references, that being in the contractual relationship alone, references outside the contractual relationship, through arbitration or the law (MacNeil, 1980).

The complexity of role integrity may be traced back to the previous paragraph about potential conflicts. Specialization has led to very complex work tasks, and professionals holding these positions interact with other professionals and/or the public. This may often lead to conflict as people are complex organisms. Conflict is however not necessarily a bad thing, actually quite the contrary, especially if it is not destructive (MacNeil, 1980).

- 2) *Mutuality* – This norm basically points out that a party will not voluntarily trade or enter into an exchange unless the party's utility is increased after the trade. It does not promise that the each party will benefit at the same level, but calls for some kind of evenness, especially for a relationship to exist. The norm also says that the presence of valid alternatives, as a competitive market, will limit an uneven exchange, and similarly, if this is not achievable, someone will eventually quit (MacNeil, 1980). This may be traced back to Michael Porter (1980) and his theory about the five competitive forces.
- 3) *Implementation of Planning* – We have earlier spent significant space discussing planning, so only a few elements are mentioned here. We saw that planning under

discrete contracts is limited, but under contractual relations it is essential. When we are referencing planning as a contract norm, it is the *implementation* of such planning that is the essential, especially for larger complex projects (MacNeil, 1980).

- 4) *Effectuation of Consent* – Under this norm, MacNeil (1980) discusses the lost opportunities by making a choice. Basically, if a company chooses to buy a product from one supplier, he is at the same time saying no to all other alternatives out there. He references contract remedies in case of unfulfilled obligations, but these may often not add up to, or make up for the losses incurred by the choice made and following default performance.

MacNeil (1980) further claims that remedies and consequences of entering into a contract is often unknown to the parties, and that an agreement is therefore is only reached exactly because of this or because the important parts of the contracts remains optional. Going the former route requires an immense amount of planning and implementation of such to effectuate consent. Going the latter route raises the importance of to what parts consent is given and how to deal with the remaining parts. This choice to provide consent is essential, as a common norm of contract, and will remain so unless superseded by a centralized administrative enforcing body.

- 5) *Flexibility* - Bounded rationality holds, as discussed earlier, that humans intend to act rationally, but have limited ability to do so (Williamson, 1985). This triggers the need to plan for such human limitations in the way providing flexibility for the parties. This can be done in several ways, but for discrete transactions, its characteristics (limited personal relations, short duration, limited future cooperation to mention a few), makes it somewhat unsuitable for a process change (internal). This leaves us with an external option, which can limit the scope of the transaction. For contractual relations, this is quite different as one has ongoing interpersonal relations of long duration. This indicates the possibility of adjustments and amendments within the relation as time evolves and unpredicted events occur (MacNeil, 1980).

- 6) *Contractual Solidarity* – We earlier touched upon sources of contractual solidarity and saw that for discrete transaction this solidarity comes from external sources.

For modern contractual relations, contract solidarity is sourced both internally and externally as well, but more distinguishable. For the purposes of contract norms it suffices to say that no exchange is possible without the presence of this norm (MacNeil, 1980).

- 7) *The Linking Norms: Restitution, Reliance and Expectation Interests - Restitution interests* here refer to someone who takes advantage of a transaction and breaks a promise. Under contractual relations, the restitution interest may come into play when a party is receiving a part that is too large of the total value that is created by an exchange (MacNeil, 1980).

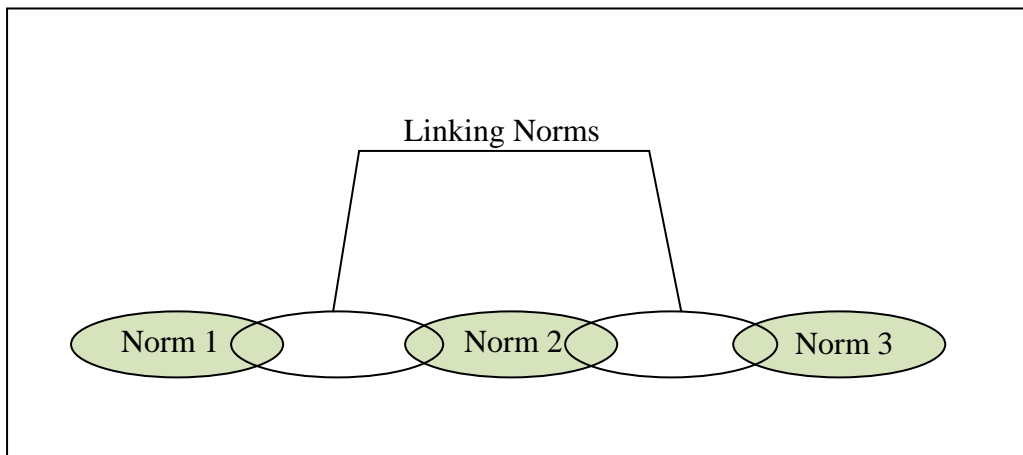
Similarly, the *reliance interest* refers to non promissory aspects of the relations, where i.e. an employee may rely on the employer to provide insurance in the absence of social security (in an American system) just because he works there. This may or may not in fact be true.

The *expectation interest* refers to what has been promised.

An important aspect of these linking norms is that they link (hence the name) the other norms together, as illustrated in figure 1. You can for example easily see how role integrity and planning may be linked through restitution and reliance interests, or for example between planning and consent. At the same time that mutuality and restitution goes hand in hand and that these linking norms are linked to flexibility under contractual relations is easily observed (MacNeil, 1980).

A second reason they are called “linking” norms is because they link the other norms to defined rules and regulations that two parties may have agreed to obey under a contract. Therefore, if a party is defaulting under a contract there may be predefined remedies that may be sought (MacNeil, 1980).

Figure 1: - Linking Norms



Note: From *Prosjekt –organisering, ledelse og gjennomføring* (2nd ed.) p. 116, by B. J. Kolltveit and T. Reve, 2002, Oslo: Universitetsforlaget.

- 8) *Creation and Restraint of Power* – Power can be created in many different ways, but is undisputedly created or inherent through trade itself (MacNeil, 1980).
Signing an agreement changes the distribution of power.

On the other side you have a restraint of power which is obvious when studying the remedies available under law for breach of contract. The modern society limits these, and for specific reasons, which are found under the other contract norms. An unlimited shift of power will eventually destroy the mutuality under the contract, and without mutuality the relationship may not survive. We also touched upon bounded rationality referencing the impossible task of foreseeing all possible occurrences under the contract. It is also therefore important for the parties that there may be only a limited shift of power. An unlimited shift would often prevent the parties to reach consent, holding the other norms firm.

In summary, we see that the power is created through trade, and at the same time is restrained. This applies both for discrete transactions and contractual relations.

- 9) *Harmonization with the social matrix* – We earlier touched on the primal roots of contract, and MacNeil's (1974) fourth root was the social context under which one places an agreement. This contract norm states that the contract must be aligned with the society in which it applies. Some of the norms that form a society are global, and some are local, or even governed by the relationship.

Harmonization with the social matrix is just as important for discrete transactions as for contractual relations, but it may be viewed differently. There is no room for customizing the discrete transaction to the various norms of the society. It is therefore given that these norms govern the way discrete transactions are conducted in a given society, also making it clear to the participants what is allowed and what is not. Still, a full harmonization is only possible if the discrete transaction is conducted in its original way – through *immediate self-interest maximization*. Similarly, for contractual relations, a full harmonization can only occur under full compliance or alignment with applicable norms in the society and where the parties operate at their full extent within these (MacNeil, 1980).

2.4.3.2. *The Relational Norms*

The norms referred to as relational norms are a somewhat intensification of the common norms, with specific focus on role integrity, contractual solidarity and harmonization with the social matrix. “*Relational norms are particularly useful for safeguarding investments and facilitating supplier commitment, because they motivate the supplier to behave in a way that would be beneficial to the relationship as a whole and thus preserve the relationship*” (Jap and Ganesan, 2000, p. 241).

- 1) *Role Integrity* – Role integrity under discrete transactions are relatively simple and exercised under a rigid set of rules and regulations. Under contractual relations you will operate under the same ultimate regulations (the law), but on a more operational level dealing with elements such as habits, customs, internal rules, expectations and so forth. Also, contractual relations are dynamic and you will have norms and roles that change throughout the relationship. This complicates the norm significantly compared to discrete transactions, but makes it equally more important. Maintaining role integrity becomes an experiment of social engineering and essential when operating under contractual relations.
- 2) *Preservation of the Relation* – This norm is an intensification of the norm of contractual solidarity. A discrete transaction has a “sharp in – sharp out” element as discussed earlier, but the contractual relations has a long duration which necessitates a preservation of the relation. This applies individually as well as collectively.

Kolltveit and Reve (2006) further elaborate that participants in such relations must work at all time as if there may be future opportunities as a result of the work they are performing currently. This necessitates focus on the other norms such as reliance, mutuality and restitution, and the parties will have to cooperate to make this work.

Brynhildsvoll (2005) elaborates on some of this same topic, as he discusses the differences between a relational - and a transaction based regime. He mentions that in a transaction based regime you would replace the contractor to improve while in a relation based regime you would work as a team with the existing contractor to improve.

- 3) *Harmonization of Relational Conflict* – This norm may be evident, but nevertheless crucial for a relationship. Harmonization of conflicts in relationships is essential, and without it, trust is jeopardized and the relationship will eventually cease to exist.

Harmonization is also very important in case of conflict between the relation itself and the external social matrix. By ignoring this conflict, the parties may come in to a situation where the social pressure becomes so intense that change is necessary or to the extreme of where it is no longer feasible to operate. The scope of how to overcome this is beyond the objectives of this thesis.

2.4.3.3. *Norm Development*

Dwyer, Shurr and Oh discuss amongst other things development of norms in their work on *Developing Buyer-Seller Relationships* from 1987. Referencing Scanzoni (1979), they describe a relationship development process divided into five phases, 1) awareness, 2) exploration, 3) expansion, 4) commitment and 5) dissolution (Dwyer et.al 1987). After the first phase of identification, and acknowledgement of the other party as a possible business partner, Dwyer et.al (1987) points to the exploration phase as the phase for development of the norms symptomatic for the relational contract. This development starts as soon as there is exchange of information between the parties with initial focus on establishing norms and standards for behavior. According to Jap and Ganesan (2000), relational norms are however not very effective in this phase, because they are not well developed.

After this, norms for future exchange are targeted, with trust identified as possibly the most important (Jap and Ganesan, 2000). In these start up phases the written contracts may have dysfunctional consequences due to their limited flexibility compared to relational norms (Jap and Ganesan, 2000 and Macalay 1963). At the same time implicit understanding and relational norms are developing to the degree that they may no longer be in line with the written contract that was signed at the start of the relationship (Helper and Levine, 1992).

Entering the expansion phase, the partners become more interdependent as they harvest benefits from the cooperation. Following this, the parties are ready take on more risk and the interdependence increases further. Casciaro (2003) advocates that as a relationship evolves, the uncertainty and complexity decrease and the potential for development of trust and relational norms increases. He further emphasizes that, due to this, it is important to take necessary time to establish these relational exchanges.

The commitment phase represents the time where the parties are not actively seeking alternative business relationships, but are enjoying the benefits of the current one. Preservation of the relationship is obtained through continuous benefits and an exchange effectiveness that comes from trust (Dwyer et.al 1987).

Business relationships in the decline/dissolution phase are often characterized by a lack of trust. You typically see that both the client and the supplier are focused on protecting their investments and gaining maximum individual benefits from the relationship instead of the joint benefits seen earlier. Reverting to the written contract will in this phase increase the commitment and possible prevent a very quick dissolution of the relationship (Jap and Ganesan, 2000).

Jap and Ganesan (2000) also write that relational norms are particularly important during the transition phases when building the relationship and when it is dissolving. Relational norms can often work as emotional and procedural buffers that can reduce the stress associated with the rapid change in these phases

This summarizes the contract norms section.

2.4.4. **Contract types**

We have spent a significant amount of time elaborating on the differences between discrete and relational contracts, and also informal more abstract differences in form of norms. We

also explained that these are the more extreme contract types. This section can partially be considered a summary of discrete and relational contracts, but it also presents a new contract type, and place the contract types in a system. The three contract types discussed by MacNeil (1974, 1978 and 1980) and Williamson's (1985) are:

- Classic Contracts
- Neo-Classic Contracts
- Relational Contract

In addition to the contract types above I have also briefly touched on alliance contracting, which is currently becoming more popular.

2.4.4.1. *Classic Contracts*

Classic contracts are discrete contracts, but additional information is worth mentioning in this context.

The classic contract is the most extreme discrete contract (strict purchase) in which presentation and discreteness are the two main factors (MacNeil, 1978).

In order to ensure discreteness, the identity of the parties to a transaction is treated as irrelevant (MacNeil, 1978). This means that there are limited or no personal relations, and that the parties themselves have limited influence on the transaction. Williamson (1985) references Telser and Higinbotham (1977) in exemplifying this when referring to the organized market in which the participants trade standardized contracts and where one unit perfectly trades another unit. In this case, the parties of the contract do not influence the terms of the exchange.

To further enhance discreteness, only limited contract remedies are available (MacNeil, 1978). They are relatively predictable so that the parties will know the effect of under-performance or non-performance. They are also limited in exposure. This limitation provides the parties a possibility to fully calculate its total exposure prior to entering the agreement (MacNeil, 1974).

A third element regarding the discreteness is the clear boundaries of being in or not being in the transaction. One is either in with the full responsibility that it takes, or they are not in at all (MacNeil, 1978).

Lastly, the introduction of third parties are discouraged as too many parties or “*poles of interests*” may create relations that can be damaging to the discreteness.

These elements that enhance discreteness also directly enhance the presentation as you are able to delimitate various aspect of the transaction. There are however other aspects of the classic contract law that focuses more specifically on presentation, such as; providing predictable terms and conditions to deal with all aspects of the transaction and remedies on expectation to ensure that the non-breaching party gets what it intended when signing the contract.

Williamson (1985) summarizes the classic contract as follows:

- the parties to the transaction are treated as irrelevant
- the nature of the agreement is carefully delimited
- the remedies are narrowly prescribed – with this Williamson references limited remedies without much room for interpretation
- third party participation is discouraged

2.4.4.2. *Neo Classic Contracts*

The dynamic reality of today’s business may require other types of transactions than those suited for the classic contract scheme as described above. This applies very much for longer term agreements that are executed under high uncertainty, making presentation close to impossible at least within the limits of feasibility (MacNeil, 1978 and Williamson, 1985). Consequently, contracts have been written to include a wider range of techniques and processes to take account for future change rather than leaving open gaps or extensive planning for full presentation. It is however, important to point out that the neoclassical contracts have a classical inheritance, and that neoclassical contracts therefore are poised with some of the same limitations we see under classical contracts (MacNeil, 1978).

In light of the potential insufficiencies of the classical contracting regime three alternatives arise: First, we can eliminate such transactions, second, we can remove such transactions

from the open marketplace and instead organize them internally. The transaction can then be executed and decisions can be made in a predefined hierarchic structure, with agreed-upon control systems while under common and united ownership. And third, we can take into use a different contracting approach that facilitates for stronger relations and additional governance mechanisms, which is what MacNeil refers to as neoclassical contracting (Williamson, 1985).

The need for stronger relations and additional governance mechanisms are necessary to facilitate the gap in planning and need for greater flexibility that arises when full presentation is not possible (MacNeil, 1978). Examples of how to facilitate this may be (*ibid*):

- (1) Use of standards for future price escalation, i.e. Consumer/ Steel Price Indexes
- (2) Use of third party definition of performance, i.e. someone representing an industry acknowledged standard, or even an arbitrator. An important point that MacNeil makes about arbitration is that there is ground to believe that litigation (as would be normal under classic contracts) would more often lead to a termination of a contract rather than going through arbitration. Planning for arbitration will therefore often be a more flexible solution than a litigation
- (3) Use of “one-party control of terms”, i.e. implementing one party’s right to exercise an option under the contract.

In addition to the above, some post commencement planning is required, especially in connection with contract adjustments (MacNeil, 1978).

By this point, it is obvious that this type of contract is characterized by an acknowledgement that the world is complex, that contracts are incomplete and that flexible settlement system are important (Williamson, 1985). These longer term agreements make the relational part even more important as well as the element of trust. In addition there is the importance of vendor selection and administration as work will take part in the future. These conditions obviously increase the transaction costs making this approach more suitable for complex agreement rather than simple transactions (Kolltveit and Reve, 2006).

Feinman states the following when he describes the neoclassical law and method, and compares it to the classical law;

The scope of neoclassical law is residual and fragmented. There is still a unitary principle of contract principles (the rules of formation, validation, performance and remedies), but the law is residual in that it no longer attempts to encompass all consensual transactions.....Neoclassical method is a mix of rules and standards. This is still doctrine, by and large, but it is doctrine of a much softer sort than in classical law.

(Feinman, 2000, p. 738-739)

MacNeil (1978) is clear on his beliefs around a continuous evolvement in a relational direction for the neoclassical contracts, but at the same time the courts and scholars will continue work towards keeping it within the classical structure.

2.4.4.3. *Relational Contracts*

I have throughout this paper elaborated on various aspects of relational contracts. In this section I will try to summarize the most important parts while also providing some further insight to relational contracting.

Ian MacNeil's influence on relational contracting is hard to circumvent. His work was, according to Kalleberg and Reve (cited in Kolltveit and Reve, 2002, p. 125) most focused on employment contracts, but what is learned from these kinds of contracts are applicable for business related/exchange contracts which is the focus of this thesis.

Relational contracting is an answer to a dynamic world and a realization that full presentation is impossible. Eisenberg (2000) writes that the theory behind relational contracting is a mirror of classic contract law. Without full presentation, discreteness also becomes problematic, and the transaction or performance becomes more dependent on the individual parties and the relations between them. Personal involvement becomes the primary relation (MacNeil, 1974). MacNeil (1978, p. 901) actually goes as far as writing that "*the relation has become a mini society with a vast array of norms beyond the norms centered on exchange and its immediate processes.*" Eisenberg (2000, p. 816) presents his definition of relational contracts as "*a contract that involves merely an exchange, but also a relationship, between the contracting parties*".

Relational contracting is further recognized through long duration with no clear commencement or completion, and substantial processes and structures for planning.

Planning is not necessarily binding and the success of the relation is measured through the amount of further cooperation in both performance and further planning. Arbitration is a preferred dispute resolution as it may often not be as ultimate as litigation (MacNeil, 1974).

Personal involvement being the primary relation type necessitates a range of norms, as discussed earlier. The most important norms under contractual relations are effectuation of consent, contractual solidarity, restitution, reliance and preservation of the relation (Kolltveit and Reve, 2006).

Even though this thesis does not intend to measure effectiveness of either contract type I find it appropriate to bring forward some of the findings made by Brown, Potoski, & Van Slyke (2006). They say that despite the growing interest in relational contracting there is yet to see any clear situations or applications where relational contract is deemed more or less effective than traditional contracting.

Also, despite the focus on the shortcomings of legal contracts from scholars like MacNeil and Macaulay, Rubin (1990) states that there has really been no noticeable decrease in use of commercial contracts, or in the length or complexity of such contracts.

2.4.4.4. *Alliance Contracting*

In addition to MacNeil's split between classic – neoclassic and relation contracts I will also briefly cover alliance contracting.

A need for greater cooperation between client and contractor, as well the importance of choosing the correct contractor has led to the rising of alliance contracting. To achieve increased cooperation, the parties establish fully integrated project teams, which necessitate a new way of thinking contract (Kolltveit and Reve, 2002). Alliance contracting is mainly used within complex projects where joint planning and performance is required to reach the goal. Revenue is according to Hetland (cited in Kolltveit and Reve, 2002, p. 127) distributed according to pre-defined criteria agreed to between the parties, and can be established both inter between contractors/suppliers or inter between both contractors/suppliers and the client.

I have compiled the below table 2 to further structure the information and to easier visualize the similarities and differences between the contract types. The information below is summarized on an aggregated level, and further details on classical - and relational contracts are provided in attachment 1.

Table 2 – Contract Types

Concept	Classic Contract	Neoclassic Contract	Relational Contract
Personal involvement (and importance of vendor selection)	<p>No personal relations.</p> <p>The parties themselves have limited influence on the transaction.</p> <p>Vendor selection not important.</p>	<p>Formal contracts facilitate standard, non deviatonal operation.</p> <p>Personal relations important during change/processes not presentiated in the contract.</p> <p>Vendor selection important.</p>	<p>Personal involvement is primary relations.</p> <p>The parties have major influence on outcome.</p> <p>Vendor selection crucial.</p>
Presentiation	<p>Full presentiation.</p>	<p>Includes an understanding that full presentiation is not feasible and incorporates therefore possibilities for future change.</p>	<p>Full understanding that presentiation is impossible.</p> <p>Primary relations will handle future change.</p>
Planning	<p>Fully binding.</p> <p>No post commencement planning.</p> <p>Complete and specific planning.</p>	<p>Binding (no information available).</p> <p>Post commencement planning, but mostly in connection with contract variations/ amendments.</p> <p>Aims for completeness and specificity as far as feasible.</p>	<p>Binding, but some tentativeness is acceptable.</p> <p>Extensive post commencement planning.</p> <p>Limited completeness and specificity in planning.</p>
Communication	<p>Limited, formal.</p>	<p>Significant, can be deep².</p>	<p>Extensive, deep.</p>
Commencement and Termination	<p>Clear commencement and termination, sharp in - sharp out.</p>	<p>Clear commencement and termination, but actual time of termination may not be known at time of commencement, due to variations and options.</p>	<p>No clear commencement or termination, a gradual development.</p>
Duration	<p>Short term, simple transaction.</p>	<p>Long (but limited) term, multiple transactions</p>	<p>Long term, multiple transactions under</p>

² Explicit information about communication under neoclassical contract law is of limited availability, but it is reasonable to assume a significant, sometimes deep existence of communication due to post commencement planning and a realization that the contract is not complete.

		under contract.	relation.
Number of participants	Two.	Most often two, but can be more depending on type of agreement.	Can be two, but often several, or masses.
Transferability	Fully transferable, rather simple.	Transferable , more complex due to relational element.	Difficult and costly to transfer, but not impossible (i.e. corporate takeover/buyout).
Future cooperation required in post-commencement planning and actual performance	Limited or none required.	Success dependent on future cooperation in both performance and post commencement planning, however somewhat limited where long term agreements for future work is already in place. ³	Success fully dependent on future cooperation in both performance and post commencement planning
Division of burdens and benefits	Clear division of burdens and benefits.	Clear division of burdens and benefits, however relational aspects may impact distribution and timing of such.	Benefits and burdens are shared.

Note. Data in column 2 and 4 adopted from “The Many Futures of Contract” by I.R. MacNeil (1974) *Southern California Law Review*, 47, 738.

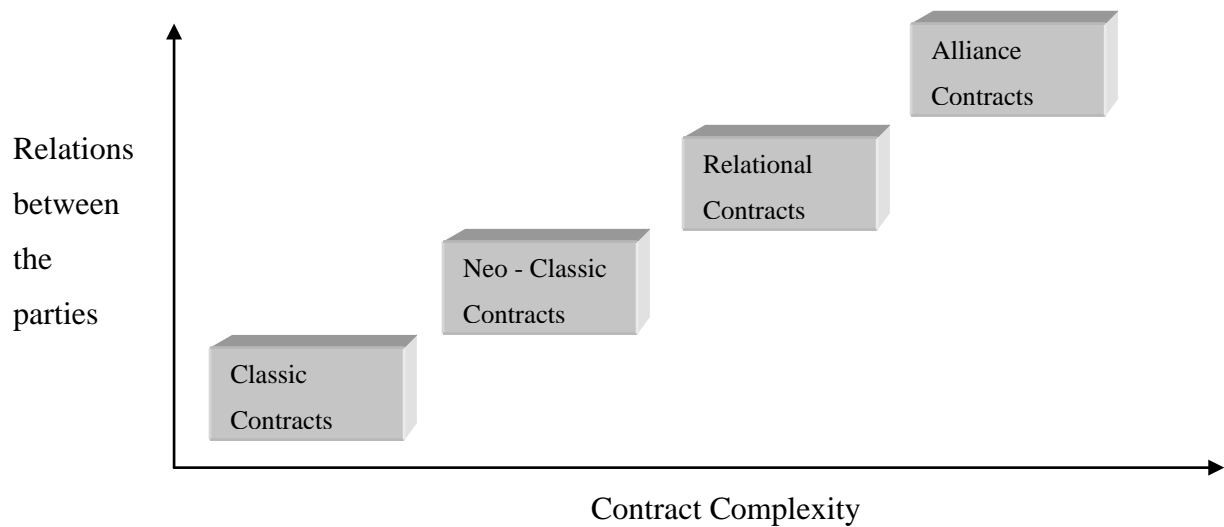
Data in column 3 partially based on MacNeil (1974, 1978 and 1980)

2.4.5. Application of Contract types

The listing of the various contract types is important in order to understand the differences between them. In order to further clarify where the various contracts come into use I have included the below Figure 2.

³There is limited explicit information available concerning future cooperation’s impact on performance and future planning under neoclassical contract law. However, I consider it implied by MacNeil (1978) that future interaction between the parties i.e. in form of further work drives performance and post commencement planning

Figure 2: Contracts, Relations and Complexity



Note. From *Prosjekt –organisering, ledelse og gjennomføring* (2nd ed.) p. 135, by B. J. Kolltveit and T. Reve, 2002, Oslo: Universitetsforlaget.

This figure clearly shows how the classic contract is of lowest complexity and has low relational aspects. Realizing that we are living in a complex dynamic world where adjustments may be necessary in the future are some of the factors that lead us to Neo Classic Contracting. Many applications require long standing relationships for complex deliveries or superior performance. This moves relational contracting higher and further to the right in the figure. At last we have alliance contracting which we said could be fully integrated project teams (high level of personal relations) for complex projects. This is as relational and complex as it gets and is displayed in the very top right corner.

When discussing contract types it may appear that an organization is left with one or the other contract types, meaning that the contract types are substitutes. Poppo, L and Todd Zenger (2002) describe in a study of information exchange how relational governance often has been viewed as a substitute to the more traditional classic/neo-classic formal contract. The traditional contract has in fact been understood to undermine trust, and thereby increase the chance for opportunistic behavior which they per default were constructed to prevent. Poppo and Zenger (2002) describe how these traditional contracts can work in harmony with a relational governance and work as compliments rather than substitutes. The study shows how managers have a tendency to use relational norms more heavily as the contracts are becoming

more complex (presence of asset specificity, uncertainty and difficulty in measuring performance), and at the same time, customizes the contracts to a greater extent as the relational governance is being developed. In contrast to formalized contracts, relational governance facilitates the flexibility, solidarity and information exchange needed to manage the contractual relationships in a dynamic environment.

2.4.6. Degree of Formalization

The different contract types, from classic to alliance contracting have as shown various properties that make them suitable for a range of applications. One of the properties that distinguishes these contracts and is the basis for much of the research in this thesis is the degree of formalization, which needs some further clarification and definition.

The degree or level of formalization is previously visited by several authors, however there appears to be no consistent definition of the term. Poppo and Zenger's (2002) attempted to measure the degree of formalization through the amount of customization and legal work required to establish a contract. Marcolin's (2002) approach to contract definition was the detailing of the provisions in the contracts and the number or pages in the contract. Cannon, Ashrol *et al* (2000) and Sunde (2007) discusses formalization through elements such as rules, procedures, standard operating procedures and dispute resolution procedures that are implemented in a contract. This handles the more basic elements which are found find in most drilling and well services agreements today.

In this thesis I would like to take this definition a little further and define the level of formalization more specifically as to the extent a contract has provisions for the below elements, listed in table 3, and where a contract that has provisions for the following elements below is considered highly formalized:

Table 3 – Provisions in a highly formalized contract

#	Contract Provisions	Examples
1	Administrative Provisions and Definitions	<ul style="list-style-type: none"> • Definition of contract terms • Exclusive supply • Who has authority to act under the contract?
2	Contract Structure	<ul style="list-style-type: none"> • What contract documents constitutes the contract? • What takes precedence in case of conflict?
3	Performance of the Work	<ul style="list-style-type: none"> • Minimum requirements for performance • Requirements for Quality Systems • Authority Requirements
4	Progress of the Work	<ul style="list-style-type: none"> • Reporting of delayed progress
5	Variations, Cancellations and Suspension	<ul style="list-style-type: none"> • The variation order process • When to cancel and when to suspend
6	Delivery and Payment	<ul style="list-style-type: none"> • Delivery and transfer of ownership • Invoicing requirements and payment process
7	Breach of Contract	<ul style="list-style-type: none"> • Rectification and guarantee liability • Liquidated damages
8	Force Majeure	<ul style="list-style-type: none"> • Effects of Force Majeure
9	Liability and Insurances	<ul style="list-style-type: none"> • Mutual Indemnification • Limitation of liability
10	Property Rights and Confidential Information	<ul style="list-style-type: none"> • Rights to information, technology and inventions • Confidential information
11	Law and dispute resolution	<ul style="list-style-type: none"> • Governing law • Procedure for dispute resolution
12	Scope of work	<ul style="list-style-type: none"> • Area of operation/application • Requirements for personnel and equipment • Deliverables and Reporting
13	Compensation format	<ul style="list-style-type: none"> • Definition of rates for personnel and equipment • Penalties and bonuses • Adjustment of pricing • Price list
14	Administration requirements	<ul style="list-style-type: none"> • Requirements to Quality Management Systems • Requirements for Health Safety and Environment • Reporting routines
15	Technical Specifications	<ul style="list-style-type: none"> • Technical specifications to equipment to be used under the contract

This list could be made endless depending on the level of detail. However, the above headlines should encompass most elements that would be applicable in a long term working relationship. The list is based on Norsk Fabrikasjonskontrakt 2007, which was a cooperative effort between Statoil, Hydro and Norsk Industri to land a common framework for fabrication work for the NCS, hereinafter referred to as NCS.

It is important to point out that formalization is not necessarily related to MacNeil's presentation (1974) even though they may pull in the same direction. A highly formalized contract does not necessarily have to try to predict the future (presentation), it could just have broad provisions that could deal with future occurrences.

2.4.7. Reasons for high or low degree of formalization

In their study of international business relationships and cross culture governance modes, Homburg, Cannon, Krohmer and Kiedaish (2009) elaborates on mechanisms used by managers around the world to manage risk. They write that international differences in the use of governance mechanisms for managing uncertainty are to be expected. They base this on previous research, referenced in Hofstede (1994), showing international differences in how to avoid uncertainty and willingness to accept risk. They further describe that this impacts the choice of governance mode and that in order to minimize uncertainty they actively monitor the market and use formal contracts with clearly defined rules. They find this to be applicable where the managers experience a higher degree of uncertainty than other. This corresponds with Heide and John's (2002) findings that more dominant or powerful companies actually tend to extract safeguards. It would be the buying firm that would regulate use of added/less safeguards as they usually have an important influence with respect to governance mode. The United States represents one of those cultures where the managers are less likely to avoid uncertainty; something that would indicate a lower degree of formalization (Homburg *et.al.*, 2009).

Uncertainty is a common denominator for many things that would lead to a more or less formalized contract. Uncertainty is one of the dimensions of transaction cost analysis discussed earlier. In addition, we have asset specificity as maybe the most importance factor, and frequency (Williamson, 1985). These are all elements that could drive a more or less formalized contract. Dyer (1997 p. 353) says for example; "*The standard (transaction cost) reasoning is that as asset specificity increases, more complex governance structures (i.e.*

more complex contracts) are required to eliminate or attenuate costly bargaining over profits from specialized assets". Aubert, Rivard and Patry (1996) says that when it comes to outsourcing, complex governance structures mean comprehensive agreements that features detailed clauses. When MacLeod and Malcomson (1993) discuss supply chain contract detailing, they focus on environmental uncertainty and say that the level of a contract detailing should be positively correlated with environmental uncertainty. This is close to what Leiblein and Miller (2003) states when saying that greater uncertainty will require flexible contract provisions and lead to intricate contracts.

Another important aspect is bounded rationality and opportunism (presented earlier). These two factors are very important in this matter as the presence, risk or absence of these play a large role in how formalized a contract is or should be, i.e use of safeguards in the contract.

In addition to the above, or sometimes in parallel to asset specificity, Skogh (1989) says that the greater the business deal, the more detailed the contracts are, while Eisenhardt (1989) claims that the measurability of the transaction, and ability to staff task impacts the degree of formalization.

2.5 Theoretical Framework – Summary and Key Points

We have seen that the division of labor leads to specialization. More specialization increases the need to exchange or to make economic transactions; however, an efficient exchange can only take place through co-ordination. Transactions can be coordinated in two ways, either across the market or within organizations.

In transaction cost economics the basis unit for analysis is the transaction itself, and it can take place across the market or within an organization. How it is organized is a matter of minimizing costs, and we saw that the establishment of firms was a result of low cost of internal co-ordination compared to a range of market transactions, ref Coase (1937).

Bounded rationality and opportunism are important behavioral assumptions which, together with the dimensions of transaction cost; asset specificity, uniqueness and frequency, forms the basis for choice of governance structure. High asset specificity combined with frequency favors relational contracting, while standard goods of low frequency favors more spot related markets.

The difference between discrete transaction and contractual relations were described through the help of 12 factors and 11 norms. Some of the most important were personal relations, contractual solidarity and planning.

Further we saw that classic contracts are discrete contracts, and that neo-classical contracting is an answer to a more dynamic market. Relational contracts are the frameworks for conducting several transactions under the same terms and conditions while understanding that presentation is limited and opportunism present. Safeguards are established to minimize risk exposure.

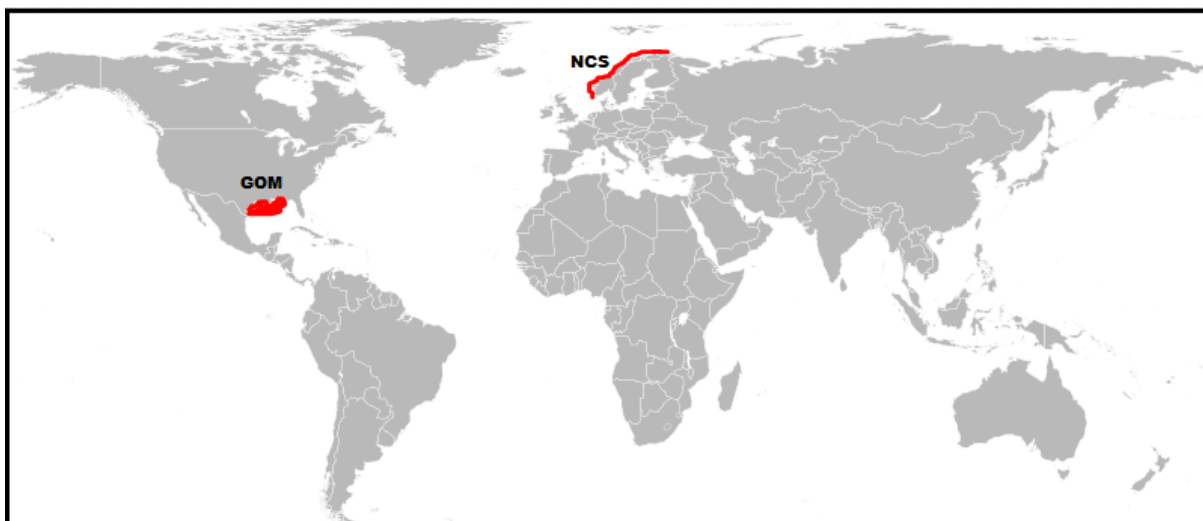
The end was dedicated to formalization of contracts, how it can be defined and what factors that can trigger a low or high degree of formalization.

This concludes the technical framework.

3 Two important regions for oil and gas exploration and production

This section provides information about the characteristics of the two operating areas relevant for this thesis, the Norwegian Continental Shelf (NCS) and the US Gulf of Mexico (US GOM) (figure 3). Much could be written about these areas, but I have tried to limit it to what I considered value adding information for this thesis.

Figure 3 – NCS and the US Gulf of Mexico



Note. Adapted From *World Map Image with Flags (date unknown)* Google.

3.1 The Norwegian Continental Shelf

Esso was the first operator on the NCS, and drilled the first exploration well in 1966. They had to tow a drilling rig over from the US GOM as there was no industry in Norway that could supply the equipment required. It was however not until 1969 that the first commercial find was made, by Phillips. By 1972 there were three Norwegian oil companies; Statoil, Hydro and Saga Petroleum (Lerøen, 2006).

Statoil was, through the first years, given at least a 50% share in all new leases and Statoil thereby quickly grew to become a dominant actor on the NCS (Lerøen, 2006). Today Statoil, who merged with Hydro's oil and gas division in 2007, has about 80% share of the oil and gas production on the NCS (Norwegian Ministry of Petroleum and Energy).

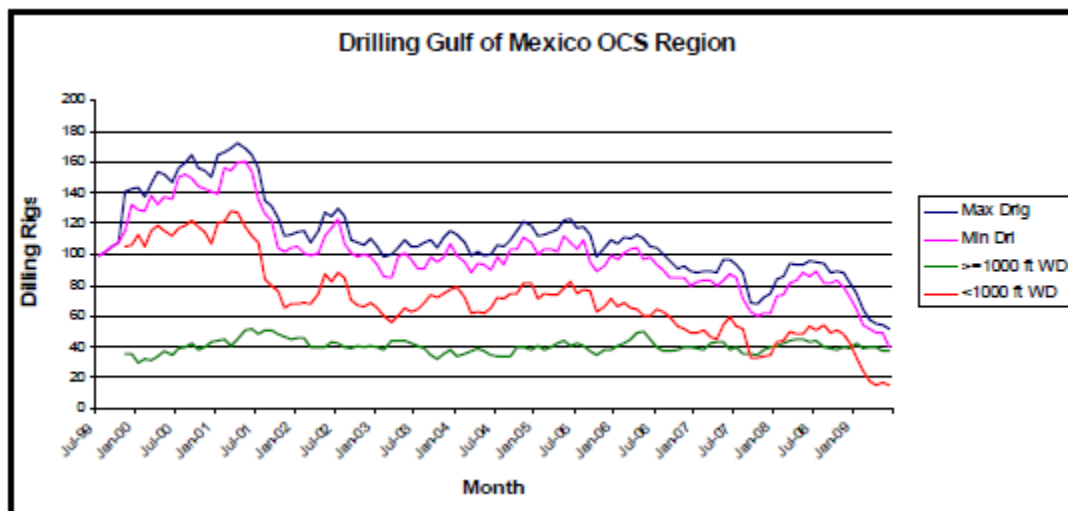
10 years ago there were about 10 operators on the Norwegian Continental Shelf (Selmer). There are today 41 registered operators on the NCS, however only a third of these are actively drilling or has operations in Norway (Norwegian Petroleum Directorate).

3.2 The US Gulf of Mexico

In the US the search for oil first started onshore all the way back in 1859. The first offshore well in the US GOM was however not drilled until 1947 by operator was Kerr-McGee (Suite101). Operations on the shelf have grown significantly since then, and the oil companies keep going further and further out in the US GOM. More than 50,000 wells have been drilled (O’Grady and Bagley, 2010). Today there are about 120 active operators in the US GOM and this number has not changed significantly the last 10 years (Bureau of Ocean Energy Management, Regulation and Enforcement).

Rig activity in US GOM has steadily decreased as can be seen in Figure 4 below. At the time the Macondo incident hit there were 51 active rigs in the US GOM (O’Grady and Bagley, 2010).

Figure 4 – Drilling Rig Count



From: MMS Update, Place unknown, Feb 2010, Minerals Management Services

When it comes to positions in the US GOM for 2011 Chevron has the highest activity with nine drilling units assigned, while BP and Apache has six each out of a total of 60 drilling units. Five oil companies operates 50 % of the drilling activity for 2011 (Reddall and McCormic, 2011).

4 Research Methods

4.1 Introduction

In this part of the Thesis I will try to present and argue for the approach I have taken when conducting research related to the problem described in section 1.2. I have listed the various alternatives and discussed why an exploratory design is the appropriate research design.

4.2 Research Design

A research design is the framework under which the research will be carried out, and it is usually distinguished between three different designs; exploratory, descriptive and casual design (Hair, Babin, Money and Samouel, 2003).

Exploratory research design is often used when the researcher has very little information about the subject, and there is very limited amount of theory available to establish any kind of predictions. In other words, exploratory research is often used to develop a better understanding of the research problem, which can later can be used for more descriptive research and quantitative analysis (Hair *et.al.*, 2003).

Descriptive research design is often used when describing the characteristics of a phenomenon/research question. This kind of design aims to provide answers in who, what, where, which, and how questions. It estimates the frequency or proportion and association of variables or it makes some specific predictions through the use of hypothesizes (Rugg & Gordon, 2006). Descriptive designs are usually characterized to be of a quantitative character, and an example of a descriptive design can be tracking of seasonal trends by analyzing sales figures (Hair *et.al.*, 2003).

Casual research design is used to determine a causative relationship between the independent variable, A and the dependent variable, B (Gay, Mills and Airasian, 2006). Examples can be; does a highly formalized contract prevent trust among business partners? Or does a high market share cause less quarrelsome contractors?

It is clear that no numbers (of significance and preciseness) will be collected and no hypothesizes will be developed, and therefore a casual design is not suitable. The research problem does state form of causal relationships, but a causal research requires very precise execution which will not be met through the qualitative data collection method planned for

this thesis. It is important to keep in mind that contractual data often is very sensitive, so unless there are public templates available, then the amount of data available will be very scarce.

This thesis aims to educate the reader concerning the research questions in hope of becoming the basis for more detailed descriptive and/or causative research at a later stage. Based on the above, an exploratory research design is determined as the best fit for this thesis.

4.3 Data collection

Data collection under an exploratory design is mostly conducted using literature reviews, focus groups, depth interviews, delphi technique or projective technique. These are all qualitative methods, which according to Hellevik (1991) is characterized by having the researcher getting involved and aims to obtain a pattern of the impressions, instead of watching from the outside and measure and conduct numeric analysis (often characteristic for a quantitative method). Johnson and Reynolds (2007) describe how other sources of empirical data can be obtained through the written record, which is composed of documents, reports, statistics, manuscripts, and other written, oral, or visual materials. This is often referred to as document analysis.

I will first conduct a document analysis to help answer the two first research questions concerning type, content and structure of the agreements.

The second source of data is interviews. There are several forms of interviews i.e. structured, semi-structured and unstructured interviews, and these are used in various applications. Hair, *et.al.* (2003) points to depth interviews as the most appropriate for an exploratory design, as it is often used when applied toward an area that is relatively unexplored. Depth interviews are mainly unstructured. Depth interviews are characterized by being one – to –one discussion between an interviewer and a respondent, and where the respondent is hand-picked due to his competence, knowledge or insight in a particular matter. Dalland (2000) underlines the need to be interactive in the interview process through use of nuanced descriptions and supplemental questions. Through this approach (qualitative method), the researcher may to a greater extent be able to obtain an insightful understanding of where the respondent is coming from, and also to create those relationships that foster such sharing of information. Since each interview has a tendency to be unique with limited to no

fixed set of questions asked of all respondents, it is typically harder to generate and analyze data from unstructured interviews (Trochim, 2006).

For this project I used various sources in order to cover the span of information needed to answer the research questions. I have, in an effort to simplify, presented the various sources in the table below.

Table 4: Data sources

Data Collection Method	Source/ Subjects	Background/Reasoning
Document Analysis	Statoil's contract template for drilling and well services	Statoil's template is based on Norsk Fabrikasjonskontrakt for 2007, but with some additions to make it more appropriate for a services - and supply contract. Statoil has today approximately 75 – 80% of the market on the NCS and this template is used for close to all drilling and well services contract. As the other operators on the NCS only has fractions of the remaining 20-25% of the market the Statoil template can pretty much be used as an example for service contracts in use on the NCS.
Document Analysis	Three different US GOM service contracts for drilling and well services.	There are no clear market leaders in the US GOM as we see in Norway with Statoil. I have therefore chosen to base this off of three different agreements, and found the commonalities between them. Two of these contracts are obtained from two acknowledged law firms in the US and represent (according to them) what you will see of US based contracts for drilling and well services for US GOM. These law firms represent a range of clients working in the US GOM. The last contract is obtained from a former independent oil company located in Houston. The contract is only a few years old and verifies to a large extend the validity of the contracts obtained from the two law firms.
Interviews	Four Service Providers	I identified key personnel from the major service providers; Schlumberger, Baker Hughes and Halliburton, service companies representing about 75% of the market. In addition I also interviewed a representative from Quail tools who provide rental services on a smaller scale than the majors.
	Three Oil Company personnel	I interviewed three people within Statoil who has or have had roles as discipline advisors, procurement manager and/ or buyer. The interviews were scheduled over telephone and mostly conducted over lunch to reduce the limited available time these individuals

		have to none- work activities during business hours. Interviews with Statoil representatives in Norway were conducted over telephone.
Conversations/ e-mails	Professional input	<p>Various topics of this thesis was discussed with experts in the field, such as:</p> <ul style="list-style-type: none"> • Knut Kaasen with Scandinavian Institute of Maritime Law at University in Oslo. • Fredrik Stang Rydin, former CPO of Hydro and signee on Norsk Fabrikasjonskontrakt 07 • Group of discipline advisors for Strategic Procurement in Statoil. <p>Communication for this group was mainly conducted over email, but also face to face conversations took place</p>

4.4 Validity and Reliability

In general, empirical research on inter firm contracts/exchange is limited as such exchanges are subject to confidentiality and therefore hardly ever published. For that reason some of the work herein is based upon templates and not actual inter firm contracts. This limits the validity somewhat, but with the time and resources available, this is one of the concessions that had to be made. Any person conducting research will have to weigh ideal method up against what is practically feasible, meaning that a thorough evaluation must be done concerning what method/design is best suited for the research question given the resources, time, experience, etc. that is available to the researcher (Halvorsen, 1996).

Validity and reliability refers to the accuracy and consistency in the methods used to research the problem, in other words, we measure what are supposed to measure and that we would see the same results if we conducted the testing over and over again (Hair *et.al.*, 2003). It is normal to split validity into internal and external validity.

Internal validity refers to whether a delta in an indirect variable alone can explain the delta in the dependent variable, or if the delta in the dependent variable actually comes from something outside what is being studied. It is mostly relevant where you are trying to prove a causal relationship (Trochim, 1999). I understand internal validity to be somewhat of limited relevance for this thesis. I do however have one question where we search for causal relationships. Whether I have been able to capture the elements, that comprise the casual

relationship or not, is difficult to answer, but it does at least provide for many alternatives that can constitute the cause. I cannot rule out that there are variable also outside these that in this specific case would impact what we are setting out to measure.

External validity relates first and foremost to generalization of the results, and the accuracy if doing so. In other words, if the results of the study would be the same for different people, at different times, at a different place (Trochim, 2006). As this is a qualitative study with unstructured interviews, and not an objective observation of a repeating activity it is by nature harder to generalize. I feel however, that I have been able to either cover a decent part of the “population” or where this is not possible obtained expert consultation and advice on contracts and contract formalization. It should however be mentioned that even though four representatives from the largest service companies have been interviewed it does not necessarily mean that the information obtained is these companies’ formal view on this matter.

Reliability as described above has to do with consistency and thereby the quality of the measurement used (Trochim, 2006). To describe what is in the contracts I have, instead of basing this on secondary sources, used actual contracts and found that to be a very good approach. When starting the research, it was hard to know whether it would be sufficient, but after gathering and studying the information, it is consistent with only minor variation. This gives confidence in the approach taken as consistency is an indicator of reliability. The same applies when it comes to the interviews. There was also really no “new” information after the first interview, just elaborations around the same issues and subjects. There was also very limited contradicting information. Later on, when conferring with experts in their field they further confirmed parts of the information obtained during the interviews, providing me with some confidence concerning quality of the measurement used.

At the same time, it must be noted that the accuracy and consistency are not at a level where the results should be generalized.

4.5 **Ethical concerns**

There are several ethical concerns or considerations in a research project. There are ethical aspects that the researcher has to deal with before, during and after collecting, interpreting and presenting data. At the same time, the people providing input have responsibility that they provide truthful information (Hair *et.al.*, 2003).

All of the above are relevant for this thesis; however the one that stands out the most is the ethical dilemmas of the researcher post collection of this information. Because of my employment with Statoil I have had to be very clear with respondents and provider of information that this thesis is not in any way funded or sponsored by Statoil. This is a personal project and none of the information provided is to be used for Statoil's gain going forward. This specifically relates to the contracts provided from legal firms. Even though I have not been provided with the counterparts of the contract, it has been agreed with the providing parties that I will not bring this information forward for use in Statoil.

5 Findings

This section aims to present results and findings from 1) the study of selected contracts and 2) interviews with designated professionals with in-depth knowledge about contractual applications on the NCS and/or GOM.

5.1 Document Analysis of Contracts

The document analysis was first and foremost meant to provide a broader insight into the content and structure of the various agreements, with special focus on contract type, and degree of formalization as defined above. Below is a listing of what was found during the review of contracts relevant for the two regions. I will later discuss what the findings means in the context of contract types and formalization.

5.1.1. Statoil’s standard contract for drilling and well services on the NCS

Statoil has a setup with a “general” template, and discipline requirements are added to this template depending on services to be contracted. Below in table 5 is a presentation of the contract up against our definition of contract formalization. The discipline requirements are excluded from this initial analysis as they are contract or service specific. I will come back to the relevance of these later.

Table 5 – Statoil standard contract for drilling and well services

#	Provisions	Included	Sub-provisions relevant for formalization and contract type
1	Administrative Provisions and Definitions	Yes	- >30 definitions of contract terms, structured. - Exclusivity. - Company Representative and his role.
2	Contract Structure	Yes	- Structure of contract (terms and conditions, exhibits and purchase order), prevailing provisions. - The purpose and role of the Purchase Order.
3	Performance of the work	Yes	- Authority Requirements. - Contractors equipment and personnel. - Quality, Health, Safety and Environment (QHSE).
4	Progress of the work	Yes	- Delayed progress and reporting of such.
5	Variations, cancellations and Suspension	Yes	- Detailed provisions for Variation Orders and requests for such. - Definition of cancellation and effect of such. - Definition of Suspension and effect of such.
6	Delivery and Payment	Yes	- Compensation, Invoicing, Payments and Audits.

			- Title and ownership.
7	Breach of Contract	Yes	- Effects of breach of contract due to delay or defect. - Effects of company's breach of contract. - Contractor's limitations of liability.
8	Force Majeure	Yes	- Effects, notification and cancellation due to Force Majeure.
9	Liability and Insurances	Yes	- Contractor and Company's indemnity. - Indemnity for parties not a part of Contractor or Company. - Limitations to indemnity regime in cases of subsea pollution and pollution from reservoir, in-hole equipment and loss of well. - Indirect losses. - General insurance requirements without insurance limits.
10	Proprietary Rights and Confidentiality Provisions	Yes	- Rights to information and technology. - Confidentiality provisions.
11	Dispute Resolution	Yes	- Court proceedings.
12	A pre-defined scope of work	Yes	- Detailed description of the work to be performed under the contract. - Area of operations. - Requirements to contractor's equipment and personnel. - Delivery and Mobilization. - Optional work outside pre-defined area of operation.
13	Compensation format	Yes	- Description of rates available under the contract for equipment and personnel. - Terms of delivery. - Penalties available under the contract. - Yearly price adjustments based on pre-defined indexes.
14	Administration requirements	Yes	- Requirements to Health, Safety and Environments. - Requirements to Quality Management Systems. - Requirements for montly, daily and and of project reporting.
15	Technical Specifications	Yes	- Technical specifications for equipment needed to perform the work and covered under the contract.

5.1.2. Typical US Gulf of Mexico Drilling and Well Services Contract

Table 6 below constitutes a summary of three contracts obtained from three individual sources. Two of them are actual contracts in use or in recent use in US GOM. The last one is forwarded as an example of industry standards for US GOM. Information about the respective contract parties is considered confidential. As for most contracts for the US GOM,

these are structured in the form of Master Service Agreements (hereafter referred to as MSA). An MSA constitutes in US GOM mostly terms and conditions. In addition, you may often find a list of applicable services and a standardized price book provided by the service provider. Other documents are (sometimes) established project by project/ well by well and not as a part of a long term arrangement between the parties.

I have in some places used a ratio to indicate whether a certain provision is included or not (in a total of 3 contracts). The sample size is just not large enough to conclude on, especially where there are discrepancies within the samples.

Table 6 – Typical US Gulf of Mexico drilling and well service contract

#	Provisions	Included	Sub-provisions relevant for formalization and contract type
1	Administrative Provisions and Definitions	YES	- 0 - 7 Definitions of Contract Terms, limited structure. - No exclusivity. - No information about personnel authorized to operationalize the contract – done on project basis.
2	Contract Structure	YES	- Structure of Contract (terms and conditions, list of services, standard price schedule) and prevailing provisions. - The purpose of the purchase order.
3	Performance of the work	YES	- Authority Requirements. - Independent Contractor. - Standards of Performance.
4	Progress of the work	YES (2/3)	- Limited information about progress.
5	Variations, cancellations and Suspension	YES (2/3)	- Mutual termination rights. - change and amendment mentioned, limited procedures.
6	Delivery and Payment	YES	- Invoicing/payment Requirements. - limited information on transfer of ownership.
7	Breach of Contract	YES	- Simple provisions for breach of contract and Company's rights in case of breach.
8	Force Majeure	YES (2/3)	- Effects, notification and cancellation due to Force Majeure.
9	Liability and Insurances	YES	- Contractor and Company's indemnity. - Limitations due to Care, Custody and Control . - Extensive insurance requirements with pre-defined limits for various activities that may occur under the contract.
10	Proprietary Rights and Confidentiality Provisions	YES	- Somewhat simple confidentiality provisions. - No information on Intellectual Property.
11	Dispute Resolution	YES	- Two of the agreements had provisions for court proceedings

12	A pre-defined scope of work	NO	- Listing of services that can be called off under the agreement.
13	Compensation format	NO	- Sometimes a detailed price book for all available services is attached to the MSA.
14	Administration requirements	NO	- No adm requirements. - Drug and Alcohol Policy.
15	Technical Specifications	NO	- No technical requirements.

5.2 Interviews

This section will describe and present the findings related to the remaining part of the research problem. Information was collected through unstructured/ semi structured interviews with targeted representatives from the largest drilling and well services providers⁴, personnel with significant experience working for various oil companies⁵, and advisors within Statoil in Norway⁶. The interviews conducted with the advisors in Norway were mainly through telephone-interview with follow up questions via email. Interviews made in the US were conducted face to face over extended lunch to minimize interview object's "unproductive" time.

5.2.1. Contract types

The services that are performed are identical in the two regions, but there are distinct differences when it comes to the contracting of these.

In Norway, the majority of the contracts are based on Norsk Fabrikasjonskontrakt, NF07, also for drilling and well services. This is verified directly through access to Statoil contracts, but also through discussions with discipline advisors in Statoil regarding what is used in the marketplace in general. Statoil is actually bound to use NF07 in many areas, especially within

⁴ Sustin Irvin, Senior Account Representative with Halliburton. Interview 08.03.2011
 Alan McDill and Robert Brownly, Senior Account Representatives with Baker. Interview 09.03.2011
 Per Irgens, Wireline Sales Representative with Schlumberger. Interview 17.03.2011
 Tip Cain, Senior Sales Representative with Quail Tools. Interview 16.03.2011

⁵ Kenneth Dillard, former Procurement Manager with Statoil Gulf of Mexico. Interview 02.03.2011
 Dana S. Pitre, Sr Procurement Specialist with Statoil Gulf of Mexico. Interview 03.03.2011

⁶ Jan Hegdal, Advisor Strategic Procurement with Statoil ASA. Interview 17.03.2011
 Inger Mari Sjo Johannesen, Specialist Procurement and Logistics with Statoil ASA. Email 11.03.2011
 Roger Foss, Chief Consultant SCM with Statoil ASA. Email 10.03.2011

projects (Rydin⁷). The contracts are mostly time bound, meaning that there is an i.e. 4 year firm contract period, with optional periods following that.

There are however, according to Kaasen⁸ examples of international majors using their international standard that they have in place on a corporate level with the large international service providers.

Even though the contracts that I have been able to access addresses mostly the same issues and have somewhat similar format, it appears from interviewing both service companies and Statoil representatives in Houston that there is no given contract standard in US GOM. Some of the respondents mentioned however the Universal Commercial Code (UCC) in the US as a reference point for many companies, and also as a fall back where no contract was in place. There are standards in the market such as the IADC standard, which is a standard from the International Association of Drilling Contractors. This standard is applicable for drilling contracts (i.e. for hire of drilling rigs/ vessels), but these are rarely used for drilling and well services contract, which is the segment relevant for this thesis.

The US GOM service contracts appear to be less time bound than what is seen on the NCS. In the US, they operate with what is called evergreen master service agreements that has a clear start date, but at any given time under the contract, it is unclear how long the contract will last. It was however mentioned by one of the service companies that the industry is going away from these kinds of contracts, mostly due to scope creep and changes in risk and political environment.

On questions regarding objectives with the way the contract is laid out, the respondents answered both for the NCS and in US GOM that the contracts in large appear to try to encompass or overcome all thinkable situations that may occur. They don't necessarily address this in specifics, but through provisions that are constructed to work as a frame and govern future occurrences, including variations and amendments.

Several respondents from the service providers brought up the amount of oil companies in the US GOM market compared to other regions as a key to the current contract structures. If there were a limited amount of customers out there then they would be able to negotiate customized agreements/price formats with each of these. However, with the US GOM

⁷ Fredrik Stang Rydin, former CPO of Hydro and currently Procurement manager with Statoil Gulf of Mexico. Interview. 16.03.2011

⁸ Knut Kaasen, Professor with Nordisk institutt for sjørett, UiO. Email 22.03.2011

market they consider this close to impossible. They would have to hire significantly more staff just to manage the amount of different agreements. And with the pressure on low pricing they don't believe that the oil companies would pay for additional staffing in the office. The industry has therefore somewhat accepted this approach as the most efficient one, at least in the past. Today, most companies require a signed MSA for work to occur, not just a purchase order.

In addition to the written, signed contract the participants also all underlined the importance of client and contractor relationship management. There is a common realization that no matter how well highly paid lawyers and teams of industry professionals try to map out everything, they have yet to be able to incorporate all possible future scenarios in the written contract. It should also be mentioned that according to the majority of the respondents this is often where relationships play a key role, especially where the contracts are long term the customer/contractor relationship management has high focus and also most benefits. A long term relationship enables the various involved personnel to also get to know the spirit of the contract in a better way and thereby more easily be able to solve problems not governed by the contract. Quarterly management meetings are a forum that is often used to foster good communication between the larger companies.

From a performance perspective it is important to monitor progress and performance, but from a business perspective, it is out most important to have a good relationship with your client or your supplier. Even though the respondents pointed out that relations are crucial, especially if one ends up in situation that is not described in the contracts, they also responded that good relations sometimes even overrides the written contract where the applicable situation actually is governed by the contract. It was pointed out that this was mostly applicable (according to their experience) in business relationships where they had exclusive rights to supply the company of the specific services.

When it comes to relationship management, most respondents mentioned that the importance of such was more important the more formalized the business relationship was. One of the key goals when having a secured supply under a long term exclusive agreement is to earn additional business. One of the respondents from the service providers mentioned that they had provided their services to a very large oil company consecutively for more than 25 years. This was partially related to their performance of course, but the respondent made it clear that it was in large, due to the excellent relationship between the parties.

Further it was clear that the standard in US GOM had been that the service companies were easily replaced if they did not perform according to expectation from the oil companies. This had changed a little bit the last ten years, but is still very common. From NCS where the standard is long term contracts, it is not common to replace contractors within the duration of the contract, but rather work together as a team to focus on continuous improvement and to solve any challenges that might come along. This was according to Statoil one of the primary reasons for the contract format in use today.

5.2.2. **Regional differences in degree of formalization**

This section was partially covered through the document analysis, but I also wanted additional information and explanation from other parties to confirm and verify what I saw through the content analysis. In addition, the content analysis did not say anything about reasons for any differences.

All the interview objects explained the US GOM contract structure to be MSAs, as explained earlier. The MSAs are meant to represent the legal framework for work ordered by an oil company (i.e. Chevron, BP or Shell) and performed by a service provider (i.e. Halliburton, Schlumberger or Baker Hughes). There are no commitments from either party under the MSA, meaning that all work is being awarded on a well or project basis. This gives both parties both advantages and disadvantages. For the oil companies, this means that they are freer to terminate the use of certain service providers due to under par performance and they can also bid this out as often as they want in order to obtain best price and availability in the market at any given time. For the service provider, one of the main drawbacks is lack of possibility to plan demand. One of the service provider respondents mentioned that they were not able to access the best tools in the company purely because everything in the US GOM was short term contracts. Their corporate management prioritized having those kinds of tools in regions where they knew they were able to sell this on a frequent basis (i.e. on the NCS where Statoil is using these tools under long term agreements). It was further mentioned that all capital expenditure had to be justified through future committed work and that this “rule” had become even stricter after the recent financial turmoil. On the positive side regarding short term contracts, if the service provider is out bid by a competitor then it is only for a short term period. In a long term contract the service provider may be out for an extended period of time.

Further, it was emphasized that MSAs are put in place between two parties without any ties to a specific scope of work, but merely as a tool to eliminate the need to negotiate terms and conditions every time work is supposed to be conducted. Especially in the US with the extensive legal focus, without an MSA in place you could easily kill projects due to the extra time required to enter into contracts. The interview objects mentioned both MSAs that were time bound and MSAs that were evergreen (no end date), with the latter currently being the predominant format. It was also mentioned that only 5-8 years ago this was more like a handshake business, and that a written contract was often not required. This is not the case today.

One of the service providers did mention that they had scope specific and time bound contracts in place for a few services. This was specifically related to contracts where large units had to be placed onboard a drilling rig to perform the service. Instead of quoting services per project or well, this interview subject believed that the oil companies found it more cost effective to keep one contractor (one large integrated unit) onboard for an extended period of time. The interviewee said that 3-5 years was the most common duration for such contracts.

Two of the service providers also mentioned that they have a standardized price book with terms and conditions included, so that if someone calls on them to perform work, and where no MSA is in place, then their price book could constitute the agreement between the parties. Pricing is provided as a discount to this pricebook, and changes in pricing is usually reflected as an adjusted discount. There is no pre-defined process, but something the contractor will request based on actual price increase.

In Norway there is, according to the interview subjects from Statoil, traditionally frame contracts or frame agreements in place for all services procured with a relatively high frequency or where access to limited materials/services is crucial for the business. A frame contract is a scope specific and time bound agreement with a sole service provider, to provide a certain service to the entire oil company. A frame agreement is the same as a frame contract, but under an agreement an oil company has the opportunity to contract several service providers for the same service, and let them compete per well or project. A frame contract/agreement in Statoil, which is based on NF07, and is the standard on the NCS, is compiled as presented in the following table 7, summarized for easy presentation:

Table 7 - Standard NF07 setup

Structure	Name
Terms and Conditions	Conditions of Contract
Exhibit A	Scope of Work
Exhibit B	Compensation
Exhibit C	Contract Schedule
Exhibit D	Administration Requirements
Exhibit E	Specifications
Exhibit F	Drawing
Exhibit G	Company Provided Items
Exhibit H	Subcontractors
Exhibit I	Company's Insurances
Exhibit J	Standard Bank Guarantee
Exhibit K	Contractor's proprietary information
Exhibit L	Parent Company Guarantee

An interesting thing to point out from this is that the advisor in Statoil could tell that they are moving in the directions of MSAs as well. In very recent years they have established MSAs with their largest service providers within drilling and well services. This is done for two main reasons, 1) to reduce transaction costs by making the tendering processes more efficient and 2) to use frequent tenders in markets where competition was limited. The experience was that you spent a long time in a contract evaluation to work out the legal terms and conditions instead of focusing on pricing and pricing structures to cut the best possible deal. And where you in addition did not have sufficient competition, this approach of long term agreements did not work very well. There were low discounts in pricing, and high barriers for entry for new entrants.

These MSAs are not time bound and lists the various services that are applicable under the agreement. It was underlined that even though MSAs were in place, the strategy of going with long term contracts remains as default.

5.2.3. Factors impacting degree of formalization

When it came to asking about why there exists various contract structures, then the majority mentioned it was because of risk based contracting. Not only when thinking MSA or not, but actually within most aspects within procurement and business relationships. With risk based

contracting, they talk about an approach to contracting based on the risk of getting access to the service at the right price, quality and time where shortage in availability of certain equipment or services automatically generate a need for a more firm framework that can secure this supply. This was further said to differ from company to company and depended on how well contracted goods or services, repetitive variation in quality, time and price of such, would impact the company's value proposition.

Size and solidity of the company was mentioned as a differentiator and it was also mentioned that there was a positive correlation between the size of the company and degree of formalization. Larger solid companies are able to handle commitments and take on more risks. Less solid companies are more likely to have less formalized frameworks as they shop from well to well and must have efficient tools to do so, and not large ridged forms that take months to negotiate.

The cost of operations was another factor that was mentioned. The higher the cost of the operations, the more important it is to keep those operations going. In the US there are land operations where the rig cost might be USD 20 – 25,000 a day, while in deeper water there are rigs running at USD 600,000 a day. Cost and risk associated with these operations vary significantly as well as the need for adequate governance, including safeguards and a highly specified contracts.

Infrastructure came out as a differentiator as well. While in US GOM there is a great oil and gas industry infrastructure, you may in other parts of the world, be rather on your own when drilling. In remote locations, there is a greater need for longer formalized contracts while you in the US GOM have such high competition that you are able to source locally, and the need for long term commitments are limited. This is not relevant for most drilling operations conducted in Norway, but it can be for the northernmost locations.

Another interesting factor that was brought forward by several of the service companies was how short sighted the US market often is. The US services market is very much driven by “wall street” and results for the next quarter. There appear to be limited thinking of long term formalized commitments versus limited terms and conditions and a quick round of quotations to obtain the best price.

Bundling of services was also pointed out as a factor by the Statoil representatives in Houston. During the last six years there has been a fragmentation of services in the US

GOM. On the NCS and many other regions, services are to a greater extent bundled. This boosts the value of each contract and thereby the need formalize the relationship in a more extensive way. The reason for this fragmentation is many, but those that were mentioned were 1) the service companies ended up losing too much through bundled services, and 2) as the industry moved to deep-water with higher rig rates, the reliability of the various tools became more and more important. The various oil companies wanted hands on business relationships with the company that was providing the service instead of them having to go through a third party just because the client required bundling of services.

Several of the respondents in the US mentioned historic events as triggers for additional formalization. September 11th and the Macondo incident in the US GOM was mentioned as examples. The first one led to an increased formalization of specifically insurance rules and regulations as companies became more risk adverse. It was very expensive to buy insurance and some could not even get it. When it comes to the Macondo incident, they all mentioned that it may be too early to tell as drilling is just about to resume in the US GOM this spring of 2011 (deepwater drilling has been on hold due to drilling moratorium and withheld permits following the accident). However, some signs of where this is going is already clear. One of the service providers mentioned internal shifting of roles and responsibilities when it came to approval of oil companies' terms and conditions. Earlier it was the line management (i.e. drilling department) that had the final say, but now the lawyers have been given additional responsibility and power to ensure that the service provider does not take on unintended risk. The other service company respondents confirm the picture by saying that they have become more risk adverse and that intent in the contracts will be limited as much as possible. The intent is to be replaced by written risk distribution. From Statoil's side, it is expected that the service providers have an increased focus on indemnification, risk and liability going forward.

5.2.4. Change in contract type and degree of formalization

This topic has a somewhat theoretical basis and when interviewing, it was impossible to discuss all the elements that distinguish the various contract types and affect the degree of formalization. However, through use of illustrations and examples, the interview subjects understood the concept and were able to answer, in a quite cohesive way.

For long term formalized agreements, the interviewees elaborated on the importance of the written contract in the startup phase of a contract. During this time the contract is “the bible” and used and referenced in most communication between the supplier and the client. This applies both for US GOM and NCS. However, as time goes on, relations continue to play a bigger role in the business relationship; the contract is not that often used in conversations, and relations get a more important role. One of the respondents mentioned that they have had a very important client for a number of years, and they are now able to agree on changes to the contract on a management level without involving procurement or the legal department. He also pointed out that it has to be mutual, so that the contractors might have to give a little as well in tough economic times where either the oil price is low or there are bad economic times in general. This would, according to them, not worked out if the client was just shopping around.

6 Discussion

Through analysis and argumentation I have, in this section, tried to combine the findings presented in the previous section with appropriate theory. I have based the discussion on the four research questions for this thesis and structured the section accordingly.

6.1 Contract types used for drilling and well services contracts

To determine the contract type, I have used both document analysis and interviews as sources of information. The document analysis was meant to give more accurate and detailed information than any interview would be able to provide. On the other hand, the document analysis does not provide much information about the contractual relationships. This is where the interviews proved to be a good source of information.

In order to provide a structured discussion, I decided to base this on Table 2 – Contract Types, and the variables used to distinguish the contract types. However, before getting into all the details it is important to clarify that the contracts from both regions have both written and non-written elements to them, but they vary between the regions.

6.1.1. Personal involvement (and the importance of vendor selection)

The contract for NCS does not state anything explicitly about personal involvement, but the clauses in the contract clearly leaves room for human interaction. This specifically comes into effect when you are either deviating from the contract or you are in a situation of default. The contracts are long term, pricing is often fixed or indexed (pre-determined), and the work is called out with the use of a Purchase Order. This reduces the need for personal involvement if the contract is followed. On the other side, one of the reasons why we have the long term contracts in Norway is to enable an increased dialogue between the companies to facilitate teamwork and innovation. In this respect the quarterly meetings play an important role. Good relations are very important when change occurs. A common understanding that is built on trust and desire to create a win-win solution is key to make this work. Personal involvement indicates that we are either under a neo classic or relational contract, or somewhere between.

The contracts for GOM do not state anything specifically about personal involvement either. Personal relations appear however, to be quite different. Under the standard MSAs you have long lasting relationships (evergreen) formalized through a rather limited contract, with

frequent short term projects with limited continuity. There is no doubt that having an extensive amount of personal involvement, along with relationship building and maintenance is key to earn future business.

As these contracts relate to services, there is obvious personal involvement at the execution phase of the contract. And in saying this, it is worth mentioning that there is a delay between time of contract and time of performance. Drilling and well services are complex services, and the oil companies spend much time selecting the right vendors. Defect services on a rig can lead to consequential losses for the operator that is much greater in monetary value than the service actually causing the problem. It is therefore crucial that the contracting companies have a proper quality, health, safety and environment system that is not only in place, but also followed. It is not just because of potential errors that it is also important to perform a proper vendor selection, these rig operations may run up to one million dollars per day, so if you are able to get hold of the most efficient vendor, then this may save you a tremendous amount of money on a deep water well, estimated to take 180 days to drill.

6.1.2. Presentation

It appears both from the document analysis and the interviews that the NCS contract goes further than the US GOM model when it comes to presentation. The NCS contract appears to be more detailed within most areas, trying to predict and handle future occurrences. However, everybody involved understands that it is impossible to foresee all future events under contracts applicable for this kind of work. Both the contracts are therefore very process oriented where they just line up the processes without trying to predict every possible outcome.

Something worth mentioning however, are the effects reported after the Macondo incident. There appears to be a push regarding a higher level of contract detail, something that would drive the contracts in the direction of presentation.

As in previous sections, relations are key whenever agreements on complex challenges need to be reached.

Still, for these kinds of services, we are far away from full presentation which is seen in classic contracts.

6.1.3. **Planning**

Work performed under these agreements is complex, and may have a long duration with several phases. Planning performed prior to commencement is binding, but only if there are no changes in the project/contract itself. The planning is made as specific and complete as feasibly possible. It is however only complete if there are no changes required to basis.

A discrete transaction that is presentiated will have no need for post commencement planning. However, for these contracts, extensive planning is required, also after commencement. This is related, amongst others, to duration and complexity of the agreement, and indicates a type of contracts other than classic contracts.

6.1.4. **Communication**

Through the document analysis it was somewhat noticeable that the requirements for communication were stricter under the NCS contract compared to the GOM contracts. In the NCS contracts, there were personnel identified and authorized to act on behalf of the contract parties. There was also within certain segments of the contracts detailed requirements for information exchange and formal communication between the parties (i.e in case of variations). This would indicate a very formal approach to communication under the NCS contracts. The GOM MSAs were not in any way formalized to this extent and could indicate a less informal approach.

From an operational perspective however, one would both have formal and informal communication. Even though it was only the NCS contracts that indicated nomination of personnel one would find these nominations at the work order level in both regions. The nature of the work covered by these contracts requires an intimate working relationship to solve the challenging tasks.

In addition there is, especially under the NCS contracts, much contact at various levels independent of the actual ongoing work assignments, i.e management meetings, performance reviews etc. This can be of an informal or more formal character, and will tend to develop through a working relationship, and the norms existing in such relationship. Feedback, especially from Quail tools indicate that the norms may be a little different under a GOM MSA than an NCS contract as one under a GOM MSA you do not have the same guarantee for future work. The security of future work under the NCS contracts enables the contractor, according to the informant from Quail tools, to invest more time and resources in long term

development and improvement projects, rather than just going from job to job. Similarly, the communication under these regimes is different, as in an MSA there isn't this security and need to always sell in the next job.

In the two regions there are elements of both requirements for formal communication derived from the contract, and natural rather extensive informal communication driven by long term relationship and contractor performance management. The limited requirements to formal communication, on a contract level, in the GOM MSAs appear to be somewhat symptomatic for a more relational approach to contracting.

6.1.5. Commencement and Termination

The formal contracts in place between the parties in both regions have a clear commencement date. This is the commencement of the formal relationship, not the actual work, or the informal relationship that is likely to have been in place prior to this. The contracts on the NCS have a somewhat clear end date, i.e. four years after commencement, though with possibilities to extend the contracts with pre-defined periods of x years, months or wells. The optional periods reduced the clear boundaries in the agreement which we see in more classic contracts. From US GOM we see that a large degree of the agreements are evergreen. This would indicate a more relational approach to contracting than on the NCS.

At the same time, even though one under an MSA has a long term agreement, this does not mean that work is continuously ongoing. The GOM MSA way of contracting with frequent short term jobs, limited exclusiveness or long term commitments, and easy termination could actually, in a way, represent a sharp in and sharp out. So in one aspect, the overriding MSA is pulling this type of contract in a relational direction, but the operationalization of this agreement, seen in an isolated event, is pulling it in a more classical direction. Zenger and Poppo (2002) do discuss contract types as complimentary to each other, and what we see here may be an example of just this. Through the words *easy termination* we also recognize lack of the relational norm *preservation of the relation* as discussed in Brynhildsvoll (2005) and referenced earlier.

6.1.6. Duration

The majority of well services performed on the NCS and/or in GOM is performed either under a frame agreement or under an MSA. As mentioned earlier, close to no well services

will be performed in GOM without an MSA in place. On the NCS, the representative from Statoil clarified that frame agreements were put in place wherever there were frequent purchases of the same service or where the service was of strategic importance to Statoil. This clearly indicates a long term formal relationship between the parties which eliminates the classic contract types.

The formal contracts on NCS are mainly of limited duration indicating a neoclassic contract, while the GOM agreements are somewhere in the middle of neoclassic contracts and relational contracts due to their focus on evergreen contracts.

Independent of the formal written contract in place, there is relationships existing between the parties that have been there for a long time, and will continue to be for an unknown number of years, all pulling this in a relational direction.

6.1.7. Number of participants

The contracts that I have analyzed for this thesis have two contract parties, as per legal definition. However, there are often several parties involved through a hierarchy of contractors and sub-contractors. Within the drilling and well services, we however see a clear difference between NCS and GOM. On the NCS you have a much larger use of subcontractors for drilling and well services than what is normal in the US GOM. This is assumed to be something that has developed over time due to the market power of the larger oil companies on the NCS (Statoil and Hydro) and their requirements for bundled services. In the US GOM, the contractors have historically had more bargaining power and been able to withstand this requirement. You can therefore say that there are often more parties involved in a specific contractual relationship on NCS than in GOM. This would pull the US GOM agreements in a classical contract direction, while for the NCS contract this identified would pull these types of contracts in a neoclassic and relational direction.

6.1.8. Transferability

There is little to nothing standing in the way of the transfer of a discrete transaction, but it becomes a little more complicated when it comes to contractual relations. There is nothing that really separates the GOM or NCS practice on this point other than that the language appears to be more formalized in the NCS contracts. The contracts are transferable i.e in the form of assignment. Assignment was reviewed in the document analysis although not made

into a separate point in the overview. This was also briefly covered through my session with the Statoil advisor.

Basically this means that a contract can i.e be assigned from Company X to Company Y permanently or for a period of time. Permanently i.e with respect to a buy out/ merger, and temporarily in case of a corporation between Company X and Company Y where Company X assigns all its rights and obligations under a contract to Company Y. This is relatively easy on the formal side, but the informal relational part is the demanding one. MacNeil writes in his “*Many futures of Contracts*” (1974) that this may be almost impossible to achieve, or at least uneconomical under contractual relations, while he in “*The New Social Contract*” (1978) actually changed his mind finding his work of 1974 to be inaccurate on this point. He refers to a buyout and transfer of employees, but I believe this also could be applied for these contracts with respect to assignments. The key here will be communication and exchange of information.

6.1.9. Requirement for future cooperation

The nature of drilling and well service work requires significant follow up after a contract is signed or a relationship initiated. This comes to both planning and post commencement planning, but also performance and follow up post performance. This relates both to GOM MSAs and NCS contracts which would pull them in a relational direction. The only apparent difference here would be requirements for performance and technical requirements to be used for future planning that is included in the NCS contracts. This does not change the fact that future cooperation is required, but it may simplify the cooperation if the map and tools is already in place through the formalized contract. The short duration and sharp in – sharp out commencement/termination eliminates the need for post commencement cooperation and future performance in order to succeed.

6.1.10. Division of burdens and benefits

As for the above, there appears to be limited differences in the actual contracts with respect to division of burdens and benefits. As for typical classical contracts, work/performance is exchanged against compensation. However, the additional dimension under the drilling and well services contracts are additional burdens and benefits based on the performance. Poor performance on one part hurts both or all parties in the projects, while good performance benefits both or all parties in the project. A drilling service contractor that performs

uninterrupted drilling over a long period of time may be rewarded with a bonus in addition to his base payment. The oil company has saved significant time and thereby shares some of these benefits with the drilling contractor. The same applies if he delivers his tools too late to the shore-base and the oil company has to wait for the tools and suffers rig time. The contracts may here require the drilling company to share some of this burden. The NCS contract is somewhat more formalized within the area, but through interviews, it is discovered that even though it is not necessarily recorded in the contracts, they experience that the oil companies still try to recoup cost related to lost time incidents.

6.2 Regional differences in degree of formalization

This section is mainly based on the document analysis, though with some input from the interviews. The nature of the content limits the amount of information that was made available to me, however, for the purpose of the discussion I'm treating this as a representative sample and rather limit any subsequent conclusions.

It is important to point out that it is not the difference in specific items that is important but the total assessment of all the items together.

The below table is a summary of the findings after studying the contracts. I have used YES/NO to denote whether the actual provision was included in the contract and Extensive/Moderate/Limited/Not included to denote the comprehensiveness of the provision, if at all included

Table 8 – Contract Formalization Comparison

#	Contract Provisions	Examples	Included?	
			Comprehensiveness of provision	
			NCS Contract	GOM MSA
1	Administrative Provisions and Definitions	<ul style="list-style-type: none"> • Definition of contract terms. • Exclusive supply. • Who has authority to act under the contract? 	YES Extensive	YES Limited
2	Contract Structure	<ul style="list-style-type: none"> • What contract documents constitutes the contract? • What takes precedence in case of 	YES Moderate	YES Moderate

		conflict?		
3	Performance of the Work	<ul style="list-style-type: none"> • Minimum requirements for performance. • Requirements for Quality Systems. • Authority Requirements. 	YES Extensive	YES Limited
4	Progress of the Work	<ul style="list-style-type: none"> • Reporting of delayed progress. 	YES Moderate	YES (2/3) Limited
5	Variations, Cancellations and Suspension	<ul style="list-style-type: none"> • The variation order process. • When to cancel and when to suspend. 	YES Very Extensive	YES (2/3) Limited
6	Delivery and Payment	<ul style="list-style-type: none"> • Delivery and transfer of ownership. • Invoicing requirements and payment process. 	YES Moderate	YES Moderate
7	Breach of Contract	<ul style="list-style-type: none"> • Rectification and guarantee liability. • Liquidated damages. 	YES Extensive	YES Limited
8	Force Majeure	<ul style="list-style-type: none"> • Effects of Force Majeure. 	YES Moderate	YES (2/3) Moderate
9	Liability and Insurances	<ul style="list-style-type: none"> • Mutual Indemnification. • Limitation of liability. 	YES Extensive	YES Extensive
10	Property Rights	<ul style="list-style-type: none"> • Rights to information, technology and inventions. • Confidential information. 	YES Moderate	YES Limited
11	Law and dispute resolution	<ul style="list-style-type: none"> • Governing law. • Procedure for dispute resolution. 	YES Moderate	YES Moderate
12	Scope of work	<ul style="list-style-type: none"> • Area of operation/application. • Requirements for personnel and equipment. • Deliverables and Reporting. 	YES Extensive	NO Not included
13	Compensation format	<ul style="list-style-type: none"> • Definition of rates for personnel and equipment. • Penalties and bonuses. • Adjustment of pricing. • Price list. 	YES Extensive	NO Not included
14	Administration requirements	<ul style="list-style-type: none"> • Requirements to Quality Management Systems. 	YES Extensive	YES Limited

		<ul style="list-style-type: none"> • Requirements for Health Safety and Environment. • Reporting routines. 		
15	Technical Specifications	<ul style="list-style-type: none"> • Technical specifications of equipment to be used under the contract. 	YES Moderate/ Extensive	NO Not included

Administrative Provisions and Definitions

The NCS contract has an extensive set of definitions in the contract making it crystal clear what is meant with a set of important concepts used later in the contract. The MSAs had only a few definitions which were also in some of the contracts spread throughout the agreement. This may not be an important subject in itself, but very symptomatic for formalization of these agreements.

An important difference however is the use of exclusive rights. It was found through the interviews that this is widely used in Norway, but to a less degree in GOM. The importance of this is that the relationship which is created between two entities, when in close cooperation over time, rather than when companies shop around for each project. Building of trust would, in a relational contracting perspective some places, replace the need for formal contracts, however; what we see here is that the contracts with exclusive rights and long term commitments are those that are the most formalized.

Another important concept is the concept of authorized personnel to act on behalf of the contract entities. There is no such wording in the MSAs, but it has an important function in the NCS contracts. Through discussions with Statoil legal, it is pointed out that, in their view, it is very important to ensure that all contractual formal information is routed to the correct person authorized by the Company to act on its behalf. There is also an automatic replacement of personnel in this position after four years to ensure that the contractual safeguards are complied with and not ruled insignificant due to relational influence. These rules clearly indicate that Statoil is aware of pitfalls related to relational governance and take appropriate actions to protect the individual and the company.

Contract Structure

There were no significant differences under these provisions. Worth mentioning is however,

that all contracts listed the Terms and Conditions prevailing over all other documents and communication.

Performance of the Work

There was surprisingly limited language concerning authority requirements and standards of performance, equipment and personnel in the MSAs. This is a key provision in the NCS contracts. The most important reason for this, according to some of the experts referenced earlier, is related to the warranty language in the contracts where they in the US do not warrant intent, while this is a requirement in the NCS contracts. The intent is therefore to a larger degree spelled out in the NCS contracts in order to define whether a party in the contract is in default or not. As mentioned earlier it is expected that the authority requirement provision will be made more comprehensive going forward after the Macondo incident and the increased focus on compliance.

The MSA includes some language regarding “independent contractor” which is not seen in the NCS contracts. This relates to separation between Company and Contractor as independent parties to further clarify the responsibilities between the parties. This is interesting from a relational contracting perspective and norms of relational integrity, by the fact that these roles and responsibility are already laid out in the formal contract.

Progress of the work

No significant differences between the contracts were identified with the exception of the NCS contract being more detailed and comprehensive.

Variations, Cancellations and Suspension

This section is very different in the two different contracts. The NCS contract has several pages on variations alone, while the MSAs barely mention variation orders. The reason for the highly formalized NCS contracts in this is mainly due to this template being built on a fabrication template where one has turnkey or lump sum pricing and the variation order has a much bigger relevance than in a service contract.

The NCS contract also includes provisions for suspension and termination that are very favorable for the oil company. This is most likely due the purchasing power of the oil companies signing NF07 and may not be the same for minor operators on the NCS. The NCS model has a one sided termination right, while the GOM MSA has mutual termination rights. This itself implies more a relational approach with a win/win culture under the MSAs, rather than a formalistic dominating principal-agent relationship that you can interpret the NCS contract to be.

Delivery and Payment

No significant differences between the contracts were identified with the exception of the NCS contract being more detailed and comprehensive.

Breach of Contract

This is another set of provisions that is very different between the contracts. This relates again back to the warranty and the use of intent in the NCS contracts. The NCS contracts is highly formalized within this area with several clauses and procedures on how to handle defective equipment or delayed progress. It appears that the entities putting this contract together have spent significant time and resources trying to predict all possible future outcomes, or presentation in MacNeil's terms.

The GOM MSAs have some language included regarding this subject, but it is very limited. These findings match what the representatives from some of the service companies mentioned regarding handling of defective equipment or delayed work in the US GOM. According to them, this was more of a negotiation from occurrence to occurrence, while the NCS contracts have specified rules, risk distribution and liability caps in case of breach of contract.

Force Majeure

No significant differences between the contracts were identified with the exception of the NCS contract being more detailed and comprehensive.

Liability and Insurances

This section is highly formalized in both the NCS contract and the GOM MSA. The biggest difference found was in insurances, where there in the MSA is very detailed insurance requirements with pre-defined limits, while in the NCS contracts it was put on the contractor to ensure proper insurance coverage. There are two reasons standing out; first, that in the US GOM there is a range of smaller contractors while you on the NCS mostly work with larger companies with bundled services. The operators on the NCS know that these larger companies have sufficient securities. Second, it is widely known that the industry in the US has a history of frequent court proceedings and settlements and sufficient insurance is a license to operate.

Property Rights and Confidential Information

There are significant differences in the amount of wording that is put into the contracts concerning these subjects with the NCS contract being more detailed and comprehensive.

Law and Dispute Resolution

No significant differences between the contracts were identified with the exception of the NCS contract being more detailed and comprehensive.

Scope of Work

It is under this and the following sections that the different formats really becomes evident. The NCS contract has a pre-defined scope of work with items such as personnel and equipment requirements, deliverables, reporting and area of operations as defaults. In addition, service specific discipline requirements are added to the contract before going to the market for a long term contract.

Duration is one of the keys to the differences. As operators in the US GOM mostly work from well to well or project to project they do not include the scope of work at contract level, but at a work order level. You will most of the time only find a listing of services that are applicable under the MSAs, with no scope of work connected to this. On the NCS each

contract is dedicated for a certain services. This is one of the core differences between contracting in the two regions, and again, the NCS contract is more formalized.

Compensation

After analyzing the contracts and interviewing the service companies, it is pretty clear that there is no standard practice in the US GOM concerning compensation formats, but the most common practice is that it is the contractor's pricebook that constitutes any compensation format. This is in vast contrast to how this is done on the NCS. Information from the service providers indicate that it is the fragmentation of services and the amount of players in the US GOM that drives this setup. As mentioned earlier, and due to the amount of operators in the the GOM, smaller contractor cannot work with operator-specified compensation formats without hiring a range of people to be up to speed on the differences in the contracts. To circumvent this problem, they provide a discount to their own price list to the various companies based on how much business they get.

The NCS contract is set up with a compensation format instructed by the oil company with all inclusive pricing, rules and regulations for adjustments of such. In the US GOM, it is apparently more common that the contractor approach the oil company and request increased pricing based on actual cost increase (where they have submitted pricing for a longer term).

Contract Schedule

No significant differences between the contracts were identified with the exception of the NCS contract being more detailed and comprehensive.

Administrative Requirements

Clear differences are also identified under Administrative Requirements. Extensive language on requirements to Quality, Health, Safety and Environment (QHSE) is included in the NCS contract, while this is taken care of at a work order level under an MSA. In addition, but outside the contract, under both regimes there are rules and regulations for qualifications of the contractors' QHSE system every year to disqualify anyone who does not follow the guidelines set by the operators.

Technical Specifications

As for the above, there are clear differences, but it is mostly related to the contract setup. The MSAs are non-specific and it is impossible include all possible technical requirements in the contract. On the NCS, the contracts are service specific and it is therefore natural to incorporate the technical specification in the actual contract.

It should be repeated that the information above is a snapshot of contracts established prior to the Macondo incident, and that the interviews are indicating a further formalization of the contracts.

6.3 Factors impacting degree of formalization

We have now looked at the degree of formalism in the two regions. This section is divided to a discussion concerning factors contributing to the level of formalization in these contracts.

Risk Mitigation

We saw earlier that Homburg *et.al.* (2009) described that managers tend to increase the level of formalization in the contracts when uncertainty is perceived to be high. This is very much in line with what the industry is now facing in the aftermath of the Macondo incident. Even though this accident happened only a year ago, the old companies are starting to take measures to reduce their risk. We found earlier that one of the service companies have given their legal department more power, another service company said that they as a company are becoming more risk adverse. Both of these would indicate a further formalization of the contract to clarify the risk distribution. This was, according to one of the respondents for Statoil in Houston, also the fact after the World Trade Center incident in 2001 where insurance requirements became the focus. Both of these events are something that has and likely will continue to have impact for contracting, especially in the US GOM. From Norway there are accidents like Alexander Kielland and Piper Alpha that has had a rather large impact on contracting. I have not been able to record anything regarding increased uncertainty as a factor to increased formalization in this matter. However, both of these events changed technical requirements and the requirements to management systems which are a part of the NCS contract requirements today.

BP recently sued three of its own contractors for 40 billion USD following the Macondo incident (Lagorce 2011). If BP wins this case it is likely to have a severe impact on what formalized contractual protection service contractors will require before entering into any new contract.

Security of supply

One of the key factors that was mentioned by many of the respondents was security of supply, and the reason for this is mainly tied up to the consequential cost of not being able to supply on time, and not so much on price. Some of these drilling operations, especially those operating in deeper water run at approximately one million US dollars a day, so proper contractual safeguards to incentivize the contractor to deliver on time is considered one of the main reasons to a rather highly formalized contract. I find it appropriate to point to Skogh's (1989) comment here about the size of a business deal being correlated with the level of detail in the contracts. Even though the explicit contract may not be of large value, it is still a part of a network of outsourced activities that all fail if one fail, seen in the views of an oil company.

These multimillion dollar drilling rigs that are hired on long term contract are also a huge liability to the oil company and represent in this context the presence of asset specificity. If there is a lack of supply of services and equipment, then there is at risk of putting the drilling rigs out of work because they cannot easily be re-deployed without a significant efficiency loss. The measures suggested by the informants regarding additional safeguards are in line with Dyer's (1997) work on asset specificity and complex governance structures as previously referenced.

There are no significant differences in asset specificity between the two regions on this issue and therefore formalization of contract due to potential lack of supply should not make a difference in between the degree of formalization.

Market Conditions

It was mentioned by a few interview subjects that they experience a positive correlation between size/solidity of company and the degree of formalization. They said that these larger more solid companies could take on larger commitments and more risk, and that the smaller

companies often driven by financial institutions operated more short term and therefore needed simple terms and conditions. These observations correspond with the findings from Eisenhardt (1989) about a company's staffing and degree of formalization, as does the contract review of Statoil's frame agreement. Statoil is considered a large company, well-staffed, and has, according to the definition of degree of formalization presented herein highly formalized contracts.

Another item related to market conditions is infrastructure and what it may lead to in relation to contract formalization. Even though the illustration provided by one of the American service companies does not address NCS in specific it may still be relevant for some areas. Houston, as the international hub for the oil and gas industry has all the infrastructure in place, all the major companies are present, all the service lines are present, and availability is usually really good. This means that there is usually no need for an oil company to make long term contract in order to get companies interested. They often already have the equipment or services available on the shelf. If you combine this with the short term focus in the US you have a large incentive to optimize contract pricing at all times. However, in order to facilitate frequent negotiations you need efficient governance structures (ref frequency dimension of transaction cost theory), and not large formalized contracts that takes months to negotiate. On the other side, you find oil discoveries like the recently found Skrugard (Skaalmo, Bjerke & Lindeberg, 2011) in the Barent Sea where there is limited availability shore bases, personnel and resources. In situations like these, the service companies tend to require larger commitment from the oil companies so they limit their risk related to investments in the area (asset specificity).

Another factor that can be categorized under the heading market conditions is what the market allows in terms of bundling. On the NCS one will find a large degree of bundling, while in GOM there are very specialized stand-alone services. This means that for the same range of the services, more services are rolled up into one contract, making the commitment larger and the contract more complex. This again means that risk for opportunism rise as does need for safeguards (Williamson, 1985). As the contracts become larger, the compensation does as well, and again, according to Skogh (1989), so does the detailing in the contract (increased degree of formalization). This is maybe the clearest differentiator between the region and contributor to different degree of formalization between US GOM and NCS.

6.4 **Change in contract type and degree of formalization**

The information that I was able to obtain from the various interview objects regarding phasing, and impact on governance, were remarkably similar, both between operator and contractor, as well as between US and Norway. The ruling governance method at the beginning of a relationship appears to be the written contract, and this is mainly because of the lack of trust between the parties, the parties are studying and learning one another. This is in line with the findings of Jap and Ganesan (2000) described earlier.

They further mentioned that after a while, when the relationship has grown and trust has been developed then the written contract became less and less used as the ruling form of governance (it does not mean that the contract or degree of formalization changes, it only means that the use of the contract to govern the relationship does). Now it is relationship and relational norms that to a larger degree governs the relationship to whether that be according to or outside the contract. The Quail long term contract example that was presented earlier is a good example showing this. This finding is also in line with those of Helper and Levine (1992).

I did not record any information indicating any change in the degree of formalization in the (written) contracts as a relationship progresses through various phases, however, what was changing was the use of the contract. The relationship based on the formal written contract represents to a large degree a neoclassical governance mode, while the informal part of the relationship representing the relational contract does change. Both from the interviews conducted and the theory framework presented we find that relational norms have an increasingly important role as a relationship progresses. According to Zenger and Poppo (2002) contract types can work as complimentary to one another and not just work as alternatives.

Limited information was recorded regarding the end of a relationship, but from the theory, we know that it appears as the norms are very important in this phase as trust may be broken and reason for the relationship ending. At the same time reverting to the written contract may boost the commitment to a proper process and prevent a quick dissolution (Jap and Ganesan, 2000)

7 Conclusion

Through an academic journey of studying works from renowned authors and scholars such as MacNeil and Williamson, and through current practical and operational information obtained from various business professionals, I feel like I have addressed the research problem in an adequate manner. It did however become clear rather early that this thesis would have to be of a qualitative exploratory nature and that I would not be able to obtain desirable accuracy and consistency. Information about contracts and contracting practices was hard to obtain, and the choice of research design also limited the ability to make sound predictions or generalization. It is therefore imperative, that the conclusions drawn herein are viewed in the light of this information.

The objective of this thesis was primarily to document current governance structures, and to study the regional differences in contract type and degree of formalization between the Norwegian Continental Shelf and the US Gulf of Mexico. In addition, a few research questions were added and deliberated on concerning triggers for formalization and contract type.

The contracts for drilling and well services appear to mostly be governed under neo-classic contract law, especially for the contracts applicable for the Norwegian Continental shelf. The contracts in place for US Gulf of Mexico appear to have a stronger relational element to it, although not enough to be defined as a pure relational contract. Both of the contract formats tries to a large extent to presentiate the future through written contracts with safeguards. Only limited focus is put on development of norms as a means to regulate the relationship.

Degree of formalization was measured using 15 variables, and several important regional differences were identified. The Norwegian Continental Shelf is characterized with limited long term explicit contracts with terms and conditions, plus a set of exhibits detailing all contract specific provisions. US Gulf of Mexico is characterized by evergreen master service agreements with a list of applicable services, and sometimes with an attached pricebook. When it comes to terms and conditions the two agreements more or less address the same issues, but only 4 out of 11 provisions/topics were considered equally formalized. The Norwegian Continental Shelf contract had a higher degree of formalization on all other provisions/topics. In addition, the MSAs do not address Scope of Work, Compensation, or Technical Specifications which is a significant contributor in our definition of degree of

formalization. In conclusion drilling and well services contracts for the Norwegian Continental Shelf appear to be more formalized than those of US Gulf of Mexico.

I have throughout this thesis, from studying books and articles, identified various elements that impacts the degree of formalization. These are summarized in three elements;

1. Risk mitigation, representing formalization efforts made to limit assumed uncertainty.
2. Security of supply, due to the high importance of timely delivery (because of asset specificity) and the effects of clear safeguards.
3. Market conditions, in the form of size of companies involved, size of deal, and available infrastructure.

Finally I also looked at how the contract type and contract formalization changes over time. The findings indicate no change to the degree of formalization. For contract type I conclude with that the written contract is the most important governance mechanism in the start and end of a relationship. In between the buildup and cessation of the relationship, trust and relational norms play a significantly more important role, to the extent of actually governing the relationship on a day to day basis.

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Attachment 1

Transactional and Relational Poles

Attachment 1 – Transactional and Relational Poles - Summary

	CONCEPT	EXTREME TRANSACTIONAL POLE	EXTREME RELATIONAL POLE
1	<p>Overall Relation Type</p> <p>a) Personal involvement</p> <p>b) Types of communication</p> <p>c) Subject matter of satisfactions</p>	<p>Non primary</p> <p>Segmental, limited, non-unique, transferable</p> <p>Limited, linguistic, formal</p> <p>Simple, monetizable economic exchange only</p>	<p>Primary</p> <p>While person, unlimited, unique, non-transferable</p> <p>Extensive, deep, not limited to linguistic, informal in addition to or in lieu of formal</p> <p>In addition to economic, complex personal non-economic satisfactions very important; social exchange; non-exchange</p>
2	Measurability and actual measurement of exchange and other factors	One side of exchange is money; other side is easily monetized; both are actually measured; no other aspects	Both exchanges and other factors are relatively difficult to monetize or otherwise measure, and the parties do not monetize or measure them
3	Basic sources of socioeconomic support	Apart from exchange motivations themselves, external to the transaction	Internal to the relation, as well as external
4	Duration	Short agreement process; short time between agreement and performance; short time of performance	Long term: no finite beginning; no end to their relation or performance, except perhaps upon death of parties
5	Commencement and termination	Sharp in by clear agreement; sharp out by clear performance	Commencement and termination, if any, of relation likely to be gradual; individual entry into existing relation is often gradual, as may be withdrawal; individual entry may be by birth, and withdrawal by death
6	<p>Planning</p> <p>a) Primary focus of planning</p> <p>b) Completeness and specificity</p> <p style="padding-left: 20px;">a. Possible when planning occurs</p> <p style="padding-left: 20px;">b. Actual planning accomplished</p>	<p>Substance of exchanges</p> <p>Can be very complete and specific; only remote contingencies (if those) are beyond reasonable planning capacity</p> <p>Very complete and specific; only the practically unplanned (of which there is</p>	<p>Structures and processes of relation; substance planning for initial period primarily</p> <p>Limited specific planning of substance possible; extensive specific planning of structures and processes may be possible</p> <p>Limited specific planning of substance carried out; extensive planning of structures may or may</p>

	CONCEPT	EXTREME TRANSACTIONAL POLE	EXTREME RELATIONAL POLE
	<p>c) Sources of forms and mutual planning</p> <p>a. Bargaining and adhesion</p> <p>b. Tacit assumptions</p> <p>c. Sources and forms of post-commencement planning</p> <p>d) Bindingness of planning</p> <p>e) Conflict of interest in planning</p>	<p>little) left unplanned</p> <p>Specific consent to price of a good produced unilaterally by seller; short bid-ask bargaining, if any</p> <p>Inevitably present, but inherently relational and anti transactional</p> <p>No post-commencement planning</p> <p>Planning is entirely binding</p> <p>Enterprise planning can be expressed only through zero-sum allocative planning, hence all mutual planning is conflict laden</p>	<p>not occur</p> <p>Adhesion without bargaining unlikely except in case of entry of new members into existing relation; otherwise extended mutual planning merging imperceptibly into ongoing relation being established; a “joint creative effort”</p> <p>Recognized aspect of relational planning, without which relations cannot survive</p> <p>Operation of relation itself is prime source of further planning, which is likely to be extensive; may or may not be extensive explicit post-commencement planning</p> <p>Planning may be binding, but often some or all of it is characterized by some degree of tentativeness</p> <p>Enterprise planning may be separable at least in part from allocative planning, and hence relatively low in conflict; merger or non-allocative enterprise planning with allocative planning may occur in ways which mute conflict and provide non-negotiable ways for dealing with it</p>
7	Future cooperation required in post-commencement planning and actual performance	Almost none required	Success of relation entirely dependent on further cooperation in both performances and further planning
8	Incidence if benefits and burdens	Shifting of other specific assignment of each particular benefit or burden to one party or the other	Undivided sharing of both benefits and burdens
9	Obligations undertaken	Genuinely expressed, communicated and exchanged promises of parties	Relations itself develops obligations which may or may not include genuinely expressed, communicated and exchanged promises of the parties.
	a) Sources of content	External to parties and	Both external and internal to the

	CONCEPT	EXTREME TRANSACTIONAL POLE	EXTREME RELATIONAL POLE
	<p>b) Sources of obligation</p> <p>c) Specificity of obligation and sanction</p>	<p>transaction except for their triggering it by manifestation of consent</p> <p>Specific rules and rights specifically applicable and founded on the promises; monetizable or monetized (whether by mutual party planning, i.e. promissory or otherwise, i.e. by rule)</p>	<p>relation; same as the source of content of the obligation as to internal element</p> <p>Non-specific; non-measurable, whether based on customs, general principles or internalizations all arising from relation or partly from external sources, restorative unless breach results in termination, then may become transactional in nature</p>
10	Transferability	Entirely transferable with the sole exception of an obligor's ultimate liability for non-performance	Transfer likely to be uneconomic and difficult to achieve even when it is not impossible
11	Number of participants	Two	May be as few as two, but likely to be more than two
12	<p>Participants views of transaction or relation</p> <p>a) Recognition of exchange</p> <p>b) Altruistic behavior</p> <p>c) Time-sense</p> <p>d) Expectations about trouble in performance or among the participants</p>	<p>High</p> <p>None expected or occurring</p> <p>Presentation of the future</p> <p>None expected, except perhaps that planned for; if it occurs expected to be governed by specific rights</p>	<p>Low or perhaps even none</p> <p>Significant expectations of occurrence</p> <p>Futurizing of the present, i.e. to the extent past, present and future are viewed as separate, the present is viewed in terms of planning and preparing for a future not yet arrived</p> <p>Possibility of trouble anticipated as normal part of the relation, to be dealt with by cooperation and other restorational techniques</p>

Attachment 2
Interview Guide

Interview Guide

- Introduction and objectives, names, positions, daily duties.
 - Please consider questions as talking points and not yes/no questions
 - I will ask follow up questions where
 - I will limit discussion to one hour

Interview Subject:

[name]

[Company]

[Title/Position]

1. Please elaborate on content and structure in drilling and well service contracts applicable for the Norwegian Continental Shelf/ Gulf of Mexico
2. What do you consider as contributing factors to the drilling and well service contracts formats in place for Norwegian Continental Shelf/ Gulf of Mexico?
3. What pros and cons do you see with very formalized contracts/relationships versus less formalized
4. How important are relations under a business and/or contractual relationship, and how does this change during the lifecycle of a business/contractual relationship?
5. How does historical events such as the Macondo accident impact the applicable contract formats for drilling and well services?
6. Please mention some key characteristics of the contracts for drilling and well services for Norwegian Continental Shelf/ Gulf of Mexico?