Valuation of Solstad Offshore ASA

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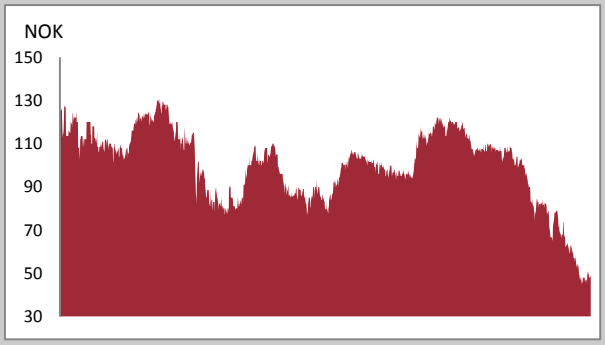
SOLSTAD OFFSHORE ASA

Executive Summary

Solstad Offshore ASA

Oil Service/Offshore Supply	
Recommendation:	**Buy/Hold**
Target price (NOK):	**Kr 54,80**
Share price (NOK):	**Kr 48,90**
Upside potential:	**12,07%**
Reuters ticker:	**SOFF.OL**
Bloomberg ticker:	**SOFF:NO**
Market cap (NOK):	**1892m**
Enterprise Value:	**12528m**
Number of shares:	**38,7m**
WACC	**7,74%**

Performance 5 years



Return	-3mnd	-6mnd	-9mnd
Return	-22,05%	-36,22%	-51,28%
Price high	67,75	86,00	108,00
Price low	45,00	45,00	45,00

Solstad Offshore is a strong Norwegian Offshore Supply player with operations in all the major regions. The company provides exposure to the high-end PSV, AHTS and CSV segment - with a total fleet of 47 vessels.

The major driver for SOFF`s revenues is the global E&P spending. Petroleum companies' investment is driven by the level of the oil price. The overall demand for OSVs is positively affected by number of offshore rigs, platforms and subsea wells.

The recent plunge in the oil price has created a challenging market for the OSVs companies, with lower demand for OSV vessels. This together with the high supply growth the recent years has resulted in an oversupply of OSV vessels. Hence, lower dayrates and utilization rates. Therefore the competition among established firm is extremely high, and the future market conditions can be categorized as the "Survival of the fittest".

SOFF`s ROIC has increased since 2011, but still lower than WACC. Going forward we expect the future ROIC to decrease on short-term, but will see rising levels in 2017-

Based on our estimated value we see SOFF as a potential investment for marginal investors. This BUY/HOLD recommendation is supported by the multiples, and SOFF arguably has an upside potential of 12, 07%.

Key figures	2012H	2013H	2014H	2015E	2016E	2017E	2018E
Revenue	3 362 203	3 626 139	3 880 173	3 277 415	3 108 013	3 179 413	3 362 874
Growth	12,82%	7,85%	7,01%	-15,53%	-5,17%	2,30%	5,77%
EBITDA	1 441 967	1 554 286	1 712 983	1 307 668	1 229 587	1 260 061	1 420 862
Growth	34,74%	7,79%	10,21%	-23,66%	-5,97%	2,48%	12,76%
EBITDAMargin	42,89%	42,86%	44,15%	39,90%	39,56%	39,63%	42,25%
EBIT	857 150	1 122 920	1 251 156	794 801	733 858	780 738	957 308
EBITMargin	25,49%	30,97%	32,24%	24,25%	23,61%	24,56%	28,47%
Oil price $/bbl	111,26	111,63	108,56	60,00	72,00	78,00	79,00
E&P growth	8,00%	7,00%	4,00%	-25,00%	-2,00%	9,00%	3,00%

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1.0 Introduction

1.1 Motivation

The purpose of this paper is to analyze and valuate the Norwegian Offshore Supply Vessel company Solstad ASA (SOFF). Our motivation for writing this thesis is founded on many factors and reasons.

We find the skill of valuation both challenging and highly interesting. As we both have studied *Finance & Strategic Management*, we thought it were a great opportunity to combine our developed knowledge in both fields. We have experienced that a good valuation requires interdisciplinary skills, as it allows us to thoroughly investigate several aspects of the company.

The Offshore Supply Vessel (OSV) industry is a highly volatile, complex, capital intensive and cyclical business. The industry is extremely affected by the macro-economic environment. Thus, demand for OSV vessels are based on numerous factors. The most significant driver is the petroleum companies offshore spending, which again is dependent on global economic conditions (oil price). These factors were also one of the main reasons for picking this topic. The extreme drop in the oil price in the second half of 2014 has influenced the world economy severely as numerous countries are highly reliant on the oil price. According to CIA (2015), Norway is at present the world`s 16th largest producer of crude oil. As we both are from Norway, we have noticed that this drop has affected the whole country. Many people have already lost their jobs, and the whole country is basically “shaking”, due to the uncertainty about the future oil price development. Hence, we find this kind of thesis extremely interesting, as we both increase our valuation skills and develop an in depth understanding of the oil price and OSV industry.

The OSV industry is a highly globalized industry, with several participants across the world. However, Norwegian companies have historically experienced a strong market position. One of the main OSV actors in Norway is SOFF. SOFF were established in 1964 as a shipping company (dry cargo), but first developed into a specialist in providing services for the offshore petroleum industry in 1998. Since this, SOFF has changed their fleet composition in line with the demand from oil companies. SOFF is one of the most experienced actors in the whole industry, they operates globally with a modern fleet and has high exposure to the interesting subsea market. The OSV market is expected to become extremely challenging the next years. Therefore, it will be really interesting to see if SOFF has the capability to compete and fight in a market that is categorized by many analysts as the: “Survival of the fittest”.

1.2 Problem Statement and Sub-conclusions

The overall scope of this thesis is to determine the fair value of SOFF. To find the most accurate value, we will apply different valuation techniques. Our subjective findings will be abridged in a commendation to potential investors.

"What is the fair value of SOFF per 27.04.2015, and does the current share price reflect the future outlook of the company?"

The arrows illustrates if our determined value of SOFF is lower (overvalued) or higher (undervalued) than the current share price of 48.9 NOK. We have defined a number of sub-questions to support the key problem statement.

Industry Analysis (Section 3.0)

In order to answer the problem statement and carry out the most accurate valuation conceivable, it is important to develop a comprehensive knowledge of the OSV industry. Additionally, information concerning the overall structure of the OSV industry (business cycle) and the historical development of SOFF is important.

- What characterize the OSV market, and how is the value chain composed?
- What are the main peculiarities of SOFF business concept, vision and strategy?
- How has SOFF developed?
- Who are SOFF`s peers and competitors?

External Analysis (Section 4.0)

This section of the paper examines how external factors influence SOFF`s value creation. We will look at the relationship between demand and supply in the OSV industry. Thereafter we will analyze the industry structure, combined with an internal analysis, to see if SOFF holds a competitive advantage.

- What are the external factors that influence SOFF?
- How does the demand/supply relation affect the dayrate mechanism?
- How does the industry structure affect future earnings prospects?
- Does SOFF hold a competitive advantage?

Financial Analysis (Section 5.0)

The financial analysis targets to evaluate SOFF`s historical performance and recognize any reasons for the development. This section provides us with an understanding and ability to forecast future financial performance in section 7.0.

- How have SOFF and the selected peer group performed financially over the last 8 years (2006-2014)?
- How has SOFF and their peers been affected by the latest recession in the industry (Financial Crisis (2009) and the recent plunge in the oil price (2014)?
- How is the OPEX development and financial gearing?
- What are the predictions for the upcoming financial performance?

Forecasting (Section 7.0)

This section ties together the results from the strategic and financial analysis, combined with the SWOT (Section 6.0), to provide a realistic forecast of future cash flows for SOFF.

- How will the market outlook affect the future FCF of SOFF?
- How will the spot market for the different segments change in the future?

WACC (Section 8.0)

We estimates WACC through CAPM, debt return and capital structure. We will use an iteration method, combined with both collection of historical data and future trends in the market.

- What WACC is associated with an investment in SOFF?

Valuation (Section 9.0)

The theoretical share price of SOFF can be deliberated through countless valuation models. We will apply three models to ensure the validity of our forecast (further explained in section 2.1).

- What is the fair value of SOFF per share using the models explained in section 2.1?
- How sensitive is the decisive value to variations or vicissitudes in the key value drivers?
- What is the enterprise value of SOFF when applying relative valuation through multiples?

This approach is categorized as the *analytical-synthesis theory* by Ingebritsen (1991). The approach smears the solutions of the sub-questions defined, and copes it into a total solution to the key problem statement (1.2) (Ingebritsen, 1991).

2.0 Scientific knowledge and methodology

The purpose of this section is to make the thesis clearly, consistent and easy for the reader to follow the argumentations and analysis. We will apply both strategic and financial analysis in order to answer the problem statement (1.2). As a consequence of this, we will apply both qualitative and quantitative methods. This valuation of SOFF is written from an independent analyst`s opinion and only publicly accessible data is used.

We will apply different theories from financial literature, articles and academic books, described in section 2.1 under. The financial statement analysis and valuation theory, are based on the theories presented by Petersen & Plenborg (2012). We have also used annual reports, research from major investment banks and official market data. The consolidation of all the theory and data is used to estimate a fair value of SOFF. Our selected sources will be referenced by the APA method (both in-text and in the reference list).

2.1 Selected theories and models

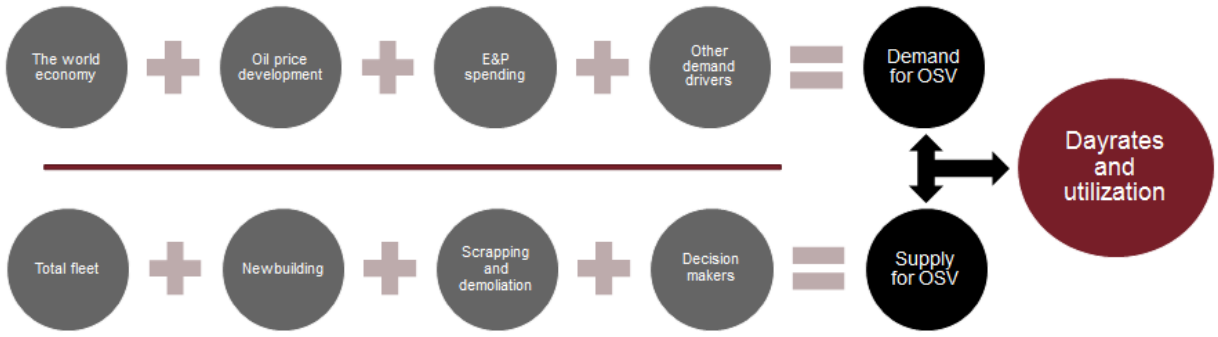
External analysis (Macro-economic environment): The shipping market model

As the OSV industry is heavily influenced by macro-economic factors, the Shipping Market Model, developed by Martin Stopford, is used to recognize and analyze the main drivers. The Shipping Market Model offers a tool for examining the relationship amid demand and supply in commodity industries (Stopford, 2009). The OSV industry is a global business, with many competitors that offers the same product, and mobile assets (vessels) (Pareto, 2015). Hence, it can be categorized as a “commoditized industry”. The future OSV dayrates and utilization will be extremely important to determine, as it is the most significant factors affecting revenue. The shipping market model is applicable, because it captures the main drivers in the industry – and how these affect OSV dayrates.

Stopford (2009) developed this model with the intention of analyzing traditional shipping markets. The original model is illustrated in appendix 2.1. However, the OSV industry is a specific and particular segment. Thus, we have created a “modified” model – by removing some factors (Seaborne commodity trades and Average haul) and replaced those factors with specific factors affecting the OSV industry. The overall aim of this breakdown in section 4.0 is, as mentioned, to explain the OSV dayrates. This will be extremely important when forecasting in section 7.0. The PESTEL framework is another framework to analyze the external environment (first developed by Francis Aguilar in 1967 under the name “ETPS”).

However, we have chosen to use the Shipping Market Model because it is more custom-made for the OSV industry. Thus, it can capture all the important market factors (Stopford, 2009). The "modified" Shipping Market Model is illustrated under.

Figure 2.1 –The "modified" Shipping Market Model
(Source: Stopford 1997 & Own contribution)



As we can see from figure 2.1, the demand for OSV is a function of numerous factors. We have therefore taken a top-down approach in section 4.0, in analyzing the oil price and the consequent E&P spending. To define the supply for OSV`s, we will look at all the decision makers (particularly the vessel owners) and how they affect the overall dynamics in the market.

Industry Analysis

Porter`s Five Forces (P5F) is used in order to understand the OSV industry and its dynamics (Grant, 2013). This is a highly relevant framework to develop an overall understanding of the competitive environment for SOFF (Porter, 2008). P5F in turn identifies the profitability of the industry (that will be further analyzed in section 5.0), and how SOFF is situated relative to its competitive environment. This will be used to forecast SOFF`s future potential for profitability.

Figure 2.2 – Porters five forces
(Source: Porter (2008), illustrated in Grant (2013) & Own contribution)

In the OSV industry there are, as we will see in this paper, many variables that affects the competition and in turn SOFF`s potential for profitability. Thus, we find the P5F framework illustrated in figure 2.2 as the greatest model because it covers the overall competition through five steps (analyzed in section 4.2).

Internal Analysis

The VRIO framework is used in order to highlight the capabilities and resources of SOFF. It is extremely important to understand the potential for competitive advantage, as this is a major source for profitability (Grant, 2013). To identify the key factors, we will examine SOFF`s value chain and classify them into, as illustrated in figure 4.14: human, physical, financial and organizational resources. Each of the factors will be evaluated, according to the questions of value, rarity, imitability and if SOFF is organized to capture value. This is done to figure out if the factor provides SOFF with a competitive disadvantage, competitive parity, temporary competitive advantage or a sustained competitive advantage (Barney & Hesterly, 2012).

Barney & Hesterly (2012) defines the VRIO framework as a good instrument to study the internal environment of a firm. To determine its competitive potential it is important to ask the question (illustrated in figure 2.3) about a resource or capability (Barney & Hesterly, 2012).

Figure 2.3 – VRIO questions
(Source: Barney and Hesterly (2012) & Own contribution)

1. Question of ***Value***: "Does a resource enable a firm to exploit an environmental opportunity, and/or neutralize an environmental threat?"
2. Question of ***Rarity***: "Is a resource currently controlled by a small number of competeting firms?"
3. Question of ***Imitability***: "do firms without a resource face a cost disadvantage in obtaining or developing it?"
4. Question of ***Organization***: "Are a firm`s another policies and procedures organized to support the exploitations of its valuable, rare, and costly-to-imitate resources?

As you will see in the internal analysis section 4.3, we have applied a toolbar illustrated under. This is done to "benchmark" resources and make it easier for the reader to follow our argumentation. By doing this, the conclusion of the VRIO model is easier to understand. Additionally, we can determine if SOFF has a competitive potential.

Competetive Disadvantage	Competetive Parity	Temporary Competetive advantage	Sustained Competetive advatange

External and internal factor Analysis (SWOT)

The SWOT framework is used to recapitulate our findings in the strategic (3.0, 4.0) and financial (5.0) sections. These findings (Illustrated in section 6.0) lays the foundation for the forecasting in section (8.0).This framework evaluates the Strengths, Weaknesses, Opportunities, and Threats affecting SOFF. Though, this model is not the only tool applicable for analyzing these factors. Valid and related frameworks are for example SCOPE, CORE and SOAR, but as SWOT are easy to use and understand: this well-known framework is preferred (Grant, 2013).

Figure 2.4 – SWOT Framework
(Source: Grant (2013) & Own contribution)

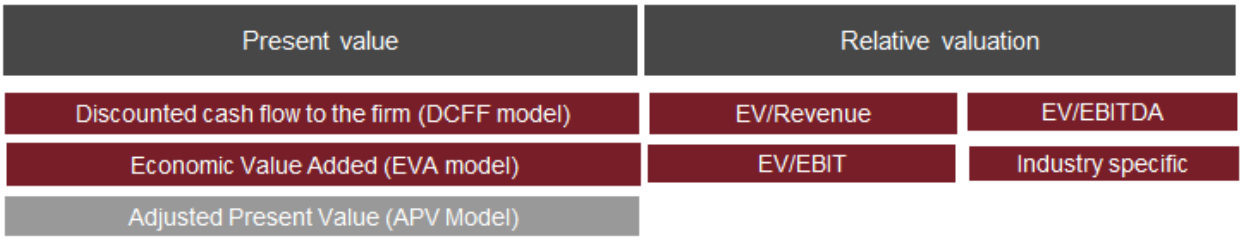
Regression analysis (SAS Enterprise Guide)

In our forecast of OSV dayrates in section 7.0, we have used a regression analysis for the AHTS and PSV segment. Founded on historical time series of different explanatory variables (Oil price, Number of rigs, #AHTS vessels) we will run a multiple regressions for the AHTS dayrates. This is done to check if there is a relationship (linear) with our dependent variable (AHTS dayrates). We also comprehended the same multiple regression for the PSV segment, but the results weren't applicable for future forecast. Therefore, we only used a simple regression with oil price as the explanatory variable and PSV dayrates as the dependent variable. The descriptions and details of the models can be seen in appendix 7.2-7.3.

Valuation approaches

There is a wide range of valuation techniques appropriate to assess the fair value of SOFF. In relation to the problem statement (1.2), the main focus is to evaluate the enterprise value (EV). There are two key approaches to valuation of EV (as liquidation models and contingency models are dismissed as valuation approaches to the overall scope of this thesis): present value models and relative valuation by multiples. To answer the problem statement (1.2), the DCF and EVA method will be applied, in a combination with our selected multiples, illustrated under.

Figure 2.5– Valuation Approaches
(Source: Petersen & Plenborg (2012) & Own contribution)



As long as the present value models are founded on the equivalent input, they give identical results. This is because they are derived from the dividend discount model explained in Petersen & Plenborg (2012). However, the DCF model is the most common valuation technique. This model determines the EV value of SOFF through the use of the free cash flow to the firm (FCFF) (Petersen & Plenborg, 2012). In our valuation the FCFF are forecasted from 2015 to 2020 (6 years), and Gordon`s Growth Model is applied to calculate the terminal value. The formulas applied in the DCF model is illustrated in appendix 2.2

The EVA model is also applied (to make sure that there are no blunders in the DCF-estimates). This model determines the value of a firm, based on the after tax operating income, subtracting the charge for the cost of capital employed (Petersen & Plenborg, 2012). The formulas applied in the EVA model are illustrated in appendix 2.2

The relative valuation, through our selected multiples (EV/EBITDA, EV/EBIT & EV/Revenue) is a fast and easy method of estimating the EV. Forward looking multiples have been applied as they are more precise than backward looking multiples (Koller et al, 2010). Additionally all equity-based multiples (P/B & P/E) are dismissed according to Koller et al (2010) “the best practice model” (Koller et al, 2010). Equity-based multiples do not consider leverage, which is an extremely significant factor when doing a

comparison of SOFF to peers. Additionally P/E multiples is affected by the capital structure and not evenhanded its operating performance.

This was just a short introduction to the valuation approaches used, and will be further explained in section 8.0

Sensitivity Analysis

This paper is based on several subjective assumptions. Hence, the estimate of SOFF can therefore be biased by our (analysts') opinion. Therefore, it is really imperative for future investors to understand how small variations in the underlying factors impact the overall value of SOFF. Based on this knowledge, we have created numerous sensitivity analyses to discuss the most precarious assumptions in our forecast (Section 7.0). The sensitivity analysis will provide the investor with useful information about down-or upside potential as a consequence of variations in the external environment (Section 4.0) and - or internal factors (4.3).

2.2 Criticism of sources, delimitations and structure of paper

Delimitations

In order to deliver a valid answer to the problem statement (1.2), and to make the collection of information and analysis convenient, some limitations and assumptions have been compulsory:

- Only publicly available information has been used in the analysis
- The cut-off date has been set to April 27, 2015, which is the day after the publication of the latest annual report. Thus, no information after this date has been used in this valuation.
- Cash surplus is paid out as dividends as it does not affect the firm valuation
- Some vessels have contracts which can be extended by charterers; we have assumed that these vessels will enter the spot market when their long-term contracts are terminated.
- 10 years of historical data is used as this will cover the entire business cycle in the OSV industry.

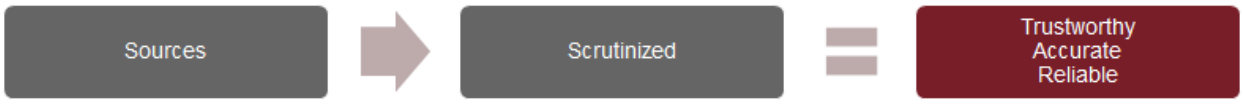
Assumptions regarding the forecast are emphasized as they occur in the appropriate sections.

Criticism of sources

As mentioned in the introduction in this section; information published by SOFF and their peers are applied in this paper (ref SOFF and peer`s annual reports). A remarkable note is that companies may have incentives to endorse themselves as an attractive OSV company in order to boost their image. On the other side, the validity of annual reports is still deliberated being fairly high, because of the requirements specified by law and the audit validation. However, to avert potential bias from affecting the cogency of the paper, we will remain critical when dealing with this kind of information.

Our statistical and historical data are mostly a combination of certain independent sources to prevent bias in the estimates. We have primarily used sector reports written by industry professionals (RS Platou, Pareto, DNB Markets etc.), who are assumed having valid and objective knowledge of the industry or market. To evaluate and get an exhaustive understanding of SOFF`s external environment (oil price development etc.), we have applied different articles and information by major companies and organizations (World Bank, IEA, EIU, OPEC etc.). We believe these sources are reliable and built on accurate data. On the other side, information from for example OPEC could be biased, as they can consider important information as confidential. Overall, this is data all other analyst could retrieve. Therefore, we have assumed a strong form of market efficiency (all prices replicate all information of the company and the economy) (Brealey, Myers, & Allen, 2014).

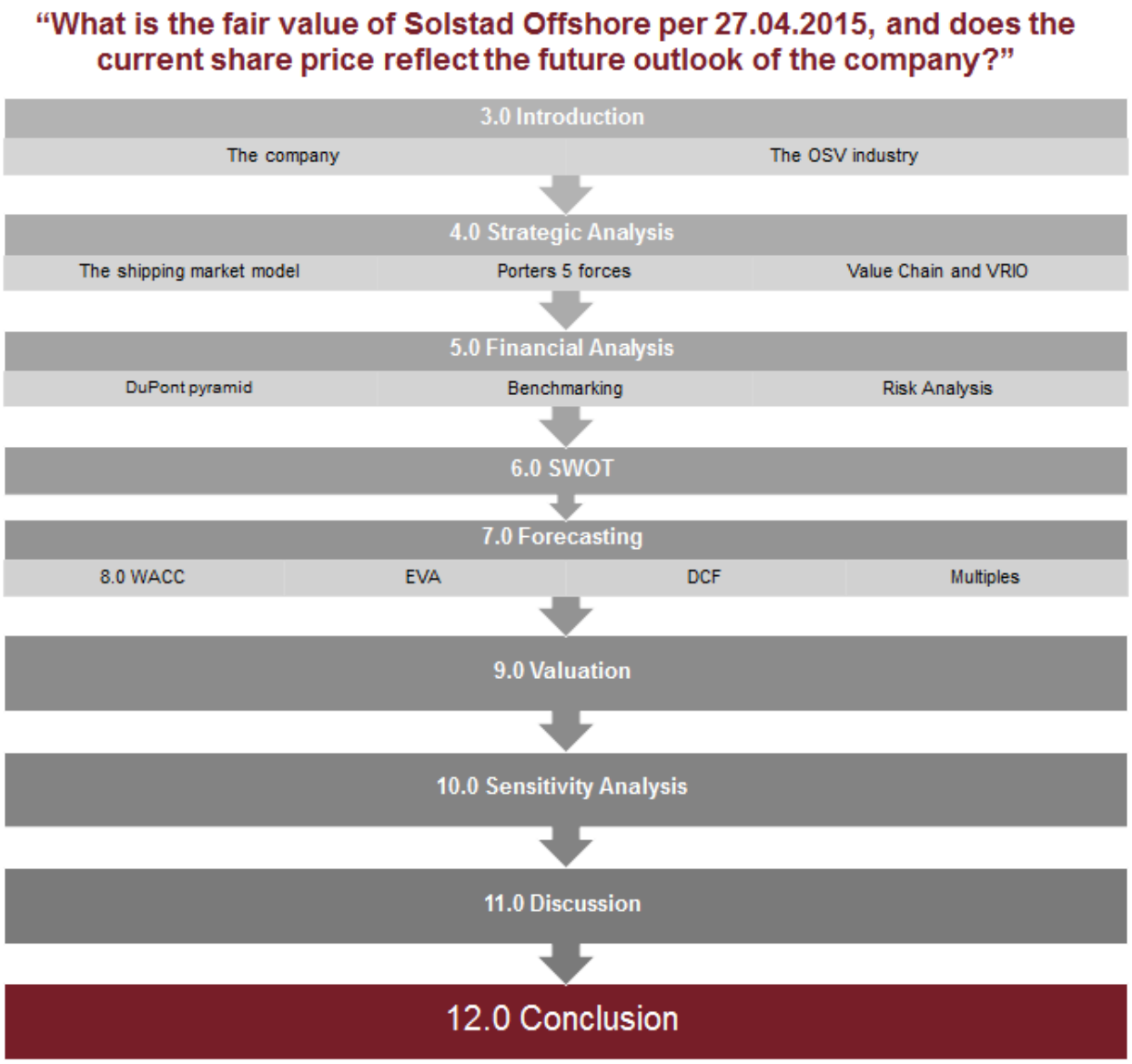
Other sources are also inspected, to measure and evaluate their overall precision and trustworthiness. In sum, we deliberate our sources of primary and secondary data as being reasonably trustworthy and a high amount of validity.



Structure of paper

The structure of this paper is illustrated in figure 2.6. On the basis of the selected models presented over, each section analyzes different characteristics that lay the foundation for the subsequent section. We argue that, by following this structure, the paper gets consistent and easy to follow.

Figure 2.6 – Structure of the paper
(Source: Own contribution)

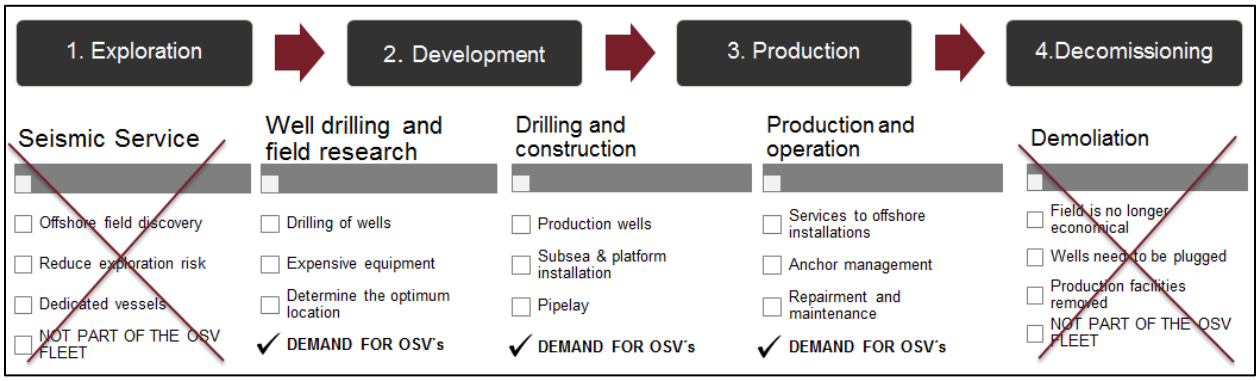


3.0 Internal Analysis

3.1The Offshore Supply Market

Offshore Supply Vessel (OSV) is an ocean motor vessel used for transporting goods, cargos, supplies and offshore exploration and production (E&P) equipment across oil platforms. OSV`s is used by oil and gas companies for E&P activities, and transportation of offshore energy resources. Additionally, OSV vessels support the oil rigs installation process (ABG, 2015). As the OSV companies operate offshore, they need to face challenges such as long distances, extreme weather conditions and ultra-deep water (Pareto, 2015). With the operationally challenging production characteristics, the OSV industry can be categorized as an industry with high operational risk. Thus, the demand for advanced technology has increased substantially the recent years. The demand for OSVs can best be defined by the value chain for the oil petroleum industry illustrated under.

Figure 3.1 – Demand for OSV in different parts of the offshore petroleum companies value chain
(Source: World Bank (2009) & Own Contribution



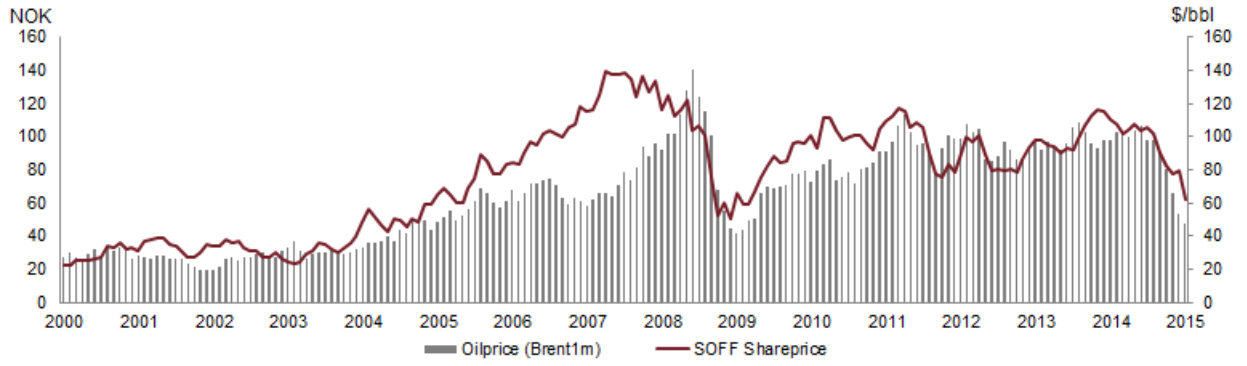
The value chain for the petroleum industry contains upstream, midstream and downstream activities. The value chain starts with the exploration and recognition of suitable areas. Then, the fields are evaluated, developed and composed, and these upstream activities are called E&P (World Bank, 2009).The midstream activities refer to infrastructure such as transporting and storage of products and crude oil. The commodities are usually transferred by very large crude carriers (VLCCs), liquefied natural gas (LNG) tankers, or pipeline networks. The last part of the value chain is the downstream activities which include the processing, transportation, marketing and distribution of the finished product. As illustrated in figure 3.1, OSV companies take part in most of the process except for the seismic service and demolition of rigs (red cross). Well drilling & field research, drilling & construction, and production & operation all have disparate demand for OSV services. The vessels can be divided into three main

segments: Platform Supply Vessels (PSV), Anchor Handling Supply Vessels (AHTS) and Offshore Support Construction Vessels (OSCV) (RS Platou, 2015). The AHTS and PSV are demanded all over the relevant value chain. OSCV are requested in two out of three stages (Drilling & construction and Production & Operations). SOFF operates with a dispersed fleet, in all these segments – and can therefore be characterized as a major player in the OSV industry.

Historical development of the OSV market

In line with the development of the offshore petroleum industry around 1950s, the demand for OSVs emerged. Thus, OSV became a worldwide industry. The supreme demand factor for OSV`s are the petroleum companies E&P spending, which again is directly affected by the level of the oil price. Figure 3.2 illustrates the great correlation between the oil price and SOFF`s share price. Throughout the period from 2004-2007 the oil price attained historical high levels and the E&P spending reached all-time high. Hence, the OSV market was extremely profitable with high OSV dayrates. As we can see from the illustration below, the financial crisis in 2009 resulted in a sharp drop in the oil price. Thus, E&P spending experienced a negative growth, which slowed down the demand for OSVs. In 2009, the global economy recuperated, but as the market conditions were extremely good in the years before the financial crisis – the orderbook was extremely high. The delivery of these vessels caused an imbalance between supply and demand in the OSV industry. The recent plunge in the oil price (2014-2015) has caused the OSV market many of the same bullwhips as under the financial crisis. Oversupply of vessels and slowing demand, again puts pressure on dayrates and utilization. As higher utilization is equivalent to greater revenue potential – the present market for OSV companies can be categorized as extremely challenging. This will be further analyzed under section 4.1.

Figure 3.2 – Oilprice development vs SOFF share (2000-2015)
(Source: Datastream, Oslo Børs, SOFF annual reports & Own contribution)



3.1.1 Solstad at a glance

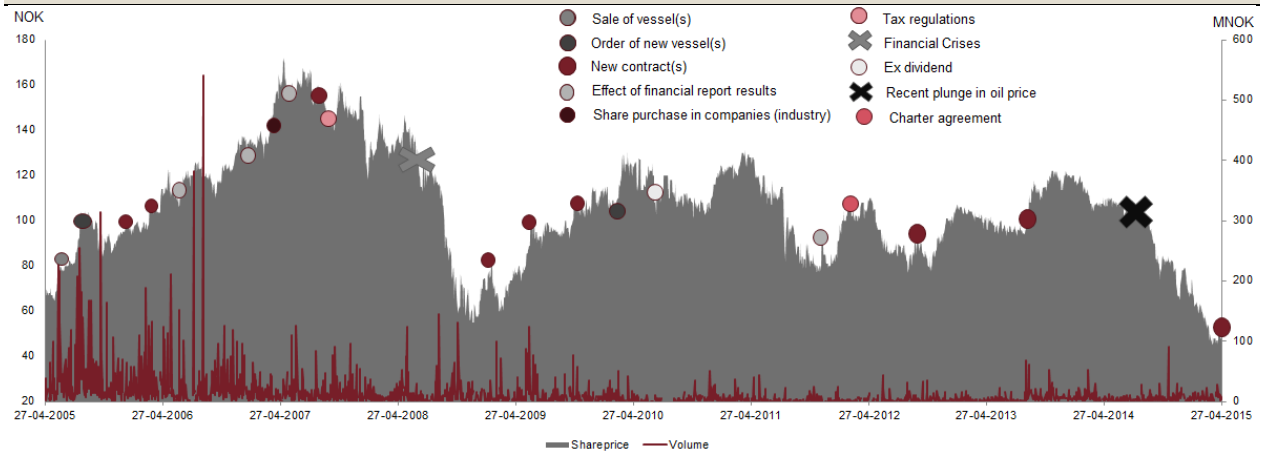
History

Solstad Rederi AS was established in 1964 by Captain Johannes Solstad in Skudneshavn. SOFF first established itself as a shipping company within the dry cargo sector. Later on, the company also moved into the container segment before they entered the OSV industry in 1973. In 1982, SOFF sold their last dry-cargo and solely operated as an OSV company before they again entered the shipping industry in 1989 (SOFF - AR, 2014). In 1998, SOFF stated their operational strategy, by selling their last shipping vessel and thereby developed into a specialist in providing services for the offshore petroleum industry. SOFF got listed on Oslo Stock Exchange in October 1997 as Solstad Offshore ASA, under the ticker SOFF.

Major historical events and SOFF share price development

SOFF`s share price development has been volatile and in line with the oil price, as illustrated in figure 3.2. Important historical events for SOFF that historically has increased SOFF`s share price (d-o-d % change) are order of new vessels, new contracts, share purchases, beneficial charter agreements, and stable financial reports. Historical events that has decreased the share price (d-o-d % change) can be explained by negative macroeconomic episodes (financial crisis, oil price drop), ex dividend and negative tax regulations. SOFF`s share price reached a record high price of 172 NOK in 4th May 2007, due to the beneficial market conditions for OSV companies from 2004-2007. In 2009, SOFF share price dropped to 56 NOK as a consequence of the financial crisis. Today (27.04.2014) the share price is 48.9 NOK as an aftereffect of the recent plunge in the oil price. Appendix 3.1 illustrates that the periods with highest d-o-d (%change) in the share price were 2008-2009, 2011-2012 and 2014-2015

Figure 3.3 – Major Historical events and SOFF share price development (27.04.2005-27.04.2015)
(Source: Datastream, Oslo Børs, SOFF annual reports & Own contribution)



Organization and activities

The company's mission is to operate as an integrated shipping company within high specification vessels (SOFF - AR, 2014). As illustrated in figure 3.1, SOFF`s core business is to provide services to petroleum-related offshore activities. The superiority of SOFF`s vessels are rigged to carry out projects over and above traditional supply and anchor-handling services. The operation is managed from their head office in Skudeneshavn, in addition to branch offices in Aberdeen, Rio de Janeiro, Singapore, Perth and Manilla. The overall corporate structure is illustrated in appendix 3.2. The spread of their operational management is due to their global footprint that is illustrated in figure 3.5, with 18 of their vessels placed in the North Sea, 9 in the Brazilian Continental Shelf, 7 in Asia, 5 in the Mediterrean, 4 in Golf of Mexico (GoM), and 3 in Africa.

Business concept, objective and strategy

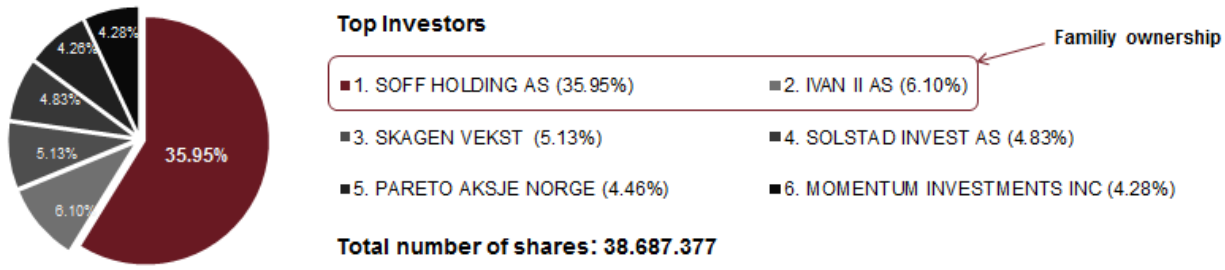
To be able to conduct a detailed valuation of SOFF, it is important to have an understanding of their objectives, strategy and business concept. This understanding makes a more comprehended strategic and financial forecast (Plenborg & Petersen, 2012). SOFF`s overall goal is to be a major player and provider of a wide range of services through operational excellence (SOFF - AR, 2014). They are pointing to be one of the foremost shipping companies in the North Sea, and at the same time aiming to be a big actor in Brazil and the GoM. SOFF is reaching to become an industry leader in the Subsea segment, where they already are one of the biggest players in the North Sea. To reach their overall objective SOFF has established a corporate strategy to offer customer-focused solutions. SOFF try to offer specialized services when needed, and at the same time offer high quality services. SOFF is generally responsible for the overall operations of the vessels including chartering, manning and technical management. As mentioned in section 3.1 SOFF operates in a risky and volatile industry. Hence, they also seek cooperation, and long-term strategic assistance with other players to mitigate the risk (SOFF – AR, 2014).

Figure 3.4 – Business concept, objective and strategy
(Source: SOFF – AR, 2014 & Own contribution)

Ownership structure, management and board of directors

The biggest investor in SOFF ASA is SOFF Holding AS (SOFFHA) and IVAN AS, with respectively around 36% and 6% of the shares. SOFF`s total number of shares is ~ 38.7 million, where SOFFHA holds ~13.9 million and IVAN AS holds ~2.4 million. SOFFHA is an investment company evenly owned by SOFF Trading and SOFF Invest. IVAN is evenly owned by Ametista, Vindbalen, Aurorah and Syhre AS. The CEO of the two companies is Ellen Solstad. Ellen is also a board member together with Johannes (Both), Per Gunnar Solstad (SOFFHA), Kristine (IVAN) and Lars Peder Solstad (IVAN). This can clearly be characterized as a family ownership, which is a very common ownership structure among the Norwegian Offshore companies (Steen & Canyon, 2012). The top 20 shareholders in SOFF ASA currently holds ~82% of shares, and the top 6 shareholders control around 60% of the shares outstanding.

Figure 3.5 – Ownership structure (Shareholders)
(Source: SOFF – AR, 2014 & Own contribution)



Lars Peder Solstad has been the CEO of the company since 1999. He represents together with CFO (Eivind Kvilhaug), C&O Director (Hans Knut Skår Jr), and QA Director (Jakob Hoines) the key executives in SOFF. As illustrated in appendix 3.3, the board of directors consists of five people, and board members with interest (shares) in SOFF are: Terje Vareberg, Anette Solstad, Toril Eidesvik and Anders Onarheim. Ketil Lenning is the last board member and can be categorized as independent, as he has no interest in SOFF (Steen & Canyon, 2012).

Fleet and business area

SOFF is among the more sizeable OSV companies controlling a fleet of 47 vessels, including one vessel under construction. SOFF has the third largest fleet among its peers, behind DOF (79) and Farstad (64). In line with their strategy of becoming a big international player within the Subsea segment, SOFF has invested heavily in their CSV fleet the last years. SOFF`s fleet is divided between the three main

segments with currently 20 CSV`s, 18 AHTS`s and 9 PSV`s. The OSV vessels are illustrated in figure 3.6, the segments will be further described under. SOFF`s net freight income in 2014 was divided with 53% from CSV`s, 35% from AHTS`s and 12% from PSV`s. Their regional freight income was divided by 37% from the North Sea, 22% from Asia, 20% from South America, 13% from Central and North America, 4% from West Africa, and 4% from the Mediterranean and Europe (SOFF – AR, 2014). SOFF`s average age of the total fleet is ~10.4 years. The fleet is well diversified when it comes to type, age, size and specifications (RS Platou, 2015).

Figure 3.6 – Picture of OSV vessels
(Source: SOFF – AR, 2014 & Own contribution)

Platform Supply Vessel (PSV) segment

PSVs are built for serving the daily transportation needs of the offshore industry. This includes transportation of supplies and goods/equipment to and from offshore installation. PSV vessels are rigged with enormous tanks to accommodate water, ballast and fuel. As illustrated in figure 3.4, PSV`s also has large deckspace, and the size of the vessels varies from small ships (<500m^2) to large ships (900+m^2). The demand for high-end vessels with large deckspace has been a trend the recent years (Pareto, 2015). High-end vessels in the PSV segment can be classified by cargo deck area (CDA), where high-end are above 900+m^2 (RS Platou, 2015). SOFF have a total of 9 PSVs, with an average year of ~10years (Appendix 3.4). The vessels are operating in Brazil (3), the Mediterranean (3), in Norway (2), and the UK (1). One of their vessels ends their term contract during 2015 (excluding options), and 1 is exposed to the Norwegian spot market (SOFF – AR, 2014).

Anchor-Handler-Tug-Supply (AHTS) segment

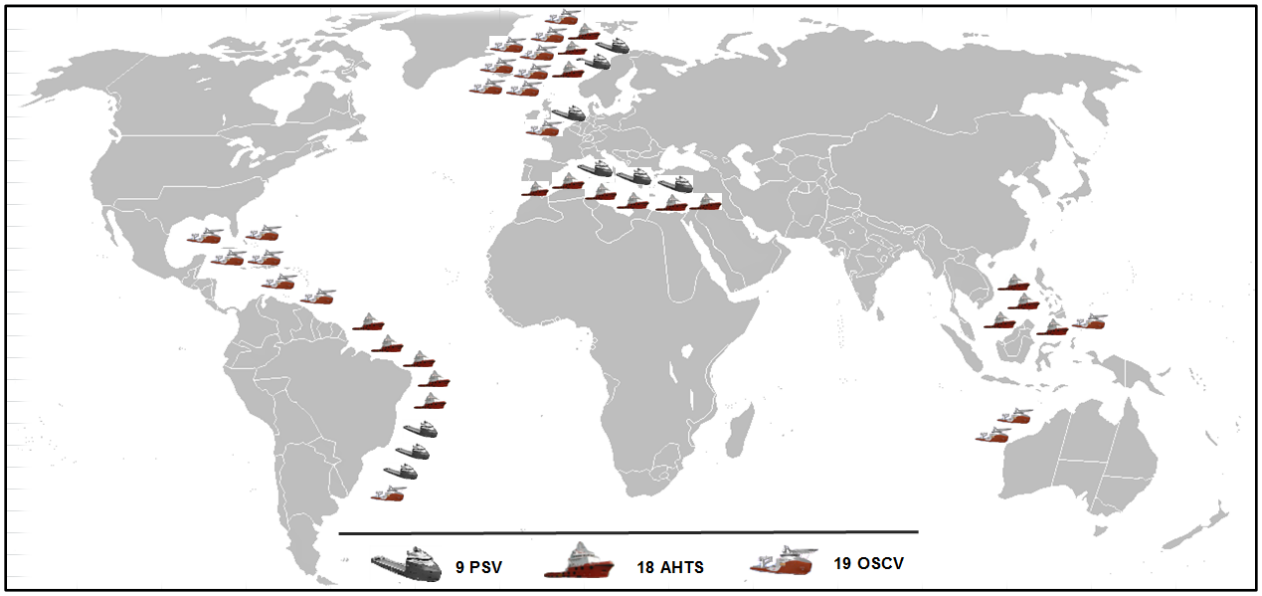
Compared to PSV`s, the AHTS`s vessels are more complex and the demand for technical complexity and specifications are higher. AHTS vessels are specially designed to handle anchors for oil rigs, and to tow offshore facilities as jack-up rigs, semi rigs, and floating production units (RS Platou, 2015). They can also

be used to transport supplies to and from offshore drilling rigs in addition to provide assistance during deep-water anchor handling and tanker loading. A recent tendency is that Ultra Deep Water (UDW) rigs are equipped with dynamical positioning, which allows the rigs to move themselves (RS Platou, 2015).This can in fact reduce the future demand for AHTS. As installations and equipment has become larger, the demand has shifted more towards the high-end segment. High-end vessels in the AHTS segment can be classified by a BHP (Boiler horsepower) > 20.000 (RS Platou, 2015). SOFF has a total of 18 AHTS, with an average age of ~14 years (Appendix 3.4). The vessels are operating in Brazil (5), UK (4), Norway (3), Malaysia (3), Egypt (1), Indonesia (1) and Tunisia (1). Seven of their vessels ends their term contract during 2015 (excluding options), and 7 vessels are exposed to the spot market (SOFF – AR, 2014).

Offshore Support Construction Vessels (OSCV) – Subsea Segment

OSCV's are the biggest and most advanced vessels in the OSV industry. OSCV`s are designed to support complex offshore subsea and platform constructions. In addition, these vessels assist in the installations and maintenance of the drilling process. The complex subsea system is illustrated in appendix 3.5. As mentioned in section 3.2.3, SOFF`s main objective is to become a major player within the subsea market. SOFF has a total of 19 OSCVs (excluding newbuilds) in their fleet, with an average age of ~ 8 years (Appendix 3.4). The vessels are operating in Norway (8), GoM (4), Australia (2), Mexico (2), Angola (1), Brazil (1), Singapore (1) and UK (1). Eight of their vessels ends their term contract during 2015 (excluding options), and one is exposed to the spot market (SOFF – AR, 2014).

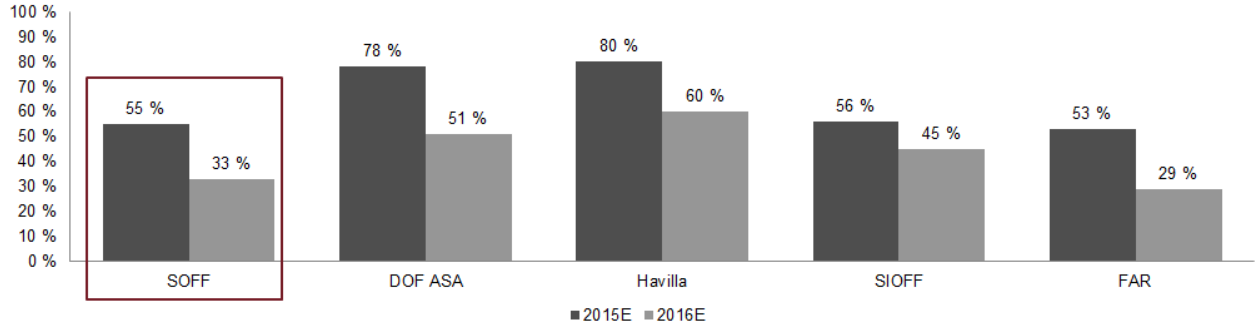
Figure 3.7 – SOFF`s Fleet overview
(Source: SOFF – AR, 2014 & Own contribution)



Contract coverage and utilization

As mentioned, SOFF operates in a very risky and volatile business and is exposed to several external factors. Thus, a common feature in the OSV industry is to fix vessels on term contracts. A part of SOFF`s strategy is to provide specialization and quality through long-term charters (SOFF – AR, 2014). The market conditions have changed dramatically the recent years, and contract coverage will be even more important for SOFF the next years (DNB Markets, 2014). As illustrated in figure 3.8, SOFF is facing a period (2015-2016) with decreasing contract coverage. Hence, SOFF is more exposed to the volatility in the spot market. The contract coverage is fair compared to the average contract coverage for the peer group of 67% and 46%.

Figure 3.8 – Average utilization for SOFF 2014, and future contract coverage (2015-2016).
(Source: RS Platou (2015), SOFF – AR, 2015 & Own contribution)



Geographical segments

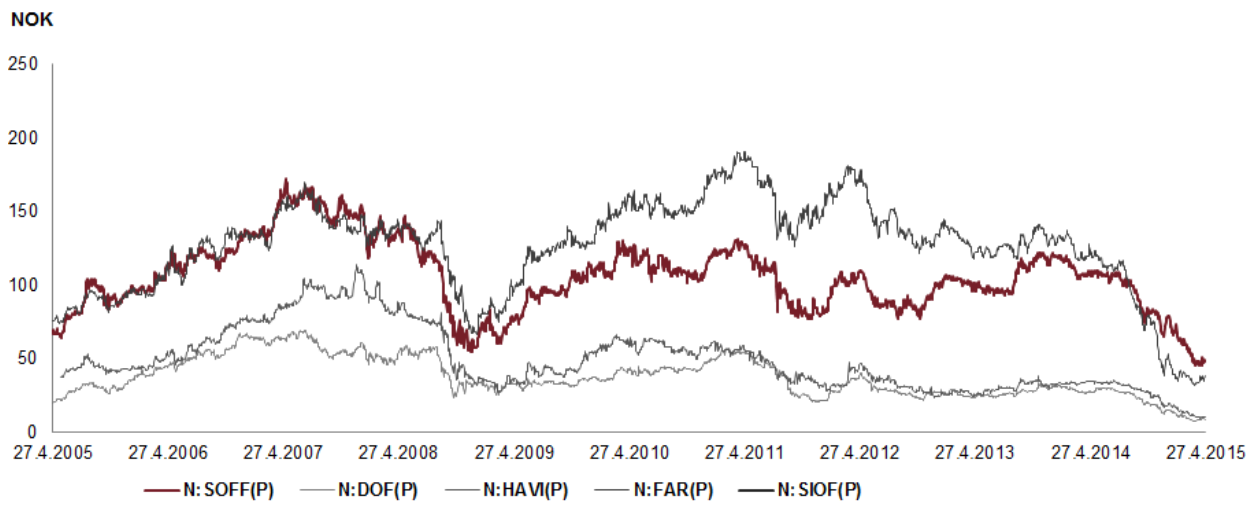
As illustrated in figure 4.9, The North Sea and Brazil are SOFF`s main focus areas and consist of ~60% of the total fleet. The remaining 40% operates in all the major offshore regions in the world. We will further analyze the most important markets for SOFF under section 4.1.1.3.

3.1.2 Interpretation of peer group

There is important to conduct a relevant assessment of SOFF´s sustainability performance. Hence, we need to identify critical competitive strengths and weaknesses, as well as key sustainability challenges and opportunities affecting SOFF. To analyze the historical development, we need to define a peer group to analyze SOFF´s proportionate performance. The analysis will compare their competitors' performance against SOFF and to achieve an "appropriate" analysis, we have to choose peers carefully. According to Petersen & Plenborg (2012) it is important that the financial statements are based on the

same accounting principles and that the firms benchmarked are comparable. They should operate in the same industry and have somewhat similar risk profiles. We have chosen our peer group based on factors as size of the company, comparable fleet (medium to-high-end segment), their core operations, and the location of their fleet (Appendix 3.6). Based on our peer group analysis, the subsequent companies listed at Oslo Stock Exchange (OSE) have been elected: Farstad Shipping ASA, Siem Offshore ASA, Havila Shipping ASA and DOF ASA. As we can see from the appendix 3.6, the peer group shares numerous of the same characteristics as SOFF, but there are also many particular differences. DOF ASA is the only company in the peer group with high exposure to OSCV/Subsea market. Farstad and Havila don't have operational vessels in GoM, Australia and the Mediterranean. The total fleet and the market cap also differ, but in spite of this we (and industry specialists) see the peer group as the most comparable firms listed on OSE. They have the same core operation, organizational structure and value chain (Figure 3.1) (RS Platou – ABG – Pareto, 2015). Additionally their expected outlook is ranked from negative to positive.

Figure 3.9 – Peer Group Comparison - Share price development
(Source: RS Platou (2015), Annual Reports & Own contribution)



DOF ASA

DOF was founded in 1981, and is the leading player within the OSV industry and subsea construction services. DOF has sustained a very active and progressive newbuilding programme the last years. The increased size of the fleet, which now counts 80 vessels, has similarly increased their debt levels noticeably (RS Platou, 2015). As illustrated in appendix 3.6, DOF has the same high exposure towards the Subsea segment as SOFF and operates in the same major regions. DOF has a well-diversified fleet and

high contract coverage considering the size of the fleet (RS Platou, 2015). Thus, most of their fleet operates on long contracts, with low exposure to the spot market. DOF share the same market environment as SOFF and can be defined as a highly important competitor in the future. As illustrated in appendix 3.7, the company had a total operating income of MNOK 10.6, and net debt (total debt - cash & cash equivalent) of 21.0 in 2014. DOF`s contract coverage for 2015E and 2016E is respectively 78% and 51%. RS Platou (2015), states that their future outlook is *stable*.

Farstad Shipping ASA

FAR was established in 1956, and entered the OSV industry in 1974. The company expanded rapidly through newbuildings and renewal of the fleet in the nineties. Thus, they became a fully integrated shipping company. By the end of 2014 the company`s operating fleet counts 62 vessels. FAR has a low exposure to the subsea segment (3 vessels) compared to SOFF (21 vessels) and DOF (31 vessels). As exemplified in appendix 3.7, the company had a total operating income of MNOK 4.4 and net debt of 9.5 in 2014. FAR contract coverage for 2015E and 2016E is respectively 53% and 29%. RS Platou (2015), states that their future outlook is *negative.*

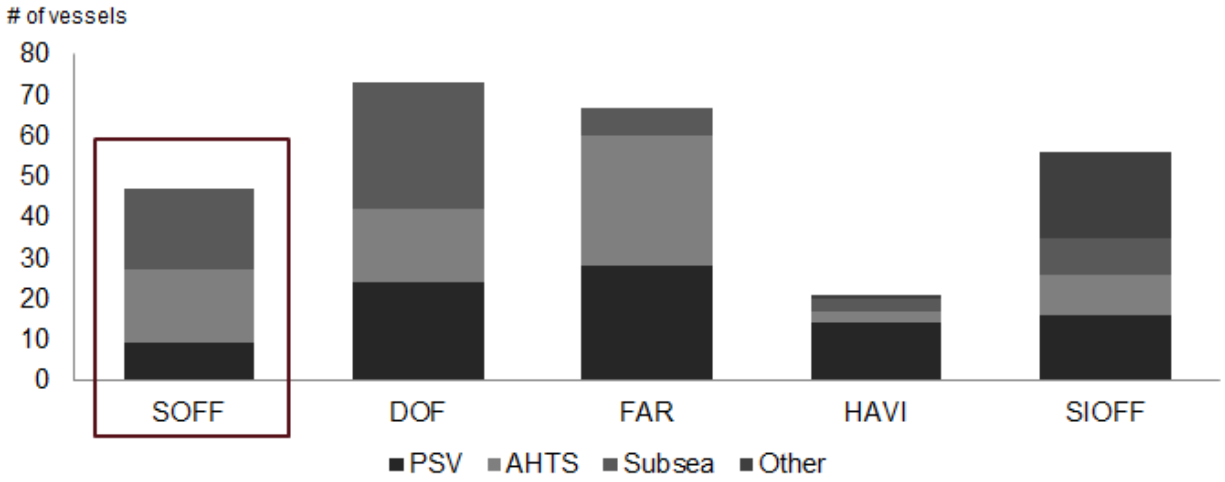
Havila Shipping ASA

HAVI was established in 2003, by the Sævik family which controls Havila AS. HAVI is a key Norwegian OSV company with a total operating fleet of 27 vessels. HAVI has experienced an extremely high fleet growth, and as a result become highly leveraged, with expensive debt (RS Platou, 2015). 63% of their fleet (which consist of ~85% AHTS/PSV) operates in the North Sea. Thus, they are exposed to high risk as the market conditions for both the vessels and regions will be challenging in the years to come (Section 4.1.1.3). However, HAVI has one of most modern fleets in the peer group. As represented in appendix 3.7, the company had a total operating income of MNOK 1.7 and net debt of 4.7 in 2014. HAVI`s contract coverage for 2015E and 2016E is respectively 81% and 60%. RS Platou (2015), states that their future outlook is *stable*.

Siem Offshore ASA

SIOFF was established from a spin-off from Subsea 7, in 2005. SIOFF can be characterized as a growing company with 9 vessels under construction (20% of total fleet), and 47 vessels currently available. SIOFF has a large and modern fleet which is spread by type and regions. SIOFF operates in the same major regions and have the same total fleet size as SOFF (before the orderbook delivery). However, SIOFF has currently a low exposure to the Subsea Segment compared to SOFF (9 vessels vs 21 vessels). Their high exposure of 10 vessels in the Brazilian market can be challenging, because of Petrobas` signal of postponing the term contracts. This can result in 90% of their vessels operating in the challenging spot market (RS Platou, 2015). As denoted in appendix 3.7, the company had a total operating income of MNOK 3.6 and net debt of 8.3 in 2014. SIOFF`s contract coverage for 2015E and 2016E is respectively 56% and 45%. RS Platou (2015), states that their future outlook is *negative*.

Figure 3.10 – Peer Group Comparison – Fleet contribution
(Source: RS Platou (2015), Annual reports & Own contribution)



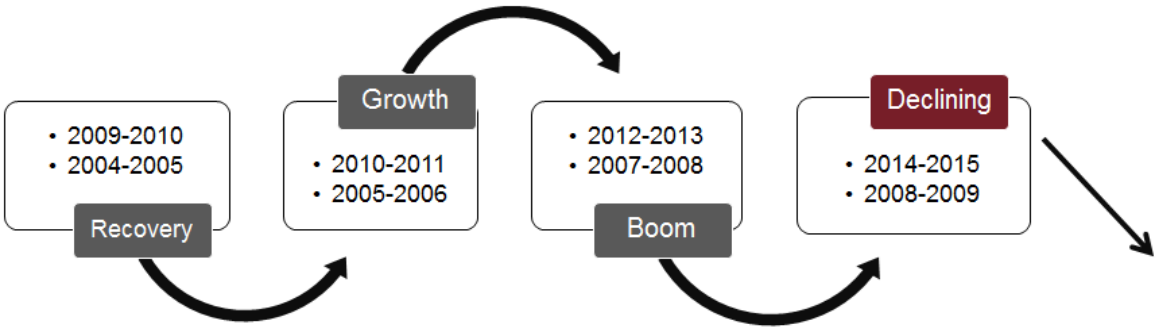
3.1.3 Business cycle and state of now

The OSV industry is a highly volatile and cyclical business. If we look at the share price development from SOFF and the peer group (figure 3.5), we can see some clear patterns. The business cycle can be defined by 4 phases, respectively: recovery, growth, boom and slowdown (Petersen & Plenborg, 2012). When studying SOFF`s strategic and financial outlook, and to avoid forecasting errors, it is extremely important to understand the business cycle. Petersen & Plenborg (2012) states that this approach can be applied to identify which phase the company is facing now, and in the future. This will be applied in our forecasted period (2015E-2020E).

As we explained in section 3.1.2, the OSV market experienced extremely beneficial market conditions in 2003-2004, and the market grew tremendously in 2005-2006. SOFF and rest of the other major OSV companies reached record high share prices in 2007-2008, and the correspondingly market conditions can be defined as a boom. In 2008-2009, the financial crisis hit the market and as a consequence the OSV industry walked into a declining phase. Later on, the OSV market recovered from end of 2009-2010, and grew with a stable rate from 2010-2011. In 2012-2013 the OSV companies experienced beneficial market conditions (that led to ship owners high orders of new vessel). From July 2014 to present (27.04.2015) the OSV industry can again be characterized as in a declining phase. This is mainly because of the tremendously plunge in the oil price of ~44%. They now operate in a challenging market with falling demand and oversupply of vessels. The macroeconomic events that caused the slowdown in the business cycle in 2009 and 2014/2015 can clearly be defined as extraordinary events.

The OSV industry is currently in the declining phase, and we believe that the market in 2016- will go into a recovery face, with better market conditions for the OSV companies.

Figure 3.11 – Business Cycle
(Source: Petersen & Plenborg (2012) & Own contribution)



4.0 External Analysis

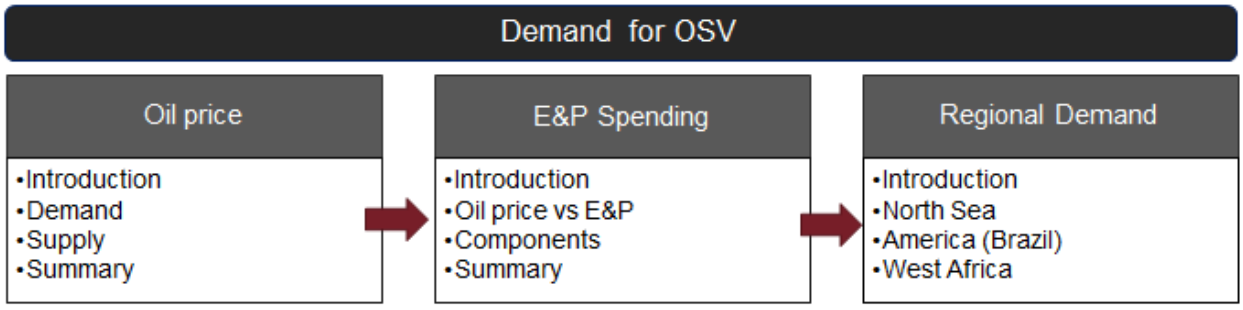
4.1 The Shipping Market Model

To understand the dayrate mechanism described in section 4.1.3, and forecast the future development of dayrates in the OSV market, it is important that we comprehend an analysis of the relationship between supply and demand. We have therefore chosen the Shipping market model by Stopford, as described in section 2.1.

4.1.1 Demand for OSV

The demand for OSV is a combined function of numerous factors shown in figure 4.1.The price level of oil is the single most important factor affecting Oil Company's investment budget, and thereby their E&P spending (Barclays, 2013). Historically, the most important driver for OSV demand has been the global E&P spending, as seen in the appendix 4.1.

Figure 4.1 –Illustration of Demand for OSV
(Source: Stopford (2009), Barclays (2013) & Own contribution)



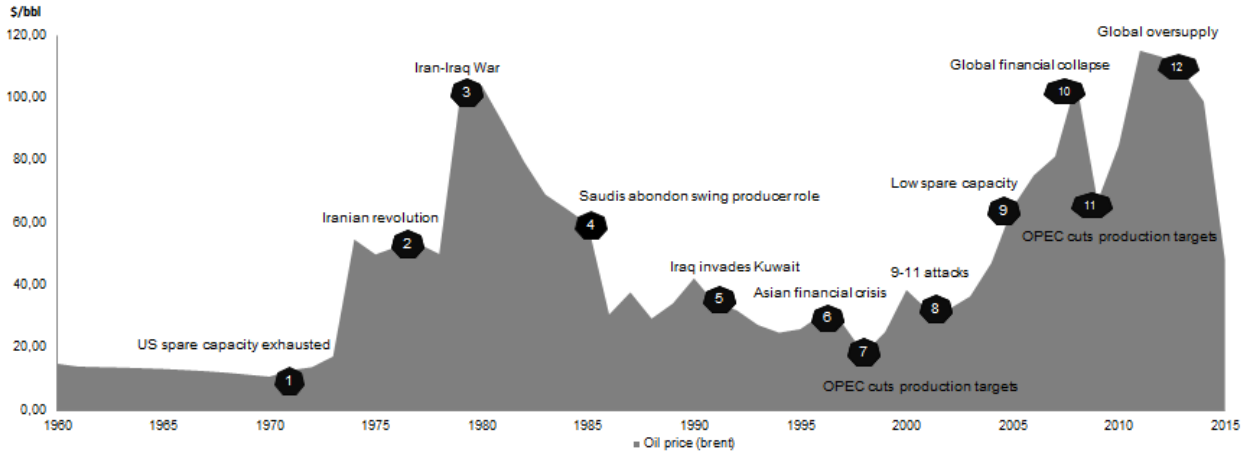
4.1.1.1 Oil price

Introduction

Crude oil is traded in a global market, and the price is reflected through demand and supply. We have chosen to analyze the total global demand from respectively Organization of Economic Cooperation and Development (OECD) and non-OECD. To analyze the future global supply we will divide the market into Organization of the Petroleum Exporting Countries (OPEC) and non-OPEC. In addition to supply and demand, the oil price is to a large degree related to a variability of expectations and, geopolitical and economic events (DNB Markets, 2015). These events have the potential to disrupt the flow of oil to the market. Plentiful of the world`s crude oil is located in areas that have been disposed to political upheaval (EIA, 2015). Additionally, it is important to look at the U.S dollar development, as it has high

correlation with the oil price (World Bank, 2015).The overall balance between all these factors will be used to forecast the future oil price (2015E-2020E).

Figure 4.2 – Crude oil prices and key geopolitical and economic events
(Source: World Bank (2015), U.S Energy Information Administration (EIA), Datastream & Own contribution)



As we can see from figure 4.1, the oil price has been quite volatile from 1970 to 2015. Events of changes in spare capacity (1 and 9), wars and revolutions (2, 3 and 5), financial crisis (6 and 10), cut in OPEC production targets (7 and 11), and Saudis abandoning of being a swing producer (4) are factors that all influenced the oil price. The recent decline in oil price between June and December 2014 (12) was around 44%, and the negative development has continued into the first months of 2015 (Appendix 4.2). The recent drop in the oil price is the third-largest seven-month decline since 1970 (World Bank, 2015).

A combination of increased unconventional oil (Appendix 4.3-4.4) supply from non-OPEC producers (mainly U.S oil production) and OPEC´s abandoning of price targeting, combined with other significant fundamental drivers formed a “faultless storm”. This storm exerted strong downward pressure on oil prices. If we look at the occasion during 1985-1986 (4) they share two key similarities; the unconventional oil production and OPEC´s movement toward targeting market share rather than prices (EIA, 2015).

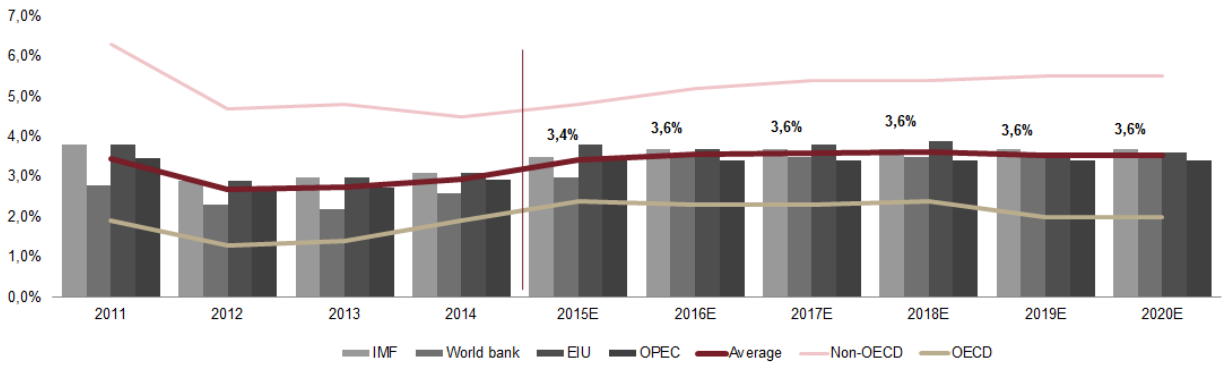
The United Arab Emirates energy minister Suhail al-Mazrouei stated in January 2015: “We cannot continue to be protecting a certain price” (UAE Energy Forum, 2015). Hence, OPEC decided to maintain its production unchanged at 30 million barrels per day (EIA, 2015). The oil price is extremely complex and hard to forecast, so we will discuss the most important market factors when trying to forecast the future oil demand and supply.

Oil demand

The single most significant factor affecting oil demand is the growth of the world economy, reflected through Gross Domestic Product (GDP). The year to year (y-o-y) % change of oil demand and GDP is illustrated in appendix 4.5. It is important to divide the global oil demand into two segments when analyzing the future GDP growth. Developed markets (OECD) have experienced a negative GDP growth rate the last years, but the global GDP growth has been averaged out by the higher growth coming from non-OECD countries. Correspondingly, the y-o-y % change of the total global oil demand dropped from 1.36% to 0.81% from 2013 to 2014 because of weaker economic activity, increased efficiency and a rising switch away from oil to other fuels (Appendix 4.6) (World Bank, 2015).

Although, as shown in appendix 4.6, the oil intensity of global GDP has declined by almost 50% since 1970 - higher increase in GDP will lead to an increased oil demand (World Bank, 2015). Economic conditions and policies that affect the transport of goods and people have significant impact on total oil consumption (vehicle ownership etc.). OECD countries are often more mature and slower-growing, and tend to have larger service sectors relative to manufacturing (World Bank, 2015). As a result, strong economic growth in these countries may not have the same impact on oil consumption as it would in non-OECD countries. The importance of oil consumption in GDP varies significantly across countries. Some countries rely heavily on oil for their energy consumption, and some have diverse sources of energy (World Bank, 2015).

Figure 4.3 – Forecast of the future GDP Growth (% Change)
(Source: EIU (2015), OPEC (2015), World Bank (2015), IMF forecast (2015) & Own contribution)

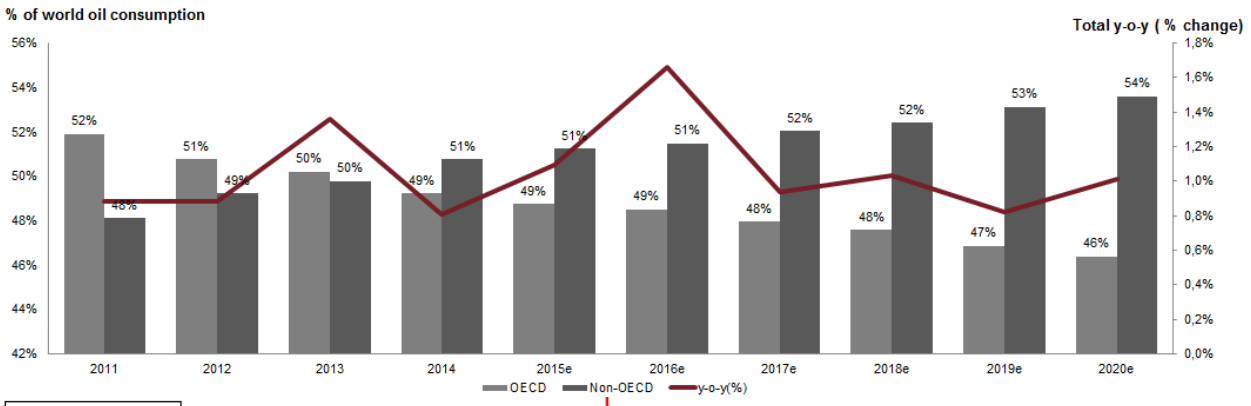


GDP Growth	Historical				Expected					
Year	2011	2012	2013	2014	2015e	2016e	2017e	2018e	2019e	2020e
Average	3,5%	2,7%	2,7%	2,9%	3,4%	3,6%	3,6%	3,6%	3,6%	3,6%

As we can see from figure 4.2 the GDP y-o-y % growth is much higher for Non-OECD countries (light red line) than OECD countries (tan line). Oil consumption in developing countries has risen extremely in recent years, and this will most definitely also reflect the global oil consumption in the future (EIU, 2015). Compared to the OECD countries that declined their oil demand from 2000 to 2010, non OECD oil demand has increased more than 40 percent (IEA, 2014). China, India and Saudi Arabia have had the largest growth in oil consumption among the countries, resulting in almost ~60% of 2015 oil demand growth (OPEC, 2015).

The rising oil consumption by these countries reflects rapid economic growth. Factors as transportation, structural conditions, manufacturing processes, population growth and fuel for power generation tend to increase the economic activity, and in turn oil demand is growing (IEA, 2014). We therefore see that the non-OECD economic growth rates tend to be an important factor affecting oil prices (Figure 4.4). China`s strong economic growth has recently resulted in the country becoming the largest energy consumer and second largest oil consumer in the world. IEA projects that virtually all the net increase in oil consumption in the next 25 years will come from non-OECD countries (IEA, 2015).

Figure 4.4 – Historical and expected oil consumption (Non-OECD and OECD)
(Source: IEA (2015), ABG (2015) & Own contribution)



Oil consumption	Historical				Expected					
Year	2011	2012	2013	2014	2015e	2016e	2017e	2018e	2019e	2020e
OECD	46,5	45,9	46,025	45,5	45,55	46,1	46	46,1	45,8	45,8
Non-OECD	43,1	44,5	45,625	46,9	47,875	48,9	49,9	50,8	51,9	52,9
Total consumption	89,6	90,4	91,65	92,4	93,425	95	95,9	96,9	97,7	98,7
y-o-y(%)	0,88%	0,88%	1,36%	0,81%	1,10%	1,66%	0,94%	1,03%	0,82%	1,01%

Figure 4.4 illustrates how the increased GDP growth in non-OECD countries impacts the oil consumption and expects that non-OPEC will be the biggest oil consumer in the future. We can see that until 2013, OECD countries were the biggest consumer of oil with ~46 million barrels a day (mdb), but IEA forecasts that this will change during the years to 2020. IEA forecast that the global oil consumption will increase

(y-o-y) with around 1% the next years, and thus in line with OPEC´s forecast growth of 1.17% in the medium term (OPEC, 2015). IEA state that the future demand growth is hard to predict, but their upward adjusted demand report in the last month, can reflect a global economic recovery in the short term. This is illustrated in the stabilized oil price from February 2015 – April 2015 (Appendix 4.2). However, important factors as China`s future GDP growth is uncertain, and plays an important role for the forecasted non-OECD growth.

Oil Supply

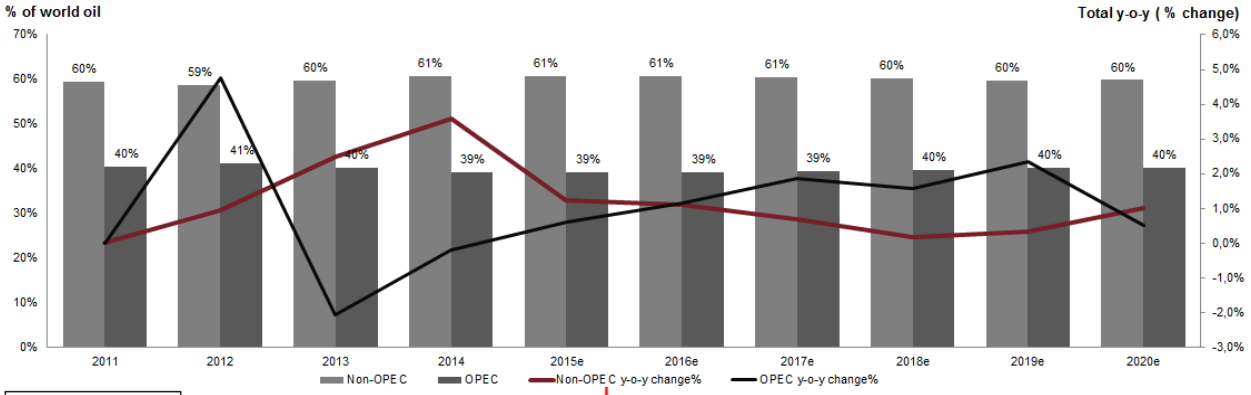
As mentioned in the introduction, the world crude oil production is divided between two major players; OPEC and non-OPEC. OPEC consists of 12 members (Appendix 4.7), and seeks to actively manage oil production from their member countries by setting production targets (OPEC, 2015). Historically, crude oil prices have had high correlation with OPEC´s production target policy. This is also what happened in the recent oil price drop, when OPEC´s largest producer Saudia Arabia abandoned to be a swing producer (EIA, 2015). Indications of changes in crude oil production from Saudia Arabia, frequently affect oil prices (Appendix 4.8) as they can use their spare capacity to either increase or reduce OPEC`s oil supply (World Bank, 2015). When trying to forecast the future OPEC oil supply, factors as spare capacity and their member countries unwillingness to maintain production targets have to be considered. Saudia Arabia historically has had the greatest spare capacity, and has usually kept around 2 million barrels per day of spare capacity. Additionally, Saudi Arabia can tolerate the present low oil prices since their conventional oil has a very low breakeven price (Appendix 4.9). Given OPECs market significance, events than entail an actual or future potential loss of oil supplies can produce strong reactions on oil prices (IEA, 2015).

As we can see from figure 4.5 on next page, the oil production from countries outside the OPEC currently represents about 60 percent of world oil production. The most vital markets of the non-OPEC production include regions of the former Soviet Union, North America and the North Sea. Non-OPEC producers make independent decisions about oil production in contrast to OPEC`s central coordination (IEA, 2015). Furthermore, Non-OPEC producers are often owned by investor-owned oil companies (IOCs), and their goal is to increase shareholder value and make investments decisions based on economic factors (IEA, 2015). Hence, non-OPEC investments, and thus future supply capability, tends to respond more readily to changes in market conditions. Generally, non-OPEC producers are regarded as price takers in contrast to OPEC´s goal of trying influence prices by managing production. As a consequence, non-OPEC producers tend to produce at or near full capacity and so have little spare

capacity (OPEC, 2015). Lower levels of non-OPEC supply tend to increase the crude oil prices (Appendix 4.10) by decreasing the total global supply and increasing the "Request on OPEC". The production change from the Non-OPEC countries increased heavily from 2013 to 2014 (Mainly due to U.S Shale oil), and this oversupply combined with OPEC`s abandoning of being a swing producer resulted in a sharp drop in the oil price from June 2014. This is illustrated in figure 4.6. Non-OPEC production growth are almost completely dependent on US production growth, and this is about to collapse (Swedbank, 2015). This is in line with EIA latest drilling-efficiency report that indicates flattish production from March to April. As already mentioned, the breakeven price of oil is illustrated in appendix 4.9. This price includes E&P costs, oil well development costs, transportation costs, selling costs and administrative expenses (Market Realist, 2015).

The massive oil price decline will impact oil producers with high breakeven prices (US shale oil, Canadian oil sands and Artic exploration). The US oil rig count has been declining, and the low oil price could make some oil producers to stop operations (Baker Hughes, 2015). This is also in line with the market report from OPEC in April 2015:"US tight oil and Canadian oil sands output are expected to see lower growth following the recent strong declines in rig counts". Because of these market factors, IEA expects that production will likely decline over the medium-term for the unconventional oil sources. As we will see under section 4.1.1.2, rig counts and utilization continue to fall and E&P spending is being cut. Whether this industry can keep their production stable given the present oil price of 64.57 $/bbl will have a huge impact on the global supply.

Figure 4.5 – Historical and expected oil supply (Non-OPEC and OPEC)
(Source: IEA (2015) & ABG (2015) & Own Contribution)



Oil supply	Historical				Expected					
Year	2011	2012	2013	2014	2015e	2016e	2017e	2018e	2019e	2020e
Non-OPEC-supply	52,8	53,3	54,625	56,575	57,275	57,9	58,3	58,4	58,6	59,2
OPEC supply	35,8	37,5	36,725	36,65	36,875	37,3	38	38,6	39,5	39,7
Total production	88,6	90,8	91,35	93,225	94,15	95,2	96,3	97	98,1	98,9
y-o-y(%)	1,00%	2,42%	0,60%	2,01%	0,98%	1,10%	1,14%	0,72%	1,12%	0,81%

Historically, OPEC has responded to oversupply by cutting their production, and thereby balanced the supply and demand to keep the price stable (OPEC, 2015). The total increase in production from 2013 (91.35 mbd) to 2014 (93.225 mdb) was around 2%, constitutes the highest growth seen since shale oil emerged in the US. Because of the high uncertainty around the production growth outlook in the non-OPEC supply, the number of active rigs around the world can be a good indication (OPEC, 2015).This will be further discussed (Section 4.1.1.1.2.).

IEA expects that the supply growth will stabilize over the next years to around 1%. OPEC`s supply in figure 4.5 is a combination of their crude production and other liquids (NGL). It is important to follow the OPEC`s future actions closely. They demonstrated after the cartels meeting in November how influential they are over price swings (DNB Markets, 2015). Saudia Arabia – OPEC´s biggest producer, pumped close to a record amount of crude oil in Mars 2015 (IEA, 2015). Iraq and Lybia also managed to boost their production. This, together with OPECs low breakeven price $/bbl will enhance for increased y-o-y production % change from OPEC (Illustrated in Figure 4.5). This can in fact, as discussed be disrupted by geopolitical and economic events, as illustrated in figure 4.2. Weather conditions can also play a significant role in oil supply; an example was the production decline in Iraq, Lybia and Nigeria in February 2015 (DNB Markets, 2015). The influence of these types of factors on oil prices tends to be relatively short termed, but this is important factors that need to be taken into consideration – and in turn, make the market even more complex. As discussed over, we can clearly see that the OSV market is highly driven by macro-economic factors.

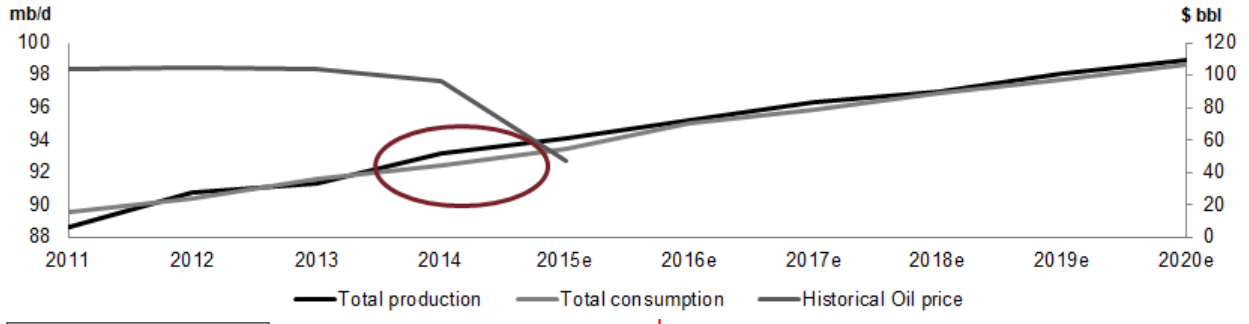
The U.S dollar appreciation

Historically, there has been a high correlation between the US dollar and the oil price (EIA, 2015). The U.S dollar appreciated by ~10 percent contrary to the major currencies in the second half of 2014 (Appendix 4.11). As we can see an increase in U.S dollar corresponds to a decrease in the oil price. The U.S dollar appreciation that was caused by different monetary policies in the Euro Area, Japan and United States, played a significant role in the general decline of commodity prices (Frankel, 2014). A forecast performed by Scotiabank in March, states that as a result of all the underlying dynamics of the U.S dollar, we can see a continuation of the increased dollar exchange rate in 2015-2016 (Scotiabank, 2015). Based on historical data, this will in turn put pressure on oil prices.

Balance between supply and demand

Figure 4.6 illustrates how the oversupply in 2014 (red circle) resulted in the sharp drop in the oil price. IEA, the World Bank, IMF and EIU believe that this oversupply will decrease in the next years and that the balance will stabilize in the future. This is illustrated in "Over supply in % of production", in figure 4.6. The forecasted oil demand will be quite stable the next years (~1% y-o-y growth), and the oil supply will most definitely stabilize because of the discussed market factors (example: oil price under the breakeven price for many producers).

Figure 4.6 – Total production and demand (mb/d)
(Source: IEA (2015), ABG (2015) & Own Contribution)



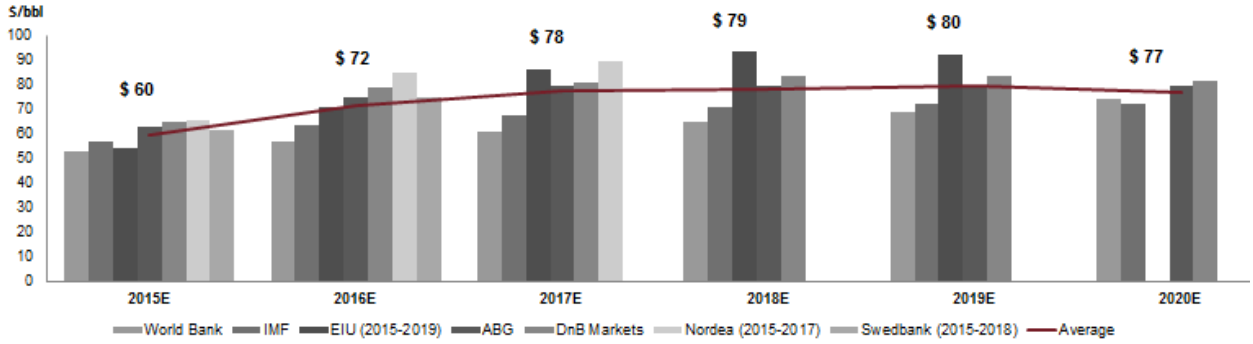
Balance	Historical				Expected					
Year	2011	2012	2013	2014	2015e	2016e	2017e	2018e	2019e	2020e
Consumption	89,6	90,4	91,65	92,4	93,425	95	95,9	96,9	97,7	98,7
Production	88,6	90,8	91,35	93,225	94,15	95,2	96,3	97	98,1	98,9
Over supply	-1	0,4	-0,3	0,825	0,725	0,2	0,4	0,1	0,4	0,2
Over supply in % of production	-1,13%	0,44%	-0,33%	0,88%	0,77%	0,21%	0,42%	0,10%	0,41%	0,20%

Outlook for the oil price

As the result of the increase in supply from non-OPEC (mainly from the US shale oil), and the OPEC countries not limiting their oil production, we have experienced a period with the lowest oil price since the financial crisis in 2009 (Figure 4.2). The oil price is a complex balance amongst numerous factors; most of all, the balance between supply and demand (Figure 4.6). The future outlook for global oil demand, are by major sources expected to grow with around 1% y-o-y, and in the short term the demand is set to pick up as consumers respond to lower prices (IEA, 2015). On the other side the expected global supply growth are forecasted at around 1% y-o-y. The ongoing cost discipline among the major oil companies and the deferment of a number of projects are expected to reduce the incremental non-OPEC supply. OPEC has signaled that they are sticking to their plan, which means low prices; and higher OPEC market share (Figure 4.5). The balance between supply and demand is expected to stabilize in the future, illustrated in figure 4.6. On the other side, the fact that Scotiabank (2015) states that the

U.S dollar will increase in the forecasted period, would result in lower prices. However, we believe that the balance between demand and supply are the most significant factor. Arguably, increase oil prices from today`s level of 64.57 to around 80$/bbl. in 2020E. Expectations from major sources, together with the calculated balance between supply and demand, and other important market factors will be used as a baseline for forecasting E&P spending and demand for OSVs.

Figure 4.7 – Outlook for the oil price (2015E-2020E)
(Source: IEA (2015), World Bank (2015), IMF (2015), EIU(2015), Analysts` report (2015) &Own Contribution)



Oil price (brent)	Historical				Expected					
Year	2011	2012	2013	2014	2015e	2016e	2017e	2018e	2019e	2020e
Average	111,26	117,63	108,56	99	60	72	78	79	80	77

4.1.1.2 Exploration and Production (E&P) investments

The production value chain of OSV`s is described in section 3.1. From figure 3.1 we can see the significant importance of E&P spending in the OSV industry. OSV companies take part in well drilling & field research, drilling & construction, and production & operation of the oil rigs (Step 2, 3 and 4 in figure 3.1). Therefore, the upstream activities, especially the E&P-spending, are an important market indicator for the demand for vessels in the OSV industry. Our primary focus will be on the markets that SOFF operates in, and this will be further analyzed under the regional demand section 4.1.1.3. We will also analyze DnB Markets` stated components of E&P spending in the oil service industry (DnB Markets, 2013).

Oil price vs E&P-spending

Lower oil prices would specially put at risk oil investment projects in low-income countries and in unconventional sources such as shale oil, tar sands, deep sea oil fields, and oil in the Arctic zone (World Bank, 2015). By conducting a linear regression analysis of historical data on the oil price and CAPEX of the major oil companies (E&P spending), we observe that the correlation has been extremely high (Appendix 4.12). From 1987-2014 the R^2 between the two variables has been ~0.94. This implies that the variance in Y can be explained 94% of the variance in X. From 2000-2014 we observe a decline in the correlation to ~0.87. This comes as a result of the unconventional revolution forcing a shift in the spending pattern (US Shale Oil). As the offshore wells today lies in extreme environments (ultra deep water), it costs twice the amount of drilling them than the average price of drilling conventional wells (Pareto, 2015). In addition the wells are more costly to maintain, resulting in a need for a relatively higher oil-price to remain profitable.

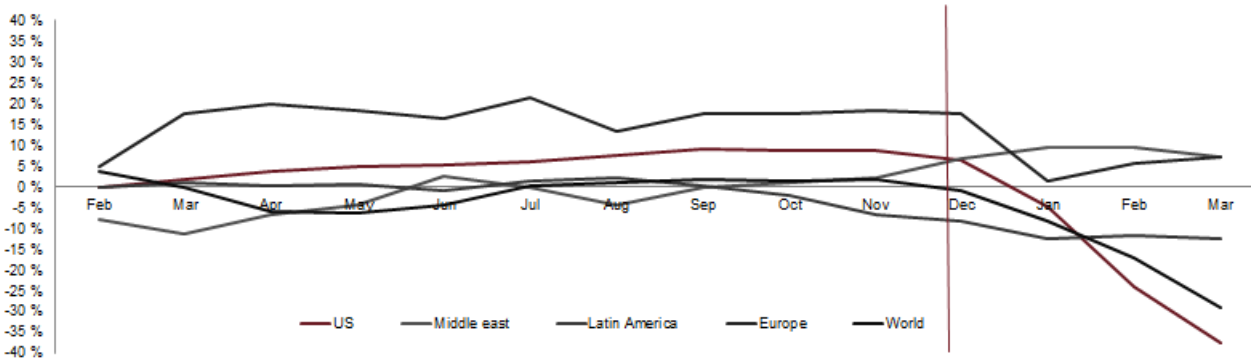
As we can see from the historical data (Appendix 4.12), during the financial crisis in 2009 the oil price dropped by 36% resulting in a decrease in actual E&P spending by ~ 18 %. Over the last year the oil price has dropped by ~39% and the upstream industry has again plunged into a downturn. To form a "benchmark", and to see the relationship between our expected oil price illustrated in figure 4.7, we conducted a linear regression from 1987-2014 (Y=4.0068X-16.596). This gave us an extreme forecast, with a decline in the E&P growth by - 53% in 2015E.

We can observe almost exactly the same output from 1987-2008, where the decline in the E&P growth, based on the linear regression, was ~41%. The actual drop in E&P spending from 2008-2009 were ~18% (23 percentage points less). This implies that the linear regression gives an extreme output, which most definitely needs to be adjusted also in 2015E-2016E and on medium-to-long term (Appendix 4.13) The components of E&P spending activity (that influence SOFF) can be classified as: rig activity (offshore market), operating costs and technical complexity.

Rig Activity

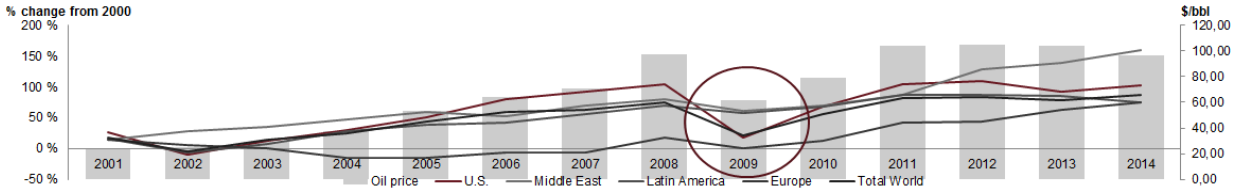
To analyze the future E&P spending growth, the most important indications of the production growth in terms of non-OPEC supply will be the number of active rigs (OPEC, 2015).When offshore drilling rigs are active they demand products and services from the OSV industry. Hence, the active rig count acts as a leading indicator of demand for products used in drilling, complementing, producing and processing hydrocarbons (Baker Hughes, 2015). Data from Baker Hughes of "Number of Active Rigs" conducted in April 2015 states that the global rig activity from July 2014 to March 2015 has decreased in all the non-OPEC regions (Figure 4.7).

Figure 4.8 –Number of Active Rigs % change from July 2014-Mar 2015
(Source: Baker Hughes (2015) & Own Contribution)



If we look at the historical data from 2000 to 2014 (Figure 4.8), we can see that the activity of active rigs has increased in all important markets (US, Middle East, Latin America and Europe) except for the financial crisis in 2008-2009 (red circle) . After the recent plunge in the oil price, we can see that the m-o-m % change in rig count from July 2014 to March 2015 has decreased over all markets except Middle East and Europe (January to March 2015 – slight increase in oil price from 45.65 $/bbl. (13.01.2015) to 54.85 $/bbl. (30.03.2015). The rig count in US has decreased substantially due to their high cost unconventional shale oil. The rig count in Middle East has seen a slow growth from July 2014 to March 2015 due to their lower breakeven price, and thereby their ability to keep up production.

Figure 4.9 –Historical rig activity (2000-2014)
(Source: Baker Hughes (2015) & Own contribution)

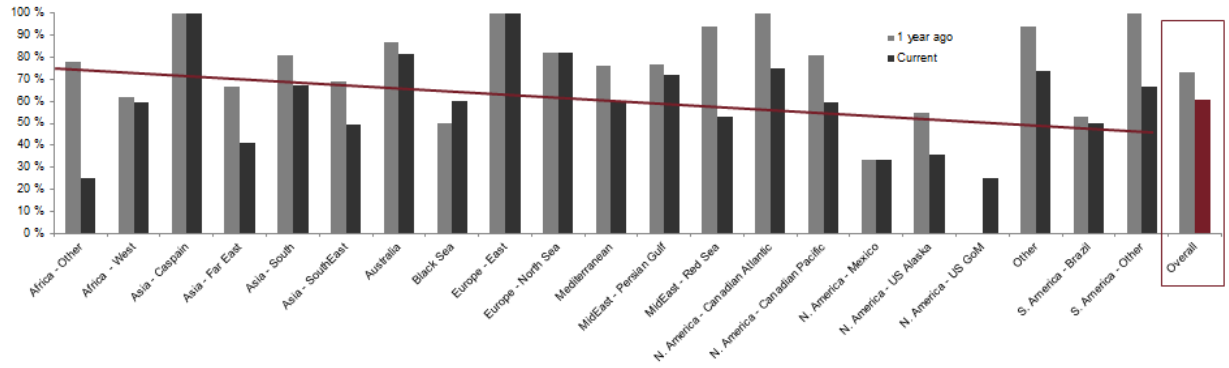


Offshore market

The substantially high oil price from 2011-2013 illustrated in figure 4.6 (~ average of 115 $/bbl), led to an increase in E&P spending and thereby an increase in number of active rigs, illustrated in figure 4.8. This consequently led to an attractive market for vessel owners with robust growth in the OSV term rates. As a result the total offshore rig count is up from last year (IHS, 2015). The demand for OSV is positively affected by the number of platforms, active offshore rigs and subsea wells. The global offshore utilization rate is down from last year, illustrated in figure 4.10. This utilization rate is forecasted to further decrease, and will be further discussed in section 4.1.3. According to a survey conducted by Barclays, over 60% of the respondents claimed that the oil price was the most important factor affecting E&P spending (Appendix 4.1) and that we need to see oil-prices above $80 to see any increase in the E&P spending. In the same survey they discovered that oil prices lower than $50 would most likely lead to further reductions in the E&P spending (Barclays, 2014).

The global offshore drilling fleet consists of ~1500 units. These are controlled by ~60 different contractors, where ~40% of global supply is controlled by solitary a few major firms (Rigzone, 2015). In figure 4.10 the historical competitive offshore rig utilization by region is illustrated. As we can see the overall utilization rates has declined in all areas (except South America – Caribbean and Black Sea), this can be described as a result of decreased demand and the overall spending cuts from the major oil companies (Rigzone, 2015).

Figure 4.10 –Historical competitive offshore rig utilization by region
(Source: Rigzone (2015) & Own contribution)



In line with the growth in deepwater exploration, and *subsea installations*: the demand for OCVSs has increased the recent years. The subsea market currently stands for ~ 9% of the total oil and gas production (Rystad Energy, 2015). As SOFF is a major player within the subsea market, with 19 OSCV in their fleet, it is important to understand and analyze this market. The global OSCV fleet has grown

quickly the recent years, and the OSCVs have characteristically been hired by large subsea players (Pareto, 2015). The vessels are often built on long-term contracts and thereby lower exposure to the spot market (higher utilization and potential for higher revenue). An example of this can be viewed in SOFF`s contract coverage (Appendix 4.16), with contract agreements with respectively Saipem, Technip and Subsea 7. A remarkable note for SOFF is that ~8 vessels *end* their term-contracts during 2015-2016.

Some analysts state that the subsea market has a huge growth potential, and Rystad Energy states that the subsea can surpass traditional platforms in terms of production in 2030 (Rystad Energy, 2015 – Pareto, 2015 – RS Platou, 2015). Dayrates for OSCVs have traditionally been less volatile than for PSV`s and AHTS`s. The trend has however loosened the past year, with a high number of vessels available for pending charters. The outlook of the dayrates will be further analyzed in section 4.1.3.

Operating costs and technical complexity

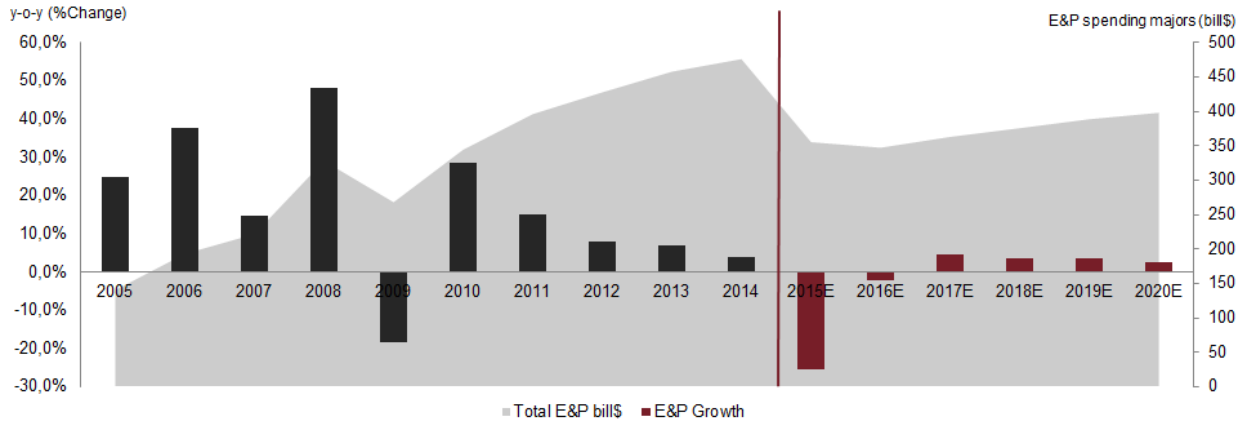
As mentioned, the offshore petroleum companies have changed their focus from conventional to unconventional oil sources. The overall focus offshore is now on unconventional fields lying in harsh environments far from the shore. Previously the fields have been in shallow water, and thereby easier to extract. The trend in today's activity is the growth of deep-water production, which can be more expensive and thereby demand higher CAPEX costs from the oil companies. As a result of this revolution, the lifting cost has increased with 10% every year since 2004 (EY, 2014). Statoil argues that for subsea wells to become more profitable the operations need to be more standardized (Statoil, 2014). As subsea projects are performed on a project to project basis the costs of them are significantly higher than drilling an ordinary well.

According to McKinsey (2014) numerous of the active oilrigs today are outdated (especially in the North Sea) but still active even though their original designed lifetime is over. This demands more maintenance to support production which again increases the operating costs (McKinsey, 2014). Another factor that increases the operating costs for OSV companies are governmental regulations. An increased focus on health, safety, and environmental requirements (ex. the number of days a worker can be offshore) has increased the operating costs of the oil companies (ABG, 2015). As workers can't work as many days offshore as previously, a need for more skilled workers has emerged (to increase efficiency). The lack of skilled workers in combination with increased water depths implies higher operational costs. In addition governments in Brazil and West-Africa has decided that to operate in their markets the OSVs need to be crewed with a certain amount of local personnel, which again can increase the labor costs (DNB Markets, 2014).

Summary - Outlook for the E&P spending

As we can see in figure 4.8, the total E&P spending (grey area) has increased every year since the end of the financial crisis. Previous events of underinvesting in E&P-spending, as the majors did in 2002-2003 to increase their cash-flow, led to an undersupply of oil (DNB Markets, 2015). The outcome of this undersupply was an increase in the oil price in 2004 and 2005, which again enlarged the E&P spending. We don't see the same increase to come, as our forecast for the oil price is an increase from today's price at 63.29 $/bbl. (27.04.2015) and up to $80 within 5 years (Figure 4.6), this figure also illustrates that the oil price will be in between the range of increased and decreased E&P spending. We expect higher operating costs in the years to come, but partly offset by the relatively lower oil price. In total we see the E&P spending decreasing both in 2015 (-25%) and 2016 (-2%), before we see a slight y-o-y% increase following the expected increase in the oil price, that moves against 80 $/bbl.

Figure 4.11 – Historical and expected E&P spending
(Source: Analysts expectations (2015), CAPEX budget (EIA, 2015), Regression & Own contribution)



E&P growth	Historical				Expected					
Year	2011	2012	2013	2014	2015e	2016e	2017e	2018e	2019e	2020e
Average	15 %	8 %	7 %	4 %	-25 %	-2 %	5 %	3 %	3 %	3 %

This argumentation is based on the linear regression discussed under the *oil price vs E&P section*, together with the forecasted E&P spending from several analysts (ABG, Pareto, Swedbank and Nordea). The forecasted E&P spending growth in 2015e (-25%) is an average founded on the top 30 major oil companies budgets for 2015E, and the forecasted E&P spending from analyst. We argue that this combination gives a more reliable result, as the regression analysis gives a result of -53% in 2015e (Appendix 4.12). This is also in line with Cowen analysts which states that global E&P-spending will decrease by at least 17% compared to 2014. As mentioned, the most important budget measure for the

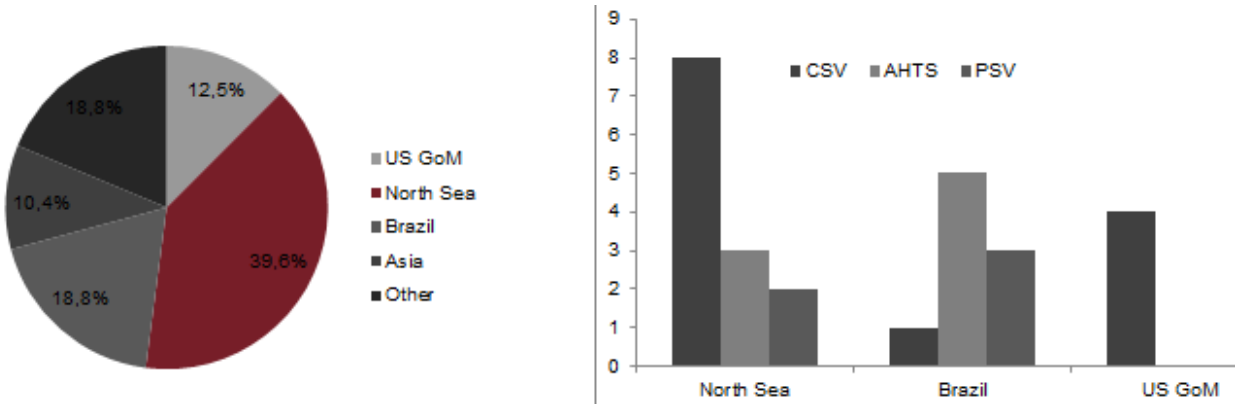
oil companies is the average breakeven rate of production; the oil price is now well under this "hurdle rate" in many of the producer's countries. This is illustrated in figure 4.11, with a negative E&P spending in 2015E. Cash flow is considered the second most important factor affecting E&P-spending, which is also one of the reasons why oil companies are decreasing their CAPEX (Barclays, 2014).

E&P spending is quite sensitive to shudders in the world economy (as the oil price). If oil companies face bad market conditions they often put E&P spending on hold, and focus on other important tasks like cutting cost (as we can see in today's market). The problem for OSV companies, that is consequently dependent on the oil companies' investments, is that is expensive and slow to restarting the process (Pareto, 2015). In addition, an upward amendment of the E&P spending often has a time lag of one year on average towards the oil price. Hence, we will only see a slight increase in total E&P on medium-long term (illustrated in the grey area in figure 4.8).

4.1.1.3 Regional demand

The continued high supply growth and weakening demand side because of lower E&P spending, together with oil companies cost reductions has led to a worsened outlook of the global OSV market (Pareto, 2015). The outlook is based on oil companies spending budgets, and implies like we saw in figure 4.11 – a negative E&P spending growth the next years. To analyze the external environment for SOFF it is important to divide the market into different segments. The largest OSV regions are the North Sea, Brazil, Asia and GoM with West Africa and Mexico emerging as key growth regions (Pareto, 2015). The OSV market has experienced a trend towards deepwater developments the recent years, and many analyst states that the subsea market has long-term growth potential, particularly in Africa, Asia-Pacific and Brazil (Rystad Energy, 2015).

Figure 4.12 – SOFF fleet divided by regions & number of vessel type within the region
(Source: SOFF – AR, 2014 & Own contribution)



North Sea

The North Sea is the region where SOFF operates most of its vessels (39.6%). SOFF's fleet in the North Sea consist of 8 OSCV`s, 3 AHTS`s and 2 PSV`s. The North Sea is characterized as one of the harshest offshore environments as the sea is rough and the wells are located in deep-water areas. The biggest producers by country are the UK and Norway. This has resulted in petroleum companies requesting large and sophisticated vessels (high-end vessels). The combination of older infrastructure that leads to rising operating costs, and the low oil price, means that many of the fields is currently making a loss (RS Platou, 2015).

However, the North Sea is characterized as a stable operating environment, with high technical expertise and substantial infrastructure (Pareto, 2015). McKinsey (2014) forecasts that the oil companies which operates in the region will focus on maintenance and decommission of old infrastructure,

together with cost cutting. Hence, they will most definitely emphasis on maximization of maturing assets rather than exploration of new fields. The annual survey conducted by Oil & Gas UK, which represents Britain's offshore energy industry, painted a bleak picture of North Sea Drilling (Oil & Gas UK, 2015). Oil & Gas drilling companies lost 5.3 billion on their North Sea operations in 2014. New investments in the region will fall as the companies are forced to cut costs. The CEO of Oil & Gas UK, Malcom Webb estimated that the industry needs to cut cost by around 40% in order to become viable. This is in line with Wood Mackenzie (2015) that states that investments in the UK portion of the North Sea will fall with around 50% from 2014 to 2015. Oil & Gas UK reports that there are plenty of reserves beneath the sea on the UK continental shelf that are available for extraction. But they are being found in smaller batches, which make them less attractive to big companies (Oil & Gas UK, 2015). With the cut in investments and E&P spending, the future investments can move to lower-cost regions such as GoM and Asia (Rystad Energy, 2015).

The "super cycle" of high sustained oil-prices above $105/bbl from 2010 – 2013 lead to an increased orderbook, causing an oversupply of OSVs in the market. Several ship-owners have had to lay up their vessels, together with weak demand fundamentals, vessel removals can be seen as the solitary path to a balanced market (RS Platou, 2015). Thus, we characterize this market as challenging, with *bad* short-term/medium outlook. As a result of the companies being highly leveraged in this mature and capital intensive industry several analysts expect some of the vessels in the North Sea to be relocated to the other low-cost regions.

America

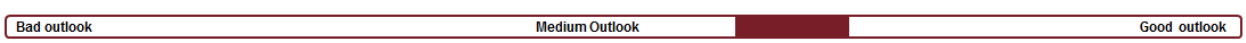
SOFF operates ~ 20% of its total fleet in Brazil, respectively 1 CSV, 5 AHTS and 3 PSV´s. This region has been affected by legal and financial problems, high uncertainty around the long-term outlook and future performance of Petrobras. Moody´s have recently highlighted how Petrobras`s liquidity risk and lower spending plans will affect large parts of Brazil`s oil and gas production chain (IEA, 2015). Moreover, the development of the Brazilian economy has been bad the recent years, with declining GDP growth (CIA, 2015). In addition they are favoring local actors as a result of the deflation of the "Real" the recent years, causing difficulties for foreign actors like SOFF. This has led to a decrease in demand for global OSVs. As a result Petrobras are pressuring charter rates on new charters below the breakeven rates of

the OSV companies. Petrobras have experienced troubles with keeping up the speed of the pumping of oil leading to higher costs and lower income (IEA, 2015). The short-term outlook for the Brazilian offshore is bad, but the long-term prospects can be viewed as better, as there are many potential projects to come which will require Petrobras to extend its fleet and also include foreign companies (Pareto, 2015). As, the offshore fields lay in extreme water depths far away from the shore, the demand for OSCV vessels will be steady/increase in the long-term. We therefore characterize the future prospect of this market to be *medium*.

GoM

As we can see from figure 4.9, SOFF has 12.5% of their total fleet in the US GoM region, with respectively 4 CSV`s. The region, both offshore and onshore, is one of the most significant regions for energy resources (IEA, 2015). IEA forecast a decent production growth both by new projects and redevelopment and expansion of older producing fields, because of the remarkable timelines related with GoM projects (IEA, 2015). Development of offshore fields requires both subsea and surface production equipment, and with over 50% of the projects starting up in 2015 and 2016 on subsea tiebacks to existing production platforms, the demand for CSV´s will be steady over the next year (IEA). But, It is important to understand that the current low oil price, will add uncertainty on the timelines of these deep-water projects (World Oil, 2015). Recently, SOFF secured a new one-year contract for their "Normand Pacific" CSV.

Due to the Jones Act cabotage (JAC) the US GoM are closed markets and consists mainly of US players only. After the recovery of the Macondo spill the US rig count increased rapidly causing a higher need for OSVs. As a consequence of the JAC it is difficult for foreign companies, to operate in this market, but as the US has a low yard-capacity SOFF operates four CSVs after being hired by Chevron and Pemex. As a result of the plunge in the oil price the US offshore rig count has decreased, but not as much as the North Sea and America. Therefore we characterize the future market prospect as *medium/good* for SOFF.

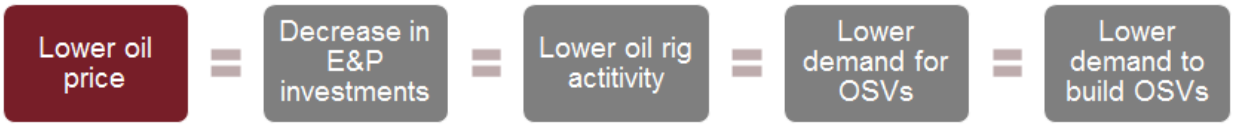


ASIA

SOFF fleet in the Asia accounts for ~20% of their total fleet. This market is fragmented and dominated by local players, as the GoM market. The OSV fleet primarily contains small and mid-sized. The offshore activities' in this region mainly takes place in in shallow waters. Hence, Asian built PSV`s and AHTS are favored. Thus, the average dayrates are in general lower than in other more harch-enviroment regions (North Sea and GoM). This market is most definitely going to be challenging on short-medium term due to the high supply growth (from Asian yards), and the decrease in demand. Hence, causing an oversupply of vessels, this again will put pressure on OSV dayrates. Thus, the future market outlook looks *bad*.

4.1.1.4 Summary - Demand for OSV

The oil price is the single most important factor affecting the global E&P spending, and the E&P spending is the leading indicator of the demand for OSV`s. Our estimates, that are based on fundamental drivers such as the balance between supply and demand indicates that the oil price will increase slightly from today`s level of 63.29 $/bbl. (27.04.2015) to around 80$/bbl. in 2020E (Figure 4.6).The recent plunge in the oil price (under breakeven price) will in fact result in a negative E&P spending growth in 2015 and 2016. As the outlook for the oil price looks brighter from 2017-2020, we will again see a rising E&P spending (Figure 4.8). The North Sea, Asia and America (Brazil) faces the toughest challenges over 2015 and 2016. The North Sea is a high cost and mature industry, with focus on cost cutting and utilizing of existing assets. Brazil is affected by the extreme uncertainty around Petrobras and the negative development of their economy. The Asian market is affected by the current and future oversupply of vessels. These market factors will drive the demand for OSV`s down, but we can see growth opportunities in the medium-term, driven by the higher expected oil price (Figure 4.7). The increased exploration and focus against deep-water areas in GoM the recent years, together with the timelines related with the projects in 2015 and 2016, we can see a more or less steady market the next two years. The demand for OSV differ in many ways, it is not an overall demand. Age, fleet size, technical specifications etc. As illustrated under, the demand for OSVs will slow down on short term, due to the decreased E&P spending. In the next section we will analyze the supply of OSVs.



4.1.2 Supply of OSV

As we analyzed in section 4.1.1, demand for OSV slows down as a response of the expected decrease in future E&P spending. Lower demand for OSVs will normally lead to lower demand to build OSVs, but due to the construction time of vessels of around 12-36 months (depending on yard capacity and vessel type), the supply of OSV can be described as slow in reply to changes in demand (Stopford, 2009 – Pareto, 2015). In this passage, we aim to expound and analyze the most important factors affecting the supply of OSV.

4.1.2.1 Five decision makers

Stopford (2009), states that the supply of vessels is disciplined and under control by four groups of decisions makers: ship owners, charterers/shippers, financial institutions and regulatory authorities. There is also a broad agreement of including a fifth decision maker that is shipyards. The market of shipyards has been an important factor of the changed pattern in supply of OSV`s the recent years (China`s entering in the market, that currently stand for ~63% of new orders) (RS Platou, 2015). We will now explain the five decisions makers that contribute for the total supply.

Ship owners

The ship owners (SOFF, DOF etc.), order new vessels when they face good market conditions. In a growing and profitable market, illustrated in the business cycle in figure 3.7 (2005-2007 and 2011-2013), vessels owners' cash flow (because of higher dayrates) increase and stimulate their interest in an extension of their current fleet. They also decide about scrapping, and their overall focus is increased profit. The overall OSV fleet can be categorized into three types, PSV´s, AHTS´s and Subsea vessels.

The existing fleet of AHTS is ~ 1960 vessels, with respectively 173, 77 and 17 in expected delivery in 2015, 2016 and 2017+ (RS Platou, 2015).The existing fleet of PSV`s accounts for ~1465 vessels, with respectively 390, 280 and 8 in expected delivery in 2015,2016 and 2017+. In the last ten years, there has been an extraordinary amount of newbuilds (AHTS average supply growth of 7% and PSV average supply growth of 7%), driven by good market conditions in the OSV industry, and the dominant position of Asian yards. However, the Asian yards have experienced a high slippage rate the recent years as a result of factors as low level of know-how with European specification, liquidity issues and inadequacy of skilled people (Pareto, 2015). The historical slippage rate has been around 20%-25% in the AHTS segment, and the future orderbook is therefore adjusted with a rate of around 25%. This will smooth out the delivery in 2015, 2016 and 2017 respectively. The high slippage has been notably evident for the

PSV segment (higher slippage rate than AHTS, due to higher supply of low-end vessels) (RS Platou, 2015).Thus, the expected PSV orderbook is therefore subjectively adjusted with a slippage rate of around 30%. This is illustrated in figure 4.10 on the next page.

Historically the OSV industry has experienced a low scrapping rate, except for the record high demolitions in 2009 with around 2% (34 vessels) (Clarksons, 2014). As the demand for fresher vessels the competition from higher specification vessels will increase in the forecasted period. As a consequence, the demolitions are expected to increase in the coming years. A reasonable scrapping rate of around 2%-5% is therefore expected to hit the market the next years. A more aggressive vessel scrapping can occur in the next business cycle, dependent on the expected market conditions and scrap prices (RS Platou, 2015). As the global OSV market has significantly worsened the past months, we could also expect to see order cancellations.

The existing fleet of Subsea consists of around 424 vessels, with respectively 30, 26 and 20 in expected delivery in 2015, 2016, and 2017+. As mentioned, the demand for subsea installations has increased the last years due to the exploration of deepwater areas. This segment has been extremely attractive and has offered vessel owners long-term contracts. This is illustrated in appendix 14, through the subsea vessels fleet growth. The long-term prospect for the subsea market is good, but the short-medium term outlook has become challenging. Lower E&P spending in the next years, will result in lower demand for Subsea Vessels. The subsea backlog is expected to continue decreasing on short term (RS Platou, 2015).

Unless oil prices move back to ~80$ bbl (~breakeven price for deep water areas) and boost field development (E&P spending), owners will face lower dayrates and utilization because of the imbalanced supply and demand in the OSV market (RS Platou, 2014).The OSV market has experienced a substantial amount of newbuilds the recent years. With an average increase of around 13 % (y-o-y) change in E&P spending over the last 10 years (figure 4.11); together with a decent high utilization rate around 80%, the market has been profitable. This has resulted in an increase of around 8% (y-o-y) change in the total world fleet over the last 10 years, as the demand for OSV has been high. As we can see from figure 4.13 the expected orderbook in 2015E is respectively 173 for AHTS and 390 for PSV. This amount was ordered when the market outlook was good (high oil price and expected increase in E&P spending), but as the oil price fell dramatically the market conditions (because of lower demand for OSV) has changed. The balance between supply and demand will be further in analyzed section 4.1.3.

Figure 4.13 – Total World Fleet 2015E-2017E (AHTS, PSV) – Slippage and Scrapping rates
(Source: Pareto (2015), Clarksons (2014), IHS (2015) & Own contribution)

	Expected		
AHTS	2015E	2016E	2017E
Fleet	1960	2027	2001
On order	173	77	17
Slippage on order	25 %	25 %	25 %
Slippage in vessels	43	19	4
Fleet after slippage	2090	2085	2014
Scrapping	3 %	4 %	5 %
Expected fleet	2027	2001	1913
Total world fleet (AHTS, PSV)	3730	3844	3706

	Expected		
PSV	2015E	2016E	2017E
Fleet	1465	1703	1842
On order	390	280	8
Slippage on order	30 %	30 %	30 %
Slippage in vessels	117	84	2
Fleet after slippage	1738	1899	1848
Scrapping	2 %	3 %	4 %
Expected fleet	1703	1842	1792

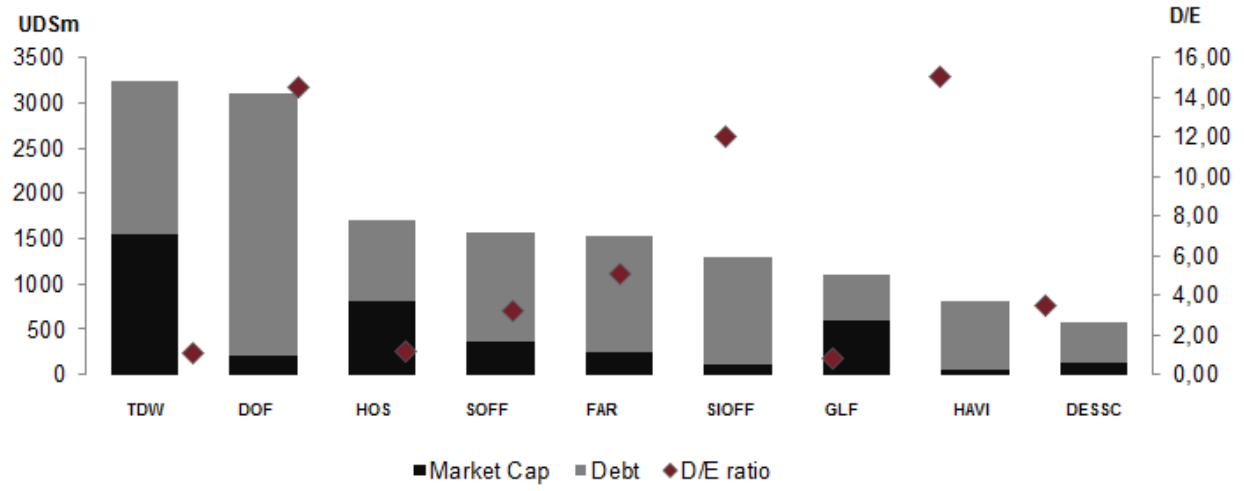
Shippers/charterers

Shippers primarily use the spot market, and can encourage an increase in the orderbook by using long-term time charters (more beneficial for OSV companies under the present market conditions), or turn into ship owners themselves.

Financial institutions

The OSV industry is a highly leveraged and capital intensive industry (Figure 4.14), meaning that access to debt is important when issuing new vessels. The market has weakened from the recent plunge in the oil price, which can reduce the future supply growth of vessels and lead to a higher scrapping rate. The scrapping rate can increase as vessels get older and the vessel owners fail to meet their debt obligations (RS Platou, 2015).

Figure 4.14 – Highly leveraged industry
(Source: RS Platou (2015) & Own contribution)



Regulatory authorities

The governmental agency regulates the business and affecting the supply through safety and environmental legislations, seen in for example the American region (Brazil). This is also categorized as a very high external risk (Figure 5.11)

Shipyards

The recent years, the Asian yards have changed the supply of OSV`s extraordinary. The high supply growth has been powered by the entry of Asian yards who have built vessels based on Pareto`s (2015) information, with a rebate to European yards (~30%). China currently accounts for around 70% of the orderbook for AHTS and PSV`s in 2015, 2016 and 2017+. Shipyards capability, capacity and know-how are important factors when analyzing the future supply.

4.1.2.2 Summary OSV supply

The OSV fleet has experienced a substantial increase of vessels the recent years. Today we can see an oversupply of vessels, as the demand for OSV has slowed down. This can be illustrated in the OSV-to-rig count (Figure 4.17) that again has seen levels that remind us of the financial crisis in 2009. As the supply is slow in response to demand, the orderbook is substantially high in 2015 and 2016. Many major broker-firms think that the supply growth of newbuildings will slow down in 2017, and flatten out. Therefore we have forecasted that the growth will be around 0-1% from 2017E to 2020E. This can in fact improve the market conditions and stabilize the dayrates and increase the utilization rate in the long-term. This will be further explained in the section 4.1.3.

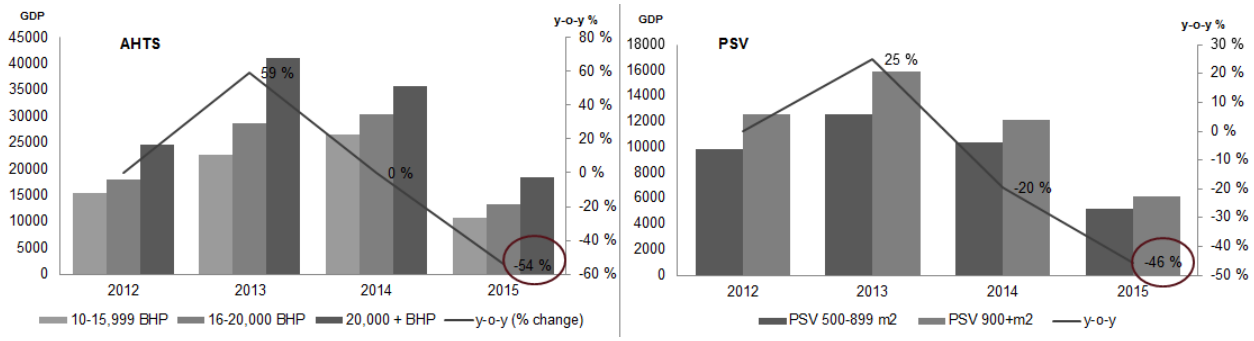
4.1.3 The day rate mechanism (Balance between demand and supply)

As we can see from the shipping market model (Figure 2.1), the dayrate mechanism can be explained by the balance between supply and demand. Both the demand and supply can be considered as fairly inelastic in the short term. Supply of OSV is hard to downgrade because of the construction time of the vessels, and the historically low scrapping and layup rate. The demand for OSV vessels is fairly stable when the oil companies face good market conditions (high oil price). The inelastic characteristic in the short term explains the extreme volatility of the OSV dayrates (as the supply is slow in response to demand). As we have seen, the demand for OSV is highly dependent on E&P spending and rig activity. The E&P spending is expected to decrease in the next years as we saw in figure 4.11. Rig activity can be illustrated by the utilization rate, and the utilization rate is expected to fall substantially in 2015-2016 as the number of active rigs will slow down (as a consequence of the low oil price, under the breakeven price in many producing countries). As the oil price is expected to increase to levels ~ 80$/bbl. in 2020, the E&P spending will increase from 2015 levels. This will result in higher utilization rate in the long-term, from the increased demand for OSV, together with the balanced supply of the total world fleet. As demand will be better from 2017, and supply of vessel will slow down, we expect higher OSV dayrates from 2017-2020 (this will be further analyzed in section 7.0). The market balance, relationship between orderbook of vessels, rigs and drilling wells are all important factors affecting the dayrate mechanism.

OSV Dayrates

OSV Dayrates can be categorized as a price/cost of a particular service a specific day. The rates vary with regard to duration of the contract, specific vessels specifications and contract terms (Hunter et al, 2014). OSV companies face two markets to utilize their vessels in, respectively the term market and the spot market. Oil companies have different demand for OSV`s and use the spot market to cover their impermanent demand, and the term market to meet their long term demand (>30 days). Market outlook, hedging strategies and speculations can be factors that increase the reallocating from spot and term market from vessel owners. The spot rates fluctuate considerably, as the rates are characterized as the current "balance" between supply and demand. This is exactly what happened in the recent recession, where the demand for OSV`s decreased and the supply increased. As we can see from figure 4.15 the overall North Sea spot AHTS (£) rates (total) suffered a -54% y-o-y change from 2014 to 2015. In contrast to the substantially increase of ~ 60% y-o-y from 2012 to 2013. The North Sea spot PSV (£) rates has seen the same trend. As we can see from Figure 4.16, the North Sea term market is more stable(y-o-y% change), and term contracts are assigned for periods ranging from one month to several years (Pareto, 2015).

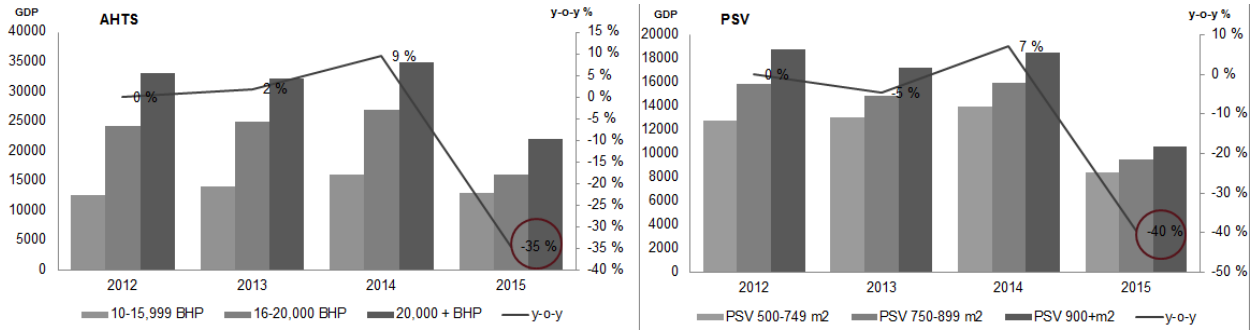
Figure 4.15 – Spot rates (AHTS – PSV)
(Source: Pareto (2015), RS Platou (2015) & Own contribution)



In line with Hunter et al (2014), RS Platou states that the contract depends on future market outlook, the current spot rate, operational costs and the duration of the charter (RS Platou, 2015). These factors together accumulated an extensively decrease in the term rates from 2014-2015. The North Sea spot market is used as the benchmark for spot rates in the OSV industry (RS Platou, 2015). The North Sea is the only strong operational spot market, as term contracts are more prevailing in the other markets. Dayrates in other regions are consequently established on the North Sea spot rate, accommodated for a regional premium bank on the cost level. The premium reflects factors as: political anxiety, bureaucracy,

taxes, local requirements and inadequacy of skilled labor. The North Sea spot rates have been eminently volatile over the last 15 years and it can be representative to further analyze the historical movement of the spot rates. The future OSV dayrates will be further analyzed and forecasted in section 7.0.

Figure 4.16 – Term rates (AHTS – PSV)
(Source: Pareto (2015), RS Platou (2015) & Own contribution)

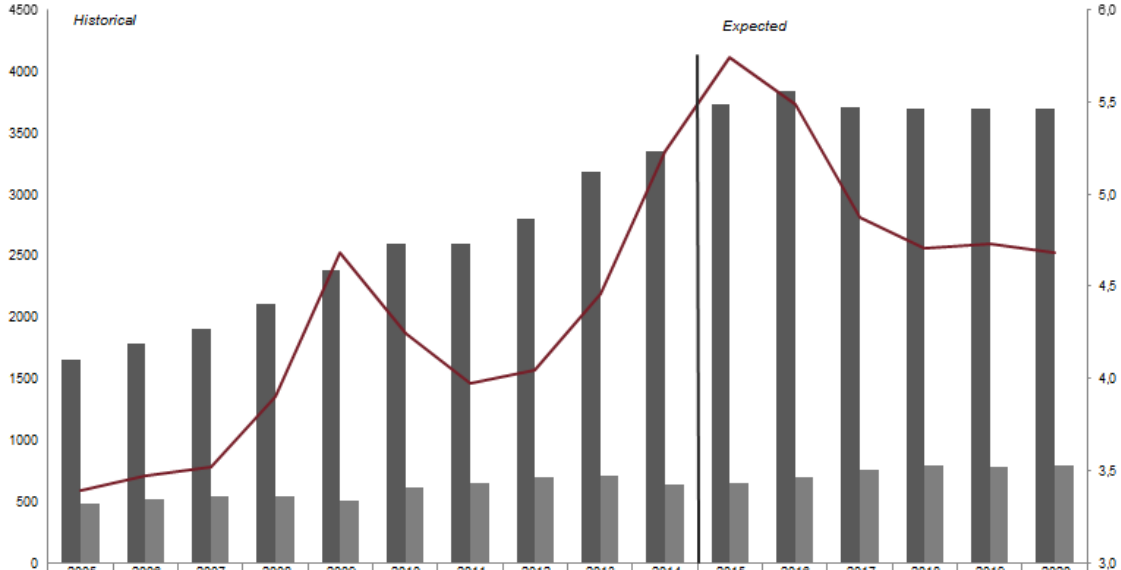


OSV to rig ratio

The OSV-to-rig ratio is a measure of the balance between supply and demand in the OSV industry (total world fleet/total rigs). A low ratio indicates high rig activity and a high number of rigs related to OSV vessels and therefore stronger OSV demand. As illustrated in figure 4.17 the ratio was very low in 2005-2007, due to the number of active oil rigs compared to OSVs, leading to extraordinary strong freight rates this year. The financial crisis in 2009 increased the ratio (~4.7), and resulted in lower utilization and OSV term rates. The OSV to rig-ratio is, based on our calculations expected to increase from 5.2 in 2014 to 5.7 in 2015E, negatively affecting the vessel owners. We can see from figure 4.17 that the OSV to rig ratio has increased substantially from 2011 to 2014, due to the average y-o-y fleet growth of 9%. The overall OSV utilization rate has been around 80-85% in these years. The last year's low demand, and decrease in rig activity changed the market balance and resulted in an oversupply of vessels (~5.2). This is reflected through the increased OSV to rig ratio in 2015E-2016E (5.7 and 5.5). The ratio is expected to decrease in the medium-long term as the supply of OSV will slow down as a consequence of the bad market conditions. Additionally, as we have analyzed, the overall market conditions for OSV companies will improve in the long term (2017-2020). Thus, a decreased OSV to rig ratio (~4.5). Thus, it is important

for SOFF to engage their vessels in long term contracts to protect against the fluctuation in demand. The vessels days in operation and efficiency can be reflected through the utilization rate, which will be discussed on the next page.

Figure 4.17 – OSV to rig ratio 2005-2014H and 2015E-2020E
(Source: RS Platou (2015) (Utilization rates and total rig fleet), Pareto (2015) & Own contribution)



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OSV Total world fleet	1650	1780	1900	2100	2375	2600	2600	2800	3180	3350	3730	3844	3706	3700	3700	3700
Marketed rig supply	486	512	540	538	507	613	654	692	713	641	650	700	760	786	782	791
OSV to rig ratio	3,4	3,5	3,5	3,9	4,7	4,2	4,0	4,0	4,5	5,2	5,7	5,5	4,9	4,7	4,7	4,7

Utilization

The cut down in future E&P spending leading to reduced demand for OSV, together with increased supply (oversupply), are putting pressure on dayrates. As we can see from the appendix 4.15, the utilization rate has averaged ~ 70% for AHTS and 90% for PSV from 2005 to 2014 (RS Platou, 2015). AHTS vessels have higher spot exposure than PSV vessels, and thereby also a lower historical utilization rate. Subsea vessels are the segment with most long-term contracts (due to high specification and project to project basis). Thus, historically they have experienced the highest utilization rate of nearly 100% (Pareto, 2015). As the higher spot exposure normally leads to lower utilization, it is important for the vessel owners to have high contract coverage the next years (2015-2016E). The Norwegian OSV companies' contract coverage over the next years is illustrated in appendix 4.16. The contract coverage faces a negative trend that means higher spot exposure, which most likely will lead to lower utilization rate in the next years. This is in line with the increased OSV-to-rig ratio in 2015E-2016E. However, the ratio is expected to decline to ~ 4.7 levels in the medium-long term, which means better utilization

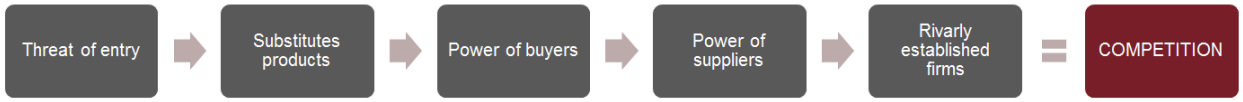
ratios of OSVs. SOFF operates per 27.04.2015 with 1 CSV, 8 AHTS and 1 PSV in the spot market, respectively, in Norway, UK, Singapore and Malaysia. The rest of the fleet is exposed to the term market with contract coverage ranging from 2 months to 3 years (SOFF – AR, 2014). SOFF's expected contract coverage is ~57% in 2015E and ~31% in 2016E.

4.1.4 Conclusion to the Shipping Market Model

The balance between oil supply and demand illustrated in figure 4.5 indicates that the oil price will increase slightly from today`s level of 63.29 $/bbl. to around 80$/bbl. in 2020E. The recent plunge in the oil price will in fact result in a negative E&P spending growth in 2015E and 2016E. But as illustrated in figure 4.6, the outlook for the oil price looks brighter from 2017-2020E, we will again see a stable/rising E&P spending. The North Sea, Brazil and Asia face the toughest challenges over 2015 and 2016. The North Sea is a high cost and mature industry, with focus on cost cutting and utilizing of existing assets. Brazil is affected by the extreme uncertainty around Petrobras and the negative development of their economy. These market factors will drive the demand for OSV`s down, but we can see growth opportunities in the medium-term, driven by the higher expected oil price. The present market conditions will lead to a lower supply growth of OSV`s (but as supply is slow in response to demand, the vessels will hit the market on the short term). Today we can see an oversupply of vessels, as the demand for OSV vessels has slowed down. This has been illustrated in figure 4.17, where the increased OSV-to-rig ratio has hit the market. According to the OSV business cycle and the external environment of SOFF, the market is declining – but will go into a recovery phase (2016) to a growth (2017-).

4.2 Porters five forces

When analyzing the strategic environment and the competitive landscape, it is highly relevant to understand the forces affecting the competition (Porter, 2008). If an industry earns a return (ROIC) higher than the cost of capital (WACC), it will attract firms outside the industry (Petersen & Plenborg, 2012). As we can see from section 5.1.2 in the financial analysis, SOFF and the peer groups average ROIC before tax from 2007-2014 has been ~7%. The WACC in the OSV industry is estimated to be around 7-9%. As we saw in figure 4.17, the OSV fleet growth has been tremendous and resulted in an oversupply of vessels into the market, as demand has decreased. The development of the OSV market has been negative and the industry is in a declining phase (Figure 3.7). As most of the OSV companies are highly leveraged (Figure 4.14), due to the capital-intensive industry they are dependent on steady cash flows to service their debt (DNB Markets, 2014). The combination of low utilization rates and bad second hand market creates high rivalry among the actors to secure long-term contracts, employment and steady cash flows. The structure of this section is illustrated in the figure below.



4.2.1 Threat of entry

There are different intensities of threat of entry for the vessel classification (low-end vs high-end vessels), and type of vessel (PSV, AHTS and CSV), but the factors deciding the threats are the same. We think that the most important factors affecting the OSV industry are: capital requirements, economies of scale, absolute cost advantage and governmental and legal barriers (Grant, 2013). We will analyze the factors of each segment under.

PSV

PSVs are characterized as low-cost vessels, and has a short construction time compared to high-end AHTS and CSVs (1-1.5 years) (Pareto, 2015). The cost of constructing PSVs has decreased substantially the recent years. This is a result of the high amount of Asian Shipyards entering the new building market (90% of AHTS & 64% PSV of the orderbook), with a cost advantage (30% discount) compared to European Shipyards. The cost of a PSV is on average ~30-60 million dollars (Clarkson, 2014). This implies that both the time and cost of entering the PSV market is low. As mentioned in section 3.2.6, PSV vessels are mainly used for transport of cargo and personnel, implying low complexity of the operations. However, economies of scale intensify the barriers to entry as the major actors achieve benefits of

ordering several vessels simultaneously. We characterize the threat of entry in the PSV segment as medium based on the balance between the most important factors affecting the OSV industry. However, the present market conditions (with low demand for OSVs), infers that the market is unprofitable and the overall threat from new entrants will be low in the next years. Therefore the overall threat of entry is defined as *medium/low*.

AHTS

The low-end and high-end AHTS`s are almost two different segments as their specifications differ substantially. The low-end vessels are mostly produced at Asian shipyards, they have experienced excess capacity the last years as there have been few orders of regular shipping vessels since the financial crisis (Fearnley, 2015). This has caused an oversupply of the low-end vessels making them both relatively cheap and accessible for many companies, implying that the capital requirements are relatively low. We consider the threat of entry in low-end segment as medium based on the market conditions (extremely low dayrates). The high-end AHTS vessels are highly complex vessels as they are designed to operate in harsh environment (RS Platou, 2015). Thereby the capital requirements are high in this segment, and only a few shipyards contains the capacity and technical knowledge to construct them (Pareto, 2015). The absolute cost advantage is also present in this segment as there is a need for experience and skills to operate these vessels in the challenging environments. We characterize the overall threat of entry in the AHTS segment as *low*.

Subsea

The subsea vessels are the most complex vessels in the OSV industry. As the segment is relatively new and complex there are only a few yards available to produce these vessels (Pareto, 2015). This makes capital requirements high for this segment as the vessels can cost more than 100 million dollars (Clarkson, 2014). Threat of entry differs from market to market as well, as the governments in Brazil and West-Africa favors operating vessels crewed with local personnel and vessels constructed by local companies. In addition banks have become reluctant to provide capital. The complexity of operating these vessels also makes the absolute cost advantage significant and we thereby consider the threat of entry in this segment as low.

Overall

Overall the threat of entry in the OSV industry is considered medium, but the threat of entering the high-end segment SOFF operates in is set to be *low/medium*. By the theory, a low/medium threat of entry makes an industry more attractive and increases the probability of making profit for companies already competing. As mentioned earlier, this is a highly capital intensive industry with vessels owners speculating/investing in good times. As we observed from the supply section in the external analysis, the supply is slow in changes in demand, as vessels have long construction time (~12 to 36 months). These investments will tie up capital, and make the industry highly leveraged. Thus, this is line with the intensity of industry entrants because of the weak market conditions.

4.2.2 Threat of substitute's products

The price the petroleum companies are willing to pay for SOFF`s services depends on the availability of substitute services (Porter, 2008). PSVs, AHTS and Subsea vessels all deliver very specific services, and in reality there are no substitutes available in today's global market. In the 70's many fishing ships where transformed/used as PSVs (SOFF – AR – 2014) but today the specifications of the PSVs are too high to make this possible. The OSV companies services accounts for only a small portion of the petroleum companies' budgets, yet they are highly dependent on these services. This combination makes the petroleum companies' demand quite inelastic to the prices of OSV services (Porter, 2008). On the other side, other energy sources besides fossil energy (oil) such as renewables, has gained noteworthy emphasis the recent years due to the negative ecological effect of fossil energy. However, the world is still comprehensively reliant on oil and gas, with a share of ~85% the recent years and forecasted share of 81% in 2035 (BP, 2015). The threat of substitutes is defined as *very low*.

4.2.3 Bargaining power of buyers

There are typically two factors that determine the intensity of bargaining power in the OSV industry: relative bargaining power and the oil companies' price sensitivity. Oil companies' price sensitivity is dependent on how much SOFF charge for their services in proportion to their total costs (Grant, 2013). As already mentioned, the cost for SOFF´s services only accounts for a small amount of their total budget, which implies that oil companies have low price sensitivity towards SOFF`s services.

The less differentiated a product is, the more willing a customer is to switch suppliers (Grant, 2013). The services of PSVs and low-end AHTSs are very similar, inferring that the petroleum companies have a medium bargaining power. The High-end AHTS and OSCV vessels deliver very specific services and thereby our customers have a low bargaining power. As the more critical a service is for a customer, the lower their bargaining power is (Grant, 2013). By the way of the petroleum companies are highly dependent of the OSV services their bargaining power can be characterized as low. SOFF´s biggest customers are Petrobras (5 AHTS), Subsea 7 (3 CSVs), Saipem (2 CSVs and 3 PSVs) and Ocean Installer (3CSVs).

When markets are in a declining phase: the demand for OSV services decreases substantially. This is a result of lower E&P spending, decreased offshore rigs activity level (lower utilization rates), higher OSV to rig ratio – resulting in extremely low dayrates. An example of this is Petrobas` actions in Brazil, where they put high pressure on the dayrates, under the level accepted by OSV companies (Pareto, 2015). The bargaining power of SOFF`s customers are therefore becoming higher, and it becomes extremely important for SOFF to maintain a good relationship to them. The petroleum companies are big players with a lot of capital and knowledge about the industry; as a result the threat of vertical integration could be present (Grant, 2013). However, as the petroleum companies value the flexibility of using several OSV companies dependent on how the market is, it is not likely that they would vertically integrate. Based on all these factors we characterize the bargaining power as *medium*.

4.2.4 Bargaining power of suppliers

Low-end segment

The most important factors affecting the intensity of the bargaining power of suppliers in the OSV market is: crew expenses and new building of vessels (shipyards). As illustrated in figure 4.10, the current order book of OSV vessels represents ~20% of the current fleet; 15% is to be delivered during 2015E and 5% in 2016E. This will increase the existing overcapacity in the market substantially. As mentioned, Low-end PSV and AHTS vessels are fairly easy to construct and as already mentioned, most of the ships are manufactured at Asian shipyards (Pareto, 2015). The low complexity and todays overcapacity makes it easy for OSV companies to switch supplier. This in combination with the current low demand implies weak bargaining power among the low-end ship yards.

High-end segment

The leading shipyards manufacturing high-end AHTSs and CSVs are located in Norway and the US. As the specification of the vessels are high there are not many manufacturers of these ships, therefore these suppliers should have a high bargaining power. As many Asian and Brazilian manufacturers have gotten a reputation of high slippage and faults there are few trusted shipyards delivering high-end vessels, increasing the bargaining power of SOFF suppliers (Pareto, 2015). The demand for OSV vessels are relatively low compared to previous years, thereby the shipyards bargaining power has decreased. We therefore argue the bargaining power of suppliers in the high-end segment to be *medium*.

Overall

On average crew expenses has accounted for 46% of SOFFs operating costs the past 7 years, making it the most important driver of costs. This is line with the total OSV crew expenses that accounts for ~70% of vessels OPEX (DnB Markets, 2014). The regulations in Brazil and West-Africa the last years requiring ships to be crewed with local personnel have created a lack of skilled workers in these regions (Pareto, 2015). Training the local workers has shown to be costly, and thereby increased the bargaining power of the skilled labor that exists. It is highly important for the OSV companies to attracting high skilled personnel, where vessel`s age, specifications, facilities and equipment are important factors (SOFF – AR, 2014).

4.2.5 Rivalry between established firms

The intensity of competition between established firms is the result of interactions between six factors: concentration, diversity of competitors, product differentiation, exit barriers, and cost conditions (Grant, 2013). Since SOFF operates in the high-end segment, it is reasonable to focus on this segment when analyzing the intensity of the rivalry. The total world fleet consists of 240 AHTS's (>15000 bmp) and 870 PSV's (>3000 dwt), in the high-end segment. In addition there is a high % of the total fleet under construction (SOFF – AR - 2014), as the recent market conditions (2011-2013 has been good.

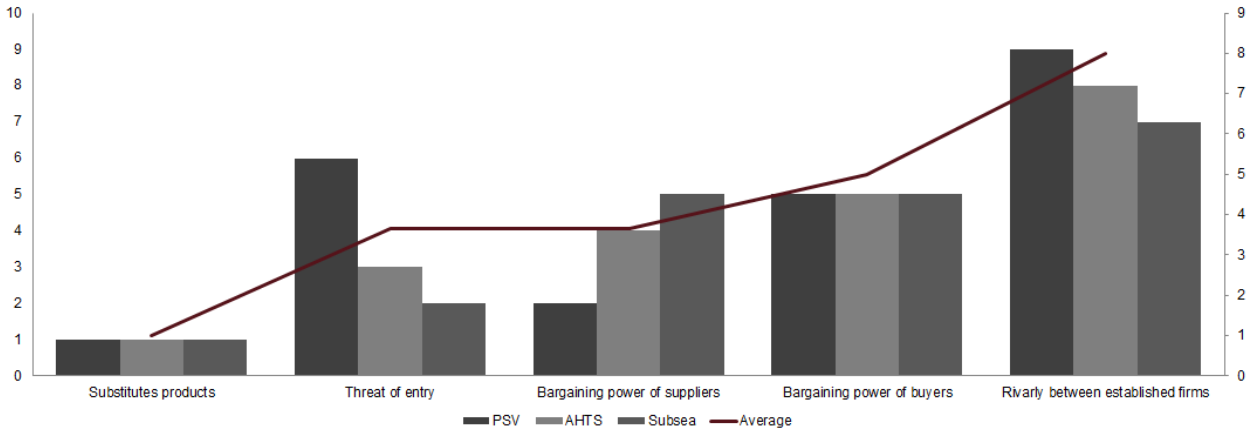
The concentration in the industry for high-end PSV's and AHTS's is high as the 20 largest owners control 52% of the world fleet (Platou, 2015). Total fleet of CSVs at the end of 2014 was approximately 250 vessels with ~20% under construction in Europe, USA, and Asia (SOFF – AR - 2014). In the OSCV market there are fewer actors, and among our peers SOFF is the company with the second largest subsea fleet (Figure 3.6). OSV companies provide in general very similar services, but of course differ in only what segment they are in. The low-end PSV and AHTS vessels deliver similar if not identical services.

The companies present in the high-end AHTS and OSCV segment differ in how advanced their vessels are, but in the end they provide the same service creating high rivalry among the actors. The excess capacity in the market today is high as the utilization rate of the vessels is extremely low. This again has weakened the second hand market substantially as high-end AHTS and PSV vessels over the last year has dropped up to 30% and 50% respectively (RS Platou, 2015). As mentioned, most of the OSV companies are highly leveraged; therefore they are dependent on steady cash flows to service their debt. The market can be described as "Survival of the fittest" by the combination of low utilization rates and the almost non-existent second hand market that creates high rivalry among the actors to secure employment and cash flows (ABG, 2015). Hence, we characterize the intensity among established firms as *very high*.

4.2.6 Conclusion to porter's five forces

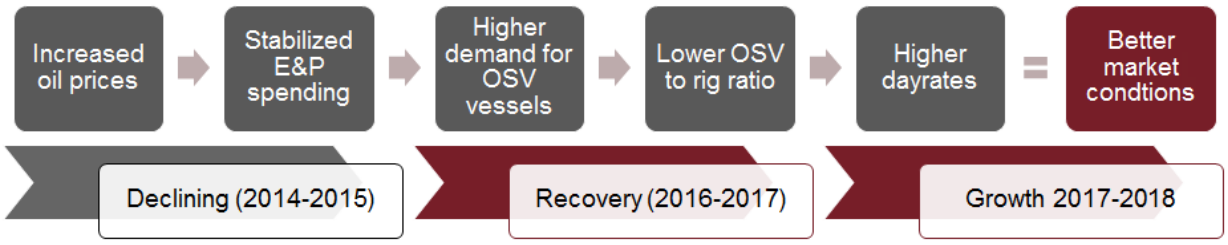
In figure 4.11, we have outlined the overall intensity of each of the potential threats. The potential threats are subjectively ranked from 0-10, where 0 indicates no threat, and 10 implies a big threat to the OSV industry. The recent plunge in the oil price decreased the profitability (ROIC<WACC) in the industry – and diminished many of the factors affecting the environment. As illustrated in figure 4.11, the OSV industry is highly competitive, with high rivalry among established firms.

Figure 4.18 – Conclusion Porters five forces (from smallest to largest).
(Source: Own contribution)



4.2.7 Outlook for the OSV industry

As discussed in section 4.1.4, the OSV industry is right now in a declining phase. With factors as low oil prices, negative E&P investments, lower demand of OSV vessels, and high supply of vessels the market can be categorized as the "Survival of the fittest". As illustrated in figure 4.11, the rivalry between established firms is categorized as extremely high. However, as the oil price will start to increase (move against level of 80$/bbl.), the E&P spending will stabilize and thereby increase the demand for OSV vessels. This will in turn lead to higher dayrates and better market conditions in 2017-2020. This is illustrated below.

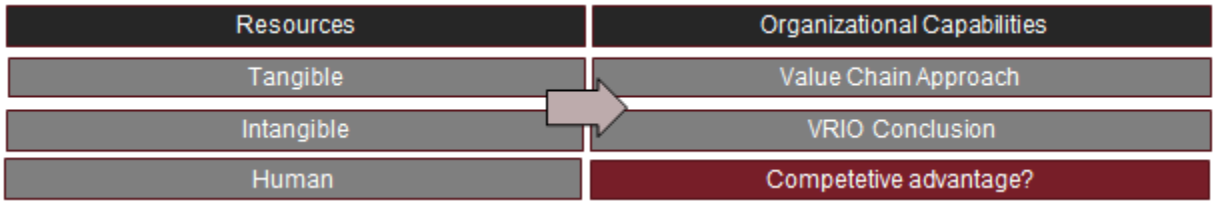


4.3 Internal Analysis

4.3.1 Identifying resources and capabilities

We have now analyzed SOFF`s industry`s characteristics in section 3.1. In section 4.1, we defined SOFF`s external environment through the shipping market model. We defined and summarized the competitive environment in section 4.2 and 4.2.6. In the next passage we need to look at how SOFF generate returns. Hence, we need to analyze SOFF´s internal resources and capabilities to find out if SOFF has a competitive advantage (Grant, 2013). Grant (2013) defines resources as the productive assets owned by the firm, and capabilities as what the firm can do. To identify the resources we have divided SOFF`s resource's into tangible, intangible and human resources. To analyze their capabilities we have chosen to use a value chain approach that "identifies a sequential chain of the main activities that the firm undertakes" (Grant, 2013). The findings of this model will be summarized at the end of this section in a VRIO (Valuable, Rare, Imitable, and Organization) conclusion.

Figure 4.19 – Identifying resources and capabilities
(Source: Grant (2013) & Own contribution)



Resources

To expand our view of SOFF`s resources, we will try to identify three types of resources: tangible, intangible and human resources. The overall goal of this section is to understand SOFF´s potential for creating a competitive advantage, through their value chain and core resources. Tangible resources can be divided into financial and physical. Intangible assets can be divided into technology, reputation and culture. Human resources can be divided into skills/know how, capacity for communication and collaboration and motivation (Grant, 2013).

In order for SOFF to reach their overall objective of being a: "major player in the OSV industry, with good reputation, high quality and crew with strong maritime capability" (Figure 3.2). It is highly important that they optimize their value chain. As a major player in the OSV industry, SOFF needs tangible assets

(physical resources), through vessels and geographical location. As illustrated in 4.11, the intensity of rivalry in the OSV industry is very high. Thus, it is extremely important that SOFF put emphasis on operational (operational resources) brilliance in order to acquire and maintain new contracts with charterers. Therefore SOFF need to focus on attaining skilled crew with high technical capability (human resources). To follow their strategy of being: "a provider of customer-focused, specialized and high quality services", SOFF need a strong organizational and financial (financial resources) foundation.

Organizational capabilities

An organizational capability is a "firm's capacity to deploy resources for a desired end result" (Grant, 2013). We will try to identify SOFF`s capabilities through the value chain approach. Porter (2008) defined the primary activities in a value chain as: inbound logistics, operations, outbound logistics, marketing and sales and service.

As mentioned in section 4.1 the OSV industry is an extremely cyclical business, and it is highly relevant to have the ability to organize the fleet composition and newbuilding program in a proper way. As the supply of vessels is slow in response to demand it's important that the vessels owners forecast the future market conditions, and evaluate the second-hand market. This is characterized as the "inbound logistics". As described under "Resources", it is important that the firm has a strong organizational foundation through: excellence, quality of crew and equipment, technical competence and delivery time. This is defined as "operations". SOFF´s outbound logistics is a question of: where to allocate the vessels (market segment), and how to utilize them (term vs spot) in the market. The last part of SOFF`s value chain can be classified as sales and marketing, and important factors are: geographical locations and relationship with customers.

4.3.2 Appraising Resources and Capabilities (VRIO)

SOFF´s value chain consists of different steps and tasks that require implementation and integration of different resources and capabilities. Grounded on the different steps in SOFF´s value chain, we will analyze the most important factors in the OSV industry due SOFF´s human, physical, financial and organizational resources.

Human resources

Crew

SOFF recognize their employees as their most valuable asset (SOFF – AR, 2014). Hence, they put emphasis on safety as one of their core values. SOFF`s zero injuries philosophy will continue into the next years, with focuses on: evaluation, facilitation, planning and prevention to avoid personnel-related incidents. Another key value for SOFF is high competence crew, to ensure that their clients get "more than satisfied". Sick leave amongst the marine crew in Norway (Solstad Shipping AS) was 3.6% in 2014, which was an improvement from 4.4% in 2013. This can indicate that the work environment has improved. SOFF is an industry leader in the number of apprentices and cadets they train every year. In 2012 SOFF also got awarded a price for the best training company in 2011 (SOFF – AR, 2014). As mentioned in section 4.2, fleet age, specifications, facilities and equipment are important factors for attracting experienced and skilled personnel. As the intensity of rivalry is extremely high in the industry, crew and management can be characterized as a "success-factor" for gaining market shares in the long run. Through SOFF´s well-known crew training academy and overall focus on safety we suggest that the crew is a competitive strength and a *valuable* resource for SOFF. However, there are some limitations in *rarity* in this kind of resource as the competitors can acquire highly competitive crew if the attributes are good. However, we characterize this resource as *rare*, because of the awards received and that human capital is harder to acquire in combination with SOFF`s focus on internal talent. Thus, the peer group and industry competitors can`t obtain this by imitating the training program in the short-term, or upgrade their fleet (specifications and facilities) due to the vessel delivery time. Therefore we characterize this resource as a *temporary competitive advantage*.

Valuable?	Rare?	Costly to Imitate?	Exploited?
Competetive Disadvantage	Competetive Parity	Temporary Competetive advantage	Sustained Competetive advatange

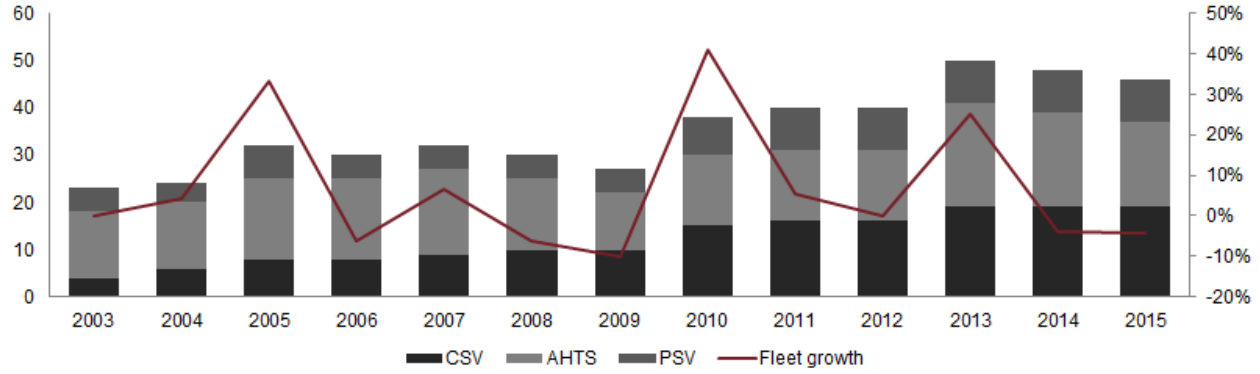
Board of directors and management

As mentioned in section 3.1, the board of directors (BoD) consists of five members illustrated in appendix 3.3. We can notice that the BoD has been quite stable the last years. Toril Eidesvik presence from 2005 and Anders Onarheim newly position from 2014 can indicate that SOFF both has a long-term focus and are able to renew itself. The board has an overall high education and experience level. We consider the BoD as highly skilled and suited for exploiting business opportunities within the industry. Lars Peder Solstad has been CEO of the company since 1999, which implies that the BoD gives the management time to follow SOFF´s overall strategy.

SOFF also has a well-known SolLead program, which educates present and future leaders to carry on the SOFF management philosophy. To be able to determine a potential competitive advantage we will analyze the historical performance of the management.

As mentioned, the OSV industry is an extremely cyclical business, and it is highly relevant to have the ability to organize the fleet composition and newbuilding program. The fleet composition is a strategic operational choice made by SOFF´s management. During the last years SOFF has continued to position as an OSCV company (currently 19 vessels that accounts for ~43%). SOFF states that their future strategy is to continue to divest assets (AHTS/PSV) on an opportunistic basis, with an overall focus on reviewing the fleet. SOFF has 1 OSCV vessel in order with expected delivery in 2016; this is low compared to their peer group average of ~4 vessels (RS Platou, 2015). As analyzed in section 4.1, the future Subsea Market can be challenging as E&P spending will decline with ~25% in 2015E. However, the recent plunge in the oil price can be described as unforeseen and almost impossible event for SOFF´s management to forecast. Overall, the strategic choices made by the management indicate that they have the ability to adjust their strategy. As illustrated in figure 3.6, SOFF has a well-diversified fleet. SOFFs fleet development from 2003-2014 is illustrated in figure 4.13 below.

Figure 4.20 – SOFF fleet development (2003-2014)
(Source: SOFF – AR, 2003-2014 & Own contribution)



As illustrated in figure 4.9´, SOFF has a large part of their fleet (~40%) operating in the North Sea. The North Sea dayrates increased substantially from 2012 to 2013, which is in line with SOFF´s fleet growth. Timing and exposure to the spot market is extremely important factors for future earnings, and can be a good indicator of management success (RS Platou, 2015). As explained under section 4.1.1.3, the North Sea region can be characterized as the most challenging market going forward. SOFF has overall low exposure to the North Sea spot market, which can be seen as a good management decision. Numerous of the OSV companies have high spot exposure. Hence, the companies are exposed towards the

fluctuations in charter rates for unchartered fleet (Pareto, 2015). As illustrated in appendix 4.17, SOFF are among the companies with the lowest EPS sensitives (Pareto, 2015). In addition, SOFF´s movement towards the Subsea Segment can be characterized as an ability to be "one step ahead" of their peers. Therefore, we conclude that the BoD and management can be viewed as a *valuable* resource for SOFF. Because of limits in rarity and imitations, we consider the resources as a *competitive parity*.

Valuable?	Rare?	Costly to Imitate?	Exploited?
Competetive Disadvantage	Competetive Parity	Temporary Competetive advantage	Sustained Competetive advatange

Physical resources

Vessels

During the last years, the majority of oil companies have changed their demand against high-end vessels, suitable for harsh environment and deepwater production. Thus, historically SOFF has tried to composition their fleet to meet this demand. SOFF`s business concept of being an "integrated shipping company with high specification vessels" can be beneficial because of the increased focus on safety and high quality from the major oil companies. On the other side, SOFF has around 17 vessels above 10 years of age. Thus, SOFF are exposed to downside in the current market environment as vessel age is one of the key factors of securing new contracts. SOFF`s OSCV new build, with expected delivery in 2016, will become the largest vessel in their fleet (deck area of more than 2.500 m2, LOA of 180 m and a beam of 33 m). The vessel will also be equipped with high technology and a lot of innovative specifications (550-ton top tension, vertical lay-system etc.). This can infer that the management are able to understand the market conditions (with high demand for vessel specification), to compete for new contracts in the future. We think that SOFF should be in an "ok" position to face the challenges in the current market environment. As already mentioned, SOFF has a favorable low exposure to the challenging North Sea Spot market compared to their peers. SOFF has a highly diversified fleet composition (size, type and specification), which can be characterized as a *valuable* resource. In addition, SOFF has a solid geographical diversity: with operations all over the world (Figure 3.5). Grant (2013) states that diversification can increase the company's growth potential, reduce the risk and create shareholder value (Grant, 2013). However, the fleet is among the oldest compared to their peers. The fleet composition can also be characterized as *rare*, because of their high exposure to the Subsea Market. Due to the high leverage (Figure 4.11) in the industry, construction time, yard capacity and bad market conditions the peers with no OSCV under construction will lag a couple of years after SOFF. Therefor we

characterize SOFF´s physical resources as valuable and rare, but not costly to imitate as the peer group can change their fleet composition in the long term. Therefore we characterize this resource as a *temporary competitive advantage*.

Valuable?	Rare?	Costly to Imitate?	Exploited?
Competetive Disadvantage	Competetive Parity	Temporary Competetive advantage	Sustained Competetive advatange

Financial resources

As we can observe from section 6 (financial analysis), SOFF has transformed its fleet over the last year and today OSCV are the largest contributor to EBITDA. RS Platou and Pareto, believes that this trend is expected to increase substantially, with the OSCV accounting for an estimated of 90% of the EBITDA in 2017E. This is due to SOFF´s contract coverage per segment and the expected challenging PSV/AHTS market (analyzed in section 4.1) the coming years. Additionally, this is also illustrated in appendix 4.17, where SOFF has a reasonably low EBITDA sensitivity towards an increase in charter rates for the vessels on short-term charters (because of their low exposure to the challenging North Sea spot market). SOFF had NOK ~11.9 bn of interest bearing debt, resulting in a debt ratio of 67% at the end of 2014. SOFF has over the last years focused on deleveraging, but with a delivery of the large OSCV vessel in 2016E, combined with the bad market conditions the leverage are expected to increase. Hence, SOFF`s financial position will deteriorate over the next years. However, compared to some of its peers (SIOFF and FAR), with a high orderbook, SOFF has positioned itself well in order to meet the challenging market conditions, and many analysts believe that SOFF are capable to accomplish their financial obligations (RS Platou – Pareto - 2015). As a summary, we characterize their financial resources as *valuable* compared to some of the peers. The financial resources are not rare, as they can be acquired by the other OSV companies in the industry. Therefore the financial resources is characterize as a competitive parity.

Valuable?	Rare?	Costly to Imitate?	Exploited?
Competetive Disadvantage	Competetive Parity	Temporary Competetive advantage	Sustained Competetive advatange

Organizational resources

SOFF`s overall focus on quality, reputation, environment and brand name is highly relevant when analyzing their organizational resources. SOFF has for many years worked on numerous procedures of environmental measures through its environmental program, “SOFF`s green operations (SGO)” (Appendix 4.18) SOFF are in the top division when it comes to reductions in emissions from its

operations. This is reflected through the listing on the "Climate Performance Leadership (CLP) Global Performance Leadership index", which assesses the environmental efforts of the major companies in the world. SOFF is one of only three companies from Norway that have a presence on this list (SOFF – AR - 2014). The effort put down in planning, controlling and coordination of SOFF`s systems, requires a highly competitive organization. Thus, this can be classified as a highly *valuable* resource for SOFF. Besides the remarkable environmental performance, SOFF´s customers can also benefit from cost savings on the charters. The overall organizational focus on their environment, local presence and cost savings is a valuable source to acquire new contracts. SOFF´s well-known brand name and reputation, due to many years of experience in OSV industry, can attract qualified labor and retain key executive management. This is shown through increased number of applicants from 1996-2014 for their well-known training academy. Therefore we characterize SOFF´s organizational resources as valuable and rare, costly to imitate and a *sustained competitive advantage*.

Valuable?	Rare?	Costly to Imitate?	Exploited?
Competetive Disadvantage	Competetive Parity	Temporary Competetive advantage	Sustained Competetive advatange

4.3.3 Conclusion Internal analysis

As we can see from figure 4.14, we have summarized section 4.2.1. We can see that SOFF`s BoD & Management, geographical location and SOFF`s financial resources are categorized as a competitive parity. SOFF`s crew and extraordinary fleet composition (due to their high OSCV exposure) are categorized as a temporary competitive advantage. Additionally, this analysis states that SOFF`s organizational resources are highly valuable and rare among the OSV companies. This gives SOFF a sustainable competitive advantage in a very challenging market.

Figure 4.21 – VRIO Summary
(Source: Barney, J.B and Hesterly, W.S (2012) & Own contribution)

Factors in the OSV industry	Valuable?	Rare?	Imitable?	Exploited?	Competetive indication
Human Resources					
Crew	Yes	Yes	Long term	Yes	Temporary Competetive Advantange
BoD & Management	Yes	No	Yes	Yes	Competetive Parity
Physical Resources					
Fleet composition	Yes	Yes	Long term	Yes	Temporary Competetive Advantange
Geographical location	Yes	Yes	Yes	Yes	Competetive Parity
Financial Resources	Yes	No	Yes	Yes	Competetive Parity
Organizational Resources	Yes	Yes	No	Yes	Sustainable Competetive Advantage

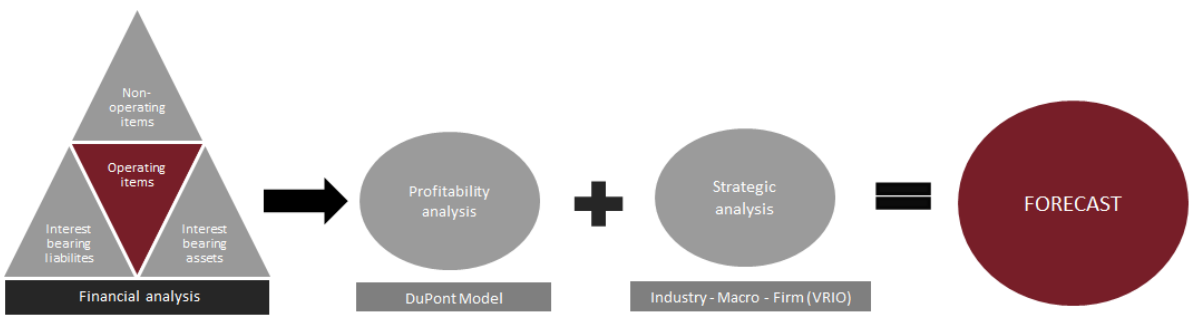
5.0 Financial Analysis

In contemplation of forecasting SOFF`s future cash flow in section 7.0, it is important that we get an understanding of SOFFs historical performance (Petersen & Plenborg, 2012). SOFF´s main activities can be classified as financing, investing and operating activities. It is extremely beneficial to separate them, as investors favor the operational activities as the essential source of value creation, and capital providers see operating profit as the primary source of servicing debt (Petersen & Plenborg, 2012). As we analyzed in section 4.3, the company's operations is harder to imitate and often the factor that makes the company unique (Brealey & Myers, 2014) Thus, the estimates of future cash flow will be more reliable by understanding the development of the most important value drivers (operational).

The historical performance of SOFF will be measured against our selected peer group. As mentioned in section 3.0 and illustrated in figure 3.7, the business cycle of the OSV industry is typically ~8-10 years. To be able to conduct a comprehended analysis of historical performance and trends, we have chosen a 9 year period. Hence, the subsequent financial analysis is built on annual reports from SOFF and peers from 2006-2014.

The structure of section 5.0, is illustrated in figure 5.1.We will start this analysis by reorganizing the company`s financial statements, by separating non-operating items, interest bearing asset and interest bearing liabilities from *operating items* (Section 5.1). Then we will analyze the company`s historical profitability with different key ratios from the Du Pont Model (Section 5.2). As illustrated in figure 5.1, the financial and strategic analysis builds the foundation of the forecast in section 7.0. The reformulated statements can be seen in appendix 5.1.

Figure 5.1 – Financial analysis & Strategic Analysis = Forecast
(Source: Plenborg & Petersen (2012) & Own contribution)



5.1 Rebalancing financial statements for analytical purposes

5.1.1 The analytical income statement

As mentioned, to obtain better knowledge of how SOFF creates value, we have reformulated their income statement into operating and financing activities. This is done as investors consider operating profit as the main source of value creation, and debt-providers see operating profits as the main source of servicing debt (Petersen & Plenborg, 2012). The reformulation of the income statements let us determine important ratios as EBIT, EBITDA and NOPAT. We have done the following reclassifications:

- We have classified *gain on sale of vessels* as an operating item as this is a recurring item and a result of SOFF always trying to optimize their fleet (SOFF – AR, 2014).
- We have separated *income from associated companies (AC) and joint ventures (JV)* into core and non-core. Income from core companies are classified as an operating item while income from non-core companies (Deep Well AS, ADSI INC) are classified as financial items. Deep Well AS operates in the deepwater drilling industry, which is the process of oil and gas exploration, and therefore not a core competence for SOFF. ADSI INC can be categorized as a moving agency and therefore not considered as a core competence for SOFF. However, it could be argued that they are in line with SOFF`s operations as they get affected by the same environmental conditions.
- IFRS accounting principles does not distinguish between *taxes on operating items* and *financing items*, thus we need to segregate them. This is done by calculating the tax shield on financing activities. As SOFF operates in several countries with different tax regimes we have chosen to use the effective tax rate.
- *Currency and interest rate derivatives* are classified as financial items as they are used as hedging instruments and not for financial gains. Derivatives are not SOFF`s core competence, and they state in their annual report that these instruments are used for hedging only (SOFF – AR, 2014).

5.1.2 The analytical balance sheet

As illustrated in figure 5.1, we have classified items into non-core, core and financial assets. Invested capital is calculated as the sum of all operating assets less operating liabilities. It is important to identify a company`s invested capital as this allows investors (shareholders, bondholders and stakeholders) to use the metric to calculate measures of performance (Petersen & Plenborg, 2012). We have done the following reclassifications:

- Current liabilities are short-term liabilities payable within the next year. Taxes payable comes as a result of paying less tax than required on operating activities. Thus, *taxes payable* is classified as current liabilities.
- As income from associated companies and joint ventures are split into core and non-core, we have divided *investments in AC and JV as core and non-core*. Core is classified under tangible and intangible assets, while non-core is classified under interest bearing assets.
- *Currency and interest derivatives* are classified as interest bearing assets (financial item) as they are solely used for hedging and not for financial gain. This is in accordance with the reclassifications of the income statement.

5.2 Historical analysis of profitability and performance

To analyze SOFF`s historical performance we will use the DuPont model (Appendix 5.2) which includes an analysis of SOFF`s operational result before looking at return on equity (Petersen & Plenborg, 2012). Thereafter we will perform a liquidity analysis to look at SOFFs ability to pay their short-term obligations and thereby analyze SOFF`s financial health.

As we chose to use the effective tax rate in the formulation of the financial statements, we need to modify the DuPont analysis. SOFF and their peers have experienced high volatility regarding their currency and interest rate derivatives. This has often led to either extremely high profit or loss on net financial items. Using the effective tax rate to separate tax on operating and financial activity did not give us comparable results among the peers, as their net financing has differed substantially. This affects after-tax measures as NOPAT[1] in the way that they are no longer comparable among the peers. We will therefore focus on pre-tax ratios when performing the profitability analysis.

The operational result is best analyzed by looking at ROIC[2] as it measures a company's return on capital invested in the operation (Petersen & Plenborg, 2012). However, ROIC is not able to explain if profitability is driven by better revenue/expense utilization or an improvement of the capital utilization. We will therefore decompose ROIC into profit margin and turnover rate of invested capital.

To analyze the ROE[3] we will explore how the company is financed and see how SOFF`s leverage impacts their profitability. We will decompose ROE into spread and financial gearing.

The profitability analysis that section 5.2 is built on is illustrated in appendix 5.3.

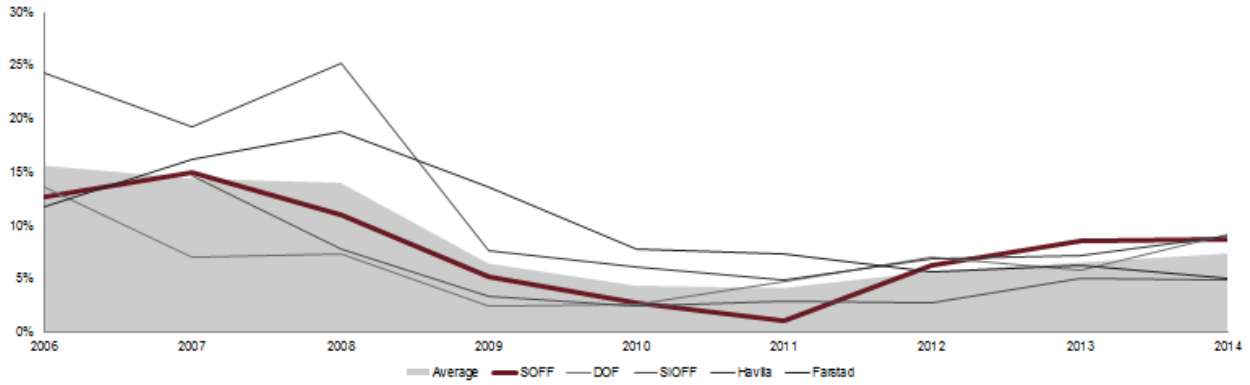
5.2.1 Decomposition of ROIC – Operational result

ROIC is the overall profitability measure for operational activities. Thus, the ratio expresses the return on capital invested in SOFF´s net operating assets (%). ROIC can be calculated either as NOPAT/Invested Capital (after tax) or as EBIT/Invested Capital (before tax). As mentioned in section 5.1.3 we have chosen to use ROIC before tax when benchmarking with SOFF`s peer group (Figure 5.2). As we can see, SOFF´s

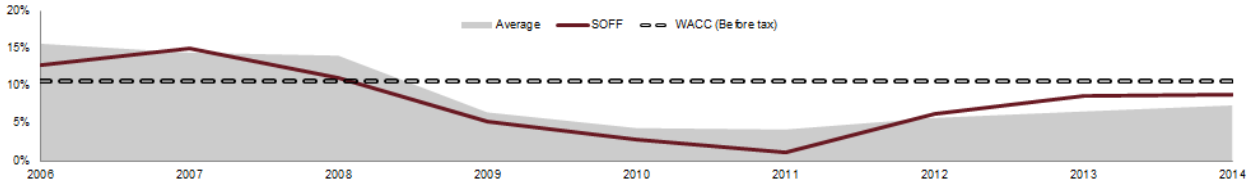
[1] NOPAT = Net Operating Profit After Tax
[2] ROIC = Return On Invested Capital
[3] ROE = Return On Equity

ROIC before tax has been moving in line with the average of their peers (grey area). From 2007-2011 SOFF´s ROIC before tax decreased from ~15% to ~1%. In a valuation context this means that the (estimated) value of SOFF has decreased, which is fairly in line with their share price development (Figure 3.3). From 2011 to 2014 we clearly see a positive trend in SOFF´s ROIC (above peer group average). If we compare ROIC to pre-tax WACC (Figure 5.2) we can see that SOFF has not been able to create value for its shareholders. To understand what has driven the development of SOFF´s ROIC, we will now decompose ROIC into profit margin and turnover ratio.

Figure 5.2 – ROIC before tax (EBIT/Invested capital), and ROIC before tax vs WACC
(Source: Petersen & Plenborg (2012) & Own contribution)



Compared to WACC (7.74% after tax = 10.6% before tax) from part 8.0, returns are not sufficient; this will be further discussed in the next sections. The development of our forecasted ROIC can be illustrated in 7.12.



***Recap*: "Around average ROIC compared to peers from 2006-2011, a positive development the recent years and the highest growth in the period 2011 to 2014".**

5.2.1.1 Profit margin

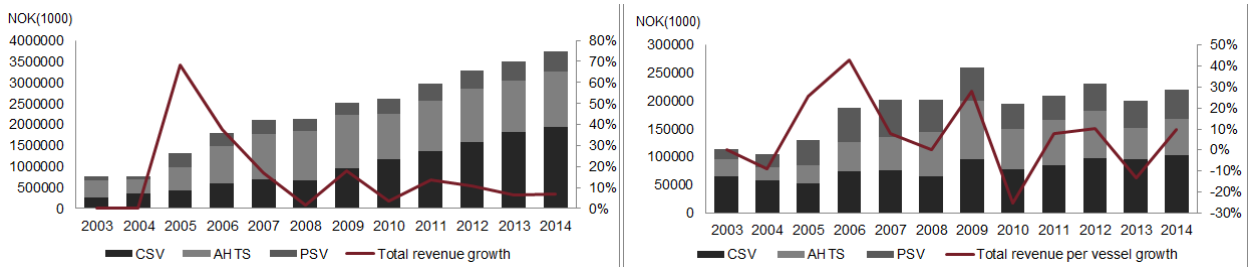
Historical development of revenue

Since 2003 to 2014 SOFF`s income has increased with ~290%, from around ~1 billion to ~3.9 billion, corresponding to a CAGR of 12%. In the same period their fleet has increased from 23 (Including Cable laying, MOSV and Standby) to 46 vessels (Only PSV, AHTS and CSV). SOFF`s income has experienced growth every financial year in the period analyzed except in 2004. Since 2006, SOFF`s CAGR in revenue has been 8.3% which is low compared to the average CAGR of their peers at 14.2%.

Revenue from business segments and vessels

The increase in SOFF`s fleet has been characterized by a shift from low-end PSV and AHTS vessels towards high-end PSV, AHTS and CSV vessels. The CAGR in revenues from their PSVs, AHTS, and CSVs has been 14%, 10% and 18% respectively. As a result the proportion of revenue from each segment has changed as well; this can be seen in figure 5.3. The proportion of revenue from the CSV segment has increased from 34% to 52%, while the share of revenue from their AHTS vessels has decreased from 54% to 35%. The revenue from PSVs has been stable in relation to total revenue, accounting for 12% in both 2003 and 2014.

Figure 5.3 – Total revenue by business segment and revenue per vessels
(Source: Petersen & Plenborg (2012) & Own contribution)



SOFF`s PSV fleet has increased from 5 vessels in 2003 to 9 vessels in 2014. While SOFF`s PSV fleet has more or less doubled, the revenue from the PSV fleet has five-doubled. As PSVs has become further standardized, more actors have entered the market; thereby SOFF has experienced volatility in their utilization. The CAGR in PSV revenue has been 14%, but as the revenue from CSVs has increased with 18% the proportion of revenues from PSVs in 2014 is 12%, the same as it accounted for in 2003.

SOFF`s AHTS fleet was stable until 2013 when SOFF ordered 7 new vessels, but as some of its vessels were becoming outdated they also laid up two vessels in 2013. The bad market conditions forced SOFF to lay up two more vessels in 2014. SOFF`s fleet now consists of 18 vessels, a slightly increase of 4 vessels since 2003. The revenue from their AHTS vessels has more than tripled and has experienced a CAGR of 10%. This is four percentage points less than the CAGR from the PSV fleet and eight percentage points less than the CSV fleet. Thus the proportion of revenues from the AHTS fleet has dropped from accounting for 54% in 2003 to account for 35% of total revenues in 2014.

SOFFs CSV fleet has almost five-doubled since 2003, respectively an increase from 4 vessels to 19 vessels in 2014. The revenue from their CSV vessels has increased thereafter (~700%). SOFF`s CSV`s has historically not been exposed to the spot market, and most of SOFF`s vessels has been utilized 100% of the time. SOFF`s CSV fleet has experienced a CAGR of 18% and the revenue now represents 52% of SOFFs total revenues. The fleet development is clearly in line with their overall business concept, objective and strategy illustrated in figure 3.2. Additionally, SOFF`s fleet composition is categorized (Figure 4.14) as a temporary competitive advantage.

Historical development of Operating Expenses (OPEX)

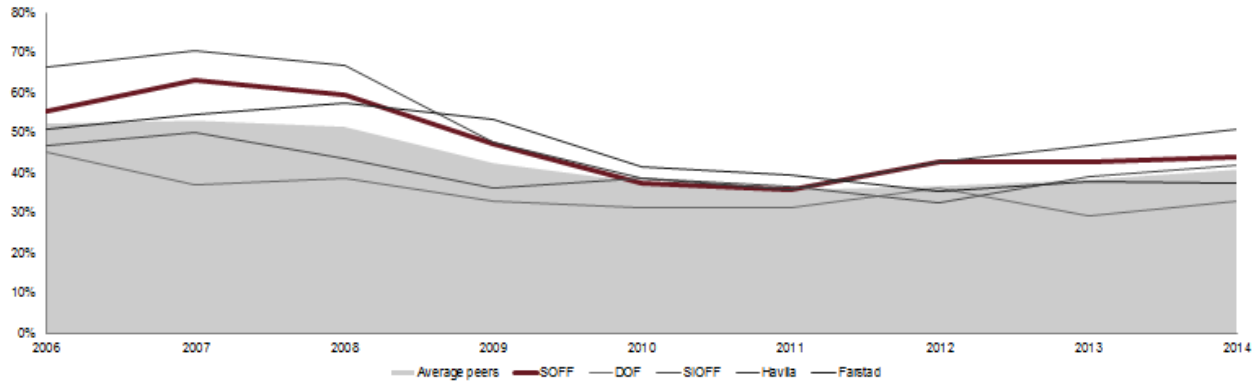
Since 2005 (first year with only PSVs, AHTSs and CSVs) crew expenses in proportion to total operating expenses have increased from 37% to 56%. This comes as a result of the shift in SOFF`s fleet composition together with their focus on highly professional and talented crew. As stated in section 3.1.2 and 4.1.1.2 these vessels are more complex to operate than the AHTS and PSV vessels and thereby more costly to operate. The proportion of crew expenses to revenue has also increased in the same period as it has changed from accounting for 10% of revenue to account for 31% of revenue. Other expenses consist of administration, bunker, and other operating expenses. Other expenses has experienced a CAGR of 15% since 2005, but as crew expenses has experienced a CAGR of 24% other expenses accounted only for 44% of total operating expenses in 2014 compared to 63% in 2005. Other expenses per vessel have tripled while crew expenses per vessel have increased by 5.5 times.

EBIT and EBITDA & EBIT/EBITDA per vessel

EBITDA-margin

EBITDA is a measurement of a company's operating profitability (Petersen & Plenborg, 2012). It is viewed as cleaner than the EBIT-margin as EBITDA only includes revenues and operating expenses. Even though SOFF`s revenue has increased, the EBITDA-margin has decreased by ~11 percentage points since 2006 to 2014. This comes as a result of SOFF`s OPEX increasing more than revenue, as a result of cost inflation mentioned in section 4.1.1.2. Since 2011, SOFF`s EBITDA-margin has increased and stands at 44% in 2014. This is higher than SOFF`s peer group, which averages at ~41%. This development is also in line with the ROIC development illustrated in figure 5.2.

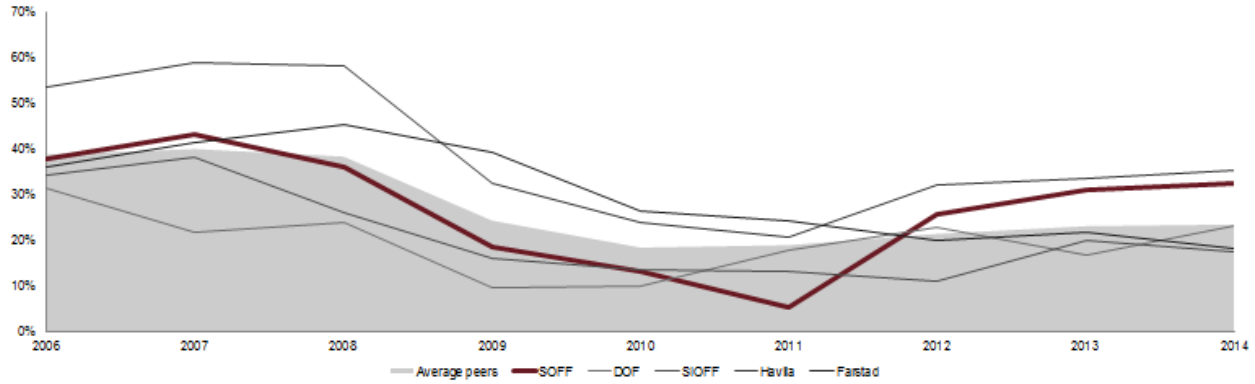
Figure 5.4 – EBITDA-margin
(Source: Petersen & Plenborg (2012) & Own contribution)



EBIT-margin

EBIT-margin reflects a company's operating profit after depreciation and amortization (Petersen & Plenborg, 2012). SOFF`s EBIT-margin has decreased by ~5 percentage points since 2006, even though their revenue has increased as a result of the same reasons mentioned under the EBITDA-margin. The average EBIT-margin of SOFF`s peers has decreased by ~13 percentage points implying that SOFF has been able to keep up their revenue compared to their costs better than their peer group (CAGR in total expenses SOFF 3.2%, compared to peer group 6.3%). This is in line with SOFF`s focus on the "green fleet", that corresponds to an impressive overall fuel reduction (Appendix 4.18). As we can see from figure 5.4, SOFF`s EBIT-margin growth from 2011 to 2014 has been tremendous (~69.5%), compared to the average peer group of 14.5%. In 2014 the EBIT-margin stands at 32.2% compared to the average peer group of 23.4%.

Figure 5.5 – EBIT-margin
(Source: Petersen & Plenborg (2012) & Own contribution)



EBIT/EBITDA-per vessel

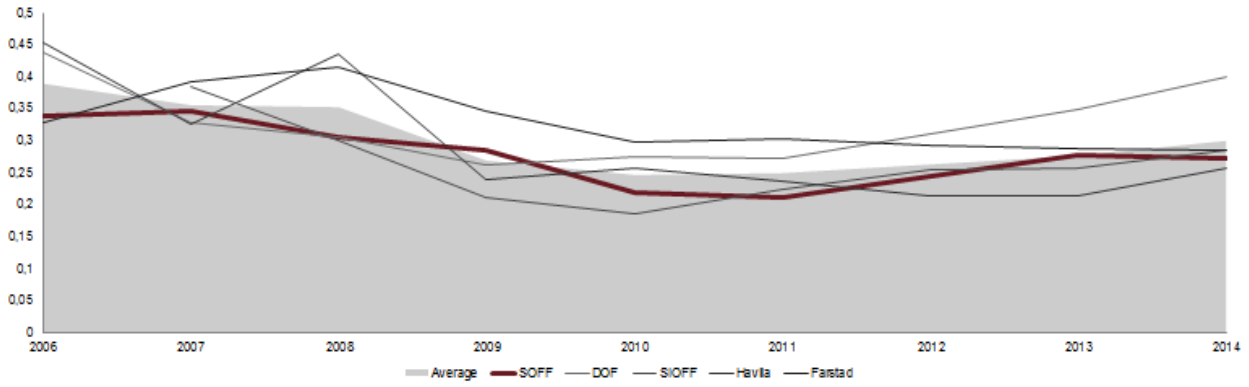
Appendix 5.6 illustrates that the EBIT per CSV vessel is double the EBIT per AHTS vessel. We can see that the volatility in EBIT for the CSV vessels have been much higher than for AHTS and PSV vessels. This comes as a result of the CSVs being more capital intensive and costly to operate making it necessary for them to have a high utilization rate to stay profitable. EBITDA/EBIT per CSV vessel has been ~125% higher than EBITDA/EBIT per vessel of PSV/AHTS combined.

***Recap*: "SOFF has historically experienced a lower CAGR in revenue than the peer group. The CAGR in revenues from their PSV, AHTS, and CSVs has been 14%, 10% and 18% respectively. SOFF`s change in fleet composition and focus on highly professional crew has increased the crew expenses proportion related to the total operating expenses. Since 2011 SOFF`s growth in EBITDA/EBIT-margin has been higher than the peer group, because of SOFF`s ability to keep down expenses (fuel reduction)".**

5.2.1.2 Turnover rate invested capital

The turnover rate of invested capital expresses a company's ability to utilize its invested capital (Petersen & Plenborg, 2012). Together with profit margin, the turnover rate of invested capital helps explain whether the revenue/expense relation and the capital utilization have improved or deteriorated over time. As the OSV industry is very capital intensive, most actors have a low turnover rate. SOFF`s turnover rate has decreased from 0.34 to 0.27 over the last 9 years as a result of high investments and not being able to utilize their vessels as much as wanted. There was a reduction in the turnover rate after the financial crisis, but the improvement of the market conditions from 2011 to 2014 improved the rate. However, we still don't see levels as those SOFF experienced before the financial crisis. The average turnover rate of their peers in 2014 was at 0.30. If we exclude DOF (0.4), SOFF`s turnover rate is around the average of their peer group, illustrated in figure 5.5.

Figure 5.6 – Turnover rate (Invested Capital)
(Source: Petersen & Plenborg (2012) & Own contribution)

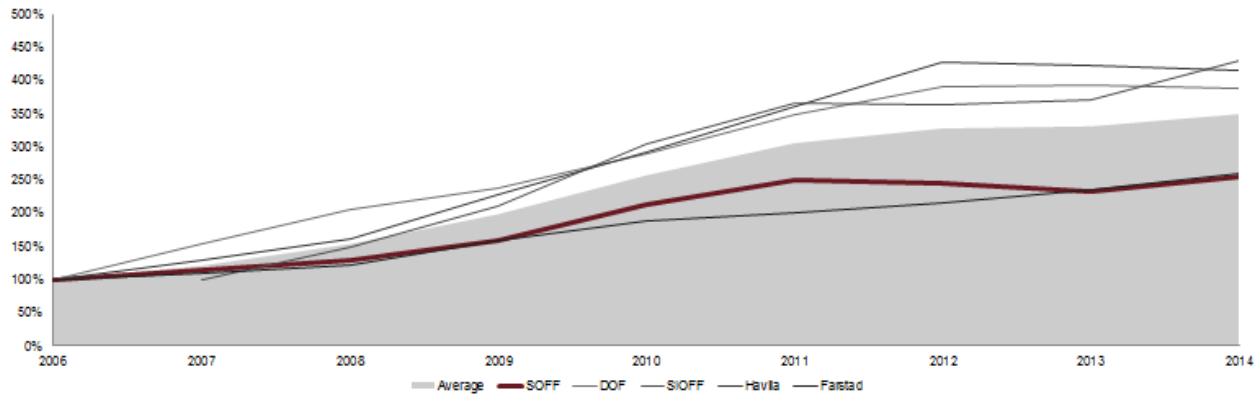


Indexing and common-size analysis of invested capital

As we can see from the common size analysis in appendix 5.5, the invested capital for SOFF and their peers has more than tripled over the last decade. This comes as a result of the good market conditions the last years (2011-2013) which have led the actors in the OSV industry to increase their fleet size. The average increase has been 350% while SOFF has increased invested capital with a little less, approximately 255%. We can see that the main driver of the increase in the invested capital can be derived from the increase in vessels and new build contracts. The good market conditions the recent years have led to a boom in new builds. The average increase in vessels and newbuild contracts of SOFF`s peers has been a four doubling, while respectively SOFF has increased by 2.7 times.

SOFFs invested capital was ~14 billion NOK in 2014, which is the third highest of its peers, 1 billion behind Farstad. The biggest company in terms of invested capital is DOF which has more than 27 billion NOK invested (due to their high exposure to the OSCV vessels). Havila is by far the "smallest" company in terms of invested capital with only 6.6 billion NOK invested. SIOF is close to both SOFF and Farstad with 13.3 billion invested.

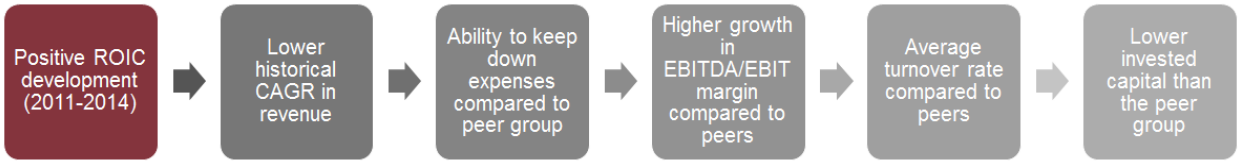
Figure 5.7 – Indexing (Invested capital)
(Source: Petersen & Plenborg (2012) & Own contribution)



***Recap**: "Low turnover rate in the OSV industry, SOFF`s turnover rate is around average compared to the peer group. Good market conditions and high demand for OSV vessels the recent years has led to a substantially increase in invested capital. However, SOFF`s invested capital is under the average peer group".*

5.2.1.3 Sub conclusion - ROIC

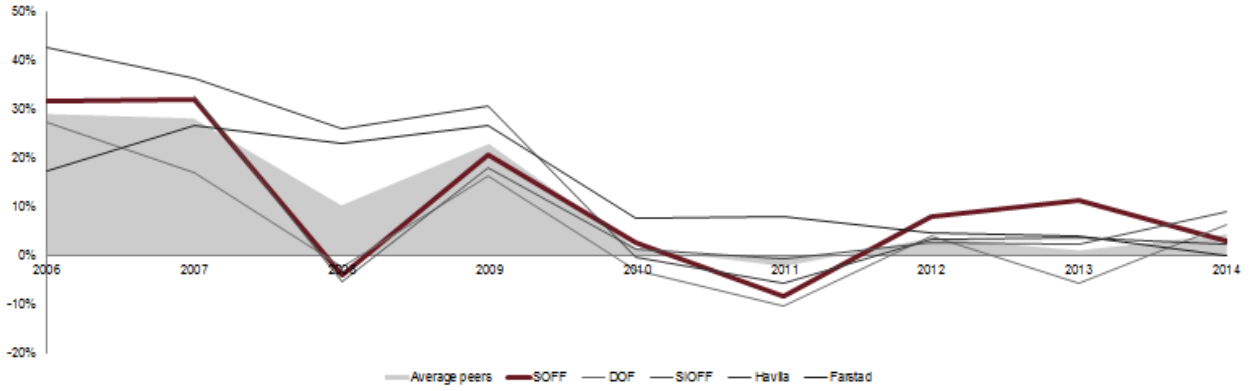
SOFF has experienced an average ROIC compared to peers from 2006-2011, a positive development the recent years and the highest growth in the period 2011 to 2014. SOFF has historically experienced a lower CAGR in revenue than the peer group. Since 2011 SOFF`s growth in EBITDA/EBIT-margin has been higher than the peer group, because of SOFF`s ability to keep down expenses. SOFF`s turnover rate is around average, but on the other side SOFF`s invested capital is under the average peer group.



5.2.2 ROE

ROE measures a company's ability to create profit from its shareholders investments and takes account for both operating and financial leverage (Petersen & Plenborg, 2012). As mentioned we will use pre-tax measures, therefore we have modified the original ratio into including profit before tax instead of net earnings after tax. The development of SOFF`s ROE has been disastrous and extremely volatile. From being substantially high at ~ 30% in 2006 and 2007, the ROE has dropped to 3% in 2014. The development of SOFF`s peers has shown the same trend from providing high returns in 2006 and 2007 before plummeting during the financial crisis, since then they have never recovered to old levels. The OSV industry saw an improvement from 2011 to 2013 as a result of sustained high oil prices and high activity on the oil rigs. However, in 2014 it dropped again because of the plunge in the oil price combined with oversupply of OSV vessels (Section 4.1). In section 8.0 we calculated the required return on equity to be 11.43% which is a lot higher than SOFF`s actual return on equity (3%)

Figure 5.8 – Return on Equity (ROE before tax)
(Source: Petersen & Plenborg (2012) & Own contribution)

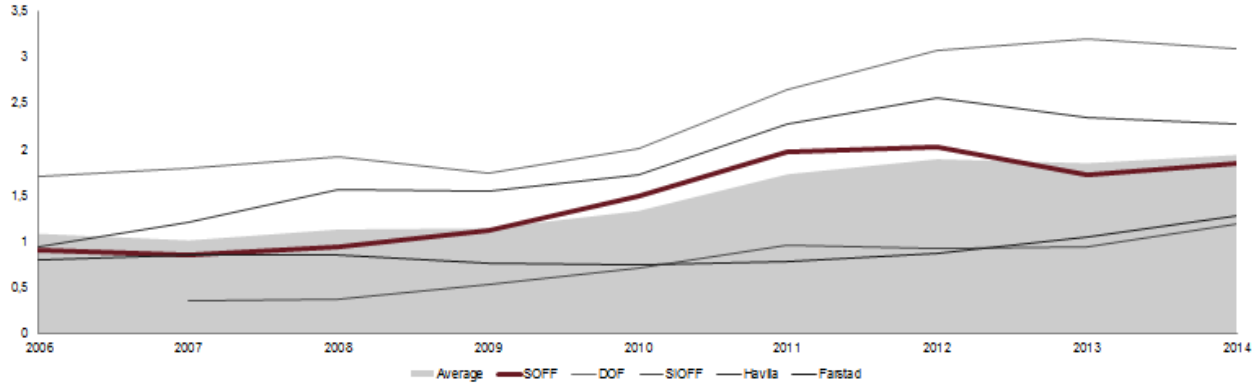


Financial Gearing

Financial gearing is calculated by dividing NIBD with the company's equity (Petersen & Plenborg, 2012). This ratio illustrates how much of the company's activities that are funded by respectively debt and equity. As seen in figure 5.9 the last year's development has shown a substantial increase in the ratio. The average of SOFF and its peers has increased from a financial gearing ratio of 1.09 in 2006 to 1.94 in 2014. SOFFs financial gearing has increased from 0.90 in 2006 to slightly below average with a ratio of 1.84 in 2014. The development in SOFF`s ratio can be explained by their substantial expansion of their fleet, being funded mostly by debt. While SOFF`s NIBD has increased by ~500%, their equity has only increased by ~70%. SOFF`s peers have increased their leverage as well, especially DOF and Havila with a

financial leverage ratio of 3.09 and 2.27. SIOF and Farstad have maintained lower ratios at 1.2 and 1.28 which is more reasonable. However, the trend in the OSV industry is not viewed upon as sustainable, which is proven by the fact that banks have become reluctant of providing capital to new investments (DnB Markets & RS Platou, 2015).

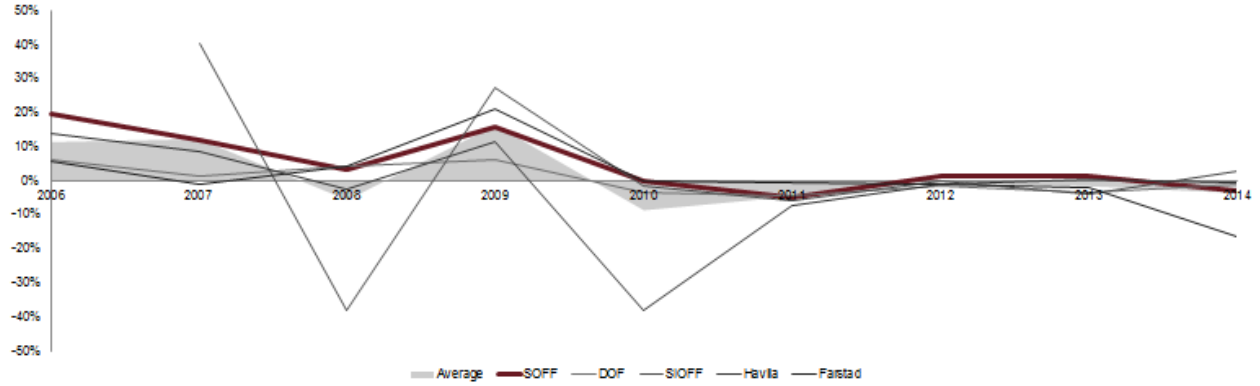
Figure 5.9 – Financial Gearing (FGEAR)
(Source: Petersen & Plenborg (2012) & Own contribution)



Spread

Spread is calculated as the difference between the net borrowing cost and the ROIC of a company (Petersen & Plenborg, 2012). Spread is calculated to analyze if the company's debt is beneficial for their shareholders, and needs to be treated carefully as it includes financial items as gain and losses on currency and interest rate derivatives (non-core). A negative net borrowing cost implies that net financial expenses after tax has been positive as a result of gains on SOFFs use of derivatives. This again will give a very positive spread. SOFFs spread has been low the last years and even negative in 2014 implying that their borrowings are destroying value for their shareholders

Figure 5.9 – Spread
(Source: Petersen & Plenborg (2012) & Own contribution)



5.2.2.1 Sub conclusion - ROE

As a result of increased financial gearing and a the negative development of SOFF`s spread, we can conclude that the shareholders' value has decreased. The development of SOFF`s ROE has been terrible and extremely volatile, thereby SOFF`s leverage has destroyed value.

5.3 Liquidity risk analysis

Liquidity risk is an important subject for every business as it decides whether or not a company will be able to pay its obligations. Lack of liquidity may also prevent a company of investing in a positive NPV project, and in some cases it can lead to bankruptcy (Brealey & Myers, 2014). First, SOFF`s short-term liquidity will be analyzed to see if they are able to pay off their short term obligations. Second, SOFF`s long-term liquidity will be analyzed to interpret their financial health. The financial ratios used in this section are illustrated in appendix 5.3.

5.3.1 Short-term liquidity risk

Liquidity cycle

The liquidity cycle measures how many days it takes to convert a company's working capital into cash (Petersen & Plenborg, 2012). SOFF has experienced a positive development since 2006 as number of days has decreased from 50.4 to 35, implying that they can turn their working capital into cash faster. The improvement comes as a result of an increase in revenue while they have managed to keep their NWC stable. As seen in appendix 5.3, SOFF`s peers development has been variable, HAVI`s liquidity cycle has plummeted as their other current liabilities has increased by 10 times while their accounts receivable have only doubled. DOF has experienced the opposite development by way of SOFF as their ratio has gone from 19.4 days to 42.7 days. This comes as a result of revenues not keeping up with their increase in NWC.

Current ratio

The current ratio analyses if the current assets are able to cover the current liabilities. As seen in appendix 5.3, SOFF`s current ratio has been above the average of their peers in all periods except in 2008 and 2012. There is no optimal level of the current ratio as it deviates from industry to industry; therefore it needs to be interpreted individually (Petersen & Plenborg, 2012). The negative development from 1.93 to 1.44 can be explained by the increase in accounts payable being higher than the increase in accounts receivables. As SOFF`s current assets are easily tradable we find the ratio of 1.44 as healthy and an indicator for SOFF being able to pay off their current liabilities within reasonable time. DOF`s current ratio is better than SOFF`s with 1.70 while their other peers have a ratio less than 1 implying that they are not able to serve their short-term liabilities.

Recap: **"SOFFs liquidity cycle has improved from ~50 to 35 days and their current ratio 1.44; thereby we can conclude that they are able to cover their short-term obligations."**

5.3.1 Long-term liquidity risk

Solvency ratio

The solvency ratio is a variation of financial leverage which tells us the relation between equity and invested capital (Petersen & Plenborg, 2012). To calculate the solvency ratio we first used market values to calculate the equity ratio as they are closer to the realizable value. As seen in appendix 5.3 , SOFFs solvency ratio has decreased substantially the last years as they have funded most of its new vessels with debt, while not being able to utilize them as much as wanted (PSV and AHTS segment), thereby retained earnings has not been satisfying. This has been the overall trend for the OSV industry and we can observe that SOFF`s solvency ratio is equal to the average ratio of their peers. As seen in section 5.2.2, SOFF`s financial gearing has increased from 1.09 to 1.94, combined with the low solvency ratio the long-term liquidity risk can be interpreted as high. This is in alignment with section 4.2.1, that banks are not willing to provide as much capital as before.

Interest coverage ratio

The interest coverage ratio illustrates if SOFF are able to pay off its net financial expenses with the operating income. EBITDA/net financial expenses are the most relevant measure as depreciation and amortization does not include a real cash flow. A negative ratio tells that the net financial expenses have been positive in that year, implying that there are no net financial expenses to be covered (Petersen & Plenborg, 2012). As seen in appendix 5.3, SOFF`s ratio have been at, or above the average peer group for most of the years except 2014, when SIOF experienced an unusually high ratio (that resulted in a unusually high average), as a result of very low net financial expenses. Compared to the rest of SOFF`s peers their rate was a bit below average, but still at 1.5 which we find sufficient for covering interests, but not in the long run with regards to retained earnings. The drop from 2013 to 2014 comes as a result of a large unrealized loss on currency derivatives. Previous years have shown a stable rate between 2.0-2.9 which we find sustainable also in the long run.

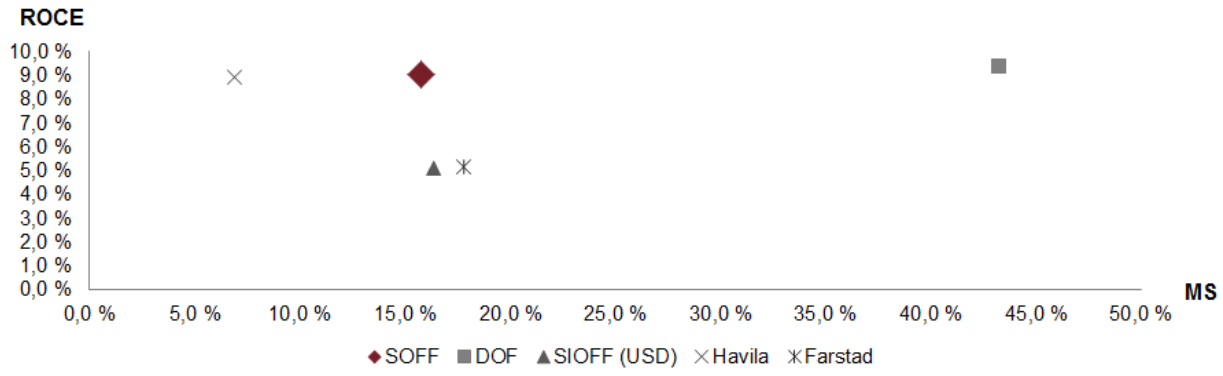
Recap: **"SOFF`s interest coverage ratio is acceptable, but the decrease in their solvency ratio implies that their financial health is not sufficient, or neither sustainable in the long run."**

5.4 Conclusion financial analysis

In section 5.2 we analyzed the historical profitability and performance of SOFF and its peers. SOFF has experienced an average ROIC compared to peers from 2006-2011. However, SOFF`s ROIC the recent years (2011-2014) has had the highest growth. SOFF`s ability to keep down expenses has resulted in an average/high EBITDA/EBIT-margin, even though the CAGR in revenue has been under/average the peer group. SOFF`s ROE has decreased, as a result of the increased gearing and the negative development of the spread. SOFF`s short-term liquidity is good, but their long-term liquidity ratios illustrates that SOFF`s financial health is not bearable in the long-run.

It is reasonable to study the ROCE[4] vs SOFF`s market share. The market share is based on a relative market share, with an assumption that SOFF + the peer group are the only competitors in the market (hard assumptions to make, but this is done to illustrate SOFF`s position among its peers). This comparison describes each company's strategic and financial position, and the higher Market Share and ROCE – the better return for shareholders (Petersen & Plenborg, 2012). As illustrated in figure 5.10, DOF has the highest market share (43.2%) and ROCE (9.3%). Based on this comparison we see that SOFF has the second highest score, with 15.7% market share and a ROCE of 9.0%. This can be explained by their overall focus on CSVs, ability to keep down OPEX, their well-diversified fleet and a stronger market balance than their peers. This is also in line with RS Platou`s (2015) ranking from bad to good market outlook described in section 3.1.3

Figure 5.10 – ROCE and Market Share
(Source: Petersen & Plenborg (2012) & Own contribution)



[4] ROCE = EBIT/Invested Capital

6.0 SWOT

Strengths (+)	Opportunities (+)
▪ Fleet composition (Diversification, and higher exposure to the CSV segment) ▪ Beneficial ROIC before tax compared to their peer group. ▪ High EBIT/EBITDA margin compared to peers (lower operational costs). ▪ Positive liquidity cycle and current ratio development (able to cover short term obligations). ▪ Green fleet program (fuel reduction) ▪ Solid geographical diversity ▪ Crew (industry leader in the number of apprentices and cadets train every year. ▪ High experience within the OSV market and good relationship with charterers.	▪ Higher oil price can indicate an increase in E&P spending – favorable market conditions. ▪ Increase in E&P spending in unconventional wells – higher demand for CSV vessels –"first mover advantage". ▪ Higher dayrates as a result of +oil/E&P ▪ High entry barriers in the high-end segment. SOFF already has vessels in place – deepwater projects in GoM. ▪ Higher demand for high-end vessels ▪ Low exposure to the challenging North Sea spot market, exposure to GoM (grew) ▪ Brand name and reputation – important to ensure new contracts
Weaknesses (-)	**Threats (-)**
▪ High D/E ratio (Average compared to peers, but not sustainable in the long run with bad market conditions). ▪ Fleet age (AHTS) ▪ Poor return on invested capital and equity ▪ Lower contract coverage compared to the average peer group, high exposure to the unfavorable spot market.	▪ Even lower oil price can indicate even more cost cutting and lower E&P spending for the major oil companies – even worse market conditions (lower demand for vessels). ▪ Higher rivalry between established firms ▪ OPEX expected to increase ▪ Local and governmental regulations ▪ High uncertainty around Petrobras ▪ Worsened second hand market ▪ Extremely risky and volatile business ▪ Orderbook of new vessels

7.0 Forecast

In the following section we will apply the findings from the previous sections to forecast the financial statements. Before we can do this, it is highly important to define a forecast horizon (Petersen & Plenborg, 2012). As discussed in section 3.14, and illustrated in figure 3.11, the business cycle of the OSV cycle is defined as ~8-10 years. We have argued that the OSV industry is currently in a declining phase (2014-2015). In section 4.2.6, we argued that the market conditions in the OSV industry will start to improve (recover) from mid-2016-2017. We think that from 2018-2020 the market will start to grow again, as a consequence of the discussed fundamental drivers in the industry. To capture the business cycle and the seasonality in SOFF`s revenue, the forecast period is defined as 6 years (2015-2020). Lastly, the terminal period, from 2021 and forwards has a steady state, consequently with a constant growth rate. Arguably, we think that the forecasted period is long enough to capture the market swings, and by 2021 we think that the OSV market is in balance (demand/supply).

As mentioned, the terminal period should have a constant growth rate (Petersen & Plenborg, 2012). This growth rate must replicate the expected average growth rate of the economy where SOFF operates. As mentioned in section 3.0, SOFF operates in many different geographical areas. Hence, they are exposed to dissimilar growth rates and inflations. Firstly, we will mention that is extremely challenging to define an accurate growth rate far into the future (unfortunately we aren`t magicians). As discussed in section 4.1.1.1, and illustrated in figure 4.3, the GDP growth were forecasted to 3.6% in the world economy in 2020E. Nevertheless, as SOFF is located in Norway (shareprice is quoted in NOK), it is important to put emphasis on the prospects of this economy. In appendix 7.1, the Norwegian inflation (in %) over the past years is illustrated. The Norwegian bank has also projected the future target of ~2.5%. As we think that SOFF has growth potential in important market as GoM and Brazil (with higher inflation rates), due to their high subsea exposure, we think the terminal growth rate can be adjusted to a higher level. Arguably, we will apply an average of the world GDP growth (3.6% in 2020E) and the projected Norwegian inflation rate (2.5%). This gives us a terminal growth rate of 2.95%.

7.1 Forecasting of dayrates

SOFF's future revenue and profitability is highly dependent on the future dayrates, making it one of the most important factors to forecast. This is analyzed in section 4.1 and these findings will be used combined with the regression analysis to forecast the dayrates. As the dayrates distinguish for the three different OSV segments they will be forecasted separately. Dayrates for the PSV and AHTS segments will be forecasted by conducting two separate regression analysis to find a statistical relationship between the variables. As the business cycle in the OSV industry is ~8-10 years (section 3.1.4); we applied historical data from 2005-2014. Thus, we find the historical data sufficient to use in our regression analysis as it covers the business cycle. As we will see later in this section, the linear relationships between the input variables were not that significant (especially for the AHTS segment). Therefore the output from the regressions will only be used as a guideline. Hence the output from the regression analysis will be modified based on our findings in the strategic analysis. For the subsea segment, there were no significant relationship between the dayrates and the input variables, because of lack in historical data. Thus, dayrates in the subsea segment are forecasted based on a fundamental analysis.

7.1.1 Forecasting of dayrates – PSV segment

To forecast dayrates in the PSV segment we performed a multiple analysis with a backward selection with regards to the variables from 2005-2014. The dependent variable is PSV dayrates for medium vessels (~700-800m^2) and the explanatory variables to begin with was the oil price, number of PSV vessels, and the rig count. As the number of PSV vessels and rig count were not significant at any reasonable levels, we chose to exclude them and perform a simple linear regression with the oil price as the only explanatory variable. The full regression analysis is illustrated in appendix 7.2.

Figure 7.1 – Summary output PSV
(Source: SAS Enterprise Guide & Own contribution

Summary - output		
R-Square	0,4176	
Prob > F	0,0601	
	Parameter estimat	Pr > |t|
Intercept	0,0168	0,8343
Ln growth oil price	0,7442	0,0601

The output (figure 7.1) tells us that changes in the oil price explain ~42% of changes in the PSV dayrates, and that the oil price is significant at a 93% confidence level. The parameter at 0.7442 tells us that an

increase in the oil price has a positive effect on the dayrates, which is in line with the finding in the shipping market model (section 4.1). The future dayrates are thereby calculated with the following equation:

$$\boldsymbol{PSV\ Dayrates = 0.0168 + 0.7442 * oil\ price}$$

To calculate the dayrates we will use the oil price forecasted in section 4.1.1.1. As the input data is in Ln growth we need to calculate it back to get the dayrates in GBP:

$$\boldsymbol{Dayrates_t = Dayrates_{t-1} * EXP\ (Ln\ growth\ dayrate)}$$

The results from the regression and the forecasted dayrates can be seen in appendix 7.2. We found the forecasted dayrates to underestimate the drop in dayrates in 2015 and we have therefore modified the regression output (Appendix 7.2). According to the regression the dayrates should drop by 28% in 2015. We find this drop to low as it is only based on the drop in the oil price. According to the findings in the shipping market model we find this drop to be scanty as we expect the increase in the PSV fleet combined with the drop in the rig count to cause a significant oversupply of vessels (Section 4.1). Therefore we estimate the dayrates to decrease by ~45% in 2015, which is in line with analysts' consensus.

The forecasted dayrates that will be applied to forecast revenues are summarized below.

Year	2015E	2016E	2017E	2018E	2019E	2020E
Spot rates PSV (GBP)	6023	6625	7150	7340	7535	7761
Growth in dayrates	-45 %	10 %	8 %	3 %	3 %	3 %

We expect the dayrates to drop by 45% in 2015 as a result of an oversupply of vessels in addition to a substantial decrease in the oil price. Further we expect the dayrates to increase by 10% in 2016 and 8% in 2017 as the expected oil price will increase to ~72 -78 $/bbl. Hence, increasing the overall demand for PSV vessels and thereby decreasing the oversupply of vessels in the market. In 2018- we expect the market to have become more or less in balance and we forecast a steady growth rate of 3%.

7.1.2 Forecasting of dayrates – AHTS segment

To forecast dayrates in the AHTS segment a multiple regression analysis is performed. The dependent variable is dayrates for AHTS vessels at ~18000 BHP. The explanatory variables used are the oil price, rig count, and the number of high end AHTS vessels. The full regression analysis can be seen in appendix 7.3

Figure 7.2 – Summary output AHTS
(Source: SAS Enterprise Guide & Own contribution

Summary - output		
R-Square	0,7048	
Prob > F	0,0856	
	Parameter estimat	Pr > |t|
Intercept	0,1764116	0,5922
Ln growth rig	2,4740	0,1858
Ln growth oil price	1,2184	0,1188
Ln growth AHTS	-2,2855	0,3269

The output from figure 7.2 above, tells us that an increase in both the number of rigs, and the oil price, will affect the dayrates positively. An increase in AHTS vessels will affect dayrates negatively. This is in line with the findings in the shipping market model (section 4.1). The oil price is significant at an 88% confidence level, the rig count at an 81% confidence level, and the number of AHTS vessels at a 77% confidence level. These confidence levels are a bit low, however we still find it plausible to use the regression as R-square is high (0.7048) and the F-ratio tells us that our explanatory variables are significant at a 10% level (0.0856) in addition to being in line with the findings in the shipping market model. If older data had been available, we expect the confidence levels to be higher. The dayrates based on the multiple regression analysis can thereby be found by the following equation:

$$\boldsymbol{AHTS\ Dayrates = 0.1765 + 2.4740 * rigs + 1.2184 * oil\ price - 2.2855 * AHTS\ vessels}$$

As the input in the model is in Ln growth, the forecasted dayrates in our regression model is found by this formula:

$$\boldsymbol{Dayrates_t = Dayrates_{t-1} * EXP\ (Ln\ growth\ dayrates)}$$

The output from the regression analysis provided some extreme results in 2015 and 2016. It forecasted a decline in AHTS dayrates of 69% in 2015 before an increase of 15% in 2016. Based on our strategic analysis we do not find it reasonable for day rates to drop that significant, therefore the expected

dayrates have been modified which can be seen in appendix 7.3. The forecasted dayrates that will be used to forecast revenues are summarized in the table below.

Year	2015E	2016E	2017E	2018E	2019E	2020E
Dayrates AHTS (GBP)	12688	13323	13856	14271	14557	14702
Growth in dayrates	-58 %	5 %	4 %	3 %	2 %	1 %

We expect the dayrates to drop by ~58% in 2015 as a result of a substantial decrease in rig activity (section 4.1.1.2) in addition to an expected drop in the oil price of 37.7% from 2014 (96.24$) -2015E (60$) (section 4.1.1.1) and a substantial increase of AHTS vessels. We expect the dayrates to start recovering in 2016-2017 as the expected oil price will increase; consequently the rig activity will increase. In addition the delivery of new vessels will not be as high as in 2015. From 2018- we expect the AHTS segment to be in more or less balance and we thereby forecast only a slightly increase in 2019 and 2020. However, we argue that this segment is going to be tough for OSV companies in the future.

7.1.3 Forecasting of dayrates – SUBSEA segment

As already mentioned, there is very little historical information obtainable for forecasting subsea dayrates. The diversification of the vessels is also more extreme than the other segments, but we will base our findings on high-end vessels. The latest data on average CSV subsea rate were on ~22.500 GBP in 2014 (Pareto, 2015). The demand for OCSVs has increased the recent years, and so has the dayrates. Based on our findings in section 4.1, we believe that the subsea dayrates will drop in 2015E, but will start to recover as the market conditions will improve. This is in line with several analysts' statements that the Subsea Market has a huge growth potential. Dayrates for OSCVs have traditionally been less volatile than for PSVs and AHTS. The trend has however loosened the past year, with a high number of vessels available for pending charters. However, we argue that the oversupply of vessels is not that significant as PSV/AHTS, and the vessels to rig ratio is lower, thereby higher demand as the market conditions improve. This is illustrated in the table below. Arguably, the subsea market will follow the forecasted increase in oil price. As a result, the demand for exploration rises (from 2017-), and thereby the OCSV dayrates will upsurge. Therefore, we believe that SOFF`s high exposure to the Subsea Market can be beneficial compared to their peers.

Year	2015E	2016E	2017E	2018E	2019E	2020E
Dayrates CSV (GBP)	18768	19707	22269	26277	28116	29803
Growth in dayrates	-17 %	5 %	13 %	18 %	7 %	6 %

7.2 Forecasting of long term contracts and utilization

7.2.1 Vessels on long term contracts

As we can see from appendix 7.4-7.6, SOFF has a number of vessels on long term contracts (especially in the OSCV segment). The expected contract coverage in 2015-2016 can be illustrated in figure 3.8, with 53% and 33%. As mentioned in section 4.1.3, vessels on long term contracts have fixed charter periods and dayrates. Therefore, they are not accessible in the spot market when they are on long-term contract. Hence, it is extremely important for SOFF to write beneficial contracts on long-term, to ensure high utilization of their vessels. As illustrated in appendix 7.4-7.6, the vessels on long-term contracts are not affected by the overall variations in the spot market, until the contract perishes. As analyzed in section 7.1, and illustrated in figure 4.15, the dayrates has decreased substantially the recent year. A remarkable note for SOFF is that ~8 vessels *end* their term-contracts during 2015-2016. Hence, they will be exposed to the challenging spot market (particularly in the AHTS and PSV segment).

To calculate the revenue contribution from vessels on contract in the OSCV segment, we have used the reported contract value for Normand Reach (entered in 2013). The value of this specific contract was ~650 MNOK, with duration of 5 years. This gives SOFF revenue of 130 MNOK every year from 2015-2019. This contract is used a benchmark for the other vessels, as almost all the other contracts are confidential. As size, specification, age, and location are highly important factors affecting the value of the term-contract, we have estimated the revenue from the confidential contracts based on these factors. Unfortunately, we were not able to conduct an analysis of location premium as a lack of consistent data. The rates are illustrated in appendix 7.7, and the different factors are explained under the appendix.

To calculate the revenue contribution from vessels on contract in the AHTS segment, we have used the reported contract value for Normand Titan (entered in 2014). The value of this specific contract was ~400 MNOK, with duration of 4 years. This gives SOFF revenue of 100 MNOK every year from 2015-2018. This contract is used a benchmark for the other vessels, as almost all the other contracts are confidential. The rates are illustrated in appendix 7.8, and the different factors are explained under the appendix.

To calculate the revenue contribution from vessels on contract in the PSV segment, we have used the reported contract value for Normand Vibran (entered in 2013). The value of this specific contract was ~250 MNOK, with duration of 4, 33 years. This gives SOFF revenue of ~57.7 MNOK every year from 2015-2017. This contract is used a benchmark for the other vessels, as almost all the other contracts are confidential. The rates are illustrated in appendix 7.9, and the different factors are explained under the appendix.

7.2.2 Forecasting of utilization

As we can see from the appendix 4.15, the utilization rate has historically averaged ~ 70% for AHTS and 90% for PSV from 2005 to 2014 (RS Platou, 2015). AHTS vessels have higher spot exposure than PSV vessels, and thereby also a lower historical utilization rate. Subsea vessels are the segment with most long-term contracts (due to high specification and project to project basis). Thus, historically they have experienced the highest utilization rate of nearly 100% (Pareto, 2015). The contract coverage faces a negative trend the next years that means higher spot exposure, which most likely will lead to lower utilization rate in the next years. This is in line with the increased OSV-to-rig ratio in 2015E-2016E (Figure 4.17).

Figure 7.3 – Forecast of utilization rates
(Source: Historical data from Pareto (2015) & Own Contribution

SOFF Utlization rates	2013H	2014H	2015E	2016E	2017E	2018E	2019E	2020E
CSV	94 %	93 %	91 %	92 %	98 %	99 %	99 %	99 %
Growth utilization rates		-1,1 %	-2,2 %	1,1 %	6,5 %	1,0 %	0,0 %	0,0 %
PSV	87 %	85 %	70 %	74 %	83 %	85 %	85 %	85 %
Growth utilization rates		-2,3 %	-17,6 %	5,7 %	12,2 %	2,4 %	0,0 %	0,0 %
AHTS	82 %	80 %	60 %	65 %	69 %	70 %	70 %	70 %
Growth utilization rates		-2,4 %	-25,0 %	8,3 %	6,2 %	1,4 %	0,0 %	0,0 %

As we can see in figure 7.3, SOFF has experienced the highest utilization rates in the OCSV segment with respectively ~94% in 2013 and 2014. The second highest utilization rates based on segment is their PSV fleet with ~ 86% in 2013 and 2014. As mentioned earlier, their AHTS fleet has experiences the lowest utilization. This development is expected to continue based on our strategic analysis. As illustrated in figure 7.3, we argue that the AHTS segment will face extremely hard market conditions (oversupply of vessels and reduced demand: rigs are equipped with dynamical positioning, which allows the rigs to move themselves). Additionally, SOFF`s AHTS fleet is old compared to some of it peers (~14 years average), which make it even harder to maintain and ensure new contracts in this segment. However,

we argue that the utilization rates in this segment stabilize around 70% in the long term, as market conditions improve and SOFF either get rid of or sale their older vessels. The PSV fleet will most definitely see the same development as SOFF`s AHTS vessels, due to oversupply of vessels in the market. However, the average age is younger (~10 years) and the overall demand for PSV vessels is higher (illustrated in the historical utilization rates in the overall OSV market).

SOFF`s OCSV fleet is also expected to experience a negative utilization growth from 2014 to 2015E. But as illustrated in figure 7.3, this rate will stabilize fast, and are arguably forecasted to increase to almost full utilization levels. This is based on findings in the SWOT analysis (6.0), SOFF`s operational experience around this segment, focus on quality and their extremely good reputation. Additionally, the demand for advance vessels and high specification vessels are further expected to increase in the forecast period. This is beneficial for SOFF as their OCSV fleet is operated by highly skilled crew on advanced and young vessels (~8 year average). Hence, we argue that SOFF can reach high fleet activity in this segment in the forecast period.

7.3 Forecasting of SOFF`s future revenues, expenses and cash flow

7.3.1 Pro forma income statement

In this section, we will predict the items in the income statement. With exception of specified item, the forecast model is based on a sales-driven approach. This will certify more reliable and higher quality estimations because it delivers a better link amid activity level and related expenses (Petersen & Plenborg, 2012). Thus, the items forecasted are founded on SOFF`s anticipated level of activity.

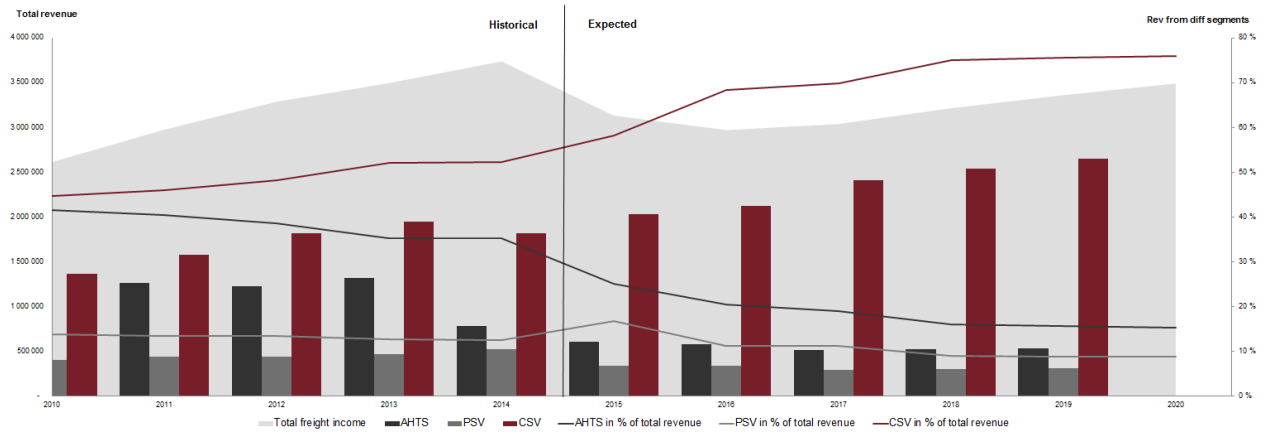
7.3.1.1 Revenue forecast

Revenue forecast

The revenue forecast in based on our findings in section 7.1 and 7.2. The revenue forecast is illustrated in appendix 7.4-7.6. Forecasted revenue for vessels on long-term contracts is described in section 7.2.1. For the vessels exposed to the spot market we have forecasted total revenue by estimating the individual revenue per vessel. Revenue per vessel is based on the SOFF's expected average dayrates each year, SOFF's expected utilization rates, and specifications of the individual vessels. The equation is illustrated in appendix 7.10.

As illustrated in figure 7.4 on the next page, we expect SOFF's total freight income to follow the development in dayrates and utilization rates. We expect a decrease of ~16% in total freight income in 2015E followed by a decrease of ~5% in 2016E. As mentioned earlier the market conditions will improve from 2017E and on, thus we expect SOFF's total freight income to increase thereafter. Additionally, we can see that SOFF follow their overall strategy (figure 3.4) of a shift towards the subsea segment as we expect ~75 % of their total freight income to come from this segment from 2018.

Figure 7.4 – Revenue forecast and revenue composition
(Source: SOFF – AR`s (2010-2014) & Own Contribution



Other operating income

As illustrated in appendix 7.11, this item has accounted for on average ~1 % of SOFF`s total income from 2006-2014. This rate has been properly stable until 2012 (with an average of ~0.4%). However, the recent 2 years the proportion of other operating income has increased to ~3% in 2013-2014. We therefore use a combination of the average from the historical period, and the recent increase in this item. As a result, we argue that other operating income will account for ~1.6% of total freight income in the forecasted period.

Gain on sale of vessels

Gain on sale of vessels has accounted for 1.8% from 2006-2014. This is a hard item to predict, but as mentioned SOFF will try to upgrade their fleet, and sale AHTS/PSV vessel on an opportunistic basis. However, the second-hand market can be categorized as bad the next years. This item accounted for ~4.5% in the years 2006-2008 (but as analyzed the OSV companies faced good market conditions in this period). As we can see from appendix 7.11, in 2009, the gain on sale of vessels accounted for 0% of the

total income. Both periods (2009) and present, faces a declining phase in the business cycle. Arguably, we use the average 1.8% of total income in the forecast period, as the market will start to improve from 2017-.

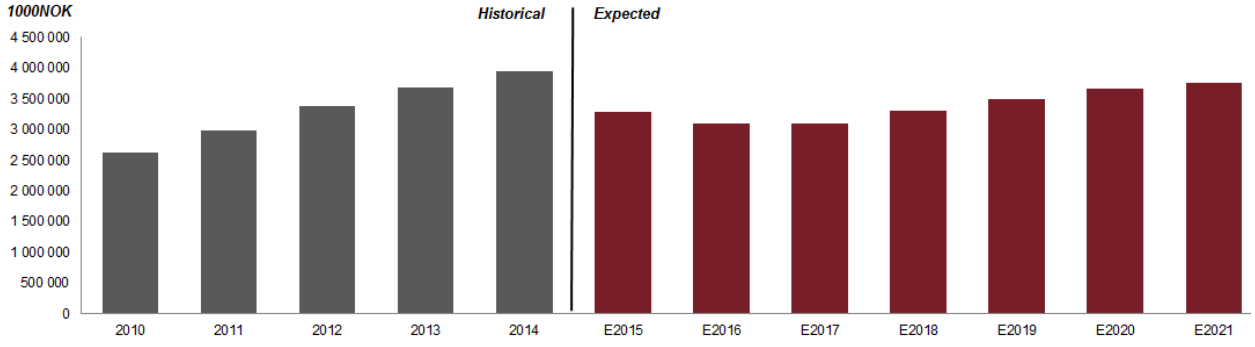
Income from investment in associated companies-core

Income from associated companies has accounted for 0.8% from 2006-2014. However, we can see an increase in the proportion to total revenue in the recent years. A reason behind this development can be SOFF`s highly qualified management, which are able to see good investment opportunities. We will apply the average from 2012-2014 of 1.2% of revenue in the forecasted period.

Total income

As illustrated in figure 7.5 SOFF's gross profit will decrease as a result of worsened market conditions in 2015E. As other operating income, gain on sale of vessels, and income from AC is calculated as a percentage of SOFF's revenue from vessels, these items will further increase the drop in 2015. We see gross profit to drop further in 2016E, stabilizing in 2017E before increasing in 2018E-. The development follows the increase in the oil price, utilization rates, and dayrates.

Figure 7.5 – Gross profit
(Source: SOFF – AR`s (2010-2014) & Own Contribution



7.3.1.2 OPEX forecast

Crew expenses

As illustrated in appendix 7.11, crew expenses are definitely the most significant factor of total expenses. In 2014, crew expenses accounted for ~55% of total expenses. The development in crew expenses/total operating expenses has been rising. This comes as a result of the mentioned increased cost inflation due to the demand for high specification vessels. Findings in the strategic analysis reveal

that crew expenses will increase the next years, as regulation from major countries, results in a constriction of the labor market. However, as the activity will slow down in 2015 we argue crew expenses will decrease from 2014 levels. On the other side, the proportion to total operating expenses will increase to ~59%, due to lower administration costs, bunker costs and other operating expenses. Thus, crew expenses to total operating expenses in the forecasted period will be around 60%. We are not basing this item directly on the total freight income (sales-driven approach), as we argue that the linear movement would be to extreme, and decrease crew expenses to much. We forecast the item to decrease in E2015 and E2016 as the market is expected to worsen (less activity) and thereby decreasing crew expenses.

Administration, bunker and other operating expenses

As exemplified in appendix 7.11, administration cost has accounted for on average 3.2% of total freight income from 2006-2014. We can see a development towards an increase in this item the recent years. The average from 2012-2014 has been ~4.2%. To be able to forecast the future administration cost it is important to look at the development of administration/total operating expenses. Administration cost has on average from 2010-2014 accounted for ~6% of total operating expenses. We argue that the administration cost will decrease from 2014 levels, because of the bad market condition SOFF is facing. SOFF will most definitely need to fire staff, and reduce their overall administration cost. We think that our approach (based on total operating expenses), gives a more reliable forecast than only basing it on total freight income: as administration cost will lag after the total freight income (too extreme if we follow the linear movement).

Bunker costs has accounted for ~ 3% of the total operating expenses from 2010-2014. As illustrated in appendix 7.11, bunker costs proportion to total freight income has accounted for ~ 1.4% from 2006-2014. Additionally, the development of this item has increased. As SOFF has increased their activity, the bunker cost has increased. Therefore, we use the average from 2010-2014 of 1.7% in the forecasted period. As we argue that bunker costs are highly dependent on activity, we use the proportion to total freight income in the forecasted period.

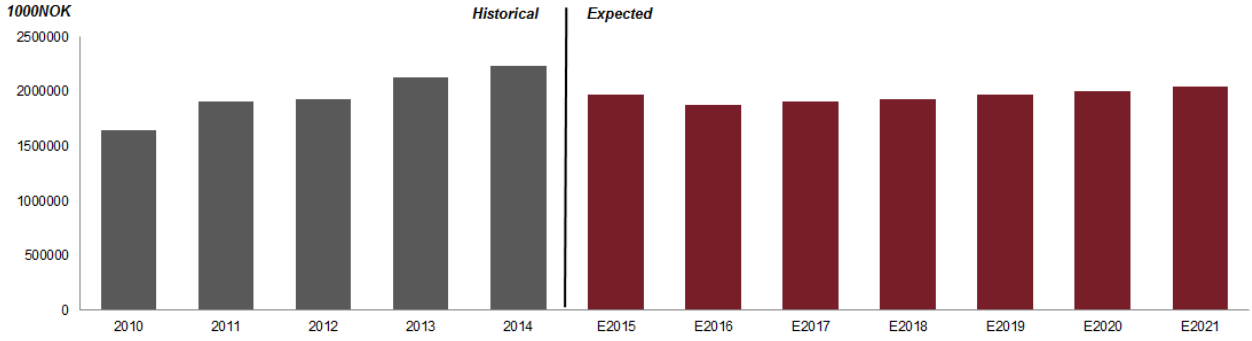
Other operating expenses are arguably as bunker costs, highly relevant to the overall activity and thereby total freight income. As we can see from appendix 7.11, other operating expenses has accounted for ~20% in proportion to the total freight income from 2006-2014. Going forward we

believe this item to increase at a decreasing pace, in line with income the next years. We expect the rate to be 19.9% in 2015E, and decline with 1% points every year to 2020 (16.0%). Due to higher freight income and SOFF`s focus on efficiency.

Total OPEX forecast

The argumentation of the items under total operating expenses is in line with our findings in the strategic analysis, SOFF focus and ability to reduce cost compared to their peers will be beneficial in the forecasted period. Their "Green-Fleet" program (Appendix 4.18) exemplifies their ability to reduce fuel costs. Their well-known SolLead program attracts talented cadets – which on long term can turn into a highly valuable source for SOFF. With their, together with the management`s expertise SOFF most definitely can be able to further reduce costs in the future. However, as SOFF has moved against the subsea segment, the OPEX has increased. As we forecasted the subsea segment faces tough market conditions now, but looks brighter in the future. Therefore, with increased activity: the total operating expenses will increase slightly from 2017-.

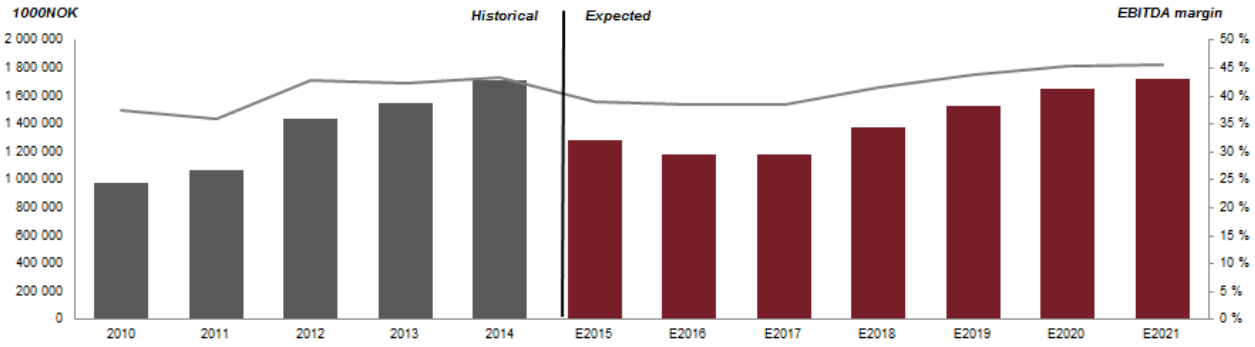
Figure 7.6– Total OPEX
(Source: SOFF – AR`s (2010-2014) & Own Contribution



EBITDA

As exemplified in figure 7.7, we expect SOFF's EBITDA margin to drop by ~3 percentage points in 2015E as a result of a noticeable drop in gross profit of ~17%. Total operating expenses will decrease as well, but as mentioned they will not decrease linearly with revenues as it would provide a too extreme result. We expect revenues to increase from 2017E-, while total operating expenses will only marginally increase y-o-y. Thus, we forecast SOFF's EBITDA margin to increase from 2017E-.

Figure 7.7 – EBITDA (EBITDA margin)
(Source: SOFF – AR`s (2010-2014) & Own Contribution



Depreciation

The average historical depreciation rate from 2006-2014 has been 5.4%. However, we can see decreasing rates from 2012-2014, with respectively an average of 3.7%. The historical rate from 2006-2014, has included periods of renewal and scrapping of vessels. As mentioned, the market conditions will be tough for SOFF the next year. We argue that after the newbuild program, with delivery of one OSCV vessel in 2016E. The depreciation rate will decrease, and that the average from the 2012-2014 is a more accurate rate for the forecast period. Therefore, after the new delivery in 2016E, the depreciation rate will decrease to ~3.5% levels. SOFF states in the annual report that they use a linear depreciation with expected lifetime of 30 years per vessel (SOFF – AR, 2014). Hence, depreciation rate of 3.33%, which is around our range and thereby support our findings.

Tax

The average tax rate for SOFF has been ~ 27% from 2006-2014. However, we can see that the tax rate has been extremely volatile, and impossible to predict. On the other side, the Norwegian corporate tax rate is 27%. This is in line with our average tax rate, and is therefore applied in our forecast period, as described in section 8.0.

Net financial expenses

Based on our calculations in section 8.0, we will use a net financial expense rate of 5.45% in the forecast period. Since net financial expenses is highly effected by SOFF`s use of derivatives, the validity on the average rate from the historical period is not proficient. SOFF`s last bond issue in October 2014 had a credit spread of 3.5%. At the cut of date the bond was trading below par and we calculated the yield to

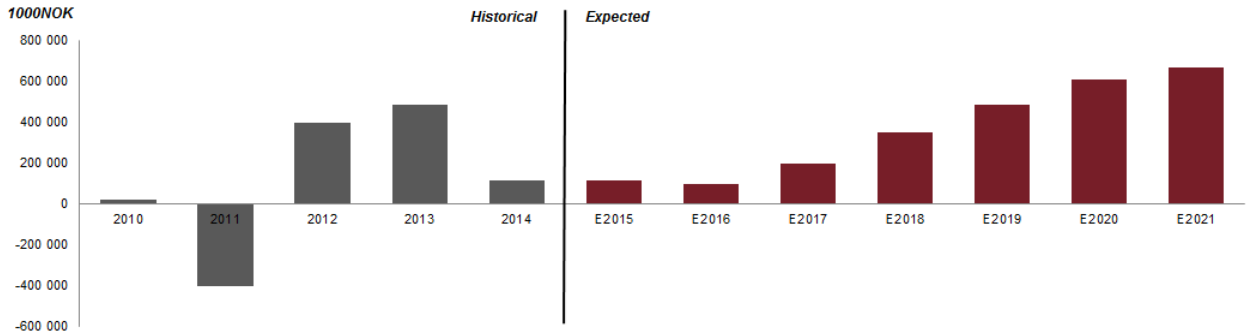
be 3.88%. The return on debt is calculated as the margin + 3 month nibor, thus we get a return on debt of 5.45%.

7.3.1.3 Pro-forma income statement forecast conclusion

Concern result

The concern result is expected to be around the same level in 2015E-2016E as in 2014. Even though the expected EBITDA margin will decrease by ~3 percentage points we expect the concern result to remain stable as the 2014 result was affect by unusually high net financial expenses. The higher expected revenues and EBITDA margins from 2017E-, in addition to decreasing depreciation and net financial expenses in the forecast period, we expect SOFF's concern result to upsurge from 2017E-.

Figure 7.8 – Concern result
(Source: SOFF – AR`s (2010-2014) & Own Contribution



7.3.2 Pro forma balance sheet

The historical value driver which the forecast is based on is illustrated in appendix 7.12. The full forecast is illustrated in appendix 7.14. As with the pro forma income statement, the forecast is based on the sales-driven approach. However, this is not the case for all items as we argue that other drivers are more appropriate to use in the specific case. This will be further explained later in this section.

7.3.2.1 Tangible and intangible assets

Vessels and new build contracts

The biggest item in tangible and intangible items is vessels and new build contracts, accounting for 95% in 2014. The forecasting of the future level of vessels and new build contracts will be based on SOFF's current order book. SOFF expects delivery of one OSCV vessel in 2016, but this is already accounted for in the new build contracts. As the OSV market has worsened the recent year we do not expect SOFF to order any new vessels in our forecast period. However, as we expect the market conditions to improve, it would be likely for SOFF to order new vessels, but we do not hold inside information. Hence, a forecast of newbuilds would be a pure guess. The value of vessels and new build contracts will therefore decrease with depreciation. We expect SOFF to scrap two AHTS vessels in 2016 and one AHTS vessel in 2018 as a result of age. As SOFF applies linear depreciation on their vessels (SOFF AR 2014) this will be accounted for when deducting depreciation. The forecast is illustrated in appendix 7.15.

Other tangible fixed assets

As we do not have any information regarding the forecast of other tangible fixed assets, we expect the item to remain at the same level as in 2014. We could have chosen to depreciate this item based on the same principles as vessels and new build contracts. However, we do not hold information regarding the depreciation rate of other tangible fixed assets. Thus, we have forecasted this item to remain at the same level as in 2014.

Other tangible and intangible assets

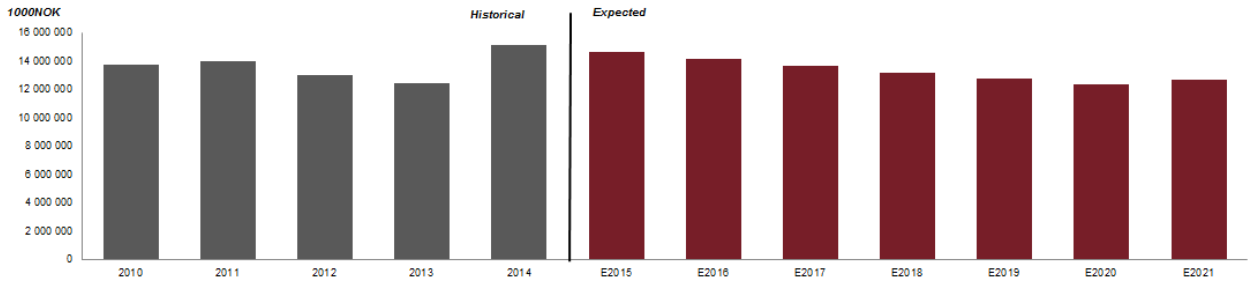
Other tangible and intangible assets includes capitalized periodic maintenance, investments in associated companies, deferred tax assets, and loans to associated companies and joint ventures. We do not find it plausible to forecast these items based on historical averages as they may not be relevant for the future. As the market has worsened the recent year we do not see SOFF increase their investment, nor provide more loans to their associated companies. Thus, we expect the items to remain at the same level as in 2014. As we have too little information regarding capital periodic maintenance and deferred tax assets, we expect these items to be at the same level as in 2014 as well.

Total tangible and intangible assets

As vessels and new build contracts accounts for ~95% of total tangible and intangible assets the future development of this item is highly dependent on SOFF's fleet. As mentioned we do not expect SOFF to

order any new vessels in our forecasting period and as a result total tangible and intangible will decrease with approximately the amount of depreciation of SOFF's vessels. Other tangible fixed assets and other tangible and intangible assets are forecasted to remain stable.

Figure 7.9 – Total tangible and intangible assets
(Source: SOFF – AR`s (2010-2014) & Own Contribution



7.3.2.2 Net working capital

Net working capital consists of current operating assets and current operating liabilities. The forecasted net working capital is based on a sale-driven approach where each item is forecasted based on an historical average in proportion to revenues. As we argue that current operating assets and liabilities are highly dependent on activity, we use the proportion to total freight income in the forecasted period. This is illustrated in appendix 7.12.

Current operating assets

Current operating assets consist of accounts receivable, bunkers and other inventories, and other short term receivables. As exemplified in appendix 7.12, all these items have experienced a stable relationship in proportion to revenue, thus we find it plausible to forecast these items based on an historical average, 21%, 2%, and 8% respectively.

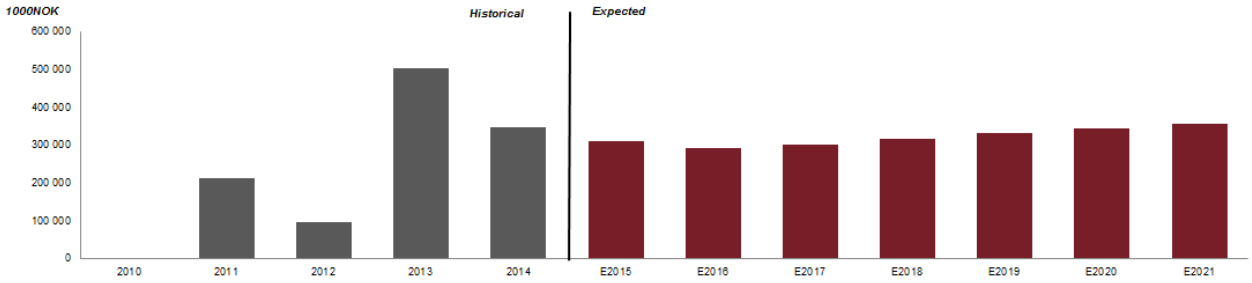
Current operating liabilities

Current operating liabilities consist of accounts payable, current taxes payable, accrued salaries and related taxes, and other current liabilities. As illustrated in appendix 7.12, all these items have experienced a stable relationship in proportion to revenue, thus we find it reasonable to forecast these items based on an historical average, 7%, 2%, 2% and 9% respectively.

Sum net working capital

As illustrated in figure 7.1 we expect NWC to decrease in 2015E. The decrease comes as a result of an expected decrease in revenues. As all the elements included in the NWC are estimated in relation to revenues, we would expect a decrease in revenues to lower NWC. We expect NWC to follow the forecasted development of SOFF's revenues and thereby increase from 2017E-.

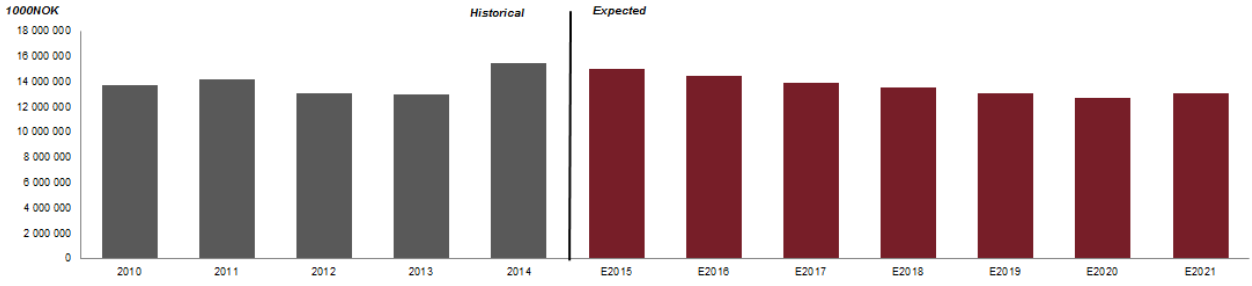
Figure 7.10 – Net working capital
(Source: SOFF – AR`s (2010-2014) & Own Contribution



Invested capital

Invested capital consists of total tangible and intangible assets and sum net working capital. As tangible and intangible assets accounts for ~98% of invested capital we expect the development in invested capital to follow our forecasted estimate of tangible and intangible assets. Figure 7.1 illustrates that we expect a decrease in invested capital in every year with approximately the depreciation of SOFF's vessels.

Figure 7.11 – Invested capital
(Source: SOFF – AR`s (2010-2014) & Own Contribution



Net interest bearing debt

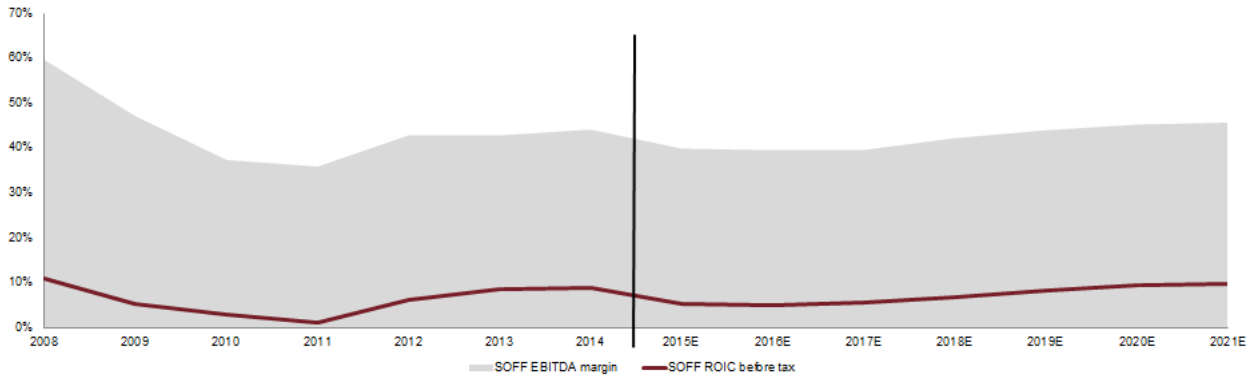
Net interest bearing is calculated as a percentage of invested capital. SOFF's optimal capital structure is calculated in section 8.3 and consists of 49.74% debt and 51.26% equity. If SOFF were to rebalance from ~70% debt at the end of 2014 to ~50% during 2015 they would have to raise capital. As stated in section 3.0-4.0 raising capital is tough in today's market conditions. Thus, we do not find it likely that SOFF will be able to rebalance their capital structure that extreme in one year. As illustrated in appendix 7.14 we expect SOFF to periodically rebalance at the end of each year until they will reach their optimal capital structure of ~50% in 2019. As appendix 9.1 illustrates we find this periodically rebalancing possible as SOFF's estimated FCFF is high enough to cover the rebalancing.

7.3.3 Evaluation of the estimates supporting the pro forma statements

The forecasted development of ROIC and EBITDA margin is exemplified in Figure 7.12. Petersen & Plenborg (2012) states that: if the future performance diverges from the historical development, the analyst needs profounded arguments to back this interpretation.

As we can see from figure 7.12, the development of EBITDA and ROIC has followed each other closely. As described in section 3.0-4.0, SOFF experienced extremely good market conditions in 2005-2008, resulting in record high EBITDA margin and ROIC (Appendix 5.3). The financial crisis in 2009 resulted in a significant drop in both ratios, before it recovered (in line with OSV business cycle) in 2011. As explained in section 3.1.4, and illustrated in figure 3.11, the market grew from 2011 to 2013. Our forecast (figure 7.12) illustrates the same development as we expect a drop in 2015E and 2016E as a result of worsened market conditions, before recovering in 2017E-. Based on this development we find our forecast to hold a solid validity.

Figure 7.12 – Historical and forecasted EBITDA margin and ROIC
(Source: SOFF – AR`s (2010-2014) & Own Contribution



8.0 Weighted Average Cost of Capital (WACC)

The weighted average cost of capital (WACC) work as a measurement for the required recompense that the owners and lenders entail for bearing the risk of investing capital in the firm (Brealey & Meyers, 2014). In this section we will use the capital asset price model (CAPM) to calculate the return on equity (RE) and the WACC to discount the future forecasted cash flows. However, as the WACC is the required rate of return, it also turns out to be a brink of performance, as ROIC must exceed the cost of capital signified by the WACC. For the sake of calculate the WACC, each constituent in the equation must be deliberated and calculated.

CAPM

$$re = rf + \beta e * (rm - rf)$$

WACC:

$$WACC = \frac{E}{V} * re + \frac{D}{E} * (1 - Tc) * rd$$

8.1 Return on equity, RE

When estimating the investors required rate of return we will use the capital asset pricing model (CAPM) as most financial textbooks suggest using the CAPM (Petersen & Plenborg, 2012). The CAPM framework depends on numerous theoretical assumptions, but these will not be discussed or evaluated in this thesis. The investors required rate of return can be defined as the illustrated CAPM equation: a risk-free rate, the systematic risk on equity, the equity risk premium (rm-rf), and a liquidity risk premium (Petersen & Plenborg, 2012).

8.1.1 Risk free rate,rf

The risk free rate states how much an investor can earn without taking any risk. A default free government bond is often used as a measurement, with maturity corresponding to the forecasting horizon (5 year for SOFF). When using the DCF and EVA model the time horizon is usually infinite, thereby a 30-year government bond would match the cash flow well. However, a 30-year governmental bond would face illiquidity problems which again will affect the yield. Inflation is present over such a period; therefore we have chosen to use a 10 year Norwegian governmental bond to match both the time horizon, effect of inflation and the currency (NOK) that SOFF is listed with at OSE. At the cut-off date the 10 year Norwegian governmental bond has an interest rate at 1.57%, and is applied in the CAPM as the risk free-rate.

8.1.2 Systematic risk - Beta

When estimating beta we will use an average of several methods. Estimating the raw beta of SOFF is done by performing a regression analysis on the return on the stock compared to a benchmark. To get a picture of how SOFF faces the strategic challenges in the market, we have chosen to incorporate a fundamental analysis in our calculations of the beta. This method builds on the fundamental characteristics of a SOFF`s risk profile, and evaluate both the operational and financial risks (Petersen & Plenborg 2012). We will also include the beta from comparable companies to enrich the beta analysis and eliminate some of the sourcing errors (Petersen & Plenborg 2012).

Regression beta

According to Damodaran (1999) we can estimate the beta of a company by regressing it returns against the returns of their market index. We need to consider certain issues when calculating a beta as what market index to use, the time period used, and the return interval. As SOFF is listed at OSE we find OSEBX as a good index when calculating SOFF`s beta. Thus, OSEBX reflects well how the investors in SOFF`s market are diversified. Another important factor is that OSE is almost "monopolized" by petroleum- and petroleum related companies, which have high vulnerability towards the oil price. As we saw in section 4.1, the oil price is also an extremely important factor affecting the demand for SOFF`s services. To create a more meaningful description (SOFF and OSE tend to move in the same direction) of the risk involved, the Morgan Stanley Capital Index (MSCI) is included. MSCI includes the most major equity markets, and is a good indicator for changes in the world economy. Section 3.0, showed us that SOFF operates in a global market, with operations stretching all over the world (Figure 3.5). Hence, the relation to the MSCI will offer vivid strengths on the firm specific risk.

The choice of time period is important as it will provide different betas. By going further back in time we will achieve a result based on more data, however a company's business mix might have changed over the period which will not provide a beta based on the current strategy. As stated in section 3.1.4 SOFF`s business cycle is ~ 8-10 years, therefore we have chosen to calculate a beta based on returns over the last 8 years. As 2005 (10 years ago) was the first year with SOFF`s current vessel mix (PSV, AHTS and CSV), we think it's reasonable to use 8 year instead of 10, as the business mix needs time to settle in the corporation.

Return interval is important in the way that the shorter intervals you choose the more observations you get. However, a stock does not trade continuously, and non-trading can reduce the correlation with the

index causing the beta estimated to be too low (Damodaran, 1999). Based on this, we think that quarterly and annually periods returns will not give us enough observations to calculate SOFF`s reasonable beta; therefore we have chosen to use monthly returns when performing our regression, this is also the most common choice among practitioners.

As we have estimated SOFF`s beta based on 8 years returns, we face a problem regarding SOFF`s capital structure. The beta reflects SOFF`s average historical D/E-ratio. To get a more accurate estimate we unlevered the beta with the average D/E-ratio and relevered it with SOFF's D/E-ratio. Most theories assume the debt beta to be zero (Damodaran, 1999); however one of the assumptions for doing this is that the D/V-ratio is low. As SOFFs D/V-ratio has increased substantially the recent years we do not find this reasonable. We have therefore calculated a β_D[5] from the CAPM-relationship (Appendix 8.1); this gives us a regression beta of 1.04.

Beta from comparable companies

To adjust for the liquidity problem (low share liquidity) faced in the regression beta we will estimate a beta based on the beta of SOFF`s peers. The peer group`s stocks is not as much traded as required for a comprehensive analysis, however a comparison will give us an estimate if the regression beta lies in a reasonable range (Petersen & Plenborg 2012). SOFF`s peers betas were found at Bloomberg and were unlevered individually based on their capital structure (market values). The debt beta were also calculated for each of SOFF`s peers, based on the margin of their bonds outstanding. The analysis provided an average unlevered beta of 0.69, and a relevered beta with SOFF`s capital structure to be 1.92 (Appendix 8.2)

Beta from fundamental factors

As mentioned in 8.1.2 we also included a fundamental analysis, with the fundamental characteristics of SOFFs risk profile including external, strategic, operating, and financial risk factors (Petersen & Plenborg 2012). The model is based on the risk assessment of the different factors and the scoring classification system ranges from low to high (0.4-1.4→). Our fundamental analysis of SOFF`s external, strategic, operating and financial risk is illustrated in appendix 8.4. As we can see the subjective overall risk profile of SOFF is calculated as medium/high (Beta 1.15).

[5] Beta debt = (rd-rf)/(rm-rf)

Summary – Different beta estimates

Our different beta estimates ranges from 1.04 to 1.92 which is a wide range as a result of some estimation errors. To adjust for estimating errors we have used Bloomberg's way of adjusting the beta towards one. The rationale behind adjusting the beta towards one comes as a result of companies growing bigger with time and thereby diversifying and/or establishing a safer business (Damodaran, 1999). Our adjusted average beta ends up being 1.25 (Appendix 8.5)

8.1.3 Market portfolio risk premium

The market portfolio risk premium is the difference between market returns and returns from risk free investments required by investors (Petersen & Plenborg, 2012). The most common ways to estimate it is either ex-post or ex-ante. Ex-post is based on historical data and is not forward looking. The ex-ante approach is based on analysts' consensus and tries to forecast an equity risk premium, thus we find this approach the most appropriate when estimating SOFF's equity risk premium. Koller et.al (2010) argues that the equity risk premium is between 4.5-5.5%, while a survey conducted by PWC indicates a market risk premium of 5% (PwC, 2013). Damodaran (2015) estimates the risk premium in the Norwegian market to be 5.75%, as this premium is the most recent and estimated specifically for the Norwegian market we have chosen to apply an equity risk premium of 5.75%.

8.1.4 Liquidity premium

Liquidity refers to the costs and problems associated with converting stocks or assets for cash (Plenborg 2013 p.265). Equity traders therefore add a liquidity premium to their required rate of return between 3% and 5% on their investments (Plenborg 2013). SOFF's trading volume in 2014 was only 6% of the average trading volume for companies listed at Oslo Stock Exchange (Appendix 8.6). Thus we find it reasonable to add a liquidity premium of 4.5% to our estimate of the required return on equity.

8.2 Return on debt

The cost of debt consists of three variables: the risk free rate, the credit spread and the corporate tax rate (Petersen & Plenborg 2012). The credit spread is based on the company's credit rating and bonds outstanding. Optimally we should have assigned each category of debt its own required rate of return, but as this is not available in SOFF's annual report we will find SOFF's required rate of return on debt from their unsecured bonds outstanding. As seen in appendix 8.7 SOFF has two bonds outstanding, one maturing in February 2016 with a spread of 4.4%. This bond is priced at ~100 implying that the current spread is equal to the quoted spread. The bond issued in October 2014 has a quoted credit spread of 3.5%, however it is trading below par at 90.25 and we have therefore calculated its yield to be 3.88%. As the first bond matures within a year we find it relevant to only apply the credit yield of the bond maturing in 2019 when estimating the required return on debt.

To further investigate the return on debt we have estimated a credit rating for SOFF based on some of the financial ratios calculated in the profitability analysis. The results can be seen in appendix 8.3, SOFFs implied rating is B+. Moody's characterize rating B as a firm that is more vulnerable to adverse business and economic/financial conditions, but presently has the capacity to meet financial commitments. According to Petersen & Plenborg (2012), this rating indicates that the company`s credit spread should be between 3.2%-13.1%, which is in alignment with the calculation of SOFF`s yield on their bond. As we analyzed in section 5.3, SOFF has a fair short-term liquidity risk, but a weak long-term liquidity risk. However, SOFF`s assets (vessels), are extremely valuable. On the other hand, the second hand market faces weaker market conditions, so the liquidity of the vessels decreases. Therefore the credit spread is set to be 3.88% as it is supported by the implied credit rating (B+). Adding the findings in section 8.1.1 (rf of 1.57%) results in a required return on debt of 5.45%.

Tax rate

As SOFF operates in several different geographical regions they are subject to different tax regimes. To forecast the future tax rate one should therefore examine the different tax rates and borrowing costs in the different regions. This procedure is extremely difficult as it requires insight in every loan in the different regions (Petersen & Plenborg, 2012). One way is to apply the historical effective tax rate, but this assumes that SOFF's borrowing costs are distributed in relation to their earnings. The historical average effective tax rate from 2006-2014 is 27%, however it has fluctuated a lot as a result of SOFF's mentioned use of financial derivatives. The fact that the historical average effective tax rate is equal to

the Norwegian corporate tax rate we find incidental. As the future effective tax rate is difficult to forecast we apply the Norwegian corporate tax rate of 27% in our forecast.

8.3 Capital Structure

To estimate SOFF's capital structure we have performed an iterative process based on Patrick Larkin's article "To iterate or not to iterate?"(2011).The iterative process will provide the optimal capital structure, and thereby the relevant WACC to use in our forecast. The iterative process estimates the optimal debt to value ratio by calculating an enterprise value based on the forecasted free cash flow to the firm and the variables estimated in section 8.0-8.2. The first stage is to calculate the current capital structure based on market values of debt and equity. The only part of SOFF's debt which is publicly traded is their bonds, as this only account for a small part of SOFF's total debt we do not find it plausible to apply. Thus, book value of debt will be used in the iteration. As SOFF's bond outstanding trades under par (at 90.25), we have adjusted the book value of debt to reflect the market value (appendix 8.7). The second step is to apply the estimated market value of equity in a new calculation of WACC as the estimated equity ratio implies a new debt ratio. We thereby get a new WACC and equity value, this process is repeated until the estimated equity is equal to equity value in the previous attempt.

Figure 8.1 – Iteration process
(Source: Plenborg & Petersen (2012), Patrick Larkin (2011) & Own contribution)

Attempt	WACC	Beginning equity value	FCFF firm value	FCFF equity value	Diff Equity
1	5,10 %	1891,794	31880,240	20291,053	-18399
53	7,74 %	11660,754	23249,939	11660,753	0,001
54	7,74 %	11660,753	23249,940	11660,753	-0,001
55	7,74 %	11660,753	23249,940	11660,753	0,000
56	7,74 %	11660,753	23249,940	11660,753	0,000

The iterative process provides us with an optimal capital structure of 49.74% debt and 51.36%. With the new return of equity of 11.48% it provides us a WACC of 7.74%. This is line with analysts' consensus which ranges from 7%-10% and the provided WACC in SOFF's annual report of 7.2%. As for the capital structure we expect SOFF to gradually move towards the optimal capital structure of ~50% debt and ~50% equity, as discussed in section 7.3.2.2.

The overall WACC-break down is illustrated in appendix 8.8

9.0 Valuation

The objective of the previous sections (3-8) has been to get a profound understanding of SOFF. Thus, we have obtained high quality data to evaluate the fair share price as of 27.04.20015. As explained in section 2.1, the next section will value SOFF through Discounted Cash Flow, Economic Value Added and relative valuation (using multiples).

9.1 Discounted free cash flow model

This method measures SOFF`s ability to generate a positive cash flow. The DCF model is among the most prevalent and popular valuation methods. We have calculated SOFF`s FCFF through the pro-forma balance sheet and income statement (Appendix 9.1). The cash flow in this model is divided in two periods, the forecast period (2015-2020) and the terminal period (2021), the formulas applied are illustrated in appendix 2.2.

Figure 9.1 – DCF
(Source: Petersen & Plenborg (2012) & Own contribution)

Valuation - Discounted cash flows model (DCF)							
Term period	Short term		Medium term	Long term			Terminal period
Year	E2015	E2016	E2017	E2018	E2019	E2020	E2021
FCFF	1 125 847	1 034 875	1 025 245	1 124 902	1 215 975	1 289 581	545 021
WACC	7,74 %	7,74 %	7,74 %	7,74 %	7,74 %	7,74 %	7,74 %
Discount factor	0,93	0,86	0,80	0,74	0,69	0,64	0,59
Present value of FCFF	**1 044 979**	**891 546**	**819 807**	**834 885**	**837 654**	**824 549**	**323 452**

Present value of FCFF in forecasting horizon	5 253 420
Present value of FCFF in terminal period	7 277 084
Enterprise value	**12 530 504**
- Net interest-bearing debt	10 459 241
Estimated marked value of equity	**2 071 263**
Shares outstanding (1000NOK)	38 687
Share price 31/12/2014	53,5
Share price 27.04.2015 NOK	54,8

Growth terminal period	2,95 %

Start date	31.12.2014
End date	27.04.2015
Days360	117,00
Premium	1,0242

Figure 9.1 illustrates how the forecasting period is deliberated in the first part of the equation (appendix 2.2) (sum of the forecasted cash flows discounted by the WACC). In the second part of the equation the terminal period is premeditated, through Gordon`s Growth Formula. This formula assumes that the terminal period represents all forthcoming cash flows. Thus, it can be viewed upon as an infinite annuity; by way of the cash flows have reached a steady state (Brealey & Myers, 2014). Additionally, this equation assumes that all cash flows occur are the end of the year. As mentioned, these cash flows get discounted by our WACC (7.74%), and therefore need to be accustomed to our cut-off date (27.04.2015). As we can see from figure 9.1, the net interest bearing debt gets subtracted from the enterprise value, and we end up with the estimated market value of equity. If we divide this amount with the current total shares outstanding, we get a share price per 31.12.2014 of 53.5 NOK. As

mentioned (and illustrated in figure 9.1 in the right corner), the share price need to be accustomed to our cut-off date. The share price is brought forward by applying the subsequent equation $(1+WACC)^{117/365}$.

This results in a theoretical share price of 54.8 NOK. Hence, a potential upside of ~12.5%, as the market price at cutoff date is 48.9 NOK. Close to 60% of the estimated value is represented by the terminal period. Due to this remarkable value, we will perform a sensitivity analysis of the factors in section 10.0.

9.2 Economic value added model

As illustrated in figure 9.2, this model proposes that the value of a company equals the preliminary invested capital, plus the present value of all future EVA`s. The model counts on the same inputs as the DCF model, but calculates the value of SOFF by considering how the company creates value for its shareholders (Petersen & Plenborg 2012). The formulas for calculating EVA is showed in appendix 2.2, and as we can perceive from figure 9.2, the model suggest the same price as the DCF (Figure 9.1). However, it is important to notice that SOFF`s EVA is negative in the whole forecasting period. Hence, SOFF is actually destroying value for its shareholders. As we can see from figure 9.2, the overall value of SOFF lies particularly in the capital already invested. On the other side, based on our forecast we believe that SOFF`s EVA will see a positive development towards the terminal period. By applying solver, we checked how much the required growth in the terminal period must increase (from today's level of 2.95%) for the EVA to be 0. Solver implied that this rate had to be ~6.6%. Hence, the terminal growth of SOFF needs to be ~6.6% for not abolishing value for the shareholders in the long term.

Figure 9.2 – EVA
(Source: Petersen & Plenborg (2012) & Own contribution)

Valuation - Economic value added (ECA)							
Term period	Short term		Medium term		Long term		Terminal period
Year	E2015	E2016	E2017	E2018	E2019	E2020	E2021
NOPAT	573 314	529 182	563 255	691 765	795 360	882 372	920 721
Invested capital, beginning of period	15 516 773	14 964 240	14 458 547	13 996 557	13 563 420	13 142 804	12 735 596
WACC	7,74 %	7,74 %	7,74 %	7,74 %	7,74 %	7,74 %	7,74 %
Cost of capital	1 200 807	1 158 048	1 118 913	1 083 161	1 049 642	1 017 091	985 578
EVA	-627 493	-628 866	-555 659	-391 396	-254 282	-134 719	-64 857
Discount factor	0,93	0,86	0,80	0,74	0,69	0,64	0,59
Present value of EVA	-582 421	-541 769	-444 316	-290 488	-175 168	-86 138	-38 491

Invested capital (book value), beginning of period	15 516 773
Present value of EVA in forecasting horizon	-2 120 301
Present value of EVA in terminal period	-865 968
Enterprise value	**12 530 504**
- Net interest-bearing debt	10 459 241
Estimated marked value of equity	**2 071 263**
Shares outstanding (1000NOK)	38 687
Share price 31/12/2014	53,5
Share price 27.04.2015 NOK	54,8

Growth terminal period	2,95 %

Start date	31.12.2014
End date	27.04.2015
Days360	117,00
Premium	1,0242

9.3 Multiple valuation

As a supplement to the DCF- and EVA-analysis a relative valuation based on multiples is conducted to ensure the validity of the valuation (Petersen & Plenborg 2012). A relative valuation is popular among analysts' as it is relatively easy to conduct and provides a fast result. As stated in section 2.1 EV based forward looking multiples will be applied, as Koller et al (2010) states that they are more precise than trailing multiples. We have chosen to conduct the analysis based on EV/SALES-, EV/EBITDA-, and EV/EBIT multiples. Figure 9.3 illustrates the strengths and the reasoning for our choice of the multiples.

Figure 9.3 – Multiple description
(Source: Petersen & Plenborg (2012), Koller et al (2010) & Own contribution)

Multiples	Strengths (+)	Weaknesses (-)
EV/Sales	▪ Valuable when earnings are volatile and not illustrative for long-term operational potential	▪ A high ratio may signal that the investors consider future sales will increase significantly ▪ A low ratio may indicate that future prospects are unattractive
EV/EBITDA	▪ Unaffected by capital structure ▪ Cash flow based formula ▪ Eliminates effect of amortization and depreciation ▪ Eliminates potential misrepresentation effects of differences in tax rates	▪ Can be difficult for companies with several subsidiaries
EV/EBIT	▪ Unaffected by capital structure ▪ Eliminates potential misrepresentation effects of differences in tax rates	▪ Does not regularize for depreciation and amortization costs

It is important that the comparable companies hold the same characteristics as SOFF (Plenborg, 2012 p.227). As the chosen peer group applies the same accounting policies, tax rates, are based in Norway and are approximately the same size as SOFF we find the chosen peer group as relevant. This is supported by the fact that analysts use the same peer group in their relative valuations. As a simple average of the peers multiples may be affected by extreme values, the harmonic mean is used as it provides a more accurate value estimate (Plenborg, 2012 p.234). The use of harmonic mean is supported by Baker and Ruback (1999), and McKinsey. The multiples for SOFF's peer group and our own calculations for SOFF can be seen in appendix 9.2.

EV/Sales

SOFF's calculated EV/Sales is 40 % higher than the harmonic mean of their peers in 2015E (3.85 > 2.76) and 46% higher in 2016E (4.06 > 2.76). This can be interpreted in two ways, either that SOFF is currently overvalued or that SOFF has better future prospects (Plenborg, 2012 p.226). We argue the latter as we see SOFF's high exposure towards the Subsea segment and other important factors analyzed in section 4.3.1. The fact that SOFF should be trading at a premium provides support to our findings in the DCF and EVA analysis.

EV/EBITDA

Our forecasted EV/EBITDA multiple shows that SOFF trades at a premium. The EV/EBITDA is 22% higher than the harmonic mean of their peers in 2015E (9.69>7.94) and 21% higher in 2016E (10.30>8.49). This supports the results from the EV/Sales multiple that SOFF has better prospects than their peers and provides support for our findings in the DCF and EVA analysis.

EV/EBIT

The EV/EBIT multiple shows that SOFF is trading at the same level of its peers in 2015E as the multiple is 1% below the harmonic mean of SOFF's peers (16.01<16.23). In 2016E our calculated multiple is 13% below harmonic mean of their peers, arguing that SOFF does not have better prospectus than their peers. But as illustrated in figure 9.3, this can maybe be explained by the fact that this multiple doesn't take into account the depreciation and amortization costs.

Conclusion

As a conclusion to our relative valuation we argue that the findings in the DCF- and EVA- analysis are valid. The EV/EBIT argues that SOFF does not have better prospectus based on the EV/EBIT ratio in 2016E as it is 13% below the harmonic mean of SOFF's peers. However, as the EV/EBIT in 2015E is neutral, and the EV/Sales and EV/EBITDA multiples are clearly higher than the harmonic mean of peers in both 2015E and 2016E we argue that SOFF has better prospectus than their peers, and thereby provides support of the share price estimated in the DCF- and EVA-analysis. SOFF's multiples provided by Bloomberg shows the same findings as our calculated multiples, as they state that the EV/Sales and EV/EBITDA is above the harmonic mean of SOFF's peers in both 2015E and 2016E, while the EV/EBIT is below in both years. These findings provide further validity to our findings in the DCF- and EVA- analysis.

10.0 Sensitivity analysis

In order to ensure that our estimated share price is reliable, we have accompanied a sensitivity analysis. As exemplified through this paper, SOFF`s share price is highly sensitive towards main value drivers as terminal growth, WACC, revenue growth and OPEX. By conducting this analysis, we can easier see how the changes in these drivers influence SOFF`s stock price.

In section 4.0, we have seen how dayrates and utilization impacts SOFF`s freight income and thereby its impact on EBITDA. Moreover, our calculated WACC in section 8.0 contains several fundamental assumptions. Hence, changes in these elements will correspondingly impact SOFF`s estimated share price. As we saw in section 9.0, the terminal value amounts for ~60% of the forecasted enterprise value in the DCF model. Thus, any variations in terminal growth rate will pointedly change the estimated share price extensively.

10.1 WACC vs Terminal Growth

As described in section 9.0, the terminal growth rate of SOFF is set at 2.95%. This can however be discussed, as many analysts states that they operates in a mature industry (Pareto, 2015). On the other side, because of SOFF`s geographical presence and high exposure to the future growing subsea segment, we set the terminal rate to 2.95%. As presented in figure 10.1, a 1% change in this growth rate (to ~4%) will increase the share price significantly (~74%). However, we can see that SOFF`s share price is most vulnerable to fluctuations in our calculated WACC. If we assume a stable terminal growth rate of 2.95%, a 2 % increase in the WACC will decrease the share price significantly (101%). Based on the findings in this paper, we have found a range to be realistic for SOFF (grey area). As we can see SOFF`s share price differs from 41.0-69.9 NOK, representing a spread of ~70%. A spread of ~70% in a realistic range, clearly illustrates how susceptible SOFF`s share price is for changes in these important factors.

Figure 10.1 – WACC vs Terminal Growth
(Source: Petersen & Plenborg (2012) & Own contribution)

	WACC	Pessimistic			Realistic			Optimistic
Growth		1,00 %	1,50 %	2,00 %	2,95 %	3,25 %	3,50 %	4,00 %
Optimistic	7,00 %	88,2	91	94,2	102,6	106,2	109,6	118,1
	7,25 %	75,3	77	79,3	84,7	87	89,1	94,4
	7,50 %	63,3	64,4	65,6	68,7	69,9	71,1	56,8
Realistic	7,74 %	52,6	53	53,5	54,8	55,3	55,7	95,3
	8,00 %	41,8	41,7	41,5	41,1	41	40,8	40,5
Pessimistic	8,50 %	23,1	22,1	21	18,3	17,3	16,3	14,1
	9,00 %	6,5	5	3,2	-1	-2,6	-4	-7,4

10.2 Changes in the underlying WACC assumptions

Figure 10.1 exemplified the importance WACC has for SOFF`s estimated share price. Therefore, we think it's necessary to show potential investors how changes in the underlying WACC assumptions changes the overall WACC, and thereby SOFF`s share price. The main inputs to the WACC are revealed in section 8.0. We assume that return of debt remains persistent over the forecast period, as the capital structure remains fairly stable and our calculated rd is based on a bond that matures in 2019 (SOFF – AR, 2014). Hence, we will focus on SOFF`s beta, equity risk premium, liquidity risk premium and risk free rate.

Beta

In appendix 10.1, we can see the different beta approaches that can be applied for calculating the WACC. As exemplified the beta has a significant impact on the overall WACC. In section 8.0, you can see that we adjusted the raw beta calculated, then unlevered/relevered this beta founded on variations in capital structure.

First, the regression analysis gave us a Beta of 1.04, resulting in a WACC of 7.54%. This will effect in a share price of 66.2 NOK. Our chosen Beta is a Bloomberg adjusted average of all the methods listed, which gave us a Beta of 1.25, resulting in a WACC of 7.74%. This will, as we saw in section 9.0, result in a share price of 54.8 NOK. If we had chosen a higher Beta (from comparable companies) this would give a Beta of 1.92, resulting in a WACC of 8.30%, and respectively a share price of 27 NOK. As we can see, small changes in the Beta will influence SOFF`s share price substantially. From the lowest to highest beta (1.04-1.92), the WACC ranges from 7.54% to 8.30%, resulting in a spread in SOFF`s share price of 145% (66.2 NOK to 27 NOK). Therefore, it is vital from an investor's viewpoint to understand the influence of applying different beta values in the overall WACC calculations.

Equity risk premium (ERP)

In appendix 10.1, we have illustrated how changes in the ERP changes the WACC, and so SOFF`s share price. Damodoran`s (2015) study states that the ERP for the Norwegian market is 5.75%. This is our chosen risk premium, and as mentioned, a WACC of 7.74%, which results in a share price of 54.8. If we had chosen to follow PWC (2013) recommendations of 5% ERP, we had ended up with a WACC of 7.44% and a share price of 72.4. In sum, we can clearly see from appendix 10.1, how the ERP affects SOFF`s share price. From the lowest to highest (4.5-6.25), the WACC ranges from 7.22% to 7.92%, resulting in a spread in SOFF`s share price of 48% (86.7 NOK to 45.2). However, our chosen ERP of 5.75% gives a required rate of return on equity of 11.49%. This is on average above the historical ROE numbers

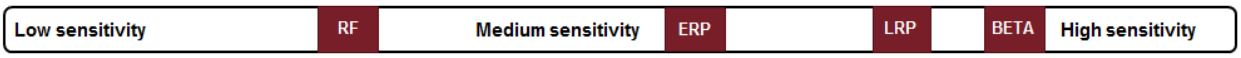
provided by SOFF the recent years. Therefore, maybe we should have chosen a lower ERP, because of the tough market conditions for OSV companies in the next years, which would result in a lower required rate on equity. On the other side, we believe that the market will start to improve, and based on SOFF`s characteristics, we rely on in a ERP of 5.75% in the forecast period.

Risk free rate

As mentioned in section 8.0, and illustrated in appendix 10.1, we have applied a 10 year Norwegian governmental bond. At cut-off date this bond has an interest of 1.57%. We have chosen to use 10 year instead of 5 years governmental bond (1.11%) because it captures every cash flow in the forecast horizon. As we can see from appendix 10.1, an increase in risk free rate will decrease the WACC, and thereby increase SOFF`s share price. The spread from a risk free rate of 0.89-2.57, results in a share price spread of 16% (51.5 to 59.8 NOK). Hence, the WACC is not as sensitive towards changes in risk free rate as for Beta and ERP.

Liquidity risk premium (LRP)

As stated in section 8.0, SOFF's share had a low trading volume in 2014 compared to other companies listed at Oslo Stock Exchange (appendix X). Thus we find it reasonable to add a LRP of 4.5% (medium/high) to our estimate of the required return on equity. If we had decreased the LRP to 3.0%, the WACC had decreased to 7.26%, which had resulting in a share price of 84. . From the lowest to highest (3.0-5.0), the WACC ranges from 7.26% to 7.88%, resulting in a spread in SOFF`s share price of 76% (84 to 47.83 NOK).



10.3 Changes in forecasting drivers

As mentioned several times in this paper, dayrates and utilization are the key drivers affecting SOFF`s revenue. Therefore, in appendix 10.3 we have applied a scenario analysis on these factors. We will first discuss changes in dayrates and utilization, before we comment on OPEX.

Revenue - Dayrates and utilization

Our estimated dayrates is founded on several important inputs conducted in this paper. As cited in section 4.1.3, the dayrates has decreased substantially the recent year. This is due to the overall factors explained in the strategic analysis (plunge in oil price, lower E&P spending, lower demand for OSV vessels, oversupply of vessels). We have forecasted that 2015E-2016E will be tough for the OSV companies as dayrates are low compared to recent year, and that the market will start to improve in line with the OSV business cycle from 2017-. This is reflected in our forecasted dayrates in appendix 10.3, with an expected share price of 54.8 NOK. However, what happens if dayrates decrease more than expected (5% points lower in the whole forecast period)? This will result in a share price of 16 NOK. On the other side, if the dayrates increase from our forecasted levels (5% points more in the whole forecast period), the share price will increase to 94 NOK. Our forecasted dayrates is based on several assumptions (increase in oil price from today's level, improvement in E&P spending from 2015E and balance in the OSV market). But as explained, these factors are highly difficult to forecast and must therefore be considered for potential investors.

As exemplified in appendix 10.3, our forecasted utilization rates follow the same pattern as the dayrates. Nevertheless, what happens if utilization rates decrease more than expected (5% points lower in the whole forecast period)? This will result in a share price of 9.20 NOK. On the other side, if the dayrates increase from our forecasted levels (5% points more in the whole forecast period), the share price will increase to 77 NOK. Hence, small changes in this factor will affect SOFF`s future revenue and thereby our estimated share price.

OPEX growth

As we can see from appendix 10.2, our estimated OPEX decrease in 2015, from 2014 levels is -12% (Figure 7.1). We argue that the total OPEX will decrease with lower activity (utilization); however administration costs will somehow be stable. Hence, the total OPEX will decrease in 2015-2016, as SOFF will face lower utilization rates and thereby lower activity. Previous findings in this paper states that the OSV market will improve from 2017-, and thereby the OPEX will also increase. Further into the forecast period OPEX is forecasted to increase with a steady rate. However, if SOFF`s forecasted OPEX growth

will be a “worst case”, with respectively 0%, 5% and 10% (2015-2017) increase in OPEX this will decrease the share price to 32.2 NOK. On the other side, if the forecasted OPEX growth will be a “best case”, the share price will increase to 68.7. This pattern clearly shows how sensitive SOFF`s share price is to changes in the forecasted drivers in section 7.0.

Low sensitivity	Medium sensitivity	OPEX	Revenue	High sensitivity

11.0 Discussion

As illustrated in appendix 11.1, the average analyst target price is NOK 49.4, which is ~11 % lower than our estimated share price of 54.8 NOK. It is therefore beneficial and interesting to see how the analysts derived these numbers. As we have stated in the sensitivity analysis, the inputs applied in the DCF model are often based on subjective thoughts and are extremely sensitive towards the share price. This variation can be illustrated in appendix 11.1, where the analyst price targets range between 43-57 NOK per share. Thus, this indicates the extreme fluctuations about when and how the OSV market will progress in the future. We are in line with the average consensus (~50 NOK), but our thoughts about possible reasons for the small deviation will be discussed below.

1. The OSV industry has been hit extremely hard by the plunge in the oil price. As we expect that the oil price will start to recover (Figure 4.7), we have a more optimistic view about the OSV industry than some of the analysts. Accordingly, we expect dayrates and utilization rates (especially in the Subsea segment) to improve from 2017-. Thus, total freight income is set to be higher in the forecast period than some of the analysts.

2. The investment banks operate with a shorter time horizon compared to our forecast as they only forecast up to ~2 years. We are aware of the long time horizon of our forecast, as this often can bring uncertainty around several important factors affecting the OSV industry (covered in section 4.1). However, we believe a longer time horizon enables us to forecast the expected improvement in the OSV industry (2017-). Thus, we can capture SOFF`s higher growth rate, before reaching steady state ~2020E.

3. We have built our valuation on argumentations based on an improvement of the subsea segment on medium term. However, several analysts states that this segment will suffer from the same tough market conditions as PSV and AHTS. This will result in lower dayrates, lower utilization rates, and thereby lower freight income. A lower OCSV freight income for SOFF will result in a substantially decrease of SOFF`s share price. However we believe that our approximations are more in line with the future demand/supply balance in this segment.

12.0 Conclusion

Our main objective of this thesis was to determine the fair value of Solstad Offshore ASA per 27.04.2015. Based on our company and market analysis we recommend a BUY/HOLD with a target price of 54.80 NOK.

SOFF has changed their fleet composition in line with the demand from oil companies. SOFF is one of the most experienced actors in the whole industry, they operates globally with a modern fleet and has high exposure to the interesting subsea market. SOFF`s total fleet has grown the recent years and experienced a shift towards CSV vessels. Today it consists of 9 PSV's, 20 AHTS's and 19 CSV vessels.

The most significant factor affecting SOFF and the OSV industry is the petroleum companies E&P-spending, which again is driven by the oil price. As the result of the increase in supply from non-OPEC (mainly from the US shale oil), and the OPEC countries not limiting their oil production, we have experienced a period with the lowest oil price since the financial crisis in 2009. The plunge in the oil price has created a challenging market for the OSV companies as petroleum companies are decreasing their E&P spending which implies a lower demand for OSV services.

We see the balance between supply and demand of oil to stabilize the next years and the oil price to move towards ~80 USD bbl in 2020. In total we see the E&P spending decreasing both in 2015 (-25%) and 2016 (-2%), before we see a slight y-o-y% increase following the expected increase in the oil price.
As the demand of OSV services has decreased, OSV companies have experienced an oversupply of vessels in the market. Thus, OSV dayrates has followed the development in the market and decreased substantially. We expect the dayrates to further decrease in 2015E. Thus, we expect the PSV, AHTS, and Subsea dayrates in 2015E to drop by 45%, 58%, and 17% respectively. The North Sea, Asia and America (Brazil) faces the toughest challenges over 2015 and 2016. The North Sea is a high cost and mature industry, with focus on cost cutting and utilizing of existing assets. Brazil is affected by the extreme uncertainty around Petrobras and the negative development of their economy. The Asian market is affected by the current and future oversupply of vessels. From 2016E- we believe the dayrates will increase as a result of an improvement in the mentioned factors in this paragraph.

Porter's five forces exemplified that the rivalry among the competitors is extremely high. This comes as a result of tough competition of receiving contracts from the petroleum companies as they are focusing on reducing costs and cutting the E&P spending. Hence, this decreased demand for OSV vessels results

in an oversupply of vessels, which in turn increases the competition in the market. However, SOFF's fleet composition is unusual compared to their peers as it contains a high exposure towards the CSV segment.

Additionally, the internal analysis states that SOFF`s organizational resources are highly valuable and rare among the OSV companies. We believe this provides SOFF with a sustainable competitive advantage in a very challenging market. Thus, we find that SOFF holds a competitive advantage regarding some of the internal resources, which we expect will lead to higher utilization rates and contract coverage in the forecast period.

SOFF has not been able to create satisfying returns for their shareholders the recent years. Their ROIC before tax decreased from ~15% to ~1% from 2007-2011. However, SOFF experienced an improvement from 2011-2014 increasing their ROIC before tax the most among their peers, reaching ~9% in 2014. SOFF's EBITDA has experienced the same development and was 44% in 2014. As we expect the dayrates to decrease in 2015E and remain relatively low in 2016E we forecast the ROIC and EBITDA to decrease as well, before increasing from 2017E-.

Based on the risk analysis of the company, we estimate a WACC of 7.74%. The output from the DCF and EVA model indicates an upside of ~12% which is supported by the multiples. The EVA model tells us that SOFF is actually destroying value for their shareholders in the entire forecast period. Thus, SOFF is priced below book value of equity.

From the sensitivity analysis it is evident that the underlying assumptions hold a significant impact on the estimated share price. Changes in dayrates or utilization rates of +/- 5 percentage points in every period provide share prices from 9.20 NOK to 94NOK. While changing the inputs in the WACC provides estimated share prices between 27 NOK and 86.7 NOK.

Our estimated share price of 54.8 is above analysts' consensus, indicating that we are more positive regarding the outlook for SOFF. We acknowledge that the EVA model provides negative output every year in the forecast horizon, but we still recommend a BUY/HOLD for a marginal investor. This is based on our argumentation and that we can see a positive EVA-development and an increasing share price with a 12% upside.

13.0 Thesis in Perspective

In section 9.0 we found some really interesting points in the calculated EVA model. We could discover that SOFF abolish shareholder value through the entire forecasting period. Given the present market conditions for the OSV companies there is thoughts and speculations about consolidation. Hence, an exciting line could be to look at alternative industrial owners for SOFF`s fleet – and thus, prized potential synergies in an M&A perspective. On the other side, this perspective would most definitely require an in-depth analysis of possible buyers. Therefore, we consider this approach to lie outside the overall scope of the original problem statement stated in section 1.2.

The findings in this paper clearly provided us with information about SOFF`s business. The overall value of SOFF lies in the value of their vessels, and not as much in the operations. Therefore, a highly interesting approach to the valuation models conducted in this paper would be the Net Asset Value. This approach could for example be used to estimate the specific returns for each vessel, or estimate SOFF`s fleet value founded on the second hand values. However, in our forecast of total freight income, in section 7, we tried to conduct a per vessel return based on the equation in appendix 7.10. The equation was built on specific contracts with detailed information about duration, specifications and value. We therefore conducted a subjective premium based on these factors, for the vessels without any obtainable information around the contracts. If we had information about every contract in SOFF`s fleet, the valuation would more accurate. This hidden information is also why many analysts differ in their estimation of OSV companies share price (Appendix 11.1).

Our forecast of OPEX is based on our findings in the strategic analysis. Hence, SOFF`s focus and ability to reduce cost compared to their peers. However, as SOFF has moved against the subsea segment, the OPEX has increased. Therefore, with increased activity on the medium term: we analyzed that the total operating expenses will increase slightly from 2017-. An interesting and valuable approach would be to look at the detailed cost level of each vessel, and abridged this as OPEX. However, we have not been able to achieve this data. This interesting data could however most certainly been found through interview with industry professionals.

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15.0 Appendixes

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Section 2

Appendix 2.1 - The original shipping market model
(Source: Stopford (1997))

SUPPLY, DEMAND AND FREIGHT RATES

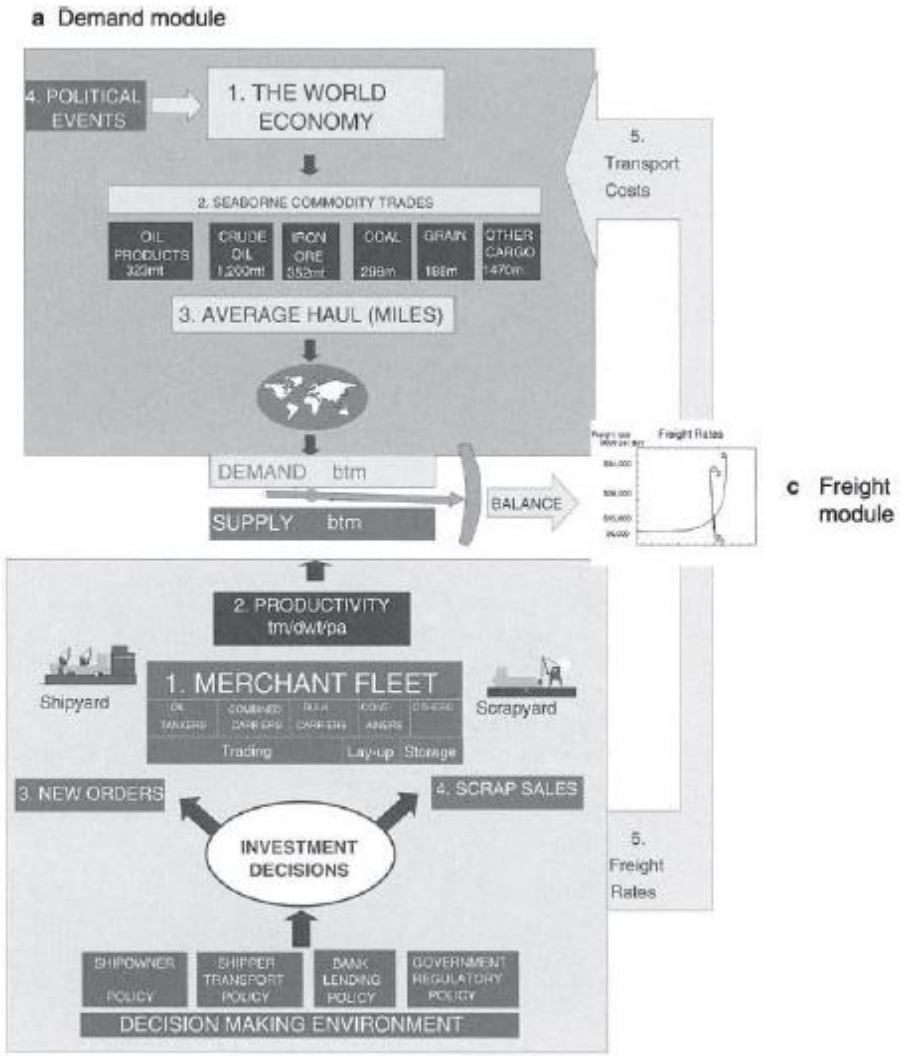


FIGURE 4.1 The shipping market model
Source: Martin Stopford, 1997

Appendix 2.2 -
(Source: Petersen & Plenborg (2012) & Own contribution)

Discounted cash flow model

The value is found by a forecast of FCFF in the forecast horizon (2015E-2020E) and a terminal period. This cash flow is discounted by the WACC conducted in section 8.0.

$$\text{FCFF} = \text{NOPAT} + \text{depreciation} \pm \Delta\text{NWC} \pm \text{non current liabilities} \pm \text{CAPEX}$$

With the following formula (two stage model) to forecast enterprise value (Plenborg & Petersen, 2012).

$$\text{Enterprise value}_0 = \sum_{t=1}^{n} \frac{\text{FCFF}_t}{(1+\text{WACC})} + \frac{FCFF_{n+1}}{\text{WACC} - g} \times \frac{1}{(1+\text{WACC})^n}$$

To find the estimated value of equity, we deduct the market value of minority interests and NIBD from out estimated EV (Plenborg & Petersen, 2008).

Economic value added

The value of a company is determined by the initial invested capital + PV of all future EVAs (Plenborg & Petersen, 2012).

$$\text{EVA}_t = \text{NOPAT}_t - \text{WACC} \times \text{Invested capital}_{t-1}$$

Thereby, we specify the ECA model in a two-stage formula and calculate the EV of SOFF (Plenborg & Petersen, 2012).

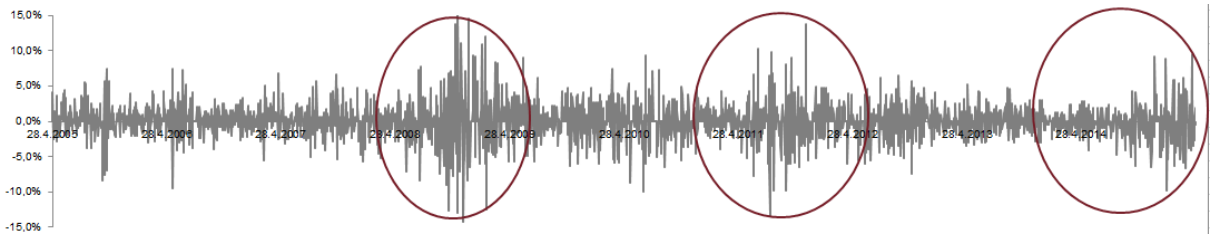
$$\text{Enterprise value}_0 = \text{Invested capital}_0 + \sum_{t=1}^{n} \frac{\text{EVA}_t}{(1+\text{WACC})} + \frac{\text{EVA}_{n+1}}{\text{WACC} - g} \times \frac{1}{(1+\text{WACC})^n}$$

As with the DCF model, we simply deduct market value of net interest bearing debt and value of

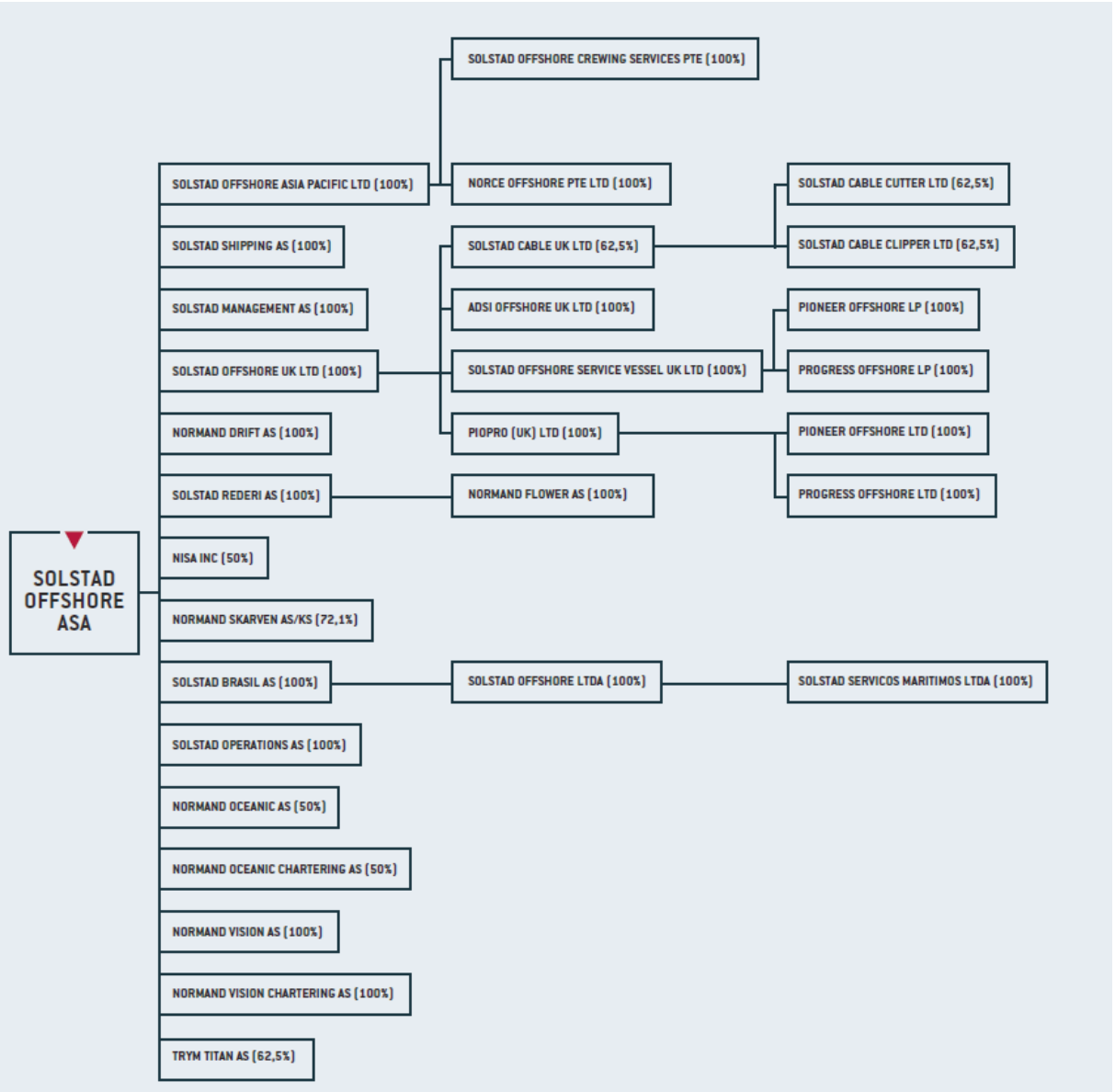
All these formulas are derived from Petersen & Plenborg (2012): and are respectively founded on page: 180,217,216 and 220.

Section 3

Appendix 3.1 – Periods with highest d-o-d%change in SOFF share price
(Source: Datastream, Oslo Børs, SOFF – AR`s & Own contribution)



Appendix 3.2 – Corporate Structure
(Source: SOFF – AR, 2014 & Own contribution)



Appendix 3.3 – Board of Directors
(Source: SOFF – AR, 2014 & Own contribution)

Terje Vareberg (Chairman)

Education	MBA from NHH
Experience	CEO Sparebank 1 SR-Bank & Deputy CEO in Statoil
Board member since	2011
Shares in SOFF	3000

Toril Eidesvik

Education	Solictitur from UiO
Experience	MD for Green Refers ASA and CEO for EMS Seven Seven Seas ASA.
Board member since	2005
Shares in SOFF	2500

Anette Solstad

Education	B.A in International Business
Experience	Wilhelmsen Lines, US, Operational and commercial analysis
Board member since	2007
Shares in SOFF	56402

Ketil Lenning

Education	Petroleum Engineering from NTNU
Experience	CEO Oddfjell Drilling Ltd, extensive experience within the oil industry
Board member since	2010
Shares in SOFF	0

Anders Onarheim

Education	MBA from Washington University
Experience	Invenstment Banks (Merill Lynch and Goldman Sachs), MD Carnegie AS
Board member since	May 2014
Shares in SOFF	15000

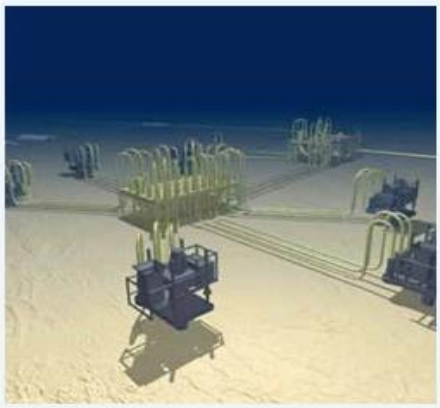
Appendix 3.4 – SOFF fleet (OSCV, AHTS & PSV)
(Source: Pareto (2015) & Own contribution)

CSV Fleet							
CSV	**Type**	**Build**	**Size m**	**Location**	**Clients**	**Firm-end**	**Option end**
Normand Reach	CSV	2014	121	Norway	Reach Subsea	Jun.19	Jun.22
Normand Vision	CSV	2014	157	Norway	Ocean Installer	Jun.22	Jun.24
Normand Oceanic	CSV	2011	157	Norway	Subsea 7	Mar.17	Mar.18
Normand Pacific	CSV	2011	122	US GoM	Ceona	Mar.15	Mar.16
Normand Baltic	CSV	2010	95	Singapore	Spot	Spot	Spot
Normand Subsea	CSV	2009	113	Norway	Subsea 7	Feb.16	Feb.18
Normand Seven	CSV	2007	130	Brazil	Subsea 7	Sep.15	Sep.20
Normand Installer	CSV	2006	124	Angola	SBM	Jun.15	Oct.17
Normand Commander	CSV	2006	93	US GoM	Technip	Jun.15	May.17
Normand Fortress	CSV	2006	94	Mexico	Diavaz	Mar.16	Mar.16
Normand Flower	CSV	2002	93	Norway	Oceaneering	Oct.16	Oct.19
Normand Mermaid	CSV	2002	90	Norway	Occean Installer	Feb.18	Feb.23
Normand Cutter	CSV	2001	128	US GoM	Saipem	May.15	May.16
Normand Clipper	CSV	2001	128	US GoM	Occean Installer	Apr.17	Apr.22
Normand Pioneer	CSV	1999	95	UK	Technip	Sep.15	Sep.16
Normand Progress	CSV	1999	95	Norway	Technip	Sep.15	Sep.16
NOR Vailent	CSV	2008	78	Mexico	Pemex	Mar.19	Mar.19
NOR Australis	CSV	2009	82	Australia	Woodside	Feb.17	Feb.18
Norce Endavour	CSV	2010	146	Australia	Chevron	Apr.15	Jul.16
NB CSV	CSV	2016	180	Norway	Saipem	Mar.24	Mar.27
Average		2007	116,1				
Average year old		8					

AHTS Fleet							
AHTS	**Type**	**Build**	**Size bhp**	**Location**	**Client**	**Firm-end**	**Option end**
Normand Ranger	AHTS	2010	28000	UK	Technip	Spot	Spot
Normand Prosper	AHTS	2010	32000	Norway	Spot	Spot	Spot
Normand Ferking	AHTS	2007	20000	Norway	Statoil	Sep.16	Sep.19
Normand Titan	AHTS	2007	16300	Brazil	Petrobas	Jun.18	Jun.22
Normand Master	AHTS	2003	23500	Brazil	Petrobas	Sep.15	Sep.19
Normand Mariner	AHTS	2002	23500	Brazil	Petrobas	Sep.15	Sep.19
Normand Ivan	AHTS	2001	20000	Malaysia	Murphy	Feb.15	Feb.15
Normand Borg	AHTS	2000	16800	Brazil	Petrobas	Jan.15	Jan.15
Normand Atlantic	AHTS	1997	19400	UK	Spot	Spot	Spot
Normand Neptun	AHTS	1996	19400	UK	Spot	Spot	Spot
Normand Jarl	AHTS	1985	12000	Norway	Spot	Spot	Spot
Nroamnd Skarven	AHTS	1986	14000	UK	Spot	Spot	Spot
Normand Drott	AHTS	1984	12000	Brazil	Petrobas	Nov.17	Nov.18
Nor Chief	AHTS	2008	10800	Egypt	Efadco	Feb.15	Feb.15
Nor Spring	AHTS	2008	8000	Indonesia	BB	May.15	May.15
Nor Captain	AHTS	2007	10880	Malaysia	Spot	Spot	Spot
Nor Tigerfish	AHTS	2007	7954	Malaysia	Spot	Spot	Spot
Nor Star	AHTS	2005	5500	Tunisia	BG	Aug.15	Aug.16
Average		2001	16669				
Average year old		14					

PSV Fleet							
PSV	**Type**	**Build**	**Size dwt**	**Location**	**Client**	**Firm-end**	**Option end**
Normand Arctic	PSV	2011	5000	Norway	BG	May-15	May-16
Normand Vibran	PSV	2008	3350	Brazil	Petrobas	Sep.15	Sep.21
Nordmand Corona	PSV	2006	3350	Mediterrar	Saipem	Jul.15	Sep.15
Normand Trym	PSV	2006	3350	Brazil	Petrobas	Sep.17	Sep.21
Normand Aurora	PSV	2006	4800	UK	Total	Apr.17	Apr.19
Normand Skipper	PSV	2005	6400	Norway	Spot	Spot	Spot
Normand Flipper	PSV	2005	4400	Mediterrar	Saipem	Sep.15	Nov.15
Normand Vester	PSV	2002	4587	Brazil	Petrobas	May-15	Jul.15
Normand Carrier	PSV	1998	4560	Mediterrar	Saipem	Sep.15	Nov.15
Average		2005	4422				
Average year old		10					

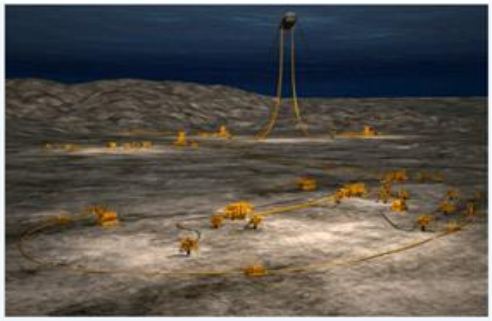
Appendix 3.5 – Complex Subsea Segment
(Source: Rigzone (2015) & Own contribution



Greater Gorgon Subsea Development

The Tordis Field Seperator
Source: Greenland Group

Tordis Subsea Production Facility



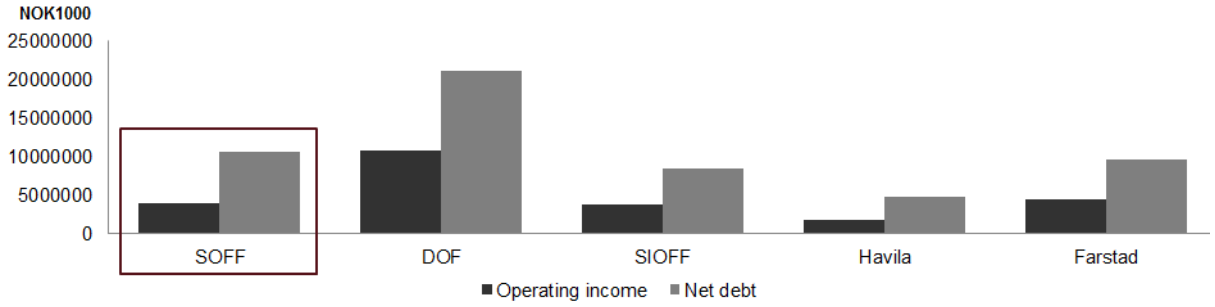
Pazflor Subsea Development

Subsea processing has helped transforming offshore developments worldwide (Rigzone 2015). Subsea is a way to overwhelm the challenges of tremendously deepwater situations. The pictures above are retrieved from: Rigzone (2015); (http://www.rigzone.com/training/insight.asp?insight_id=327&c_id=17, April 2015).

Appendix 3.6 – Peer group (Comparable fleet and location of fleet)
(Source: Pareto (2015), RS Platou (2015) & Own contribution)

Peer group comparison		Peer group							
Comparable fleet	SOFF	DOF ASA	Farstad	Havila	Siem	Eidesvik	REM	DESSC
Total fleet	47	80	62	27	47	26	20	40
Medium and high end PSV	■	■	■	■	■			
High-End AHTS	■	■	■	■	■			
OSCV/Subsea vessels	■	■	■	■	■			
High exposure to Subsea	■	■						
Location of fleet								
North Sea	■	■	■	■	■			
Brazil	■	■	■	■	■			
Asian	■	■	■	■	■			
West African	■	■	■	■	■			
GoM Vessels	■	■			■			
Australia	■	■			■			
Mediterian	■	■			■			
Listed on OSE	■	■	■	■	■			
Market cap MNOK (27.04.2015)	1795	981	1423	301	1027	509	833	1073

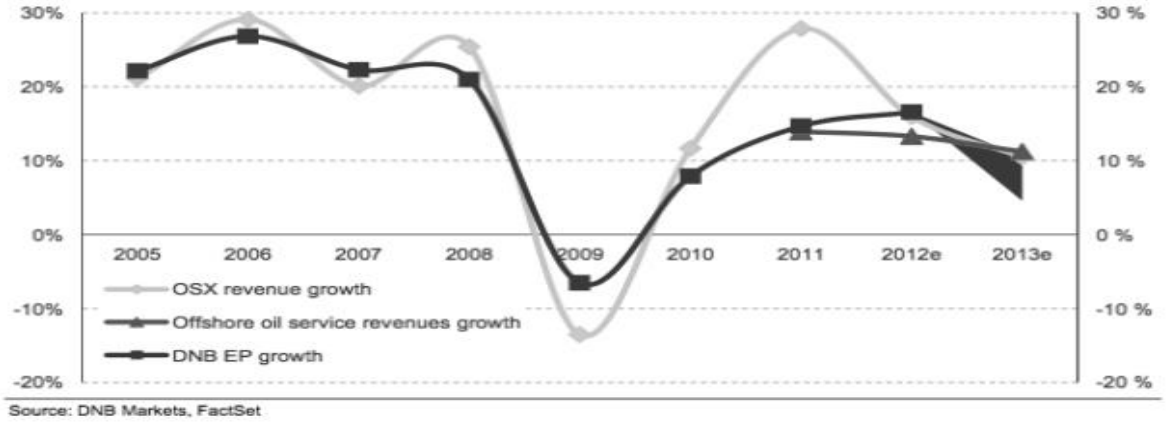
Appendix 3.7 – Peer group (Operating income, net debt)
(Source: RS Platou (2015) & Own contribution)



Section 4

Appendix 4.1 – Correlation E&P spending and oil service revenue

(Source: DnB Markets (2012) & Own contribution)

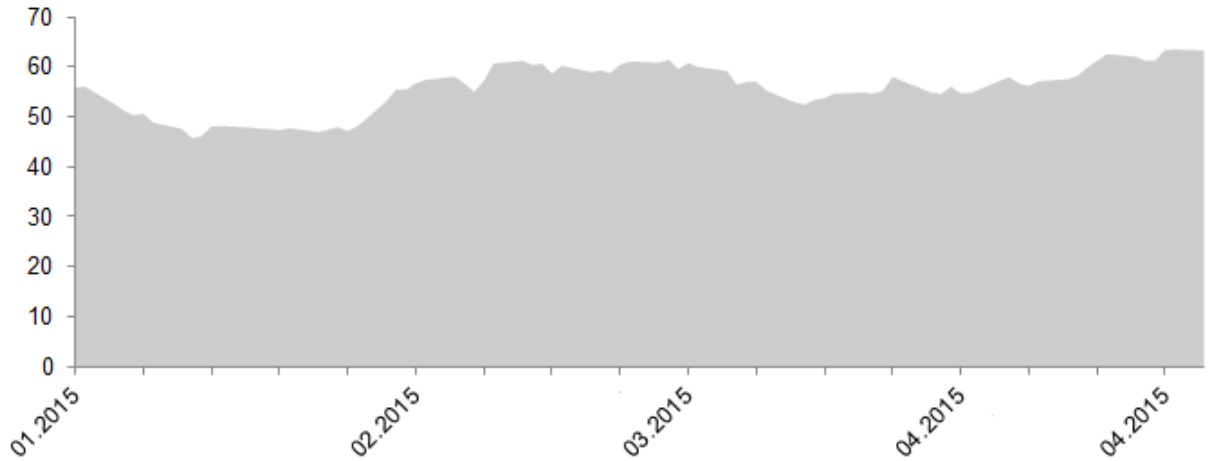


Additionally, a Survey from Barclays (2013) stated that oil price were the most important factor affecting E&P spending. Hence, high oil price = higher E&P spending = higher demand for OSV vessels.

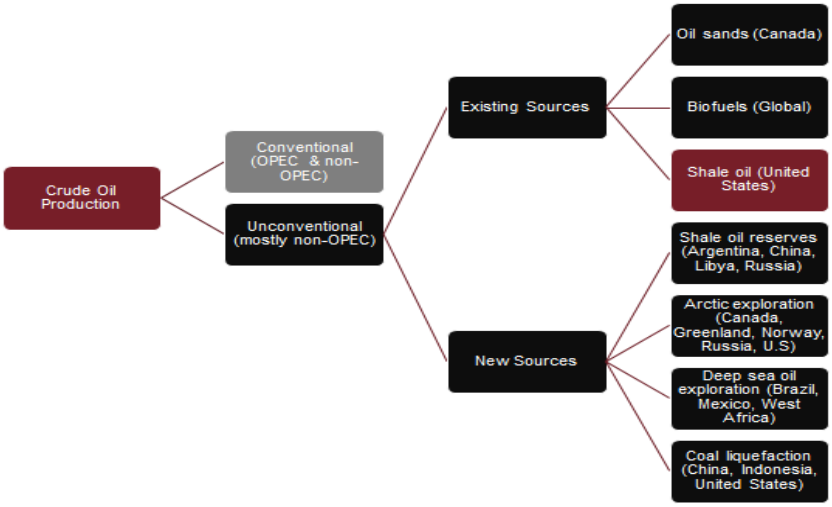
Respondents	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Oil Prices	59 %	47 %	51 %	43 %	44 %	50 %	51 %	39 %	39 %	49 %	45 %	49 %	**54 %**	**70 %**	**63 %**
Cash Flow	**68 %**	**65 %**	59 %	53 %	54 %	**60 %**	36 %	42 %	47 %	48 %	**48 %**	**53 %**	46 %	64 %	60 %
Drilling Success	41 %	44 %	30 %	30 %	43 %	43 %	34 %	35 %	39 %	26 %	21 %	25 %	31 %	39 %	37 %
Natural Gas Prices	68 %	66 %	**67 %**	**55 %**	**73 %**	52 %	**61 %**	**53 %**	**51 %**	**55 %**	54 %	42 %	47 %	42 %	30 %
Prospect Availability	45 %	60 %	39 %	55 %	51 %	58 %	53 %	42 %	45 %	23 %	18 %	22 %	32 %	30 %	27 %
Drilling Costs	31 %	35 %	49 %	35 %	38 %	41 %	40 %	37 %	36 %	31 %	24 %	24 %	29 %	24 %	27 %
Capital Availability	52 %	43 %	37 %	36 %	39 %	32 %	23 %	28 %	23 %	29 %	35 %	26 %	32 %	24 %	20 %

Appendix 4.2 – Oil price development (Brent Crude $/bbl) – 01.2015 – end of 04.2015

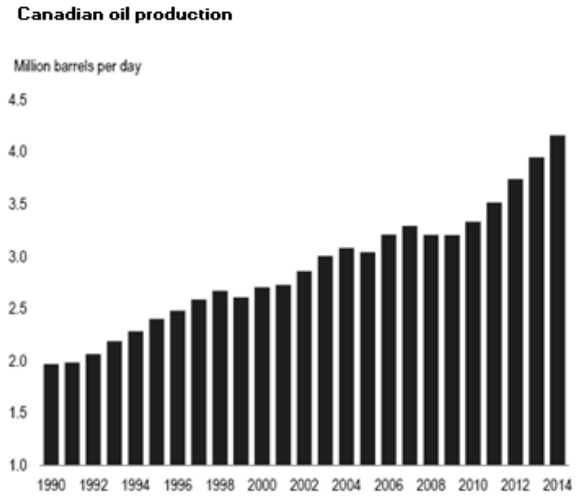
(Source: Datastream & Own contribution)

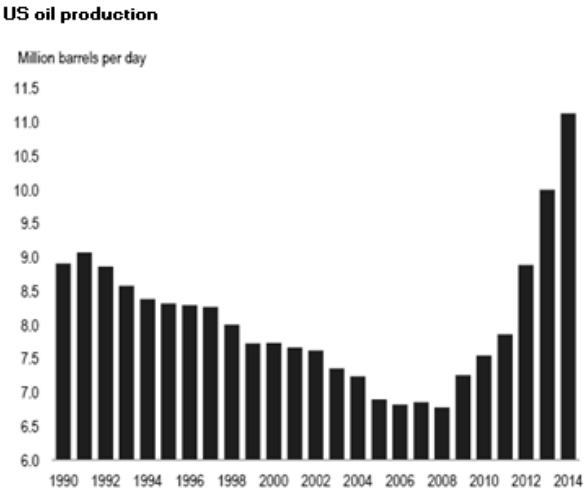


Appendix 4.3 – Conventional and unconventional sources of oil
(Source: EIA (2015), World Bank (2015) & Own contribution)

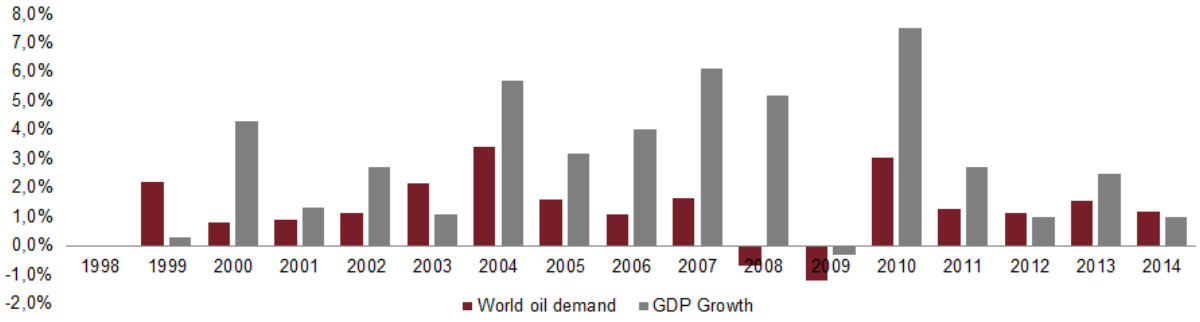


Appendix 4.4 – Oil sands (Canada) and Shale Oil (United States) - Production
(Source: EIA (2015), World Bank (2015) & Own contribution)

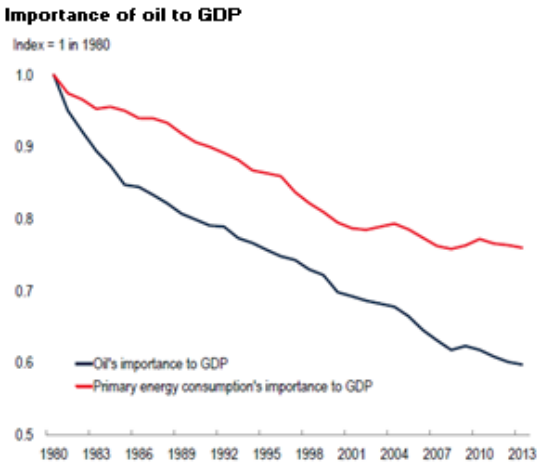


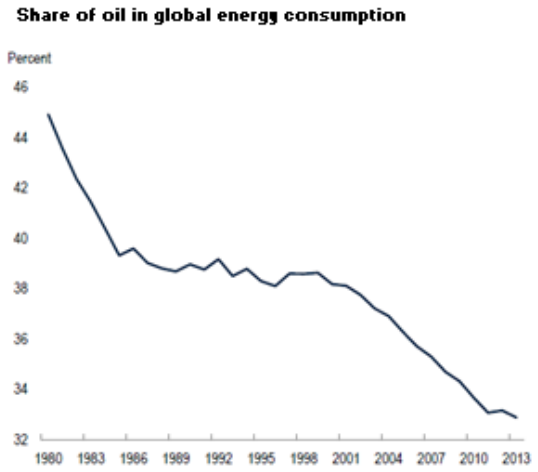


Appendix 4.5 – Relationship between World Oil demand and GDP growth (y-o-y% change)
(Source: Datastream, Pareto (2015), IMF(2015) & Own contribution)



Appendix 4.6 – Importance of oil to GDP and Share of oil in global energy consumption
(Source: EIA (2015), World Bank (2015) & Own contribution)



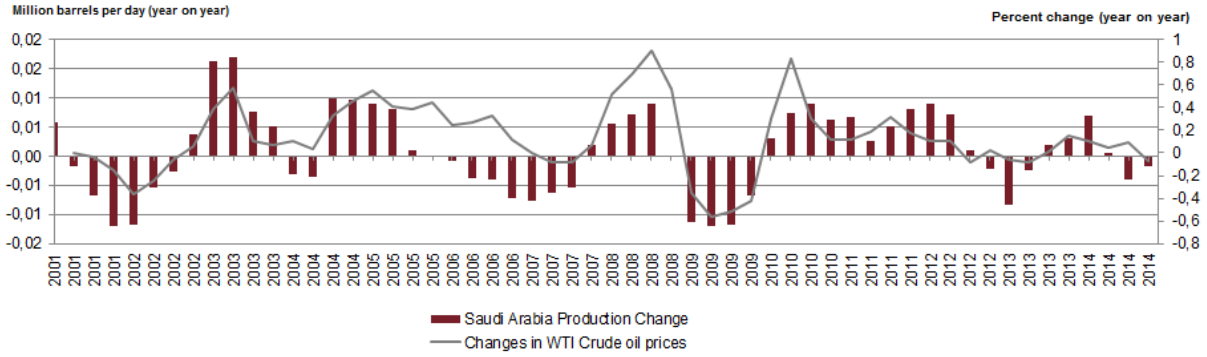


Appendix 4.7 – OPEC vs Top 30 Non-OPEC
(Source: OPEC (2015), DNB Markets (2015) & Own contribution)

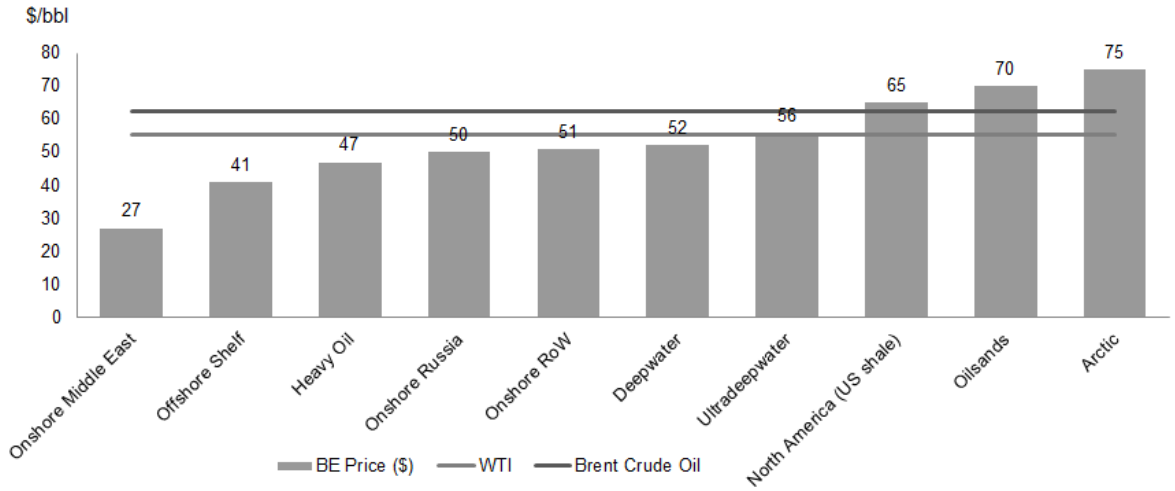
OPEC members	
Algeria	Libya
Angola	Nigeria
Ecuador	Quatar
Iran	Saudi Arabia
Iraq	United Arab Emirates
Kuwait	Venezuela

Top 30 Non-OPEC supply		
Russia	Azerbadsjan	Syria
United States	Indonesia	Equatorial Guniea
China	Oman	Yemen
Mexico	India	Vietnam
Canada	Columbia	Congo Brazzaville
Norway	Argentina	Denmark
Brazil	Maylasia	Gabon
Others	Egypt	Brunei
Kazakhstan	Australia	Trinidad & Tobago
UK	Sudan	Tunesia

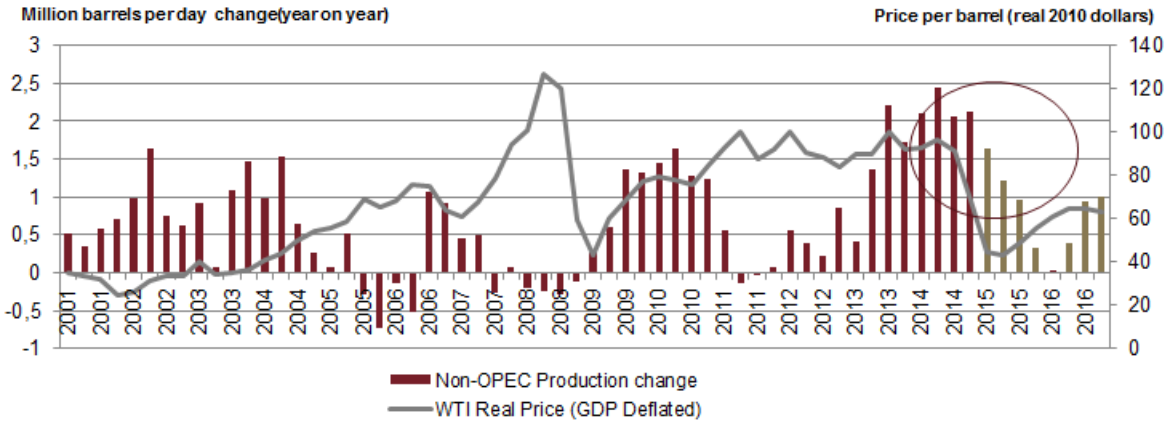
Appendix 4.8 – Saudi Arabia Production change vs Changes in WTI Crude oil prices
(Source: IEA (2015), OPEC (2015), DNB Markets (2015) & Own contribution)



Appendix 4.9 – Breakeven (BE) price - $/bbl
(Source: IEA (2015), Morgan Stanley Equity Research (2015), Seadrill (2015) & Own contribution)

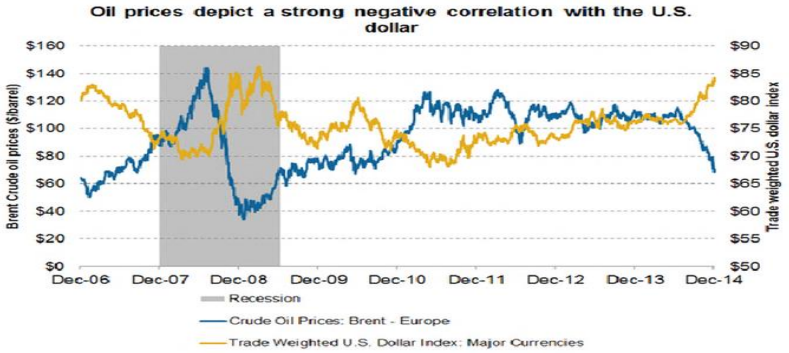


Appendix 4.10 – Non-OPEC production change vs Oil price
(Source: IEA (2015), OPEC (2015), DNB Markets (2015) & Own contribution)



Appendix 4.11 – U.S dollar vs oil price

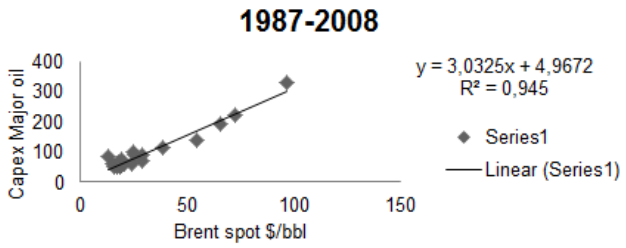
(Source: Market Realist (2015): FRED, Blackrock & Own contribution)



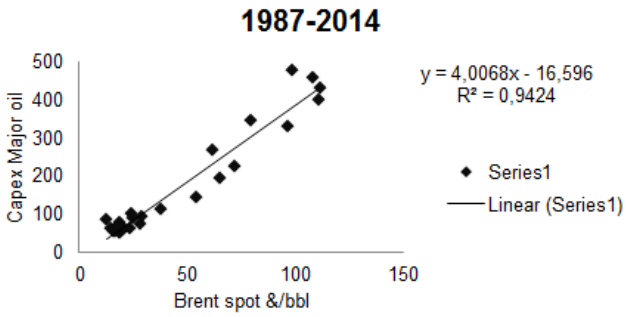
Appendix 4.12 – Oil price vs E&P spending (Regression)

(Source: Regression Analysis, IEA (2015), Datastream & Own contribution)

Linear Regression (Oil price vs E&P)			
Date	**Brent Spot**	**Major**	**Growth**
1987	18,53	50,1	
1988	14,91	62,4	24,6%
1989	18,23	55,1	-11,7%
1990	23,76	59,6	8,2%
1991	20,04	61,5	3,2%
1992	19,32	53,6	-12,8%
1993	17,01	51,8	-3,4%
1994	15,86	51,5	-0,6%
1995	17,02	59,8	16,1%
1996	20,64	59,3	-0,8%
1997	19,11	75,3	27,0%
1998	12,76	83,9	11,4%
1999	17,9	67,7	-19,3%
2000	28,66	72,8	7,5%
2001	24,46	99,9	37,2%
2002	24,99	88,7	-11,2%
2003	28,85	90,7	2,3%
2004	38,26	112,4	23,9%
2005	54,57	140,4	24,9%
2006	65,16	193,1	37,5%
2007	72,44	221,7	14,8%
2008	96,94	328	47,9%
2009	61,74	268	-18,3%
2010	79,61	344,3	28,5%
2011	111,26	395,95	15,0%
2012	111,63	427,62	8,0%
2013	108,56	457,55	7,0%
2014	99	475,86	4,0%
2015E	60	223,81	-53 %
2016E	62	231,83	4 %
2017E	78	295,93	28 %
2018E	79	299,94	1 %
2019E	80	303,95	1 %
2020E	77	291,93	-4 %



Oil price drop (Avg:2008-2009): -36%
E&P spending drop (based on linear regression): - 41%
Actual drop in E&P spending 2009: -18%



Oil price drop (Avg:2014-2015): -39%
E&P spending drop (based on linear regression): - 53%
Exected drop in E&P spending 2015: ~20-26%

High correlation

R2 explains that the variance in Y can be explained by 94% of the variance in X.
We can reject the null hypothesis with quite high certainty, at a 95% (or even at a 99%-significance level). SE>1,96. Hence, the E&P spending historically from 1987-2014 has experienced an extremly high correlation with the Oil Price.

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,970762
R Square	0,9423788
Adjusted R	0,9401626
Standard E	34,815307
Observatio	28

To reject the null-hypothesis (that the CAPEX is not dependent on the Brent Oil Price), we can reject the null hypothesis with quite high certainty, at a 95% significance level (or even 99% level), ref p-value på X-variable, også coeffecient/SE over 1,96 beviser dette. R2 explans that the variance in Y is explaines by 94% of the variance in X,

ANOVA

	df	*SS*	*MS*	*F*	*gnificance F*
Regressio	1	515415	##	425,223	1,2E-17
Residual	26	31514,7	##		
Total	27	546930			

Input to regression		
1987-20	3,0325	4,9672
1987-20	4,0068	16,596

	Coefficients	*andard Er*	*t Sta*	*P-value*	*Lower 95%*	*pper 95%*	*wer 95,0*	*pper 95,0%*
Intercept	-16,59619	10,8388	-2	0,1378	-38,8758	5,6834	-38,88	5,68336
X Variable	4,0067589	0,19431	21	1,2E-17	3,60736	4,4062	3,6074	4,40616

Appendix 4.13 – Oil price vs E&P spending (Adjusted)

(Source: Regression Analysis, IEA (2015), Datastream & Own contribution)

Adjusted for 2015E-2020E

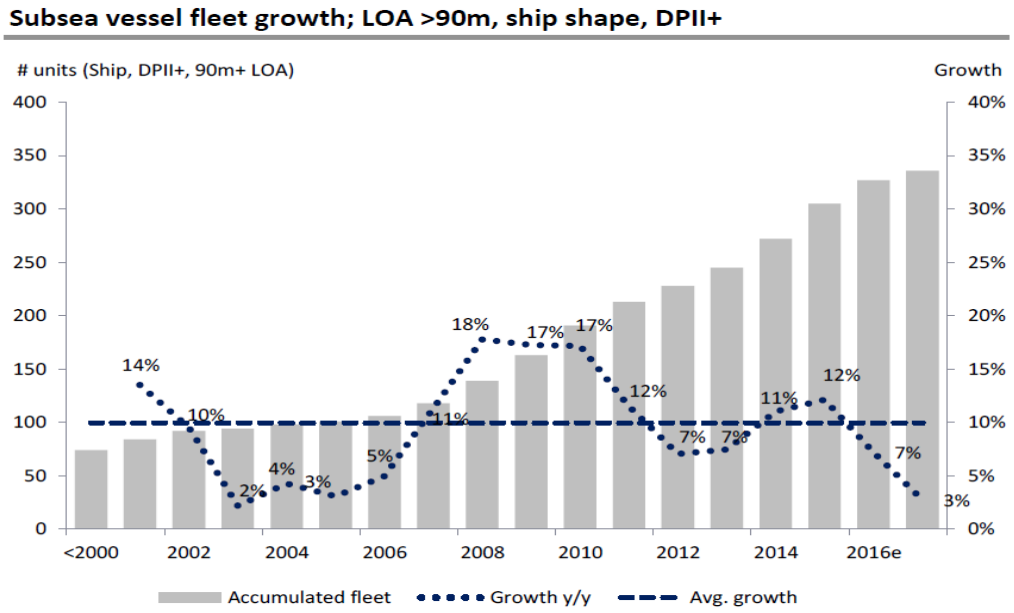
Linear Regression (Oil price vs E&P)			
Date	**Price FOB (Dollars**	**Major oil**	**Growth**
1987	18,53	50,1	
1988	14,91	62,4	24,6%
1989	18,23	55,1	-11,7%
1990	23,76	59,6	8,2%
1991	20,04	61,5	3,2%
1992	19,32	53,6	-12,8%
1993	17,01	51,8	-3,4%
1994	15,86	51,5	-0,6%
1995	17,02	59,8	16,1%
1996	20,64	59,3	-0,8%
1997	19,11	75,3	27,0%
1998	12,76	83,9	11,4%
1999	17,9	67,7	-19,3%
2000	28,66	72,8	7,5%
2001	24,46	99,9	37,2%
2002	24,99	88,7	-11,2%
2003	28,85	90,7	2,3%
2004	38,26	112,4	23,9%
2005	54,57	140,4	24,9%
2006	65,16	193,1	37,5%
2007	72,44	221,7	14,8%
2008	96,94	328	47,9%
2009	61,74	268	-18,3%
2010	79,61	344,3	28,5%
2011	111,26	395,945	15,0%
2012	111,63	427,621	8,0%
2013	108,56	457,554	7,0%
2014	99	475,856	4,0%
2015E	60	355,317	-25 %
2016E	62	347,202	-2 %
2017E	78	379,598	9 %
2018E	79	392,773	3 %
2019E	80	406,391	3 %
2020E	77	416,182	2 %

E&P spending	2015	2016	2017	Long term
ABG	-18 %	-2 %	5 %	5 %
DNB	-20 %	-5 %	5 %	3 %
Nordea	-16 %	-3 %	5 %	4 %
Swedbank	-21 %	-5 %	4 %	4 %
Average	-19 %	-4 %	5 %	4 %

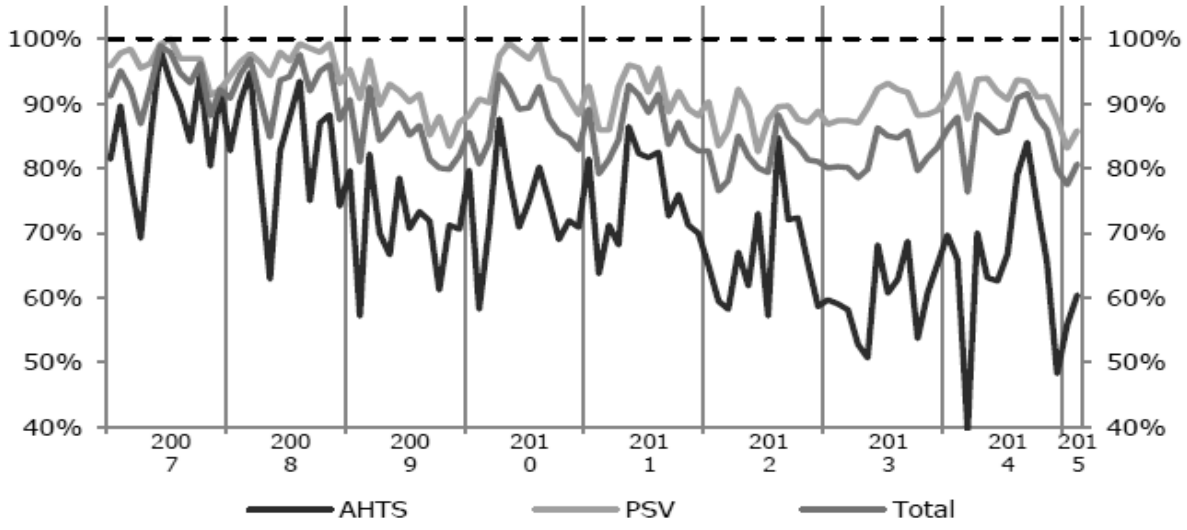
E&P Capex Budgets (USDbn)			
Company	**2014**	**2015e**	**Growth**
BG	9,4	6,5	-31 %
BP	22,9	20	-13 %
Chevron	37,1	31,6	-15 %
ENI	16,9	11,5	-32 %
ExxonMobil	13,9	12	-14 %
Lukoil	38,5	34	-12 %
Shell	15	13,5	-10 %
CNOOC	29,2	12	-59 %
Ecopetrol	17,2	7,9	-54 %
Gazprom	10,6	30	183 %
Pemex	38	19,8	-48 %
Petrobras	22,4	22,4	0 %
PTTEP	28,2	3,1	-89 %
Statoil	19,6	18	-8 %
Total	318,9	242,3	-24 %

The drop of 28 percentage points instead of 23 percentage points makes sense as the oil price has dropped by 3 perecentage points more and the recent plunge in the oil price comes as a result of the fundamental drivers of the oil, compared to a financial crisis. The forecasted E&P spending in 2015E is an average between the regression output, raports from analysts and E&P Capex Budget. From 2016E-2020E, the average from the regression and major analysts is used. The forecasted E&P spending is in line with the results already discussed in this section. The outlook is bad on short/medium term, but will most definetely be better when the market stabilize.

Appendix 4.14 – Subsea fleet growth
(Source: Pareto (2015), IHS (2015) & Own contribution)

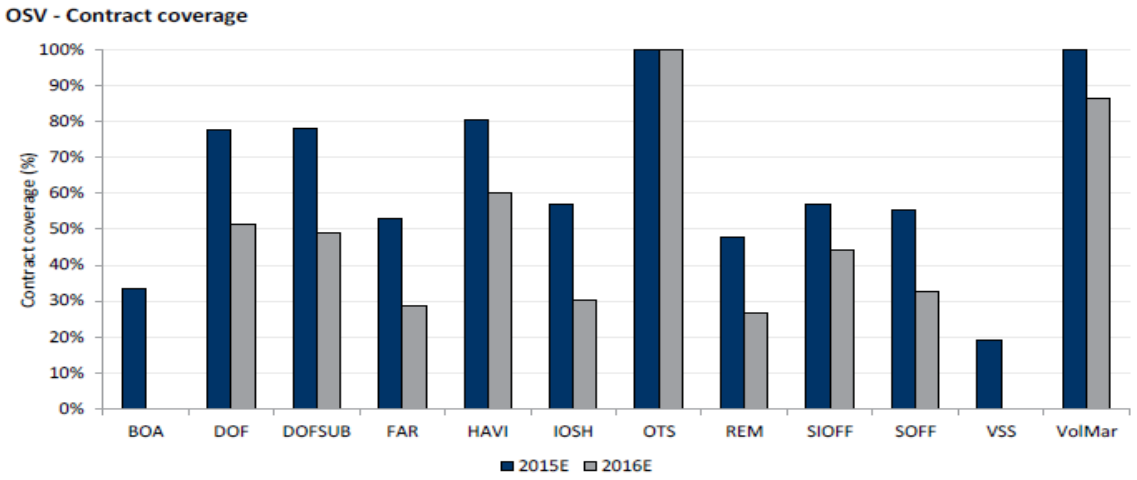


Appendix 4.15 – Fleet Utilization (AHTS and PSV)
(Source: RS Platou (2015) & Own contribution)

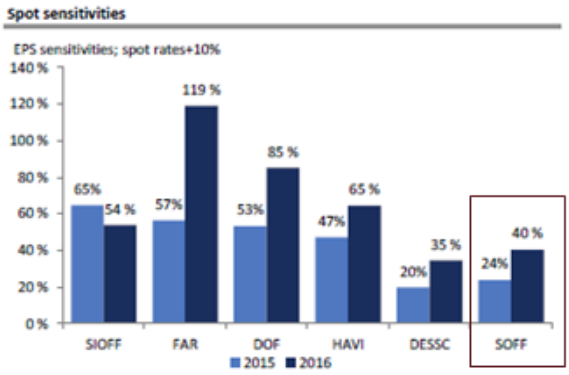


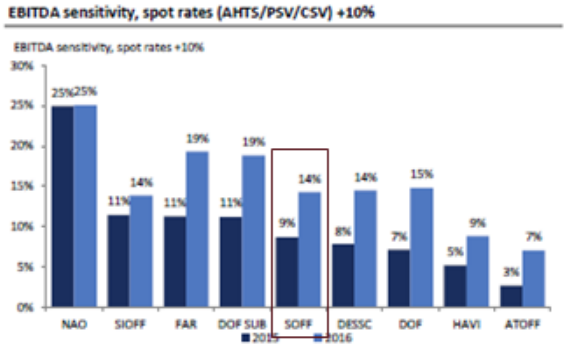
Appendix 4.16 – Contract coverage (Norwegian companies)
(Source: RS Platou (2015) & Own contribution)

Contract coverage for the different companies differ quite significantly (RS Platou, 2015).

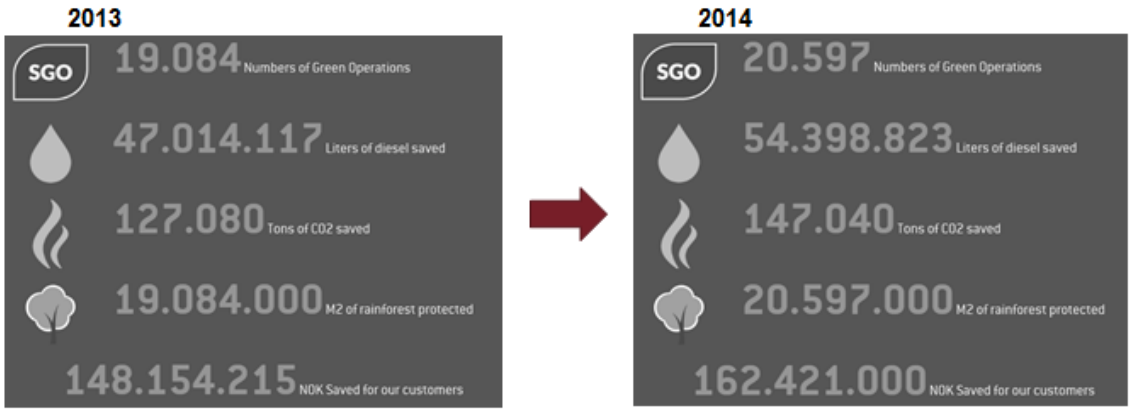


Appendix 4.17 –Spot Sensitivities (EPS, spot rates + 10%) and (EBITDA, spot rates + 10%)
(Source: Pareto (2015) & Own contribution)





Appendix 4.18 – Green fleet (2013 to 2014)
(Source: SOFF – AR, 2014 & Own contribution)



Section 5

Appendix 5.1– Reformulated income statement and balance sheet for SOFF and peers.
(Source: AR`s 2003-2014 (SOFF, Farstad, DOF, Havila & Siem) & Own contribution)

The balance sheet and income statement are reformulated founded on the theories in Petersen & Plenborg (2012).

SOLSTAD OFFSHORE REFORMULATED INCOME STATEMENT

Core operations	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
AHTS	416 886	340 278	566 553	892 721	1080 750	1179 539	1260 857	1085 254	1204 157	1266 656	1230 784	1318 685
PSV	94 705	89 209	315 717	301 484	344 900	291 258	295 780	359 279	402 202	439 197	441 439	466 601
CSV	263 398	346 761	422 628	601 185	681 894	664 064	961 896	1169 024	1368 741	1582 067	1822 850	1952 063
Total freight income	774 989	776 248	1304 898	1795 390	2 107 544	2 134 861	2 518 533	2 613 557	2 975 100	3 287 920	3 495 073	3 737 349
Other operating income	218 937	15 783	5 236	8 434	5 705	10 470	10 851	3 308	4 988	20 581	104 792	96 233
Gain on sale of vessels	0	22 133	117 170	87 647	105 801	63 550	0	0	0	53 702	26 274	46 591
Gross profit	**993 926**	**814 164**	**1 427 304**	**1 891 471**	**2 219 050**	**2 208 881**	**2 529 384**	**2 616 865**	**2 980 088**	**3 362 203**	**3 626 139**	**3 880 173**
Income from investments in associated companies - core	12 208	24 642	8 831	15 663	11 277	40 799	0	0	0	7 630	57 207	63 384
Gross profit including income from associated companies	**1 006 134**	**838 806**	**1 436 135**	**1 907 134**	**2 230 327**	**2 249 680**	**2 529 384**	**2 616 865**	**2 980 088**	**3 369 833**	**3 683 346**	**3 943 557**
Crew expenses	-301 098	-252 295	-146 093	-397 123	-443 395	-545 770	-733 869	-882 369	-1067 330	-1119 492	-1231 480	-1219 758
Administration	-28 065	-27 838	-30 299	-40 884	-46 738	-62 521	-70 383	-78 426	-92 332	-109 507	-165 126	-174 356
Bunker costs	-	-5 691	-4 311	-12 986	-16 404	-24 392	-36 284	-40 412	-37 101	-66 018	-67 938	-69 789
Other operating expenses	-174 081	-179 320	-224 733	-407 256	-325 444	-298 896	-496 704	-637 321	-713 147	-632 849	-664 516	-766 671
Total expenses	**-503 244**	**-465 144**	**-405 436**	**-858 249**	**-832 581**	**-931 579**	**-1 337 240**	**-1 638 528**	**-1 909 910**	**-1 927 866**	**-2 129 060**	**-2 230 574**
EBITDA	**502 890**	**373 662**	**1 030 699**	**1 048 885**	**1 397 746**	**1 318 101**	**1 192 144**	**978 337**	**1 070 178**	**1 441 967**	**1 554 286**	**1 712 983**
Depreciation on capitalized periodic maintenance	-240 359	-273 606	-329 955	-336 441	-437 284	-520 851	-728 948	-638 593	-918 526	-584 817	-431 366	-461 827
EBIT	**262 531**	**100 056**	**700 744**	**712 444**	**960 462**	**797 250**	**463 196**	**339 744**	**151 652**	**857 150**	**1 122 920**	**1 251 156**
Tax on core operations	-14 638	-33 898	-22 399	-19 499	-349 565	-946 274	91 661	-291 236	2 842	80 650	-117 046	-284 084
NOPAT	**247 893**	**66 158**	**678 345**	**692 945**	**610 897**	**-149 024**	**554 857**	**48 508**	**154 494**	**937 800**	**1 005 874**	**967 072**

Non-operating items and non-recurring items	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Income from associated companies - non core	0	0	0	0	0	0	2 413	2 511	11 662	15 431	6 120	1271
Termination lease	0	0	0	0	0	0	0	0	0	-86 758	0	0
Financial income	27 181	24 897	54 772	387 620	378 461	101 676	478 244	261 790	88 660	93 336	76 807	38 970
Financial expenses	-124 985	-100 054	-151 837	-209 196	-291 668	-804 935	-317 603	-501 349	-600 752	-548 214	-498 171	-547 955
Realised agio	0	36 877	-104 306	32 731	58 960	-238 056	240 102	30 476	-48 132	31 502	-166 497	0
Unrealised agio	0	0	0	0	0	0	0	0	0	0	0	-538 734
Net other non operating items	**-97 804**	**-38 280**	**-201 371**	**211 155**	**145 753**	**-941 315**	**403 156**	**-206 572**	**-548 562**	**-494 703**	**-581 741**	**-1 106 448**
Tax on net operating items (tax shield)	5 453	12 969	6 437	-5 779	-53 047	1 117 268	79 780	177 078	-10 279	-46 547	60 637	251227
Concern result	**155 542**	**40 847**	**483 411**	**898 321**	**703 603**	**26 929**	**1 037 793**	**19 014**	**-404 347**	**396 550**	**484 770**	**111 851**
Total other comprehensive income	0	0	0	0	0	106 812	-15 316	-4 178	6 427	-57 684	67 244	196 606
Comprehensive income	**155 542**	**40 847**	**483 411**	**898 321**	**703 603**	**133 741**	**1 022 477**	**14 836**	**-397 920**	**338 866**	**552 014**	**308 457**

Tax adjustments	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Profit before tax	164 727	61 776	499 373	923 539	1106 215	-144 065	866 352	133 172	-396 910	362 447	541179	144 708
Reported tax	-9 185	-20 929	-15 962	-25 278	-402 612	170 994	171441	-114 158	-7 437	34 103	-56 409	-32 857
Effective tax rate	6%	34%	3%	3%	36%	119%	-20%	86%	-2%	-9%	10%	23%
Tax shield net financing	5 453	12 969	6 437	-5 779	-53 047	1 117 268	79 780	177 078	-10 279	-46 547	60 637	251227
Tax on core operations	-14 638	-33 898	-22 399	-19 499	-349 565	-946 274	91661	-291236	2 842	80 650	-117 046	-284 084

SOLSTAD OFFSHORE REFORMULATED BALANCE SHEET

Assets	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Account receivables, freight income	164 829	167 642	230 212	356 711	509 840	497 218	466 456	521 736	700 208	518 041	707 846	756 794
Bunkers and other inventories (stock)	14 481	14 799	26 400	18 978	25 954	19 358	39 471	59 377	59 843	73 470	68 893	61 188
Other short-term receivables	38 977	58 515	123 496	139 737	202 257	141 091	264 653	215 586	161 213	199 640	267 653	357 660
Current assets	**218 287**	**240 956**	**380 108**	**515 426**	**738 051**	**657 667**	**770 580**	**796 699**	**921 264**	**791 151**	**1 044 392**	**1 175 642**
Accounts payable	46 605	51 009	29 297	94 269	135 337	167 399	162 735	311 048	257 067	187 303	111 495	371 529
Current taxes payable	5 351	15 407	40 460	26 922	56 335	50 966	91 845	105 677	75 364	67 702	15 321	40 697
Accrued salaries and related taxes	19 882	21 163	27 726	34 874	43 275	40 855	49 756	50 650	58 468	46 388	89 083	51 502
Other current liabilities	43 425	236 886	322 975	111 434	133 228	206 306	205 851	250 200	275 185	391 754	323 112	353 750
Deferred tax	46 247	54 695	23 771	16 604	25 417	-	26 970	-	-	3 000	-	-
Deferred income	89 763	3 068	25 915	23 657	20 100	-	8 596	-	-	-	-	9 339
Current liabilities	**115 263**	**324 465**	**470 144**	**307 760**	**413 692**	**465 526**	**545 753**	**717 575**	**666 084**	**696 147**	**539 011**	**826 817**
Net working capital	**103 024**	**-83 509**	**-90 036**	**207 666**	**324 359**	**192 141**	**224 827**	**79 124**	**255 180**	**95 004**	**505 381**	**348 825**
Capitalized periodic maintenance	45 388	62 313	56 892	120 911	130 855	201 928	177 386	252 378	234 822	245 830	230 255	290 253
Investments in associated companies	167 228	191 473	18 146	158 055	220 567	4 135	0	0	0	192 372	309 531	345 691
Vessels and new build contracts	3 812 107	4 278 598	5 251 679	5 352 619	6 491 230	7 289 858	9 678 572	13 490 052	13 617 667	12 400 695	11 858 533	14 417 111
Other tangible fixed assets	20 601	18 746	21 970	43 793	38 172	33 338	28 986	28 420	23 421	18 393	18 824	22 717
Deferred tax asset	-	-	-	-	-	24 244	-	17 362	43 061	115 397	58 334	61 366
Loans to associated companies and joint ventures	24 094	70 321	18 732	15 327	12 262	-	-	-	87 849	41 687	24 517	30 210
Sum tangible and intangible assets	**4 069 418**	**4 621 451**	**5 367 419**	**5 690 705**	**6 893 086**	**7 553 503**	**9 884 944**	**13 788 212**	**14 006 820**	**13 014 974**	**12 500 594**	**15 167 948**
Invested capital excluding goodwill	**4 172 442**	**4 537 942**	**5 277 383**	**5 898 371**	**7 217 445**	**7 745 644**	**10 109 771**	**13 867 336**	**14 262 000**	**13 109 978**	**13 005 975**	**15 516 773**
Goodwill	6 454	-	-	-	-	-	-	-	-	-	-	-
Invested capital including goodwill	**4 178 896**	**4 537 942**	**5 277 383**	**5 898 371**	**7 217 445**	**7 745 644**	**10 109 771**	**13 867 336**	**14 262 000**	**13 109 978**	**13 005 975**	**15 516 773**

LIABILITIES AND NET INTEREST BEARING DEBT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total equity	**1 990 968**	**2 427 124**	**2 693 790**	**3 173 787**	**3 717 458**	**3 697 623**	**4 630 319**	**4 989 443**	**4 415 914**	**4 624 932**	**4 954 275**	**5 057 532**
Average equity		2 209 046	2 560 457	2 933 789	3 445 623	3 707 541	4 163 971	4 809 881	4 702 679	4 520 423	4 789 604	5 005 904
Non-current taxes payable	-	-	-	-	356 733	214 817	-	77 543	39 931	-	-	-
Pension liabilities	-	9 530	10 520	12 813	3 573	-	-	-	-	67 398	72 018	98 781
Other financial liabilities	37 794	90 400	100 000	280 706	46 699	92 466	10 392	73 103	62 687	51 112	37 081	65 888
Other long-term loans	85 167	92 016	41 328	32 002	39 117	37 338	34 668	33 600	36 487	50 954	161 099	331 886
Debt to credit institutions	2 576 048	2 471 822	3 600 414	3 863 899	3 987 948	4 793 870	6 379 214	7 470 527	9 472 153	7 114 130	7 539 122	10 094 844
Bank overdraft	56 912	83 940	119 925	-	409 824	438 694	100 332	102 734	102 205	64 938	90 933	121 908
Dividend	0	0	0	0	0	0	0	0	0	0	0	25961
Current interest bearing liabilities	-	-	-	622 751	1 339 624	473 023	565 866	2 101 877	878 016	2 057 178	1 631 593	1 122 371
Total interest-bearing debt	**2 755 921**	**2 747 708**	**3 872 187**	**4 812 171**	**6 183 518**	**6 050 208**	**7 090 472**	**9 859 384**	**10 591 479**	**9 406 310**	**9 531 846**	**11 861 639**
Investmentents in associated companies - non-core	-	-	-	-	-	-	18 789	21 300	13 798	29 100	29 001	43 323
Market based shares	0	0	0	126 393	60 028	16 972	306	321	344	394	475	382
Other current financial assets	0	0	0	0	0	46 857	77 348	11 834	14 569	25 524	0	0
Other financial assets	208 227	206 610	268 717	647 666	565 651	0	44 068	40 038	31 140	51 651	21 881	4 031
Other long-term receivables	11 751	5 886	12 814	19 202	45 432	15 072	5 371	9 589	27 060	2 462	50 183	30 935
Assets held for sale	0	0	0	0	0	0	0	12 790	4644	0	135754	0
Pension funds	3 126	0	0	0	0	9 954	17 074	9 350	2 682	0	0	0
Investments in stocks and shares	14 831	15 002	173 648	3 223	959 708	1083 396	2 793	4 552	5 074	5 031	2 991	2 991
Bank deposits and cash equivalents	466 067	467 157	833 414	1 291 106	1052 715	829 936	1444 672	871 718	646 084	807 105	1 239 864	1 320 736
Total interest bearing assets	**704 002**	**694 655**	**1 288 593**	**2 087 590**	**2 683 534**	**2 002 187**	**1 611 021**	**981 492**	**745 395**	**921 267**	**1 480 149**	**1 402 398**
Net interest-bearing debt	**2 051 919**	**2 053 053**	**2 583 594**	**2 724 581**	**3 499 984**	**4 048 021**	**5 479 451**	**8 877 892**	**9 846 084**	**8 485 043**	**8 051 697**	**10 459 241**
Average net interest-bearing debt		2 052 486	2 318 324	2 654 088	3 112 283	3 774 003	4 763 736	7 178 672	9 361 988	9 165 564	8 268 370	9 255 469
Invested capital	**4 042 887**	**4 480 177**	**5 277 384**	**5 898 368**	**7 217 442**	**7 745 644**	**10 109 770**	**13 867 335**	**14 261 998**	**13 109 975**	**13 005 972**	**15 516 773**
Average invested capital		4 261 532	4 878 781	5 587 876	6 557 905	7 481 543	8 927 707	11 988 553	14 064 667	13 685 987	13 057 974	14 261 373

FARSTAD SHIPPING REFORMULATED INCOME STATEMENT

Core operations (NOK 1000)	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total freight income	1 932 110	2 292 736	2 943 241	3 237 111	3 323 899	3 578 870	3 709 941	3 998 418	4 352 040
Other operating income	8 800	25 500	15 383	20 468	3 802	6 019	4 083	8 749	16 898
Profit on sale of fixed assets	0	196 068	61 050	0	1 114	16 909	-10 252	7 044	15 015
Gross profit	**1 940 910**	**2 514 304**	**3 019 674**	**3 257 579**	**3 328 815**	**3 601 798**	**3 703 772**	**4 014 211**	**4 383 953**
Crewing expenses vessels	-584 954	-702 938	-789 673	-926 878	-1 161 855	-1 389 567	-1 514 873	-1 569 794	-1 748 411
Other operating expenses vessels	-256 101	-305 675	-350 428	-421 208	-582 968	-559 231	-593 965	-637 354	-728 912
Administration	-112 748	-128 857	-150 443	-173 333	-197 830	-234 565	-288 736	-283 132	-265 167
Total Expenses	**-953 803**	**-1 137 470**	**-1 290 544**	**-1 521 419**	**-1 942 653**	**-2 183 363**	**-2 397 574**	**-2 490 280**	**-2 742 490**
EBITDA	**987 107**	**1 376 834**	**1 729 130**	**1 736 160**	**1 386 162**	**1 418 435**	**1 306 198**	**1 523 931**	**1 641 463**
- Depreciation	-286 359	-336 763	-365 438	-454 909	-516 237	-544 808	-575 928	-654 407	-856 143
EBIT	**700 748**	**1 040 071**	**1 363 692**	**1 281 251**	**869 925**	**873 627**	**730 270**	**869 524**	**785 320**
- Tax on core operations	-38 520	-1 140 488	474 357	457 007	-107 353	67 891	-28 937	-61 640	2 227 243
NOPAT (Net Operating Profit after tax)	**662 228**	**-100 417**	**1 838 049**	**1 738 258**	**762 572**	**941 518**	**701 333**	**807 884**	**3 012 563**

Non Operating Items & Non-Recurring Items (NOK 1000)	2006	2007	2008	2009	2010	2011	2012	2013	2014
Financial Income	41 787	70 493	86 200	78 243	74 582	64 632	48 305	49 995	35 243
- Financial expenses	-213 016	-250 138	-307 942	-304 153	-395 155	-410 900	-435 844	-554 201	-617 505
Realised agio (disagio)	22 668	26 197	83 122	18 843	108 521	25 436	15 827	25 814	71 123
Unrealised agio (disagio)	22 674	38 584	-315 804	349 506	-165 324	-92 915	-33 861	-111 161	-281 179
Net Other Non Operating Items	**-125 887**	**-114 864**	**-454 424**	**142 439**	**-377 376**	**-413 747**	**-405 573**	**-589 553**	**-792 318**
- Tax non operating items (tax shield)	6 920	125 954	-158 070	50 806	46 570	-29 754	16 071	41 793	-2 247 090
Concern result	**543 261**	**-89 327**	**1 225 555**	**1 931 503**	**431 766**	**498 017**	**311 831**	**260 124**	**-26 845**
Total other comprehensive income	0	0	-59 674	76 017	15 707	-118 522	-46 303	-40 999	-69 825
Comprehensive income	**543 261**	**-89 327**	**1 165 881**	**2 007 520**	**447 473**	**379 495**	**265 528**	**219 125**	**-96 670**

Tax adjustments	2006	2007	2008H	2009H	2010H	2011H	2012H	2013H	2014H
Profit before tax	574 861	925 207	909 268	1 423 690	492 549	530 311	324 697	279 971	-6 998
Reported tax	-31 600	-1 014 534	316 287	507 813	-60 783	38 137	-12 866	-19 847	-19 847
Effective tax rate	5 %	110 %	-35 %	-36 %	12 %	-7 %	4 %	7 %	-284 %
Tax shield net financing	6 920	125 954	-158 070	50 806	46 570	-29 754	16 071	41 793	-2 247 090
Tax core operations	-38 520	-1 140 488	474 357	457 007	-107 353	67 891	-28 937	-61 640	2 227 243

- We have reformulated their income statement so it matches SOFFs
- We have classified profit on sale of fixed assets as operational income as it is a recurring item. This matches SOFFs reformulated income statement.
- Operating expenses consist of the same items as SOFFs operating expenses
- As Farstad operates in several countries we have chosen to use the effective tax rate when segregating the tax into operating and financial tax.
- Net non-operating items consists of the same items as SOFFs
- Comprehensive income is thereby comparable to SOFFs

FARSTAD SHIPPING REFORMULATED BALANCE SHEET

ASSETS	2006	2007	2008	2009	2010	2011	2012	2013	2014
Account receivables, freight income	315 716	341 200	533 327	473 130	471 567	555 669	624 114	616 853	622 641
Bunkers and other inventories	17 438	10 525	19 665	29 743	40 480	41 319	57 020	61 969	84 278
Other short-term receivables	101 080	156 963	144 245	296 126	210 853	181 273	229 635	281 865	267 003
Current operating assets	**434 234**	**508 688**	**697 237**	**798 999**	**722 900**	**778 261**	**910 769**	**960 687**	**973 922**
Accounts payables	112 482	165 574	204 593	177 019	231 161	234 242	224 170	281 623	281 949
Taxes payable	18 180	122 073	99 514	22 325	46 487	38 046	27 158	31 639	26 540
Other current liabilties	189 187	183 192	220 041	253 193	412 534	468 783	431 098	509 485	781 233
Deferred tax liabilities	21 946	7 989	-	14 902	30 279	48 125	43 607	41 790	42 657
Tax liabilities	-	-	-	-	9 516	4 758	-	-	-
Current operating liabilities	**341 795**	**478 828**	**524 148**	**467 439**	**729 977**	**793 954**	**726 033**	**864 537**	**1 132 379**
Net working capital	**92 439**	**29 860**	**173 089**	**331 560**	**-7 077**	**-15 693**	**184 736**	**96 150**	**-158 457**
Vessels and newbuild contracts	6 578 458	7 293 972	8 366 998	10 428 954	11 531 701	12 118 744	12 922 044	14 512 691	16 018 539
Deferred tax benefit	-	-	54 831	-	47 242	67 894	68 765	63 506	83 865
Sum tangible and intangible assets	**6 578 458**	**7 293 972**	**8 421 829**	**10 428 954**	**11 578 943**	**12 186 638**	**12 990 809**	**14 576 197**	**16 102 404**
Invested capital excluding goodwill	**6 670 897**	**7 323 832**	**8 594 918**	**10 760 514**	**11 571 866**	**12 170 945**	**13 175 545**	**14 672 347**	**15 943 947**
Goodwill	30 247	30 247	30 247	30 247	30 247	112 090	100 032	96 778	101 938
Invested capital including goodwill	**6 701 144**	**7 354 079**	**8 625 165**	**10 790 761**	**11 602 113**	**12 283 035**	**13 275 577**	**14 769 125**	**16 045 885**

LIABILITIES AND NET INTEREST BEARING DEBT	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total equity	**3 533 712**	**3 430 107**	**4 439 988**	**6 251 895**	**6 582 368**	**6 820 235**	**6 775 849**	**6 877 974**	**6 624 758**
Average total equity	3 309 868	3 481 910	3 935 048	5 345 942	6 417 132	6 701 302	6 798 042	6 826 912	6 751 366
Pension liabilities	57 510	56 721	56 181	60 118	61 901	64 469	112 324	105 431	97 043
Bonds	300 000	-	-	-	-	-	-	-	-
Tax liabilities and environmental fund	-	880 614	508 476	-	-	-	-	-	-
Interest-bearing mortgage debt	2 987 416	3 805 923	4 719 722	5 466 439	6 287 220	5 855 651	6 595 642	8 702 740	9 932 526
Current portion of interest-bearing debt	559 319	695 322	510 681	771 771	991 818	1 012 058	1 295 915	945 750	1 383 119
Leasing obligation	294 988	-	-	-	-	-	-	-	-
Forward currency and interest contracts	-	-	153 134	-	-	-	44 497	-	-
Currency and interest swap contracts	-	-	-	-	24 900	45 791	54 970	40 633	224 694
Total interest bearing debt	**4 199 233**	**5 438 580**	**5 948 194**	**6 298 388**	**7 365 839**	**6 977 969**	**8 103 348**	**9 794 554**	**11 637 382**
Other long-term receivables	7 184	9 927	14 517	24 977	27 824	35 967	5 008	17 861	16 302
Shares	4 456	4 444	5 123	5 170	5 204	5 209	5 078	5 071	5 059
Forward currency and interest contracts	47 875	38 812	-	15 671	43 364	25 076	26 456	776	-
Other current financial assets	-	-	198 998	188 291	133 338	106 661	71 932	79 028	73 818
Cash and cash equivalents	972 286	1 461 425	1 544 379	1 525 413	2 136 364	1 342 256	1 495 147	1 800 667	2 121 076
Total interest bearing assets	**1 031 801**	**1 514 608**	**1 763 017**	**1 759 522**	**2 346 094**	**1 515 169**	**1 603 621**	**1 903 403**	**2 216 255**
Net interest-bearing debt	**3 167 432**	**3 923 972**	**4 185 177**	**4 538 866**	**5 019 745**	**5 462 800**	**6 499 727**	**7 891 151**	**9 421 127**
Average NIBD	2 920 614	3 545 702	4 054 575	4 362 022	4 779 306	5 241 273	5 981 264	7 195 439	8 656 139
Invested capital	**6 701 144**	**7 354 079**	**8 625 165**	**10 790 761**	**11 602 113**	**12 283 035**	**13 275 576**	**14 769 125**	**16 045 885**
Average invested capital	**6 230 482**	**7 027 612**	**7 989 622**	**9 707 963**	**11 196 437**	**11 942 574**	**12 779 306**	**14 022 351**	**15 407 505**

- Net working capital consists of the same items as SOFFs
- Invested capital is split into with and without goodwill to match SOFFs invested capital

SIEM OFFSHORE REFORMULATED INCOME STATEMENT

Core operations (NOK 1000)	2006	2007	2008	2009	2010	2011	2012	2013	2014
Operating revenue	67 965	151 316	182 395	154 942	194 803	281 631	256 169	267 931	351 747
Other operating income	5 589	8 026	10 378	28 616	33 498	58 997	112 044	96 023	139 566
Gain/loss on sales of assets	11160	-251	-8011	1047	6281	75	13692	29827	18728
Gross profit	**84 714**	**159 091**	**184 762**	**184 605**	**234 582**	**340 703**	**381 905**	**393 781**	**510 041**
Results from associated companies	8 151	-35	483	7 660	10 036	2 367	463	2 046	1 808
Gross profit including income from associated companies	**92 865**	**159 056**	**185 245**	**192 265**	**244 618**	**343 070**	**382 368**	**395 827**	**511 849**
Crew expenses	-12 958	-36 098	-48 773	-59 671	-73 707	-108 927	-137 128	-113 945	-124 451
Other operating expenses	-40 116	-43 445	-56 262	-65 953	-79 953	-108 749	-120 487	-127 347	-172 735
Total expenses	**-53 074**	**-79 543**	**-105 035**	**-125 624**	**-153 660**	**-217 676**	**-257 615**	**-241 292**	**-297 186**
EBITDA	**39 791**	**79 513**	**80 210**	**66 641**	**90 958**	**125 394**	**124 753**	**154 535**	**214 663**
Depreciation and amortization	-10 895	-18 961	-32 080	-37 191	-59 286	-81 348	-82 749	-75 841	-96 883
Impairment of vessels	0	0	0	0	0	0	0	0	-29000
EBIT	**28 896**	**60 552**	**48 130**	**29 450**	**31 672**	**44 046**	**42 004**	**78 694**	**88 780**
Tax on core operations	-770	-7 719	3 941	529	-1 910	30 542	-10 592	15 711	-3 299
NOPAT	**28 126**	**52 833**	**52 071**	**29 979**	**29 762**	**74 588**	**31 412**	**94 405**	**85 481**

Non-operating items and non-recurring items	2006	2007	2008	2009	2010	2011	2012	2013	2014
Gain on sale of interest rate derivatives	0	54	342	6 097	368	368	368	368	368
Gain /loss on currency exchange forward contracts	20 789	39 618	-47 308	52 805	-4 789	1 450	12 479	-7 756	-3 023
Financial income	805	3 667	10 588	7 760	8 130	5 719	4 161	5 434	9 091
Financial expenses	-5 460	-13 756	-17 283	-13 238	-28 027	-44 785	-42 302	-36 132	-55 868
Net currency gain/loss (agio/disagio)	718	8 836	-18 283	19 124	2 962	-10 624	2 916	-22 651	34 092
Net other non operating items	**16 852**	**38 419**	**-71 944**	**72 548**	**-21 356**	**-47 872**	**-22 378**	**-60 737**	**-15 340**
Tax on net operating Items (tax shield)	-449	-4 898	-5 891	1 302	1 288	-33 195	5 643	-12 126	570
Concern result	**44 529**	**86 354**	**-25 764**	**103 829**	**9 694**	**-6 479**	**14 677**	**21 542**	**70 711**
Total other comprehensive income	0	0	-20 037	25 545	672	-5 122	5 232	-7 165	-24 212
Comprehensive income	**44 529**	**86 354**	**-45 801**	**129 374**	**10 366**	**-11 601**	**19 909**	**14 377**	**46 499**

Tax adjustments									
Profit before tax	45 748	98 971	-23 814	101 998	10 316	-3 826	19 626	17 957	73 440
Reported tax	-1 219	-12 617	-1 950	1 831	-622	-2 653	-4 949	3 585	-2 729
Effective tax rate	3 %	13 %	-8 %	-2 %	6 %	-69 %	25 %	-20 %	4 %
Tax shield net financing	-449	-4 898	-5 891	1 302	1 288	-33 195	5 643	-12 126	570
Tax core operations	-770	-7 719	3 941	529	-1 910	30 542	-10 592	15 711	-3 299

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SIEM OFFSHORE REFORMULATED BALANCE SHEET

Assets	2006	2007	2008	2009	2010	2011	2012	2013	2014
Accounts receivable	21 191	49 793	36 119	47 907	53 290	46 544	44 221	53 198	80 494
Inventories	1 518	2 102	1 215	1 943	4 399	9 249	7 772	7 555	10 229
Other short-term receivables	14 521	20 191	39 279	50 151	23 035	30 730	38 461	32 737	56 430
Current assets	**37 230**	**72 086**	**76 613**	**100 001**	**80 724**	**86 523**	**90 454**	**93 490**	**147 152**
Accounts payable	4 291	9 478	5 292	8 148	7 119	7 311	5 377	16 253	29 374
Current taxes payable	540	15 260	13 351	13 290	14 955	3 160	8 856	3 759	0
Other current liabilities	9 705	19 413	16 215	32 194	32 528	44 874	50 882	44 061	126 216
Deferred taxes	7 907	-	-	-	-	-	-	-	-
Tax liabilities	0	8 925	4 027	2 589	1 936	13 337	6 799	0	0
Current liabilities	**22 443**	**53 076**	**38 885**	**56 221**	**56 538**	**68 682**	**71 914**	**64 073**	**155 590**
Net working capital	**14 787**	**19 010**	**37 728**	**43 780**	**24 186**	**17 841**	**18 540**	**29 417**	**-8 438**
Capitalized project costs	4 107	2 910	1 206	546	19 102	13 570	12 153	11 027	10 965
Investment in associated companies	18 723	15 718	15 432	25 352	28 591	4 218	4 222	20 951	37 015
Vessels and new build contracts	236 655	501 113	613 998	970 432	1 374 790	1 519 747	1 368 548	1 568 043	1 874 208
Deferred tax assets	0	3 328	3 430	4 888	6 254	6 254	6 885	11 770	12 591
Intangible assets	7 939	9 232	9 232	9 232	8 903	29 441	30 020	29 737	25 937
Sum tangible and intangible assets	**267 424**	**532 301**	**643 298**	**1 010 450**	**1 437 640**	**1 573 230**	**1 421 828**	**1 641 528**	**1 960 716**
Invested capital excluding goodwill	**282 211**	**551 311**	**681 026**	**1 054 230**	**1 461 826**	**1 591 071**	**1 440 368**	**1 670 945**	**1 952 278**
Goodwill	0	0	0	0	0	0	0	0	0
Invested capital including goodwill	**282 211**	**551 311**	**681 026**	**1 054 230**	**1 461 826**	**1 591 071**	**1 440 368**	**1 670 945**	**1 952 278**

LIABILITIES AND NET INTEREST BEARING DEBT	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total equity	**142 115**	**465 179**	**425 944**	**702 728**	**769 070**	**769 750**	**786 397**	**793 888**	**823 648**
Average equity		303 647	445 562	564 336	735 899	769 410	778 074	790 143	808 768
Long-term borrowings	172 384	244 704	250 410	403 134	739 095	839 031	714 699	863 074	1 087 757
Other non-current liabilities	7 854	344	284	1 772	6 878	17 865	14 992	30 438	38 532
Pension liabilities	290	840	480	235	512	199	742	0	0
CIRR Loan	0	93 467	66 482	73 225	65 006	56 469	53 194	41 718	28 453
Deferred CIRR	0	23 429	22 278	3 627	3 259	2 891	2 523	0	0
Derivative financial instruments	343	0	30 801	0	0	10 171	12 339	11 085	0
Short-term borrowings	4 557	23 891	28 286	43 036	71 125	95 472	82 287	98 426	126 603
Total interest-bearing debt	**185 428**	**386 675**	**399 021**	**525 029**	**885 875**	**1 022 098**	**880 776**	**1 044 741**	**1 281 345**
Cash	34 384	188 308	73 371	91 088	115 185	136 635	107 068	101 206	117 623
Derivative financial instruments	9 259	15 598	0	401	3 731	0	5 829	0	0
Asset held for sale	800	800	800	800	0	0	53 604	18 121	0
CIRR Loan deposit	0	93 467	66 482	73 225	65 006	56 469	53 194	41 718	28 453
Long-term receivables	888	2 369	3 287	8 013	9 197	7 674	7 111	6 639	6 639
Total interest bearing assets	**45 331**	**300 542**	**143 940**	**173 527**	**193 119**	**200 778**	**226 806**	**167 684**	**152 715**
Net interest-bearing debt	**140 097**	**86 133**	**255 081**	**351 502**	**692 756**	**821 320**	**653 970**	**877 057**	**1 128 630**
Average net interest-bearing debt		113 115	170 607	303 292	522 129	757 038	737 645	765 514	1002 844
Invested capital	**282 212**	**551 312**	**681 025**	**1 054 230**	**1 461 826**	**1 591 070**	**1 440 367**	**1 670 945**	**1 952 278**
Average invested capital		416 762	616 169	867 628	1258 028	1526 448	1515 719	1555 656	1811 612

- Net working capital consists of the same items as SOFFs
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DOF REFORMULATED INCOME STATEMENT

Core operations (NOK 1000)	2006	2007	2008	2009	2010	2011	2012	2013	2 014
Total freigt income	2 796 410	3 285 576	3 969 672	4 258 507	5 403 000	6 503 000	8 136 000	9 754 000	10 681 000
Other operating income	214 468	168 805	370 049	68 769	59 000	33 000	210 000	-331 000	-17 000
Gross profit	**3 010 878**	**3 454 381**	**4 339 721**	**4 327 276**	**5 462 000**	**6 536 000**	**8 346 000**	**9 423 000**	**10 664 000**
Investments in subsidiares/affiliated companies	64 890	42 681	124 834	191 749	-5 000	0	5 000	1 000	0
Gross profit incl Income from assiciated companies	**3 075 768**	**3 497 062**	**4 464 555**	**4 519 025**	**5 457 000**	**6 536 000**	**8 351 000**	**9 424 000**	**10 664 000**
Crew expenses	-739 470	-1 282 683	-1 636 825	-1 960 483	-2 486 000	-3 121 000	-3 167 000	-3 969 000	-4 077 000
Bunker costs	0	0	0	0	-85000	-129000	-187000	0	0
- Other operating expenses	-979 277	-942 472	-1 147 178	-1 133 137	-1 181 000	-1 238 000	-1 992 000	-2 682 000	-3 170 000
Total Expenses	**-1 718 747**	**-2 225 155**	**-2 784 003**	**-3 093 620**	**-3 752 000**	**-4 488 000**	**-5 346 000**	**-6 651 000**	**-7 170 000**
EBITDA	**1 357 021**	**1 271 907**	**1 680 552**	**1 425 405**	**1 705 000**	**2 048 000**	**3 005 000**	**2 773 000**	**3 494 000**
- Depreciation	-417 010	-529 791	-643 265	-1 015 715	-1 166 000	-897 000	-1 110 000	-1 193 000	-1 045 000
EBITDA	**940 011**	**742 116**	**1 037 287**	**409 690**	**539 000**	**1 151 000**	**1 895 000**	**1 580 000**	**2 449 000**
- Tax on core operations	-89 613	-493 623	-1 878 588	-82 172	40 425	-309 821	607 830	117 198	454 814
NOPAT (Net Operating Profit after tax)	**850 398**	**248 493**	**-841 301**	**327 518**	**579 425**	**841 179**	**2 502 830**	**1 697 198**	**2 903 814**

Non Operating Items & Non-Recurring Items (NOK 1000)	2006	2007	2008	2009	2010	2011	2012	2013	2014
Financial Income	234 647	456 319	479 719	485 122	76 000	69 000	71 000	62 000	82 000
- Financial expenses	-414 969	-658 555	-655 382	-647 904	-953 000	-1 189 000	-1 325 000	-1 434 000	-1 355 000
Realised agio (disagio)	0	0	-984 747	0	38 000	-56 000	-81 000	39 000	-203 000
Unrealised agio (disagio)	-33 255	122 801	0	757 611	97 000	-445 000	-206 000	-606 000	-336 000
Net change in unrealised gain/loss on derivatives	0	0	0	0	3 000	-221000	-89 000	-5 000	-217 000
Net Other Non Operating Items	**-213 577**	**-79 435**	**-1 160 410**	**594 829**	**-739 000**	**-1 842 000**	**-1 630 000**	**-1 944 000**	**-2 029 000**
- Tax non operating items (tax shield)	20 361	52 837	2 101 571	-119 306	-55 425	495 821	-522 830	-144 198	-376 814
Concern result	**657 182**	**221 895**	**99 860**	**803 041**	**-215 000**	**-505 000**	**350 000**	**-391 000**	**498 000**
Total other comprehensive income	0	0	123 142	70 366	89 000	-217 000	-427 000	-222 000	26 000
Comprehensive income	**657 182**	**221 895**	**223 002**	**873 407**	**-126 000**	**-722 000**	**-77 000**	**-613 000**	**524 000**

Tax adjustments (NOK 1000)	2006	2007	2008	2009	2010	2011	2012	2013	2014
Profit before tax	726 434	662 681	-123 123	1 004 519	-200 000	-691000	265 000	-364 000	420 000
Reported tax	-69 252	-440 786	222 983	-201 478	-15 000	186 000	85 000	-27 000	78 000
Effective tax rate	10 %	67 %	181 %	20 %	-8 %	27 %	-32 %	-7 %	-19 %
Tax shield net financing	20 361	52 837	2 101 571	-119 306	-55 425	495 821	-522 830	-144 198	-376 814
Tax core operations	-89 613	-493 623	-1 878 588	-82 172	40 425	-309 821	607 830	117 198	454 814

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DOF REFORMULATED BALANCE SHEET

Assets	2006	2007	2008	2009	2010	2011	2012	2013	2014
Accounts receivables (freight income)	541080	719886	1151004	1235287	1051224	1534000	1393000	1832000	2331000
Fuel reserves and other inventory	4057	3784	13441	16116	28133	51000	56000	70000	84000
Other current receivables	208784	328875	272025	492128	904858	562000	466000	524000	626000
Current assets	**753 921**	**1 052 545**	**1 436 470**	**1 743 531**	**1 984 215**	**2 147 000**	**1 915 000**	**2 426 000**	**3 041 000**
Accounts payables	274397	273500	419924	216373	414537	857000	683000	1040000	1192000
Tax payables	28877	61224	86841	164914	100240	141000	122000	107000	190000
Other current liabilities	301933	392367	601507	420317	322515	790000	295000	290000	409000
Deferred taxes liabilities	118229	408738	353438	513472	402474	219000	161000	78000	49000
Current liabilities	**723 436**	**1 135 829**	**1 461 710**	**1 315 076**	**1 839 766**	**2 007 000**	**1 261 000**	**1 515 000**	**1 840 000**
Net working capital	30485	-83284	-25240	428455	144449	140000	654000	911000	1201000
Investments in affiliated companies and joint ventures	322537	1404501	139696	77170	70687	65000	73000	1188000	1246000
Vessels - Newbuilds - Machinery	7445867	11880609	14788340	17296772	21631607	25687000	26602000	23888000	23866000
Deferred tax assets	0	12242	123330	0	28843	211000	295000	327000	638000
Other intangible assets	0	0	5500	0	0	0	0	0	0
Sum tangible and intangible assets	**7 768 404**	**13 297 352**	**15 056 866**	**17 373 942**	**21 731 137**	**25 963 000**	**26 970 000**	**25 403 000**	**25 750 000**
Invested capital excluding Goodwill	**7 798 889**	**13 214 068**	**15 031 626**	**17 802 397**	**21 875 586**	**26 103 000**	**27 624 000**	**26 314 000**	**26 951 000**
Goodwill	375422	526063	499661	441839	477646	401000	409000	403000	418000
Invested capital including Goodwill	**8 174 311**	**13 740 131**	**15 531 287**	**18 244 236**	**22 353 232**	**26 504 000**	**28 033 000**	**26 717 000**	**27 369 000**

LIABILITIES AND NET INTEREST BEARING DEBT	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total equity	**3 290 860**	**4 554 786**	**5 498 819**	**6 809 076**	**6 727 969**	**6 670 000**	**6 720 000**	**6 346 000**	**6 867 000**
Average total equity				6153948	6768523	6698985	6695000	6533000	6606500
Pensions (Other long term provisions)	8086	14809	20141	11955	13245	13000	35000	48000	53000
Bond loans	695303	1473870	1470654	2149321	2753572	2804000	4164000	4722000	4124000
Long term portion of debt to credit instituties	3526640	6994293	8920720	8724597	13085211	16391000	16592000	14527000	13091000
Short term portion of debt to credit institutions	813564	826232	1795407	2128284	1876160	2251000	2247000	3080000	5840000
Long-term liabilites	0	288240	173967	0	0	0	378000	356000	384000
Other non-curent liabilities	1424296	1171055	162357	496856	599624	328000	271000	47000	32000
Other provisions and derivatives (commitments)	105000	212291	228820	77202	77163	256000	0	0	0
Public duties payables	53578	70267	98170	72319	79793	108000	86000	92000	101000
Total interest bearing debt	**6626467**	**11051117**	**12870236**	**13660534**	**18484768**	**22151000**	**23773000**	**22872000**	**23625000**
Investments in shares and units	333	792	5999	8910	9202	7000	5000	5000	5000
Other long-term receivables	3630	5005	269	2721	205452	272000	309000	278000	507000
Cash and cash equivalents	1552895	1859974	2831502	2213742	2644851	2040000	2145000	2219000	2609000
Vessels held for sale	186158	-	-	-	-	-	-	-	-
Total interest bearing assets	**1 743 016**	**1 865 771**	**2 837 770**	**2 225 373**	**2 859 505**	**2 319 000**	**2 459 000**	**2 502 000**	**3 121 000**
Net interest bearing debt	**4 883 451**	**9 185 346**	**10 032 466**	**11 435 161**	**15 625 263**	**19 832 000**	**21 314 000**	**20 370 000**	**20 504 000**
Average net interest bearing debt	4552303	7034399	9608906	10733814	13530212	17728632	20573000	20842000	20437000
Invested capital	**8 174 311**	**13 740 132**	**15 531 285**	**18 244 237**	**22 353 232**	**26 502 000**	**28 034 000**	**26 716 000**	**27 371 000**
Average invested capital	7227682	10957222	14635709	16887761	20298735	24427616	27268000	27375000	27043500

- Net working capital consists of the same items as SOFFs
- Invested capital is split into with and without goodwill to match SOFFs invested capital

HAVILA REFORMULATED INCOME STATEMENT

Core operations	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total freight income (PSV, AHTS, CSV)	425 740	455 380	727 219	775 275	949 756	1 194 507	1 390 650	1 390 650	1 649 302
Other Income	242 699	72 488	83 419	87 575	88 864	115 119	69 181	45 458	49 413
Gain on sale of fixed assets	52 153	147 397	311 813	0	154 402	54 038	1 738	1 606	0
Gross profit	**720 592**	**675 265**	**1 122 451**	**862 850**	**1 193 022**	**1 363 664**	**1 461 569**	**1 437 714**	**1 698 715**
Result from joint venture companies	22 030	-322	9 426	757	-42 130	-2 913	-14 479	-6 683	3 278
Gross profit including income from associated companies	**742 622**	**674 943**	**1 131 877**	**863 607**	**1 150 892**	**1 360 751**	**1 447 090**	**1 431 031**	**1 701 993**
Crewing expenses	-170 964	-122 299	-166 725	-220 220	-322 103	-430 515	-456 064	-466 877	-476 948
Bunker expenses	0	0	-10 446	-8 910	0	0	0	0	0
Vessel expenses	-65 471	-47 988	-166 075	-181 400	-298 690	-360 165	-157 973	-165 886	-215 400
Hire expenses	-14 704	-13 904	-19 505	-22 013	-24 644	-28 943	-120 729	-39 017	-41 448
Other operating expenses	-12 443	-13 465	-19 736	-20 964	-42 177	-55 786	-85 355	-88 358	-102 498
Total expenses	**-263 582**	**-197 656**	**-382 487**	**-453 507**	**-687 614**	**-875 409**	**-820 121**	**-760 138**	**-836 294**
EBITDA	**479 040**	**477 287**	**749 390**	**410 100**	**463 278**	**485 342**	**626 969**	**670 893**	**865 699**
Depreciation	-93 550	-80 535	-98 420	-132 221	-180 288	-205 240	-161 063	-187 716	-268 689
EBIT	**385 490**	**396 752**	**650 970**	**277 879**	**282 990**	**280 102**	**465 906**	**483 177**	**597 010**
Tax on core operations	-58 092	-123 268	119 152	-43 501	2 459 321	98 932	-53 244	-537 275	-452 436
NOPAT	**327 398**	**273 484**	**770 122**	**234 378**	**2 742 311**	**379 034**	**412 662**	**-54 098**	**144 574**

Non-operating items and non-recurring items	2006	2007	2008	2009	2010	2011	2012	2013	2014
Financial income	31 188	55 123	35 091	31 395	11 302	17 075	15 789	17 013	7 251
Financial costs	-75 042	-41 975	-428 280	-151 682	-271 116	-385 642	-425 616	-430 727	-397 275
Net realised and unrealised agio gains	6 144	-69 895	1 575	274 844	-25 709	-11 365	10 546	2 454	-159 452
Net other non operating items	**-37 710**	**-56 747**	**-391 614**	**154 557**	**-285 523**	**-379 932**	**-399 281**	**-411 260**	**-549 476**
Tax on net operating Items (tax shield)	5 683	17 631	-71 680	-24 196	-2 481 334	-134 192	45 630	457 306	416 413
Concern result	**295 371**	**234 368**	**306 828**	**364 739**	**-24 546**	**-135 090**	**59 011**	**-8 052**	**11 511**
Total other comprehensive income	0	0	181	-3 430	1 276	-3 196	6 077	-4 181	0
Comprehensive income	**295 371**	**234 368**	**307 009**	**361 309**	**-23 270**	**-138 286**	**65 088**	**-12 233**	**11 511**

Tax adjustments	2006	2007	2008	2009	2010	2011	2012	2013	2014
Profit before tax	347 780	340 005	259 356	432 436	-2 533	-99 830	66 625	71 917	47 534
Reported tax	-52 409	-105 637	47 472	-67 697	-22 013	-35 260	-7 614	-79 969	-36 023
Effective tax rate	15 %	31 %	-18 %	16 %	-869 %	-35 %	11 %	111 %	76 %
Tax shield net financing	5 683	17 631	-71 680	-24 196	-2 481 334	-134 192	45 630	457 306	416 413
Tax core operations	-58 092	-123 268	119 152	-43 501	2 459 321	98 932	-53 244	-537 275	-452 436

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HAVILA REFORMULATED BALANCE SHEET

Assets	2006	2007	2008	2009	2010	2011	2012	2013	2014
Trade receivables and other receivables	282 061	110 804	234 381	319 710	492 257	393 934	347 085	315 019	451 766
Bunkers and other stocks	0	5 029	5 595	9 965	13 878	15 852	17 610	22 140	18 564
Assets available for sale	0	707 230	0	0	0	0	0	0	0
Current assets	**282 061**	**823 063**	**239 976**	**329 675**	**506 135**	**409 786**	**364 695**	**337 159**	**470 330**
Trade payable	58 331	62 245	128 590	55 403	110 385	49 127	60 061	70 688	77 038
Tax payable	628	7 753	5 849	45 293	59 747	45 305	32 619	48 027	34 843
Other current liabilities	113 076	314 087	300 090	366 964	715 083	514 145	875 126	1 234 746	1 047 567
Other liabilities	0	0	0	0	0	0	0	0	7 302
Deferred tax	74 133	95 981	81 515	140 691	2 669	20 493	80 592	104 624	83 625
Current liabilities	**246 168**	**480 066**	**516 044**	**608 351**	**887 884**	**629 070**	**1 048 398**	**1 458 085**	**1 250 375**
Net working capital	**35 893**	**342 997**	**-276 068**	**-278 676**	**-381 749**	**-219 284**	**-683 703**	**-1 120 926**	**-780 045**

Deferred tax assets	-	-	-	-	14 251	26 289	14 168	8 557	5 511
Vessels and new build contracts	1 752 081	2 050 036	3 286 261	4 694 947	5 392 018	6 947 585	7 659 842	7 521 776	7 471 737
Investment in joint ventures	28 288	1 246	12 118	9 624	0	22 927	57 392	59 856	63 278
Loan to joint ventures	0	0	0	0	0	0	0	0	0
Sum tangible and intangible assets	**1 780 369**	**2 051 282**	**3 298 379**	**4 704 571**	**5 406 269**	**6 996 801**	**7 731 402**	**7 590 189**	**7 540 526**
Invested capital excluding goodwill	**1 816 262**	**2 394 279**	**3 022 311**	**4 425 895**	**5 024 520**	**6 777 517**	**7 047 699**	**6 469 263**	**6 760 481**
Goodwill	-	-	-	-	-	-	-	-	-
Invested capital including goodwill	**1 816 262**	**2 394 279**	**3 022 311**	**4 425 895**	**5 024 520**	**6 777 517**	**7 047 699**	**6 469 263**	**6 760 481**

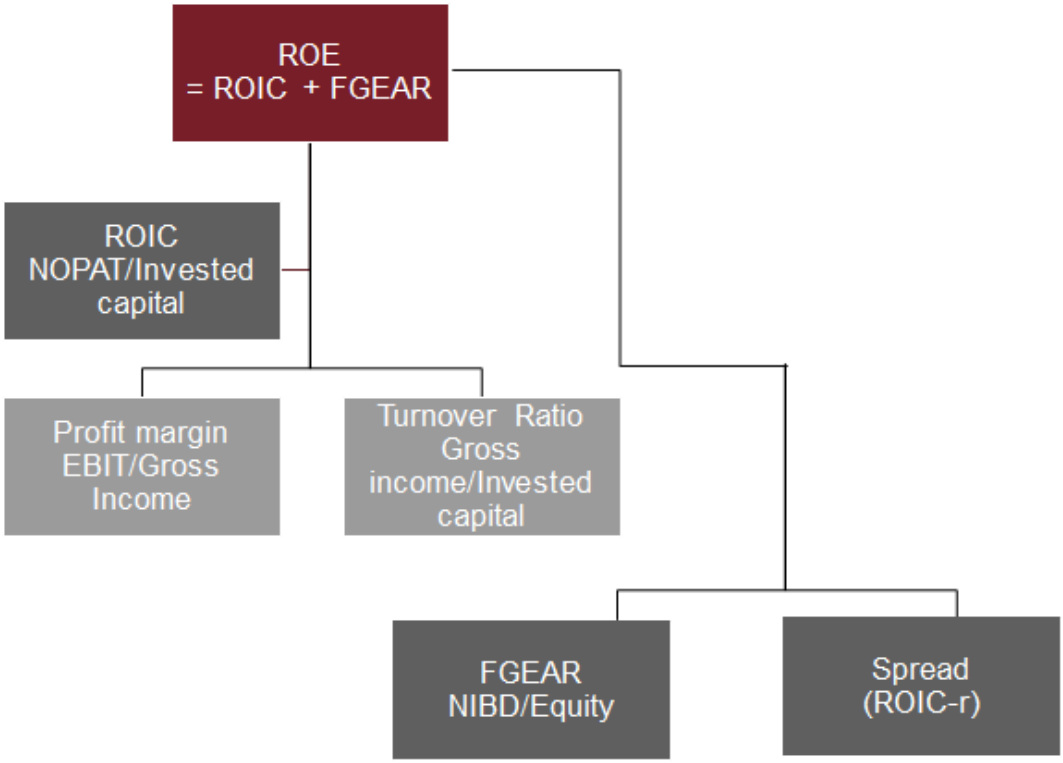
Invested capital	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total equity	**989 431**	**879 477**	**1 125 794**	**1 702 777**	**1 695 038**	**1 809 322**	**2 002 440**	**2 021 605**	**2 020 848**
Average equity	817 892	934 454	1 002 636	1 414 286	1 698 908	1 752 180	1 905 881	2 012 023	2 021 227

Pension liabilities	-	-	-	-	-	230	7 267	4 076	10 002
Other non-current liabilities	-	84 122	183 029	47 975	143 838	170 722	84 507	6 481	12 333
Borrowings	1 501 857	1 990 401	2 459 890	3 137 403	3 945 484	5 308 716	5 525 128	4 827 133	5 011 592
Derivatives	-	-	101 698	7 394	13 097	26 665	18 973	26 014	72 828
Total interest-bearing debt	**1 501 857**	**2 074 523**	**2 744 617**	**3 192 772**	**4 102 419**	**5 506 333**	**5 635 875**	**4 863 704**	**5 106 755**

Trading portfolios	-	53 663	107 565	16 955	3 556	3 556	3 556	-	-
Derivatives	5 679	22 158	26 062	88 748	100 020	30 519	4 533	2 161	139
Bank deposit	668 465	471 006	698 243	347 257	603 414	355 808	497 341	402 696	350 812
Long term receivables	729	12 398	14 556	13 436	63 696	147 814	84 803	10 786	10 966
Net pension assets	0	349	1 518	3 102	1 894	0	0	0	0
Shares	150	150	156	156	356	441	381	403	5 205
Total interest bearing assets	**675 023**	**559 724**	**848 100**	**469 654**	**772 936**	**538 138**	**590 614**	**416 046**	**367 122**
Net interest-bearing debt	**826 834**	**1 514 799**	**1 896 517**	**2 723 118**	**3 329 483**	**4 968 195**	**5 045 261**	**4 447 658**	**4 739 633**
Average net interest-bearing debt	895 789	1 170 817	1 705 658	2 309 818	3 026 301	4 148 839	5 006 728	4 746 460	4 593 646
Invested capital	**1 816 265**	**2 394 276**	**3 022 311**	**4 425 895**	**5 024 521**	**6 777 517**	**7 047 701**	**6 469 263**	**6 760 481**
Average invested capital	1 713 681	2 105 271	2 708 294	3 724 103	4 725 208	5 901 019	6 912 609	6 758 482	6 614 872

- Net working capital consists of the same items as SOFFs
- Invested capital consists of the same items as SOFFs

Appendix 5.2 – DuPont Model
(Source: Petersen & Plenborg (2012) & Own contribution)



DuPont Structure - (Petersen & Plenborg (2012):
"Profit Margin: Revenue, Production, Marketing, Distribution, Administration and Amortization and depreciation
Turnover rate invested capital: Non-current assets, inventories, receivables, operating cash and operating liabilities
WACC: Financial Leverage, creditors required rate of return and investors required rate of return"

Appendix 5.3 – Key financial ratios

(Source: Petersen & Plenborg (2012) & Own contribution)

Decomposition of ROIC

ROIC – before tax	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	12,7%	14,6%	10,7%	5,2%	2,8%	1,1%	6,3%	8,6%	8,8%
DOF	13,7%	7,1%	7,3%	2,5%	2,7%	4,8%	7,1%	5,9%	9,2%
SIOFF		14,5%	7,8%	3,4%	2,5%	2,9%	2,8%	5,1%	4,9%
Havila	22,5%	18,8%	24,0%	7,5%	6,0%	4,7%	6,7%	7,1%	9,0%
Farstad	11,3%	14,9%	17,1%	13,2%	7,8%	7,4%	5,8%	6,2%	5,1%
Average	15,06%	13,99%	13,40%	6,36%	4,37%	4,17%	5,72%	6,58%	7,40%

EBITDA-margin	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	55,45%	62,99%	59,67%	47,13%	37,39%	35,91%	42,89%	42,86%	44,15%
DOF	45,07%	36,82%	38,72%	32,94%	31,22%	31,33%	36,01%	29,43%	32,76%
SIOFF	46,97%	49,98%	43,41%	36,10%	38,77%	36,80%	32,67%	39,24%	42,09%
Havila	66,48%	70,68%	66,76%	47,53%	38,83%	35,59%	42,90%	46,66%	50,96%
Farstad	50,86%	54,76%	57,26%	53,30%	41,64%	39,38%	35,27%	37,96%	37,44%
Average peers	52,34%	53,06%	51,54%	42,47%	37,62%	35,78%	36,71%	38,32%	40,81%

EBIT-Margin	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	37,67%	43,28%	36,09%	18,31%	12,98%	5,09%	25,49%	30,97%	32,24%
DOF	31,22%	21,48%	23,90%	9,47%	9,87%	17,61%	22,71%	16,77%	22,97%
SIOFF	34,11%	38,06%	26,05%	15,95%	13,50%	12,93%	11,00%	19,98%	17,41%
Havila	53,50%	58,76%	58,00%	32,20%	23,72%	20,54%	31,88%	33,61%	35,14%
Farstad	36,10%	41,37%	45,16%	39,33%	26,13%	24,26%	19,72%	21,66%	17,91%
Average peers	38,73%	39,92%	38,28%	24,24%	18,31%	18,83%	21,32%	23,01%	23,36%

Turnover rate invested capital	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	0,34	0,34	0,30	0,28	0,22	0,21	0,25	0,28	0,27
DOF	0,44	0,33	0,31	0,26	0,28	0,27	0,31	0,35	0,40
SIOFF		0,38	0,30	0,21	0,19	0,22	0,25	0,25	0,28
Havila	0,42	0,32	0,41	0,23	0,25	0,23	0,21	0,21	0,26
Farstad	0,31	0,36	0,38	0,34	0,30	0,30	0,29	0,29	0,29
Average	0,38	0,35	0,34	0,27	0,25	0,25	0,26	0,28	0,30

Return on equity

Fiancial gearing	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	0,90	0,90	1,02	1,14	1,49	1,99	2,03	1,73	1,85
DOF	1,70	1,79	1,91	1,74	2,00	2,65	3,07	3,19	3,09
SIOFF		0,37	0,38	0,54	0,71	0,98	0,95	0,97	1,24
Havila	1,10	1,25	1,70	1,63	1,78	2,37	2,63	2,36	2,27
Farstad	0,88	1,02	1,03	0,82	0,74	0,78	0,88	1,05	1,28
Average	1,15	1,07	1,21	1,17	1,35	1,75	1,91	1,86	1,95

Spread	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	19,49%	11,44%	2,74%	15,63%	-0,06%	-4,89%	1,25%	1,43%	-3,01%
DOF	6,16%	1,43%	4,38%	6,23%	-3,28%	-4,42%	-1,54%	-3,67%	-1,16%
SIOFF		39,22%	-37,98%	27,19%	-1,81%	-6,02%	-0,09%	-3,87%	2,91%
Havila	14,45%	8,08%	-1,68%	10,94%	-36,85%	-6,80%	-1,21%	0,13%	-0,76%
Farstad	5,81%	-1,05%	6,20%	20,54%	-0,35%	-0,80%	-1,23%	-2,14%	-16,34%
Average	11,48%	11,82%	-5,27%	16,10%	-8,47%	-4,58%	-0,56%	-1,62%	-3,67%

ROE before tax	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	31%	32%	-4%	21%	3%	-8%	8%	11%	3%
DOF	27%	17%	-2%	16%	-3%	-10%	4%	-6%	6%
SIOFF		33%	-5%	18%	1%	0%	3%	2%	9%
Havila	43%	36%	26%	31%	0%	-6%	3%	4%	2%
Farstad	17%	27%	23%	27%	8%	8%	5%	4%	0%
Average peers	29%	28%	10%	23%	1%	-2%	4%	1%	4%

Liquidity risk analysis

Liquidity cycle	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	42,2	56,2	32,9	32,6	11,1	31,3	10,5	52,8	34,1
DOF	4,0	-9,3	-2,3	36,7	9,8	7,9	29,3	34,1	41,0
SIOFF	79,4	45,9	75,5	103,1	45,3	23,1	26,4	40,1	-8,8
Havila	30,8	274,9	-138,6	-131,2	-146,7	-67,0	-179,4	-294,2	-172,6
Farstad	17,5	4,8	21,5	37,4	-0,8	-1,6	18,2	8,8	-13,3
Average peers	34	14	32	59	18	10	25	28	6

Current ratio	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	1,67	1,78	1,41	1,41	1,11	1,38	1,14	1,94	1,42
DOF	1,04	0,93	0,98	1,33	1,08	1,07	1,52	1,60	1,65
SIOFF	1,66	1,36	1,97	1,78	1,43	1,26	1,26	1,46	0,95
Havila	0,65	1,15	1,71	0,47	0,54	0,57	0,65	0,35	0,23
Farstad	1,27	1,06	1,33	1,71	0,99	0,98	1,25	1,11	0,86
Average peers	1,16	1,12	1,50	1,32	1,01	0,97	1,17	1,13	0,92

EBITDA/Interest ratio	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	-5,0	-9,6	1,4	-3,0	4,7	2,0	2,9	2,7	1,5
DOF	6,4	16,0	1,4	-2,4	2,3	1,1	1,8	1,4	1,7
SIOFF	-2,4	-2,1	1,1	-0,9	4,3	2,6	5,6	2,5	14,0
Havila	12,7	8,4	1,9	-2,7	1,6	1,3	1,6	1,6	1,6
Farstad	7,8	12,0	3,8	-12,2	3,7	3,4	3,2	2,6	2,1
Average peers	6	9	2	-5	3	2	3	2	5

EBIT/Interest ratio	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	-3,4	-6,6	0,8	-1,1	1,6	0,3	1,7	1,9	1,1
DOF	4,4	9,3	0,9	-0,7	0,7	0,6	1,2	0,8	1,2
SIOFF	-1,7	-1,6	0,7	-0,4	1,5	0,9	1,9	1,3	5,8
Havila	5,5	6,8	1,0	-4,2	1,0	0,7	0,7	1,1	0,9
Farstad	5,6	9,1	3,0	-9,0	2,3	2,1	1,8	1,5	1,0
Average peers	3	6	1	-4	1	1	1	1	2

Appendix 5.4 – Common size analysis, OPEX

In percentage of revenue

Vessel crew expenses	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	21,0%	20,0%	24,7%	29,0%	33,7%	35,8%	33,3%	34,0%	31,4%
DOF	24,6%	37,1%	37,7%	45,3%	45,5%	47,8%	37,9%	42,1%	38,2%
SIOFF	15,3%	22,7%	26,4%	32,3%	31,4%	32,0%	35,9%	28,9%	24,4%
Havila	23,7%	18,1%	14,9%	25,5%	27,0%	31,6%	31,2%	32,5%	28,1%
Farstad	30,1%	28,0%	26,2%	28,5%	34,9%	38,6%	40,9%	39,1%	39,9%
Average	22,9%	25,2%	26,0%	32,1%	34,5%	37,1%	35,9%	35,3%	32,4%

Other vessel expenses	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	24%	18%	17%	24%	29%	28%	24%	25%	26%
DOF	33%	27%	26%	26%	23%	21%	26%	28%	30%
SIOFF	47%	27%	30%	36%	34%	32%	32%	32%	34%
Havila	13%	11%	19%	27%	31%	33%	25%	20%	21%
Farstad	19%	17%	17%	18%	23%	22%	24%	23%	23%
Average	27%	20%	22%	26%	28%	27%	26%	26%	27%

OPEX	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	45%	38%	42%	53%	63%	64%	57%	59%	57%
DOF	57%	64%	64%	71%	69%	69%	64%	71%	67%
SIOFF	63%	50%	57%	68%	66%	64%	67%	61%	58%
Havila	37%	29%	34%	53%	58%	64%	56%	53%	49%
Farstad	49%	45%	43%	47%	58%	61%	65%	62%	63%
Average	50%	45%	48%	58%	63%	64%	62%	61%	59%

Appendix 5.5 – Indexing and common size analysis of invested capital of SOFF and peers

Invested capital	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	100 %	117 %	134 %	160 %	215 %	252 %	245 %	234 %	255 %
DOF	100 %	153 %	206 %	239 %	289 %	349 %	391 %	393 %	388 %
SIOFF		100 %	148 %	208 %	302 %	366 %	364 %	373 %	435 %
Havila	100 %	123 %	158 %	217 %	276 %	344 %	403 %	394 %	386 %
Farstad	100 %	113 %	128 %	156 %	180 %	191 %	204 %	225 %	247 %

NWC	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	100	156	93	108	38	123	46	243	168
DOF	100	-273	-83	1 405	474	459	2 145	2 988	3 940
SIOFF	100	129	255	296	164	121	125	199	-57
Havila	100	123	158	217	276	344	403	394	386
Farstad	100	32	187	359	-8	-17	200	104	-171

Vessels and newbuild contracts	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	100	121	136	181	252	254	232	222	269
DOF	100	160	199	232	291	345	357	321	321
SIOFF	100	212	259	410	581	642	578	663	792
Havila	100	117	188	268	308	397	437	429	426
Farstad	100	111	127	159	175	184	196	221	243

Appendix 5.6 – Solvency ratios

(Source: Companies AR`s (2006-2014) & Own contribution)

Number of shares	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	37794	37794	37794	37794	37794	38687	38687	38687	38687
SIOF	170990	173124	253892	353774	395752	395752	395952	389391	389391
Havila	14687	14687	16155	16155	16155	21671	29838	30180	30180
Farstad	39000	39000	39000	39000	39000	39000	39000	39000	39000
DOF	76961	82976	82976	91267	91267	111051	111051	111051	111051

Share price	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	137	155	59	108	116	86	100	121	79
SIOF (USD)	11	19	8	9	11	8	8	10	4
Havila	78	110	32	55	57	32	24	33	19
Farstad	136	148	68	129	175	151	135	133	51
DOF	76961	82976	82976	91267	91267	111051	111051	111051	111051

Equity	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	5 177 778	5 858 070	2 229 846	4 081 752	4 384 104	3 327 082	3 868 700	4 681 127	3 056 273
SIOF (USD)	302 071	604 913	291 874	564 054	746 586	530 308	569 221	642 106	197 032
Havila	1 145 586	1 615 570	516 960	888 525	920 835	693 472	716 112	995 940	573 420
Farstad	5 304 000	5 772 000	2 652 000	5 031 000	6 825 000	5 889 000	5 265 000	5 187 000	1 989 000
DOF	5 079 426	4 978 560	2 738 208	3 376 879	4 380 816	2 443 122	2 998 377	3 553 632	1 665 765
NOK/USD	0,1606	0,1839	0,1437	0,1742	0,1715	0,1675	0,1797	0,1649	0,1265

NIBD	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	2 654 088	3 112 283	3 774 003	4 763 736	7 178 672	9 361 988	9 165 564	8 268 370	9 255 469
SIOF (USD)		113 115	170 607	303 232	522 129	757 038	737 645	765 514	1 002 844
Havila	895 789	1 170 817	1 705 658	2 309 818	3 026 301	4 148 839	5 006 728	4 746 460	4 593 646
Farstad	2 920 614	3 545 702	4 054 575	4 362 022	4 779 306	5 241 273	5 981 264	7 195 439	8 656 139
DOF	4 552 303	7 034 399	9 608 906	10 733 814	13 530 212	17 728 632	20 573 000	20 842 000	20 437 000

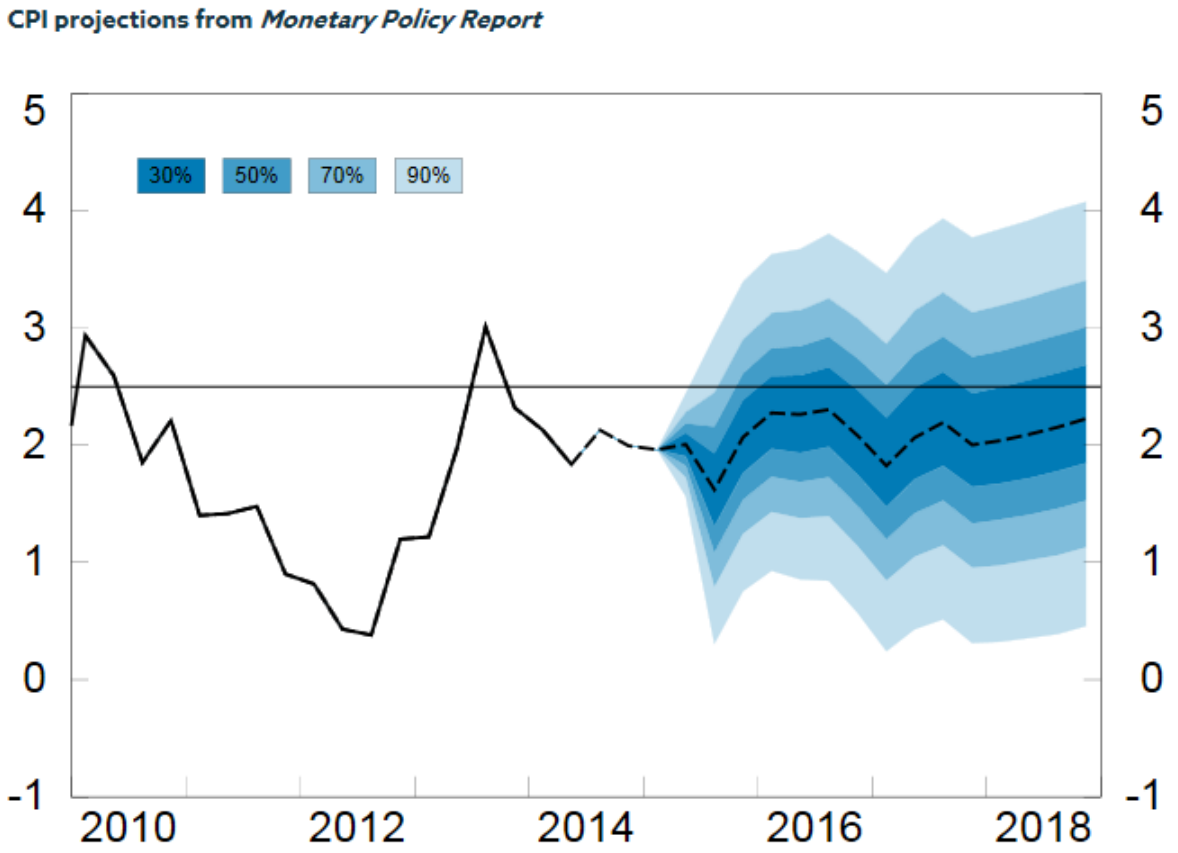
Solvency ratio	2006	2007	2008	2009	2010	2011	2012	2013	2014
SOFF	0,66	0,65	0,37	0,46	0,38	0,26	0,30	0,36	0,25
SIOF		0,84	0,63	0,65	0,59	0,41	0,44	0,46	0,16
Havila	0,56	0,58	0,23	0,28	0,23	0,14	0,13	0,17	0,11
Farstad	0,64	0,62	0,40	0,54	0,59	0,53	0,47	0,42	0,19
DOF	0,53	0,41	0,22	0,24	0,24	0,12	0,13	0,15	0,08
Average	0,58	0,61	0,37	0,43	0,41	0,30	0,29	0,30	0,13

Appendix 5.6 – EBIT/EBITDA per vessel
(Source: SOFF – AR, 2014 & Own contribution)

EBIT per vessel	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
AHTS	4 806	-577	10 984	21 963	34 357	39 006	37 995	8 986	9 221	17 880	19 060	21 576
PSV	4 354	4 110	27 117	25 788	33 958	19 251	-13	2 572	6 893	8 739	15 952	9 481
CSV	14 829	877	14 054	23 254	18 744	15 224	1 775	11 658	-2	32 813	40 545	38 708
EBITDA per vessel	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
AHTS	5 558	7 846	19 286	31 165	43 621	51 689	56 558	25 283	29 738	32 829	25 929	29 242
PSV	9 114	10 798	34 256	35 986	44 391	30 450	17 338	13 101	15 930	15 652	23 166	16 298
CSV	33 588	19 229	31 289	39 381	42 148	38 913	42 917	31 752	32 522	51 416	51 584	51 324

Section 7

Appendix 7.1 – CPI projections From Monetary Policy Report
(Source: Norges Bank (2015)



Appendix 7.2 – Regression analysis PSV dayrates
(Source: SAS Enterprise Guide & Own contribution

Historical data input to the regression model (RS Platou, Pareto):

Year	Oil price	Spot rates PSV - GBP
2005	53	6050
2006	64	10871
2007	71	13996
2008	97	13078
2009	62	8976
2010	79	9713
2011	104	11851
2012	105	12939
2013	104	12450
2014	96	10950

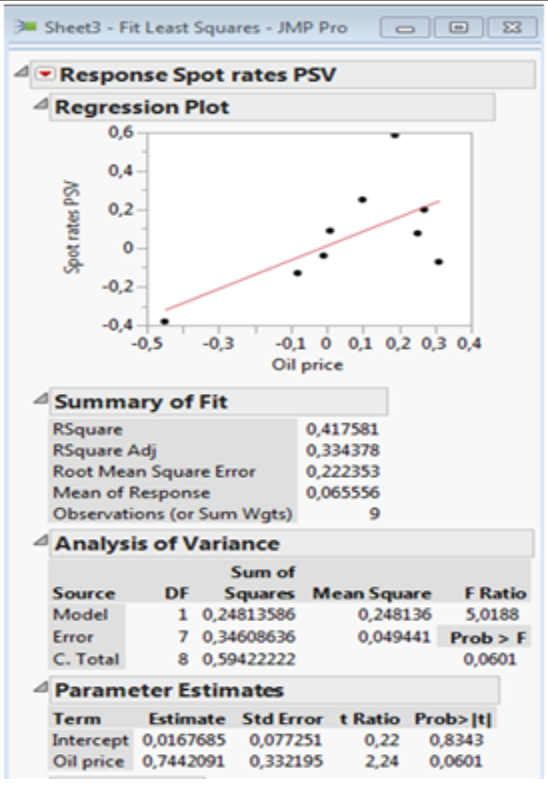
Input to the regression model

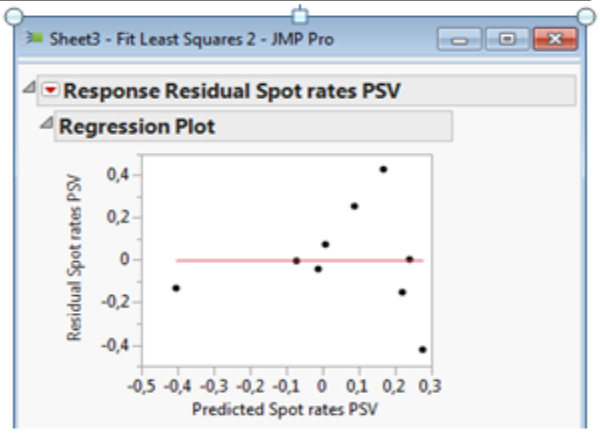
Year	LN Oil price	LN Spot rates medium PSVs
2005	3,9776	9,6866
2006	4,1634	10,0847
2007	4,2643	10,2077
2008	4,5746	9,9091
2009	4,1232	8,8530
2010	4,3700	9,4913
2011	4,6445	9,5054
2012	4,6541	9,3237
2013	4,6451	9,4295
2014	4,5668	9,3011

Growth in LN

Year	Oil price	Spot rates PSV
2006	0,19	0,59
2007	0,10	0,25
2008	0,31	-0,07
2009	-0,45	-0,38
2010	0,25	0,08
2011	0,27	0,20
2012	0,01	0,09
2013	-0,01	-0,04
2014	-0,08	-0,13

Output to the regression model





The regression analysis performed as a multiple regression with backward selection. The dependent variable was spot rates (GBP) for medium sized PSV vessels. We started with explanatory variables as oil price (USD), number of PSV vessels, and the rig fleet. As the input variables are based on different measures we transformed them to Ln numbers to make them comparable. Number of PSV vessels and rig fleet did not turn out have any significant effect on the spot rates in the regression analysis. As a result a simple linear regression was performed.

The data in our simple linear regression is based on historical data from 2005 – 2014 as we find sufficient as it covers an entire business cycle.

The output from the regression analysis tells us that the oil price explains 41.7 % (R-Square) of the changes in PSV spot rates. T-stat of 0.0601 tells us that the effect from the oil price is significant at a 10% level.

In order to generalize the results and apply them in our forecasting the time series need to be stationary (Porter, et al (2009)). To see if this assumption is met we plotted the standard residuals against the predicted values. The output shows that we have a constant variance across all the different values and no obvious pattern in the data. The fitted the mean should be zero, and we can see that it is zero. We can thereby conclude that the result from the regression analysis is plausible.

Dayrates from regression + modified dayrates (based on the strategic analysis)

Year	Oil price	Spot rates PSV - GBP	%-change
2005	53	6050	
2006	64	10871	80%
2007	71	13996	29%
2008	97	13078	-7%
2009	62	8976	-31%
2010	79	9713	8%
2011	104	11851	22%
2012	105	12939	9%
2013	104	12450	-4%
2014	96	10950	-12%
2015	60	7834	-28%
2016	72	9124	16%
2017	78	9848	8%
2018	79	10110	3%
2019	80	10378	3%
2020	77	10257	-1%

Year	Oil price	Spot rates PSV - GBP	%-change
2005	53	6050	
2006	64	10871	80%
2007	71	13996	29%
2008	97	13078	-7%
2009	62	8976	-31%
2010	79	9713	8%
2011	104	11851	22%
2012	105	12939	9%
2013	104	12450	-4%
2014	96	10950	-12%
2015	60	6023	-45%
2016	72	6625	10%
2017	78	7150	8%
2018	79	7340	3%
2019	80	7535	3%
2020	77	7761	3%

Appendix 7.3 – Regression analysis AHTS dayrates
(Source: SAS Enterprise Guide & Own contribution

Year	Rig fleet	Oil price	Number of high-end AHTS	Spot rates North Sea AHTS > 18000 BHPS (GBP)
2005	476	53	92	24970
2006	495	64	97	52110
2007	501	71	111	52220
2008	525	97	126	57997
2009	482	62	143	19115
2010	474	79	186	16210
2011	565	104	220	25001
2012	585	105	237	18789
2013	694	104	286	29101
2014	641	96	320	30210

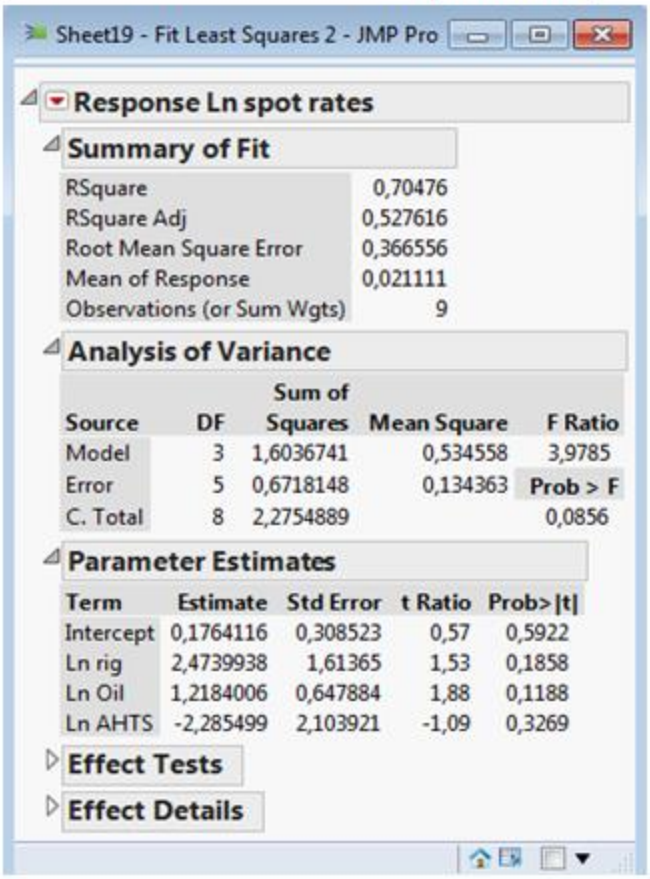
To estimate future AHTS dayrates we performed a multiple regression analysis based on the historical data in the table above. We applied data from 2005-2014 which we find sufficient as it covers an entire business cycle. Our dependent variable is North Sea Spot rates for AHTS vessels above 18000 BHP. The explanatory variables used in the analysis are rig fleet, oil price, and number of high-end AHTS vessels. In section 4.0 (shipping market model) we found these variables as the most relevant affecting the AHTS day rates. As the input variables are in different measures we transformed them into Ln-numbers to make them comparable.

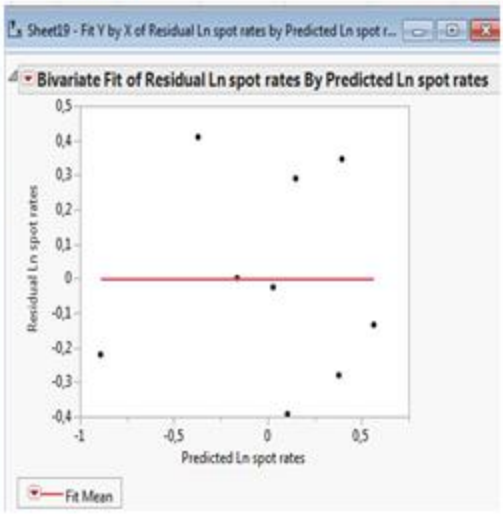
Year	Ln rig	Ln Oil	Ln AHTS	Ln spot rates
2005	6,17	3,98	4,52	10,13
2006	6,20	4,16	4,57	10,86
2007	6,22	4,26	4,71	10,86
2008	6,26	4,57	4,84	10,97
2009	6,18	4,12	4,96	9,86
2010	6,16	4,37	5,23	9,69
2011	6,34	4,64	5,39	10,13
2012	6,37	4,65	5,47	9,84
2013	6,54	4,65	5,66	10,28
2014	6,46	4,57	5,77	10,32

To estimate the future dayrates we used Ln growth in the different variables as it would give us a prediction of the growth in dayrates from year to year.

Year	Ln growth rig	Ln growth oil	Ln growth AHTS	Ln growth spot rates
2006	0,04	0,19	0,05	0,7357
2007	0,01	0,10	0,13	0,0021
2008	0,05	0,31	0,13	0,1049
2009	-0,09	-0,45	0,13	-1,1099
2010	-0,02	0,25	0,26	-0,1648
2011	0,18	0,27	0,17	0,4333
2012	0,03	0,01	0,07	-0,2856
2013	0,17	-0,01	0,19	0,4375
2014	-0,08	-0,08	0,11	0,0374

Output to the regression model





The output tells us that an increase in the number of rigs, and an increase in the oil price will affect the dayrates positively. An increase in AHTS vessels will affect dayrates negatively. This is in line with the findings in the shipping market model (section 4.0). The oil price is significant at an 88% confidence level, the rig count at an 81% confidence level, and the number of AHTS vessels at a 77% confidence level.

Our short sample size makes these confidence levels a bit too low, however we still find it plausible to use the regression as R-square is high (0.70476) and the F-ratio tells us that our explanatory variables are significant at a 10% level (0.0856).

In addition the findings in our strategic analysis stated that these three factors are the most important ones affecting the AHTS spot rates, and the estimates are in line with the strategic analysis, i.e.: rig count will increase the spot rates, oil price will increase, and an increase in AHTS vessels will decrease the spot rates. If more data had been available the t-stats would most likely have been more significant.

In order to generalize the results and apply them in our forecasting the time series need to be stationary (Porter, et al (2009)). To see if this assumption is met we plotted the standard residuals against the predicted values. The output shows that we have a constant variance across all the different values and no obvious pattern in the data. The fitted the mean should be zero, and we can see that it is zero. We can thereby conclude that the result from the regression analysis is plausible.

Dayrates from regression + modified dayrates (based on the strategic analysis)

Year	Rig fleet	Oil price	Number of high-end AHTS	Spot rates North Sea AHTS > 18000 BHPS (GBP)	% change
2005	476	53	92	24970	
2006	495	64	97	52110	109%
2007	501	71	111	52220	0%
2008	525	97	126	57997	11%
2009	482	62	143	19115	-67%
2010	474	79	186	16210	-15%
2011	565	104	220	25001	54%
2012	585	105	237	18789	-25%
2013	694	104	286	29101	55%
2014	641	96	320	30210	4%
2015	585	60	346	9501	-69%
2016	630	72	360	10912	15%
2017	720	78	375	12782	17%
2018	755	79	380	11873	-7%
2019	782	80	380	11025	-7%
2020	791	77	380	9074	-18%

Year	Rig fleet	Oil price	Number of	Spot rates North Sea AHTS > 18000 BHPS (GBP)	% change
2005	476	53	92	24970	
2006	495	64	97	52110	109%
2007	501	71	111	52220	0%
2008	525	97	126	57997	11%
2009	482	62	143	19115	-67%
2010	474	79	186	16210	-15%
2011	565	104	220	25001	54%
2012	585	105	237	18789	-25%
2013	694	104	286	29101	55%
2014	641	96	320	30210	4%
2015	585	60	346	12688	-58%
2016	630	72	360	13323	5%
2017	720	78	375	13856	4%
2018	755	79	380	14271	3%
2019	782	80	380	14557	2%
2020	791	77	380	14702	1%

Appendix 7.4 – Forecast of CSV revenues
(Source: SOFF – AR`s, Pareto (2015) & Own contribution

Forecasted revenues OSCV						
CSV	2015	2016	2017	2018	2019	2020
Utilization rate	91 %	92 %	94 %	96 %	98 %	99 %
Term + Spot						
Normand Reach	130 000 000	130 000 000	130 000 000	130 000 000	130 000 000	128 700 000
Normand Vision	168 677 686	168 677 686	168 677 686	168 677 686	168 677 686	168 677 686
Normand Oceanic	158 557 025	158 557 025	136 435 050	164 418 749	179 593 230	192 311 363
Normand Subsea	109 264 463	111 945 130	129 247 953	155 757 533	170 132 656	182 180 825
Normand Commander	83 930 579	77 585 060	89 577 011	107 949 828	117 912 698	126 262 842
Normand Fortress	84 833 058	60 165 807	69 465 348	83 713 135	91 439 159	97 914 545
Normand Flower	75 937 190	75 937 190	70 212 288	84 613 276	92 422 376	98 967 389
Normand Mermaid	73 487 603	73 487 603	73 487 603	76 872 429	83 967 114	89 913 356
Normand Cutter	101 765 289	101 765 289	61 731 208	74 392 673	81 258 497	87 012 925
Normand Clipper	101 765 289	101 765 289	85 842 315	103 449 122	112 996 614	120 998 619
NOR Vailent	73 745 455	73 745 455	73 745 455	73 745 455	73 745 455	73 008 000
NOR Australis	79 289 256	79 289 256	60 641 699	73 079 699	79 824 346	85 477 213
NB CSV	Delievered 2016	201 123 967	201 123 967	201 123 967	201 123 967	201 123 967
Normand Pioneer	71 446 281	140 239 520	161 915 672	195 125 610	213 134 078	228 227 450
Normand Progress	71 446 281	52 670 771	60 811 840	73 284 736	80 048 307	85 717 034
Spot						
Normand Baltic	62 627 913	66 481 938	76 757 734	92 501 235	101 038 328	108 193 491
Normand Seven	80 845 754	85 820 877	99 085 799	119 408 929	130 429 378	139 665 908
Normand Installer	75 570 579	80 221 076	92 620 464	111 617 513	121 918 879	130 552 726
Norce Endavour	96 249 213	102 172 242	117 964 517	142 159 792	155 279 956	166 276 312
Normand Pacific	123 209 917	86 989 209	100 434 715	121 034 516	132 204 994	141 567 266
Total revenues CSVs	**1 822 648 831**	**2 028 640 391**	**2 059 778 325**	**2 352 925 884**	**2 517 147 717**	**2 652 748 917**

Appendix 7.5 – Forecast of AHTS revenues
(Source: SOFF – AR`s, Pareto (2015) & Own contribution

Forecasted revenues AHTS						
AHTS	2015	2016	2017	2018	2019	2020
Utilization rate	60 %	62 %	65 %	70 %	70 %	70 %
Term + Spot						
Normand Titan	100 000 000	100 000 000	100 000 000	100 000 000	43 100 537	43 531 542
Normand Ferking	122 699 387	122 699 387	46 741 537	51 847 151	52 884 094	53 412 935
Normand Master	115 337 423	40 297 290	43 937 045	48 736 322	49 711 048	50 208 159
Normand Mariner	108 128 834	37 778 709	41 190 979	45 690 302	46 604 108	47 070 149
Normand Drott	82 500 000	82 500 000	82 500 000			
Nor Spring	51 533 742	18 005 172	19 631 446	21 775 803	22 211 319	22 433 433
Nor Star	45 000 000	10 610 191	11 568 530	12 832 170	13 088 813	13 219 701
Spot						
Normand Ranger	57 604 872	62 501 287	68 146 564	75 590 266	77 102 071	77 873 092
Normand Prosper	65 834 140	71 430 042	77 881 788	86 388 875	88 116 653	88 997 819
Normand Ivan	25 045 597	27 174 472	29 628 941	32 865 333	33 522 640	33 857 866
Normand Borg	19 535 565	21 196 089	23 110 574	25 634 960	26 147 659	26 409 135
Normand Atlantic	17 353 021	18 828 027	20 528 623	22 770 981	23 226 400	23 458 664
Normand Neptun	15 617 719	16 945 225	18 475 761	20 493 883	20 903 760	21 112 798
Normand Jarl	3 220 148					
Normand Skarven	3 756 840					
Nor Chief	20 286 933	22 011 323	23 999 442	26 620 920	27 153 338	27 424 871
Nor Captain	19 464 007	21 118 447	23 025 920	25 541 059	26 051 880	26 312 399
Nor Tigerfish	14 229 477	15 438 982	16 833 471	18 672 204	19 045 648	19 236 105
Total revenues AHTS	**787 147 705**	**588 534 641**	**547 200 621**	**515 460 227**	**525 769 432**	**531 027 126**

Appendix 7.6 – Forecast of PSV segment
(Source: SOFF – AR`s, Pareto (2015) & Own contribution

Forecasted revenues PSV						
PSV	2015	2016	2017	2018	2019	2020
Utilization rate	70 %	74 %	83 %	85 %	85 %	85 %
Term + spot						
Normand Vibran	57 692 308	57 692 308	57 692 308	26 391 589	27 090 283	27 902 992
Normand Arctic	61 818 182	34 153 476	41 346 050	43 468 500	44 619 290	45 957 869
Nordmand Corona	73 449 095	26 399 417	31 959 020	33 599 598	34 489 118	35 523 791
Normand Trym	57 692 308	57 692 308	57 692 308	24 351 675	24 996 364	25 746 255
Normand Aurora	58 461 538	58 461 538	32 808 091	34 492 255	35 405 407	36 467 569
Normand Flipper	73 914 027	26 566 525	32 161 320	33 812 283	34 707 434	35 748 657
Normand Vester	61 575 580	22 155 848	26 821 773	28 198 637	28 945 171	29 813 526
Normand Carrier	48 665 158	17 491 459	21 175 084	22 262 082	22 851 451	23 536 994
Spot						
Normand Skipper	29 538 141	34 348 639	41 582 313	43 716 891	44 874 258	46 220 485
Total revenues PSV	**522 806 338**	**334 961 517**	**343 238 267**	**290 293 510**	**297 978 775**	**306 918 139**

Appendix 7.7 – OSCV Rates (age, specification, location and size).
(Source: Own contribution

CSV Contract Coverage				Term			Spot		
CSV	Type	Build	Size m	Size	Age	Premium age	Size	Age	Premium age
Normand Reach	CSV	2014	121	1	0	0	1,04	6,95	0,139
Normand Vision	CSV	2014	157	1,30	0	0	1,35	6,95	0,139
Normand Oceanic	CSV	2011	157	1,30	3	0,06	1,35	3,95	0,079
Normand Subsea	CSV	2009	113	0,93	5	0,1	0,97	1,95	0,039
Normand Commander	CSV	2006	93	0,77	8	0,16	0,80	-1,05	-0,021
Normand Fortress	CSV	2006	94	0,78	8	0,16	0,81	-1,05	-0,021
Normand Flower	CSV	2002	93	0,77	12	0,24	0,80	-5,05	-0,101
Normand Mermaid	CSV	2002	90	0,74	12	0,24	0,78	-5,05	-0,101
Normand Cutter	CSV	2001	128	1,06	13	0,26	1,10	-6,05	-0,121
Normand Clipper	CSV	2001	128	1,06	13	0,26	1,10	-6,05	-0,121
NOR Vailent	CSV	2008	78	0,64	6	0,12	0,67	0,95	0,019
NOR Australis	CSV	2009	82	0,68	5	0,1	0,71	1,95	0,039
NB CSV	CSV	2016	180	1,49	-2	-0,04	1,55	8,95	0,179
Normand Pioneer	CSV	1999	95	0,79	15	0,3	0,82	-8,05	-0,161
Normand Progress	CSV	1999	95	0,79	15	0,3	0,82	-8,05	-0,161
Normand Baltic	CSV	2010	95	0,79	4	0,08	0,82	2,95	0,059
Normand Seven	CSV	2007	130	1,07	7	0,14	1,12	-0,05	-0,001
Normand Installer	CSV	2006	124	1,02	8	0,16	1,07	-1,05	-0,021
Norce Endavour	CSV	2010	146	1,21	4	0,08	1,26	2,95	0,059
Normand Pacific	CSV	2011	122	1,01	3	0,06	1,05	3,95	0,079
Average		2007	116						

We have used Normand Reach as a guideline for calculating dayrates for the other vessels. Estimated day rates for the other vessels are estimated based on their relative size and age in relation to Normand Reach specifications. We estimate the age premium to be 2% per year in the OSCV segment. This is based on our strategic analysis (the oversupply of OSCV vessels are not that significant as in AHTS/PSV segment – and the demand is expected to increase in the future, as the market will stabilize and overall increased focus against the subsea segment). As an example of the table above, Normand Reach is 121m and built in 2014, Vision is 157m and built in 2014. This gives Vision a size premium of 157/121 = 1.30 and an age premium of 0*2%.

Appendix 7.8 – AHTS Rates (age, specification, location and size).
(Source: Own contribution

AHTS Contract Coverage

AHTS	Type	Build	Size bhp	Size	Age	Premium age	Size	Age	Premium age
Normand Titan	AHTS	2007	16300	1	0,00	0	0,98	5,72	0,29
Normand Ferking	AHTS	2007	20000	1,23	0,00	0	1,20	5,72	0,29
Normand Master	AHTS	2003	23500	1,44	4,00	0,2	1,41	1,72	0,09
Normand Mariner	AHTS	2002	23500	1,44	5,00	0,25	1,41	0,72	0,04
Normand Drott	AHTS	1984	12000	0,74	23,00	0,85	0,72	-17,28	-0,86
Nor Spring	AHTS	2008	8000	0,49	-1,00	-0,05	0,48	6,72	0,34
Nor Star	AHTS	2005	5500	0,34	2,00	0,1	0,33	3,72	0,19
Normand Ranger	AHTS	2010	28000	1,56	-3,00	-0,15	1,68	8,72	0,44
Normand Prosper	AHTS	2010	32000	1,78	-3,00	-0,15	1,92	8,72	0,44
Normand Ivan	AHTS	2001	20000	1,11	6,00	0,3	1,20	-0,28	-0,01
Normand Borg	AHTS	2000	16800	0,93	7,00	0,35	1,01	-1,28	-0,06
Normand Atlantic	AHTS	1997	19400	1,08	10,00	0,5	1,16	-4,28	-0,21
Normand Neptun	AHTS	1996	19400	1,08	11,00	0,55	1,16	-5,28	-0,26
Normand Jarl	AHTS	1985	12000	0,67	22,00	0,85	0,72	-16,28	-0,81
Nroamnd Skarven	AHTS	1986	14000	0,78	21,00	0,85	0,84	-15,28	-0,76
Nor Chief	AHTS	2008	10800	0,60	-1,00	-0,05	0,65	6,72	0,34
Nor Captain	AHTS	2007	10880	0,60	0,00	0	0,65	5,72	0,29
Nor Tigerfish	AHTS	2007	7954	0,44	0,00	0	0,48	5,72	0,29
Average		2001	16669						

We have used Normand Titan as a guideline for calculating dayrates for the other vessels. Estimated day rates for the other vessels are estimated based on their relative size and age in relation to Normand Titan specifications. We estimate the age premium to be 5% per year in the AHTS segment. This is based on our strategic analysis (the supply of AHTS vessels are extremely high in the years to come, and the demand for higher specification and young vessels are important). As an example of the table above, Normand Titan is 16300bhp and built in 2007, Ferking is 20000bhp and built in 2007. This gives Ferking a size premium of 20000/16300 = 1.23 and an age premium of 0*5%.

Appendix 7.9 – PSV Rates (age, specification, location and size).
(Source: Own Contribution

PSV Contract Coverage					Term		Spot		
PSV	Type	Build	Size dwt	Size (sqm)	Size	Age	Size	Age	Premium age
Normand Vibran	PSV	2008	3350	680	1	0	0,85	0	0
Normand Arctic	PSV	2011	5000	1000	1,47	3	1,25	-3	-0,12
Nordmand Corona	PSV	2006	3350	941	1,38	-2	1,17625	2	0,08
Normand Trym	PSV	2006	3350	682	1,00	-2	0,8525	2	0,08
Normand Aurora	PSV	2006	4800	966	1,42	-2	1,2075	2	0,08
Normand Flipper	PSV	2005	4400	990	1,46	-3	1,2375	3	0,12
Normand Vester	PSV	2002	4587	956	1,41	-6	1,195	6	0,24
Normand Carrier	PSV	1998	4560	956	1,41	-10	1,195	10	0,4
Normand Skipper	PSV	2005	6400	1280	1,88	-3	1,6	3	0,12
Average		2005	4422						

We have used Normand Vibran as a guideline for calculating dayrates for the other vessels. Estimated day rates for the other vessels are estimated based on their relative size and age in relation to Normand Vibran specifications. We estimate the age premium to be 4% per year in the PSV segment. This is based on our strategic analysis (the supply of PSV vessels are extremely high in the years to come, but as PSV has overall higher utilization rates – this rate is lower than in the AHTS segment). As an example of the table above, Normand Vibran is 3350dwt and built

in 2008, Arctic is 5000dwt and built in 2011. This gives Arctic a size premium of 5000/3350 = 1.47 and an age premium of 3*4%. =0, 12.

Appendix 7.10 – Equation for calculating spot rates (revenue)
(Source: Own contribution

$$Revenue = Expected\ average\ day\ rate * (expected\ utilization\ rate * 365\ days) * relative\ size\ (premium) * relative\ age(premium)$$

Appendix 7.11 –Historical development of value drivers in relation to revenue - Income Statement
(Source: Petersen & Plenborg (2012), SOFF – AR`s (2006-2014) & Own contribution

Pro forma income statement

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	Average
Total freight income growth	38 %	17 %	1 %	18 %	4 %	14 %	11 %	6 %	7 %	12,8 %
Other operating income	0,5 %	0,3 %	0,5 %	0,4 %	0,1 %	0,2 %	0,6 %	3,0 %	2,6 %	1,6 %
Gain on sale of vessels	4,9 %	5,0 %	3,0 %	0,0 %	0,0 %	0,0 %	1,6 %	0,8 %	1,2 %	1,8 %
Income from investments in associated companies - core	0,9 %	0,5 %	1,9 %	0,0 %	0,0 %	0,0 %	0,2 %	1,6 %	1,7 %	1,2 %
Crew expenses	-22,1 %	-21,1 %	-25,6 %	-29,1 %	-33,8 %	-35,9 %	-34,0 %	-35,2 %	-32,6 %	-34,3 %
Administration	-2,3 %	-2,2 %	-2,9 %	-2,8 %	-3,0 %	-3,1 %	-3,3 %	-4,7 %	-4,7 %	-4,2 %
Bunker costs	-0,7 %	-0,8 %	-1,1 %	-1,4 %	-1,5 %	-1,2 %	-2,0 %	-1,9 %	-1,9 %	-1,7 %
Other operating expenses	-22,7 %	-15,4 %	-14,0 %	-19,7 %	-24,4 %	-24,0 %	-19,2 %	-19,0 %	-20,5 %	-19,9 %
Total expenses	-47,8 %	-39,5 %	-43,6 %	-53,1 %	-62,7 %	-64,2 %	-58,6 %	-60,9 %	-59,7 %	-54,5 %
EBITDA	**58,4 %**	**66,3 %**	**61,7 %**	**47,3 %**	**37,4 %**	**36,0 %**	**43,9 %**	**44,5 %**	**45,8 %**	**49,0 %**
Depreciation on capitalized periodic maintenance	-5,9 %	-6,3 %	-6,9 %	-7,4 %	-4,6 %	-6,6 %	-4,5 %	-3,5 %	-3,0 %	-3,7 %
EBIT	**39,7 %**	**45,6 %**	**37,3 %**	**18,4 %**	**13,0 %**	**5,1 %**	**26,1 %**	**32,1 %**	**33,5 %**	**27,9 %**
Tax on core operations	-1,1 %	-16,6 %	-44,3 %	3,6 %	-11,1 %	0,1 %	2,5 %	-3,3 %	-7,6 %	-8,7 %
NOPAT	**38,6 %**	**29,0 %**	**-7,0 %**	**22,0 %**	**1,9 %**	**5,2 %**	**28,5 %**	**28,8 %**	**25,9 %**	**19,2 %**

Excluded in the calculated average

Appendix 7.12 –Historical development of value drivers in relation to revenue - Balance Sheet
(Source: Petersen & Plenborg (2012), SOFF – AR`s (2006-2014) & Own contribution

Tangible and intangible assets	2006	2007	2008	2009	2010	2011	2012	2013	2014	Average
Vessels and new-build contracts + other tangible assets	298 %	308 %	341 %	384 %	516 %	458 %	377 %	339 %	386 %	378,66 %
Other tangible fixed assets	2 %	2 %	2 %	1 %	1 %	1 %	1 %	1 %	1 %	1 %
Investments in associated companies	9 %	10 %	0 %	0 %	0 %	0 %	6 %	9 %	9 %	5 %
Capitalized periodic maintenance	6,7 %	6,8 %	9,5 %	7,0 %	9,7 %	10,8 %	8,7 %	7,3 %	8,6 %	8,35 %
Deferred tax asset	0,0 %	0,0 %	1,1 %	0,0 %	0,7 %	1,4 %	3,5 %	1,7 %	1,7 %	1,12 %
Loans to associated companies and joint ventures	0,85 %	0,58 %	0,00 %	0,00 %	0,00 %	2,95 %	1,27 %	0,70 %	0,81 %	0,80 %
Net working capital	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**Average**
Account receivables, freight income	20 %	24 %	23 %	19 %	20 %	24 %	16 %	20 %	20 %	21 %
Bunkers and other inventories (stock)	1 %	1 %	1 %	2 %	2 %	2 %	2 %	2 %	2 %	2 %
Other short-term receivables	8 %	10 %	7 %	11 %	8 %	5 %	6 %	8 %	10 %	8 %
Accounts payable	5 %	6 %	8 %	6 %	12 %	9 %	6 %	3 %	10 %	7 %
Current taxes payable	1 %	3 %	2 %	4 %	4 %	3 %	2 %	0 %	1 %	2 %
Accrued salaries and related taxes	2 %	2 %	2 %	2 %	2 %	2 %	1 %	3 %	1 %	2 %
Other current liabilities	6 %	6 %	10 %	8 %	10 %	9 %	12 %	9 %	9 %	9 %
NIBD in % of invested capital	46 %	48 %	52 %	54 %	64 %	69 %	65 %	62 %	67 %	59 %

Appendix 7.13 –Forecasted Income Statement

(Source: Petersen & Plenborg (2012), SOFF – AR, 2014 & Own contribution

Income statement (NOK 1000)	2014	E2015	E2016	E2017	E2018	E2019	E2020	Terminal E2021
Total freight income	3 737 349	3 132 603	2 970 685	3 038 931	3 214 285	3 360 729	3 490 694	3 593 670
Other operating income	96 233	40 682	38 579	39 466	41 743	43 645	45 333	46 670
Gain on sale of vessels	46 591	57 467	54 497	55 749	58 966	61 652	64 036	65 925
Income from investments in associated companies - core	63 384	37 224	35 300	36 111	38 194	39 935	41 479	42 703
Gross profit	3 943 557	**3 267 976**	**3 099 061**	**3 170 256**	**3 353 188**	**3 505 960**	**3 641 542**	**3 748 967**
Crew expenses	-1 219 758	-1 160 000	-1 130 000	-1 200 000	-1 220 000	-1 230 000	-1 250 000	-1 270 000
Administration	-174 356	-132 826	-132 826	-120 000	-120 218	-125 695	-130 556	-134 407
Bunker costs	-69 789	-53 958	-51 169	-52 345	-55 365	-57 888	-60 126	-61 900
Other operating expenses	-766 671	-622 964	-564 430	-547 008	-546 428	-554 520	-558 511	-574 987
Operating expenses (excl. depreciation and amortization)	-2 230 574	-1 969 748	-1 878 425	-1 919 352	-1 942 012	-1 968 103	-1 999 193	-2 041 295
EBITDA	1 712 983	**1 298 228**	**1 220 636**	**1 250 904**	**1 411 177**	**1 537 857**	**1 642 349**	**1 707 673**
Total depreciation, amotization and impairment losses	-461 827	-512 866	-495 729	-479 323	-463 554	-448 324	-433 620	-446 412
Impairment losses								
EBIT	1 251 156	**785 362**	**724 906**	**771 581**	**947 623**	**1 089 533**	**1 208 729**	**1 261 261**
Tax on EBIT	-284 084	-212 048	-195 725	-208 327	-255 858	-294 174	-326 357	-340 541
NOPAT	967 072	**573 314**	**529 181**	**563 254**	**691 765**	**795 359**	**882 372**	**920 721**
Net financial expenses before tax	-1 106 448	-569 832	-534 001	-499 413	-465 155	-428 592	-379 499	-353 864
Tax shield (aka Tax on net financial expenses)	251 227	153 855	144 180	134 842	125 592	115 720	102 465	95 543
Net financial expenses	-855 221	**-415 977**	**-389 821**	**-364 572**	**-339 563**	**-312 872**	**-277 034**	**-258 320**
Profit/(loss) for the year	111 851	**157 337**	**139 361**	**198 682**	**352 202**	**482 488**	**605 338**	**662 400**

Appendix 7.14 –Forecasted Balance sheet

(Source: Petersen & Plenborg (2012), SOFF – AR, 2014 & Own contribution

Balance sheet (NOK 1000)	2 014	E2015	E2016	E2017	E2018	E2019	E2020	Terminal E2021
Capitalized periodic maintenance	290 253	290 253	290 253	290 253	290 253	290 253	290 253	298 815
Investments in associated companies	345 691	345 691	345 691	345 691	345 691	345 691	345 691	355 889
Vessels and new build contracts	14 417 111	13 912 512	13 425 574	12 955 679	12 502 230	12 064 652	11 642 389	11 985 840
Other tangible fixed assets	22 717	22 717	22 717	22 717	22 717	22 717	22 717	23 387
Deferred tax asset	61 966	51 939	49 255	50 386	53 293	55 722	57 876	59 584
Loans to associated companies and joint ventures	30 210	30 210	30 210	30 210	30 210	30 210	30 210	31 101
Total non-current operating assets	15 169 962	**14 653 322**	**14 163 700**	**13 694 936**	**13 244 395**	**12 809 245**	**12 389 137**	**12 754 616**
Account receivables, freight income	756 794	646 107	612 711	626 786	662 954	693 158	719 964	741 203
Bunkers and other inventories (stock)	61 188	51 823	49 144	50 273	53 174	55 597	57 747	59 450
Other short-term receivables	357 660	248 744	235 887	241 306	255 230	266 858	277 178	285 355
Total current operating assets	1 175 642	**946 673**	**897 742**	**918 365**	**971 358**	**1 015 613**	**1 054 888**	**1 086 008**
Accounts payable	371 529	227 443	215 687	220 642	233 373	244 006	253 442	260 919
Current taxes payable	40 697	70 900	67 235	68 780	72 749	76 063	79 004	81 335
Accrued salaries and related taxes	51 502	59 610	56 529	57 827	61 164	63 951	66 424	68 384
Other current liabilities	353 750	277 803	263 444	269 496	285 047	298 033	309 559	318 691
Total non-interest-bearing debt	826 817	**635 755**	**602 895**	**616 745**	**652 333**	**682 053**	**708 429**	**729 328**
Intangible and tangible assets	15 169 962	**14 653 322**	**14 163 700**	**13 694 936**	**13 244 395**	**12 809 245**	**12 389 137**	**12 754 616**
Net working capital	348 825	**310 918**	**294 847**	**301 621**	**319 025**	**333 560**	**346 459**	**356 680**
Invested capital (net operating assests)	15 516 773	**14 964 240**	**14 458 547**	**13 996 557**	**13 563 420**	**13 142 804**	**12 735 596**	**13 111 296**

Equity forecast	2 014	E2015	E2016	E2017	E2018	E2019	E2020	E2021
Equity, beginning of period		5 057 532	5 162 663	5 291 828	5 458 657	5 696 636	6 177 118	6 240 442
Net income		157 337	139 361	198 682	352 202	482 488	605 338	662 400
Dividends		-52 206	-10 195	-31 853	-114 223	-2 006	-542 014	-478 307
Total equity	5 057 532	**5 162 663**	**5 291 828**	**5 458 657**	**5 696 636**	**6 177 118**	**6 240 442**	**6 424 535**
Net-interest-bearing debt	10 459 241	**9 801 577**	**9 166 719**	**8 537 900**	**7 866 783**	**6 965 686**	**6 495 154**	**6 686 761**
Invested capital	15 516 773	**14 964 240**	**14 458 547**	**13 996 557**	**13 563 420**	**13 142 804**	**12 735 596**	**13 111 296**

Pro forma value drivers	E2015	E2016	E2017	E2018	E2019	E2020	E2021
Revenue growth	**-16 %**	**-5 %**	**2 %**	**6 %**	**5 %**	**4 %**	**3,0 %**
Other operating income	1,6 %	1,6 %	1,6 %	1,6 %	1,6 %	1,6 %	1,6 %
Gain on sale of vessels	1,8 %	1,8 %	1,8 %	1,8 %	1,8 %	1,8 %	1,8 %
Income from investments in associated companies - core	1,2 %	1,2 %	1,2 %	1,2 %	1,2 %	1,2 %	1,2 %
Crew expenses - % increase in costs from previous year	-5 %	-3 %	6 %	2 %	1 %	2 %	0 %
Administration - increase from previous year	-4,2 %	-3,7 %	-3,7 %	-3,7 %	-3,7 %	-3,7 %	-3,7 %
Bunker costs - % in relation to revenue	-1,7 %	-1,7 %	-1,7 %	-1,7 %	-1,7 %	-1,7 %	-1,7 %
Other operating expenses	-19,9 %	-19,0 %	-18,0 %	-17,0 %	-16,5 %	-16,0 %	-16,0 %
Depreciation as % of intangible and tangible assets subject to dep. and amort.	-3,5 %	-3,5 %	-3,5 %	-3,5 %	-3,5 %	-3,5 %	-3,5 %
Efficient tax rate (assumed)	-27 %	-27 %	-27 %	-27 %	-27 %	-27 %	-27 %
Net borrowing costs in percent (before tax) aka interest rate (assumed)	-5,45%	-5,4%	-5,4%	-5,4%	-5,4%	-5,4%	-5,4%
Account receivables, freight income	21 %	21 %	21 %	21 %	21 %	21 %	21 %
Bunkers and other inventories (stock)	2 %	2 %	2 %	2 %	2 %	2 %	2 %
Other short-term receivables	8 %	8 %	8 %	8 %	8 %	8 %	8 %
Accounts payable	7 %	7 %	7 %	7 %	7 %	7 %	7 %
Current taxes payable	2 %	2 %	2 %	2 %	2 %	2 %	2 %
Accrued salaries and related taxes	2 %	2 %	2 %	2 %	2 %	2 %	2 %
Other current liabilities	9 %	9 %	9 %	9 %	9 %	9 %	9 %
Net interest-bearing debt as a percentage of invested capital	66 %	63 %	61 %	58 %	50 %	50 %	50 %

Line item approach
Sales-driven approach

Appendix 7.15 – Forecast and depreciation of vessels and new build contracts

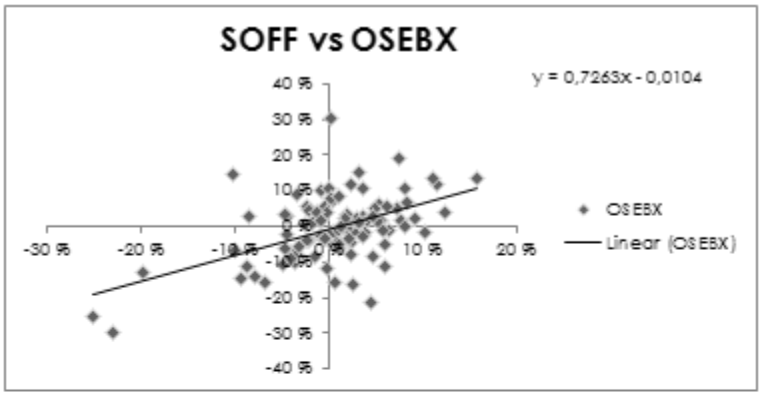
(Source: Petersen & Plenborg (2012), SOFF – AR, 2014 & Own contribution

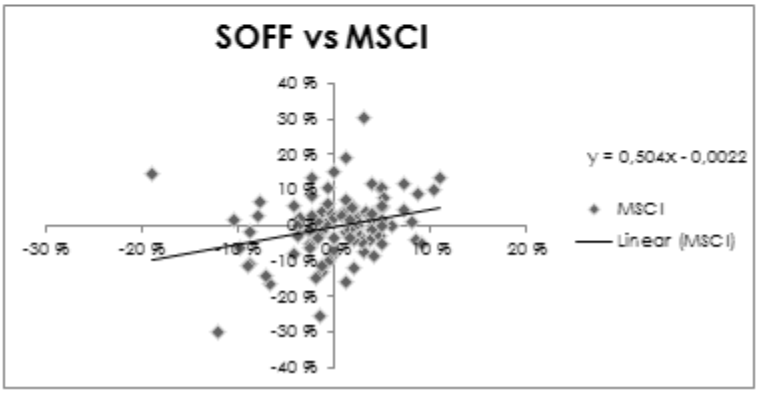
Forecasted values vessels and newbuild contracts	E2015	E2016	E2017	E2018	E2019	E2020	Terminal E2021
Vessels and newbuild contracts beginning of period	14 417 111	13 912 512	13 425 574	12 955 679	12 502 230	12 064 652	11 642 389
Depreciation vessels	-504 599	-486 938	-469 895	-453 449	-437 578	-422 263	-407 484
Vessels and newbuild contracts end of period	13 912 512	13 425 574	12 955 679	12 502 230	12 064 652	11 642 389	11 985 840

Section 8

Appendix 8.1 – Regression based beta

(Source: Damodaran (1999), Petersen & Plenborg (2012), Regression & Own Contribution)





Appendix 8.2 – Beta from comparable companies

(Source: Damodaran (1999), Petersen & Plenborg (2012), Bloomberg & Own Contribution)

Beta from comparable companies	SOFF	SIOF	Havila	Farstad	DOF
Raw Beta equity - bloomberg	0,826	1,525	0,668	1,072	1,068
Beta debt	0,36	0,50	0,61	0,40	0,47
Adjustments					
Current D/E - (market value of equity)	6,13	5,09	8,01	4,35	12,27
Unlevered - Beta asset (market value)	0,43	0,67	0,62	0,52	0,51
Average unlevered peers	0,58				
Relvered with SOFF D/E	**1,92**				

Appendix 8.3 – Implied credit rating

(Source: Petersen & Plenborg (2012) & Own contribution)

Implied credit rating	2006	2007	2008	2009	2010	2011	2012	2013	2014
EBIT interest cover	-3,374	-6,590	0,847	-1,149	1,645	0,276	1,733	1,930	1,131
EBITDA interest cover	-4,967	-9,590	1,400	-2,957	4,736	1,951	2,915	2,672	1,548
Operating income/revenue	95 %	95 %	97 %	100 %	100 %	100 %	98 %	96 %	96 %
Long-term debt/capital	47 %	47 %	50 %	53 %	60 %	67 %	67 %	63 %	65 %
Total debt/capital	78 %	84 %	82 %	74 %	71 %	73 %	73 %	73 %	75 %
ROIC-after tax	11,75 %	8,46 %	-1,92 %	5,49 %	0,35 %	1,08 %	7,15 %	7,73 %	6,23 %
EBIT interest cover	CCC	CCC	B	CCC	B	CCC	B	B	B
EBITDA interest cover	CCC	CCC	B	CCC	BB	B	BB	BB	B
Operating income/revenue	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Long-term debt/capital	BB	BB	BB	BB	B	B	B	B	B
Total debt/capital	B	B	B	BB	BB	BB	BB	BB	B
ROIC-after tax	BB	B	CCC	CCC	CCC	CCC	B	B	B
Implied credit rating	**B**	**B**	**B**	**B**	**B+**	**B**	**BB**	**BB**	**B+**

Appendix 8.4 – Fundamental method BETA

(Source: Petersen & Plenborg (2012) & Own contribution)

Fundamental method			
Types of operating risk	**Risk level**	**SOFF`s ability to manage operating risk**	**Score**
External risk (Section 4.1)			
Oil price and E&P spending	Very high	Increased fluctuation in the oil price	1,6
Orderbook of new vessels	High	High supply of vessels - lower the demand for SOFF services	1,3
Second hand market	High	Lower price on new vessels/decreased demand for OSV services	1,3
Local & Governmental regulations	Very high	Regulations in Brazil and West Africa	1,6
Average score	High		1,45
Strategic risk (Section 4.2)			
Threats from new entrants	Low	Low (Described in Section 4.2.1)	0,6
Threats from substitutes	Very low	Very low (Described in Section 4.2.2)	0,4
Bargaining power of buyers	Medium	Medium (Described in Section 4.2.3)	1,1
Bargaining power of suppliers	Low/Medium	Low/Medium (Described in Section 4.2.4)	0,7
Rivalry between established firms	Very high	Very high (Described in Section 4.2.5)	1,6
Average score	Medium		0,88
Operational risk (Section 4.3)			
Exploiting fleet facilities, utlization	Very high	Important to ensure long term contracts in these market conditions	1,6
Quality of physical resources	Medium	Highly diversified fleet composition, modern vessels, but average old	0,8
Quality of crew and management	Low	Skilled crew/management (Described in Section 4.2.2)	0,6
Choice of cost structure	High	High degree of fixed cost (high financial leverage)	1,2
Newbuilding risk	Medium	One OCSV delivered in 2016, high specifications - ensure contract	0,9
Average score	Medium		1,02
Average operating risk	**Medium/High**	**Bad market conditions, high intensity between competing firms**	**1,12**
Financial risk (Section 5.0)			
Financial leverage	High	The trend in the OSV industry is not viewed upon as sustainable	1,3
Liquidity risk	Medium/high	Short-term good, long-term not healthy	1,15
Acces to financial markets	High	Banks have become reluctant of providing capital to new investments	1,1
Average financial risk	**High**	**Financial risk is high, important to ensure long-term contracts**	**1,18**
Overall SOFF`s risk	**Medium/High**	**Risky, capital intensive and volatile business**	**1,15**

Appendix 8.5 – Summary beta estimates
(Source: Own contribution)

Summary different beta estimates	
Regression	1,04
Comparable companies	1,92
Fundamental	1,15
Average	1,37
Bloomberg adjusted	**1,25**

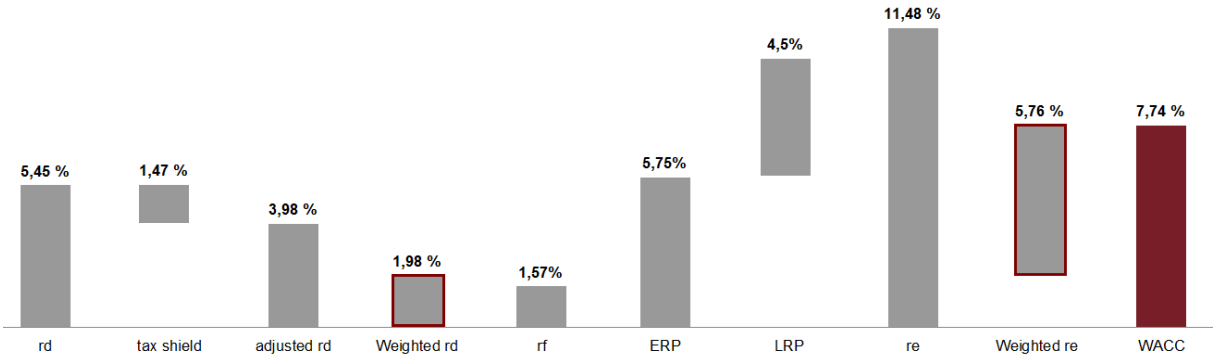
Appendix 8.6 – SOFF trading volume in % of average volume at OSE
(Source: Oslo Børs & Own contribution)

Trading volume OSE	2 014
Total volume OSE	1 061 770 804
Number of companies	197
Average volume	5 389 700
Solstad volume	346 944
Solstad volume in % of average	**6 %**

Appendix 8.7 – SOFF`s bonds outstanding
(Source: Solstad Bond Agreement 2014)

Open bond issues with floating rates	Issue 2011/2016	Issue 2014/2019
Outstanding amount	700 000 000	1 000 000 000
Price	99,9	90,25
Margin	4,40 %	3,50 %
Yield	4,40 %	3,88 %

Appendix 8.8 – WACC Break-down
(Source: Petersen & Plenborg (2012) & Own contribution)



Section 9

Appendix 9.1 – Valuation: Equity forecast, CAPEX, and Complete cash flow statement

(Source: Petersen & Plenborg (2012), SOFF – AR`s (2003-2014) & Own contribution

Equity forecast	E2015	E2016	E2017	E2018	E2019	E2020	E2021
Equity, beginning of period	5 057 532	5 162 663	5 291 828	5 458 657	5 696 636	6 177 118	6 240 442
Net income	157 337	139 361	198 683	352 202	482 488	605 338	662 401
Dividends	-52 207	-10 196	-31 854	-114 223	-2 006	-542 014	-478 308
Total equity	**5 162 663**	**5 291 828**	**5 458 657**	**5 696 636**	**6 177 118**	**6 240 442**	**6 424 535**
Net-interest-bearing debt	**9 801 577**	**9 166 719**	**8 537 900**	**7 866 783**	**6 965 686**	**6 495 154**	**6 686 761**
Invested capital	**14 964 240**	**14 458 547**	**13 996 557**	**13 563 420**	**13 142 804**	**12 735 596**	**13 111 296**

CAPEX	E2015	E2016	E2017	E2018	E2019	E2020	Terminal E2021
Intangible and tangible assets beginning of period	15 169 962	14 653 322	14 163 700	13 694 936	13 244 395	12 809 245	12 389 137
Depreciation	512 866	495 729	479 323	463 554	448 324	433 620	446 412
Intangible and tangible assets end of period	14 653 322	14 163 700	13 694 936	13 244 395	12 809 245	12 389 137	12 754 616
CAPEX	**3 773**	**-6 107**	**-10 559**	**-13 012**	**-13 174**	**-13 512**	**-811 891**

Cash flow statement	E2015	E2016	E2017	E2018	E2019	E2020	E2021
NOPAT	573 314	529 182	563 255	691 765	795 360	882 372	920 721
Depreciation	512 866	495 729	479 323	463 554	448 324	433 620	446 412
Δ Net working capital	37 907	16 071	-6 774	-17 404	-14 535	-12 899	-10 221
Net invesments (non-current assets aka. Intangble and tangible asse	1 759	-6 107	-10 559	-13 012	-13 174	-13 512	-811 891
Free cash flows to the firm (FCFF)	**1 125 847**	**1 034 875**	**1 025 245**	**1 124 902**	**1 215 975**	**1 289 581**	**545 021**
New net financial liabilities	-657 664	-634 859	-628 819	-671 116	-901 097	-470 532	191 607
Net financial expenses after tax	-415 977	-389 821	-364 572	-339 563	-312 872	-277 034	-258 320
Free cash flows to equity holders (FCFE)	**52 207**	**10 196**	**31 854**	**114 223**	**2 006**	**542 014**	**478 308**
Dividend	-52 207	-10 196	-31 854	-114 223	-2 006	-542 014	-478 308
Cash surplus	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Appendix 9.2 – Multiples

(Source: Bloomberg & Own contribution

Multiples						
	EV/Sales		EV/EBITDA		EV/EBIT	
	2015E	2016E	2015E	2016E	2015E	2016E
HAVILA	3,69	3,9	8,17	9,53	14,54	16,55
FARSTAD	2,53	2,64	7,74	8,91	22,72	30,56
DOF	2,59	2,62	8,11	8,88	11,76	14,4
SIOFF	2,51	2,3	7,77	7,08	20,54	26,44
Harmonic mean	2,76	2,76	7,94	8,49	16,23	19,96
SOFF - calculated	3,85	4,06	9,69	10,30	16,01	17,35
SOFF Bloomberg	3,34	3,40	8,15	8,56	12,57	14,87

Section 10

Appendix 10.1 – Sensitivity WACC break down
(Source:

WACC breakdown			
Beta	β	WACC	Share price
Regression	1,04	7,54 %	66,2
Fundamental	1,15	7,65 %	59,8
Bloomberg adjusted	1,25	7,74 %	54,8
Average - not adjusted	1,37	7,85 %	48,8
Comparable companies	1,92	8,30 %	27
		Spread	145 %

Equity risk premium	ERP	WACC	Share price
Koller et al. (4,5%-5,5%)	4,50 %	7,22 %	86,7
PWC survey	5,00 %	7,44 %	72,4
Damodaran	5,75 %	7,74 %	54,8
Increase of 0,25% points	6 %	7,83 %	49,9
Increase of 0,5% points	6,25 %	7,92 %	45,2
		Spread	48 %

Risk free rate	rf	WACC	Share price
1Year	0,89 %	7,80 %	51,5
5Year	1,11 %	7,78 %	52,6
10Year	1,57 %	7,74 %	54,8
Increase of 0.5% points	2,07 %	7,70 %	57
Increase of 1% points	2,57 %	7,65 %	59,8
		Spread	16 %

Liquidity risk premium	LRP	WACC	Share price
Plenborg - low	3,0 %	7,26 %	84
Plenborg	3,5 %	7,43 %	73
Plenborg - medium	4,0 %	7,59 %	63,3
Plenborg	4,5 %	7,74 %	54,8
Plenborg - high	5,0 %	7,88 %	47,83
		Spread	76 %

Appendix 10.2 – EBITDA breakdown
(Source:

EBITDA				
Revenue growth	2015E	2016E	2017E	Share price
Worst case	-40 %	-15 %	-5 %	36,00
Estimated case	-16 %	-5 %	2 %	54,80
Best case	-5 %	5 %	10 %	67,60

OPEX growth	2015E	2016E	2017E	Share price
Worst case	0 %	5 %	10 %	32,2
Estimated case	-12 %	-5 %	2 %	54,80
Best case	0 %	0 %	0 %	68,7

Appendix 10.3 – Utilization rates and day rates
(Source:

Utilization rates						
Decrease 5%-points	2015E	2016E	2017E	2018E	2019E	2020E
PSV	65 %	69 %	78 %	80 %	80 %	80 %
AHTS	55 %	60 %	64 %	65 %	65 %	65 %
CSV	86 %	87 %	93 %	94 %	94 %	94 %
Share price	9,20					

Estimated case	2015E	2016E	2017E	2018E	2019E	2020E
PSV	70 %	74 %	83 %	85 %	85 %	85 %
AHTS	60 %	65 %	69 %	70 %	70 %	70 %
CSV	91 %	92 %	98 %	99 %	99 %	99 %
Share price	54,80					

Increase 5% points	2015E	2016E	2017E	2018E	2019E	2020E
PSV	75 %	79 %	88 %	90 %	90 %	90 %
AHTS	65 %	70 %	74 %	75 %	75 %	75 %
CSV	96 %	97 %	100 %	100 %	100 %	100 %
Share price	77					

Dayrates (stable utilization rates)						
Decrease 5%-points	2015E	2016E	2017E	2018E	2019E	2020E
PSV	66 303	72 933	78 719	80 812	82 952	85 440
AHTS	139 687	146 671	152 538	157 114	160 256	161 859
CSV	206 625	216 956	245 161	289 289	309 540	328 112
Share price	16					

Estimated case	2015E	2016E	2017E	2018E	2019E	2020E
PSV	69 792	76 772	82 862	85 066	87 318	89 937
AHTS	147 039	154 391	160 566	165 383	168 691	170 378
CSV	217 500	228 375	258 064	304 515	325 831	345 381
Share price	54,8					

Increase 5% points	2015E	2016E	2017E	2018E	2019E	2020E
PSV	73 282	80 610	87 005	89 319	91 683	94 434
AHTS	154 391	162 110	168 595	173 652	177 125	178 897
CSV	228 375	239 794	270 967	319 741	342 123	362 650
Share price	94					

Section 11

Appendix 11.1 – Analyst target price
(Source: Equity research, Analytical reports & own contribution

Company	Target price (NOK)	Recommendation
Pareto	57	BUY
RSPlatou	50	HOLD
DnB Markets	43	SELL
Nordea Markets	47	SELL
ABG Sundal Collier ASA	50	HOLD
Average	49,4	HOLD
Our estimate	54.8	HOLD/BUY