What can be done to increase the value of Statoil ASA? Analysis of the discrepancy between theoretical value and stock price.

By Susana Guevara

Supervisor: Klaus Mohn

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WHAT CAN BE DONE TO INCREASE THE VALUE OF STATOIL ASA? ANALYSIS OF THE DISCREPANCY BETWEEN THEORETICAL VALUE AND STOCK PRICE. ®

FORFATTER(E)		VEILEDER:
Studentnummer:	Navn:	**KLAUS MOHN**
208081 …………………	**SUSANA GUEVARA** …………………………………….	
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To my love Carlos…

“And above all these put on love, which binds everything together in perfect harmony. And let the peace of Christ rule in your hearts, to which indeed you were called in one body. And be thankful”

Colossians 3:14–15

Thanks to Prof. Klaus Mohn who was my advisor during the creation of this thesis. He was always demanding and professional.

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Summary

The trend of Statoil's stock price has remained flat over the course of the last few years, gaining the attention of investors and managers and creating doubts among them as to whether Statoil's shares are correctly priced on the market. The intention of this thesis is to find a theoretical value of Statoil's share and compare it with its market price in order to find any discrepancy. For this purpose, three different valuation methods were utilized; Market Comparables method, Discounted Cash Flow and Residual Earnings, resulting in a value per share of 286 NOK, 165,7 NOK and 146,7 NOK respectively. After analysis, the conclusion of this valuation is that Statoil market share price is consistent with real company value, but Statoil has a comparatively low price when compared with its peer group.

During the writing of this thesis, Statoil announced its new strategy to create value and growth. This strategy was also entered into the valuation through two scenarios (a scale-back of CAPEX and a reduction in costs) in order to analyses the impact it would have on the share value. After analysis, the result of this "scenario biased" valuation was that each of the scenarios included in the new Statoil strategy are expected to have a positive impact on the share value.

Foreword

This thesis represents the final work of a two year master degree program in Business Administration with a specialization in finance, at the University of Stavanger (UiS).

The motivation behind this research is the concern that Statoil's share price has been mainly flat since the merger with Norsk Hydro ASA in 2007 despite several factors that should have positively affected its value creation, such as the strong rise in oil price and the increase in oil and gas production.

Statoil's strategy is to maximize the potential value of the Norwegian Continental Shelf, and at the same time create a long-term growth position. Additionally, Statoil appears to have had good results from exploration activities in the past few years. Recently, analysts and investors have questioned why the market value has not increased. Therefore, the aim of this thesis is first, to find out if there is a discrepancy between Statoil's theoretical value and its stock price, and secondly to analyze this discrepancy.

CHAPTER 1
Introduction

1.1. Problem Statement

Stock market is one of the most important sources for companies to raise additional financial capital by selling shares of ownership of the company in a public market.

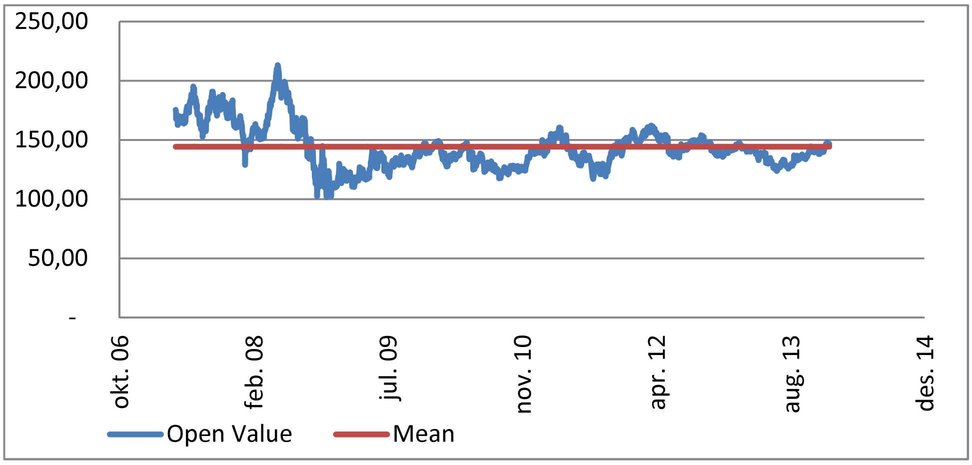
Every day analysts and investors are valuating stocks looking for a good opportunity to increase their returns. Companies, on the other hand, are continuously working to create value in order to attract investors.

The oil and gas industry is an important sector of the world's economy since billions of dollars in petroleum are traded every day worldwide. Industries in this sector play a significant role in national economics.

In Norway, the oil and gas sector represents the largest industry and is the most accountable for national value creation. According to the Norwegian Petroleum Directorate, petroleum production on the Norwegian Continental Shelf (NCS) has added more than NOK 9 000 billion to the country's GDP for more than 40 years.

In 2007, two important companies in this sector, Statoil ASA and Norsk Hydro ASA, merged to become one company which retained the name Statoil ASA. The main reason for this merger was to combine the resources and knowledge of both companies, in order to become a stronger international player than the two companies were separately. The strategy of Statoil is to maximize the potential value of the NCS, and at the same time, create a long-term growth position. Statoil's intention with the merger was to create long term sustainability based on the comparative value of its project portfolio. Although the board believed that the upside potential they foresaw for Statoil with the merger outweighed the downside, the reality is that the stock price trend has remained flat as shown in the figure below.

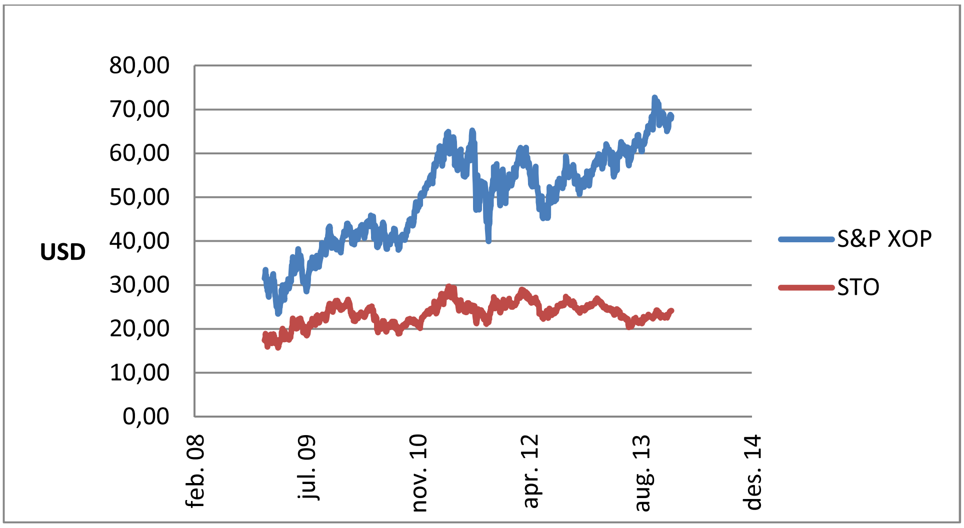
Figure 1: Statoil's historic stock price



Source: Data collected from www.statoil.com

During the course of the first half of 2013, Statoil stock price was even decreasing. There has been much concern in the media regarding the weaknesses of Statoil shares, creating frustration among managers. Since other comparable companies have not faced the same stock situation, analysts and investors are wondering, why Statoil's share price has tended to remain flat while the Standard & Poor Oil and Gas exploration and production index has tended to increase over the same period.

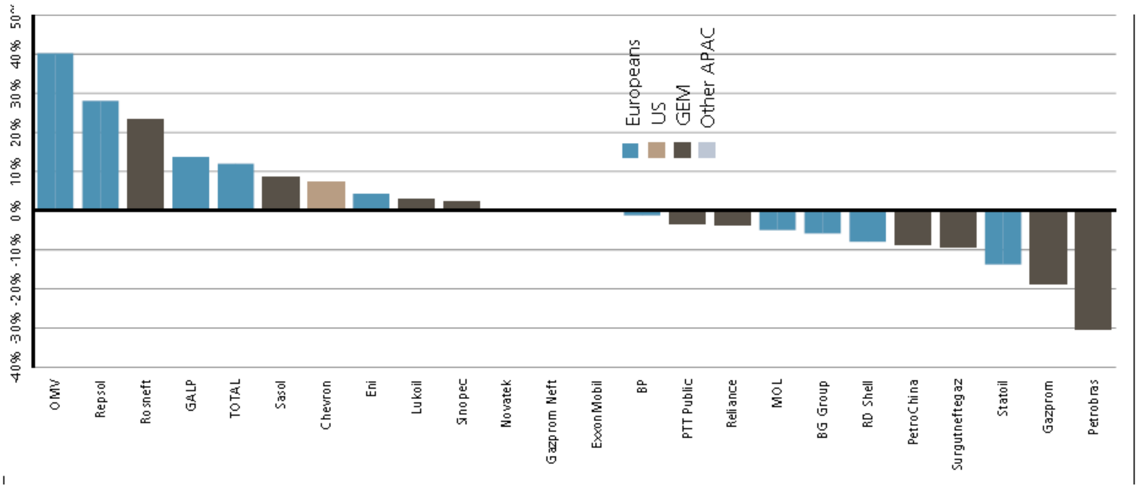
Figure 2: STO vs. S&P XOP



Source: Data collected from www.nasdaq.com

Moreover, in a study conducted by Global Oil & Market Gas Analyzer (September 2013), the last year performance assessment of Statoil share price was ranked in -15% in a representative pool of integrated oil companies; ranked only higher than Gazprom and Petrobras and far lower than other companies such as OMV (40%) and Repsol (28%).

<u>Figure 3:</u> Integrated 12-month share price performance (USD) – Up to Sep-2013



Source: Datastream, UBS

Given this background, the main goal of this research project is to value Statoil's shares using three different methods that will allow us to discover any discrepancy between its theoretical value and its stock price. From this basis, an analysis of possible differences can be presented.

This work is structured in 5 chapters. Chapter 1 presents an introduction including general and specific questions to answer. Chapter 2 is the theoretical framework; it covers an overview of the previous research related to this theme and valuation methods. Chapter 3 introduces the oil and gas industry as well as the Statoil framework. Chapter 4 presents calculation and analysis of the information; it contains all the calculations and analysis needed to answer the questions established in Chapter 1. Finally, Chapter 5 presents the conclusion and potential recommendations.

1.2. Objectives

1.2.1. General Objective

Analysis of the discrepancy between theoretical value and stock price of Statoil ASA.

1.2.2. Specific Objectives

- Make a valuation using the Market Comparable method.
- Make a Valuation of Statoil ASA using Discounted Cash Flow (DCF) and Residual Earnings methods.
- Compare the theoretical value with stock price.
- Analysis of Statoil's strategies.

CHAPTER 2
Theoretical Framework

2.1. Previous research

In May 2011, at the University of Agder, Bjørn Harald Drangsholt wrote a thesis titled "Verdsettelse av Statoil ASA" (translated to English: "Valuation of Statoil ASA") in which two methods were used; residual earnings and multiples comparable. The result of his work was a value for Statoil's share of 140 NOK while the market price was 136,4 NOK. He concluded that Statoil' shares were a bit undervalued by the market.

Another thesis related to Statoil's share price was written by Marius Urstad in 2011 at the University of Stavanger. The title of this work is "Oljepris og aksjemarked: En økonometrisk analyse" (translated to English: "Oil price and market share: One econometrics analysis"). Using an econometrics model he tested how Statoil's share price was affected by a change in oil price. He concluded that a change in oil price of 1% entails a change in Statoil's share price of 0,143%.

2.2. Valuation Approaches

The central focus in fundamental analysis is a valuation. This is based on the premise that there is a difference between book value and market value; an extra value that is omitted from the balance sheet. Thus, the value of a firm can be written as:

$$\boldsymbol{Firm's\ value = Book\ value + Extra\ value}$$

There are two simple claimants on the value of a firm; debtholders and shareholders. Both contribute cash in exchange for a claim of a payoff in the form of interest payments (for debtholders) or dividends (for shareholders). These claims are traded in the capital market based on the anticipated payoffs that the firm will pay on this claim. But at which value are they traded?

The Efficient Market Hypothesis (EMH) states that stocks always trade at their fair value on stock exchanges, making it impossible for investors to purchase undervalued stocks or sell stocks for inflated prices. An intriguing question is what makes the market efficient? The existence of millions of investors who believe that markets make mistakes and attempt to find under- and over- valued stocks and trade on these valuations believing that markets will correct these mistakes. The following passage is an excellent argument in support of the Efficient Market Hypothesis:

"…markets are inefficient until you take a large position in the stock that you believe to be mispriced, but they become efficient after you take the position."

Aswath Damodaran, Investment Valuation, 2012

Valuation is by definition the act or process of assessing value or price, it is not the act of searching for a true value that someone would like it to become. Valuation models may be quantitative, but the inputs are subject to some subjective adjustments. Therefore, when making a valuation, it is important to avoid the winds of speculation, fad and fashion by using fundamental analysis. Fundamental analysis anchors a valuation to the financial statements.

In general terms, there are three valuation approaches to value any asset or business; the Market Approach, Income Approach and Real-Option Approach. Additionally, there are several methods within each of those.

Market Approach estimates the value of an asset based on the price of comparable assets. This approach first identifies a peer group, which is a set of similar firms in the same industry with similar characteristics. Then, it calculates standardized multiples which can be used to obtain the value of the firm in question. Using this approach investors determine the value of a firm by comparing it with its rivals.

Income Approach values the business based on its ability to generate future benefits. Using this approach investors analyze the return they will receive on their investments, either in the form of annual dividends, growth in value of business or a combination of both. Income Approach determines the present value of an anticipated series of income streams. Methods such as Discounted Cash Flow (DCF), Residual Earnings Analysis (RE) and Dividend Discount Model (DDM) are some of the methods included under this approach.

Real Option Approach is a relatively new technique used to value investment opportunities which embed optionality. This technique is very useful when the environment in which the investment is made is uncertain, and when managers can manipulate the way of implementation of the investment if certain conditions arise.

2.3. Selecting a valuation method to value Statoil ASA

One of the most important things when choosing a valuation method is to ensure a cost effective approach without sacrificing the quality of the results. Different methods are available and they require different types and amounts of information. Some of the techniques are considered 'cheap' because of the simplicity involved in using minimal information. These cheap methods can put the trader in danger by ignoring relevant information. On the other end of the scale, some techniques are considered 'expensive' because of the complexity involved in the calculations, and therefore greater costs and time. The objective when choosing the most appropriate valuation method is to choose one that balances the tradeoff between benefit and cost.

Any valuation method gives an accurate intrinsic value of a company. However, the key is to use a model which captures the aspect of the firm that generates value.

"A valuation model is a tool for thinking about the value creation and translating that thinking into a valuation"

(Penman, 2013)

This thesis presents a valuation of Statoil starting with the relatively simple Method of Comparables, followed by an income based valuation approach (including Discounted Cash Flow and Residual Earnings methods), which allow us to make a more thorough analysis. The Real Option approach, which is relevant for further analysis, will have to be left for future research.

2.3.1. The Method of Comparables

The Method of Comparables provides an estimation of the market value at which a firm can be traded. This is based on the premise that an appropriate asking price of an asset is truly estimated by looking at Market Comparables. This is a fairly simple technique to use.

The downside of this method is that the calculations can be too simplistic when based on limited information. All firms are different, even when they operate in the same industry, sell the same products and follow the same accounting system. Firms have different capital structures, strategies, costs and income levels. Those discrepancies in the value between similar firms could result in a mispricing of the value.

Additionally, the multiples are based on short term historic information or near-term forecasting that does not capture the long-term performance. If comparable groups are incorrectly priced, as they are in the case of bubbles and recession, then the multiples will also be mispriced. This can be cyclic because the price of one firm is based on the price of other firms.

The main reason for using this technique in this research, despite its simplicity, is to estimate the price at which Statoil's shares should be traded considering comparable indicators.

Palepu, Healy and Peek (2010), state that "under this approach a current measure of performance or single forecast of performance is converted into a value by applying an appropriate price multiple derived from the value of comparable firms".

Penman (2013) lists three steps involved in this process:

1. Identify comparable firms that have operations similar to those of the target firm whose value is in question.
2. Identify measures for the comparable firms in the financial statements – earnings, book value, sales, cash flow – and calculate multiples of those measures at which the firms trade.
3. Apply an average or median of these multiples to the corresponding measures for the target firm to get that firm's value.

2.3.1.1. Ratios used in this valuation

When using market multiples of comparable firms to value a company, the most common multiples to use are those related to earnings and Earnings Before Interest and Taxes (EBITDA) ratios because they provide information about profitability. However, when valuing multinational oil and gas companies it is important to consider additional measures such as the Debt-Adjusted Cash Flow (DACF) which represents the operating cash flow after tax, excluding financial expenses after taxes.

The following multiples were selected for valuing Statoil:

$$\frac{EV}{DACF}: \frac{Enterprise\ value}{Debt\ Adjusted\ Cash\ Flow} \qquad \text{[Multiple 1]}$$

$$EV = Market\ capitalisation + Interest\ bearing\ debt\ (short\ and\ long\ term) - Cash\ and\ Equivalents \qquad \text{[Equation 1]}$$

$$DACF = Net\ income\ before\ minorities$$
$$+ Depreciation\ \&\ Amortisatio$$
$$+\ Exploration\ expenses\ to\ Profit\ \&\ Loss\ (P\&L)$$ [Equation 2]
$$+\ Noncash\ items\ of\ associates$$
$$+ Post\ tax\ pension\ interest\ cost$$
$$-\ Income/cash\ \ flow\ of\ peripheral\ assets$$

$$\frac{EV}{EBIT} = \frac{Enterprise\ value}{Earnings\ Before\ Interest\ and\ Taxes}$$ [Multiple 2]

$$EBIT = Revenues - Cost\ of\ goods\ sold - Operating\ expenses$$ [Equation 3]

$$\frac{EV}{EBITDA} = \frac{Enterprise\ value}{Earnings\ Before\ Interest, Taxes\ and\ Depreciation\ \&\ Amortization}$$ [Multiple 3]

$$EBITDA = Revenues -\ Cost\ of\ goods\ sold -\ Operating\ expenses$$
$$+\ Depreciation\ \&\ Amortization$$ [Equation 4]

$$\frac{P}{B} = \frac{Market\ capitalization}{Book\ valueof\ equity}$$ [Multiple 4]

$$\frac{P}{S} = \frac{Share\ price}{Sales}$$ [Multiple 5]

$$\frac{P}{E} = \frac{Share\ price}{Earnings}$$ [Multiple 6]

2.3.2. Discounted Cash Flow Method

The Discounted Cash Flow method (DCF) determines the value of a firm by calculating the present value of forecasted future cash flow plus a terminal value. Terminal value is the present value of expected future cash flow beyond the end of the planning period. This model usually involves three to five years forecasted future cash flow, which are discounted at the firm’s weighted average cost of capital to obtain its present value. The terminal value is usually calculated using the well-known model Gordon growth, which requires estimating both a growth rate and a discount rate. Using the DCF method, firm value can be defined as:

$$\begin{matrix} Firm \\ Value \end{matrix} = \begin{matrix} PV\ of\ Planning \\ Period\ Cash\ Flow \end{matrix} + \begin{matrix} PV\ of\ Terminal \\ Value \end{matrix}$$

In the case of valuing equity, as is the case in this thesis, it can be calculated directly by discounting the equity free cash flow back to the present using the expected rate of return by the firm's shareholders, or calculating the firm's value and subtracting any outstanding debt.

According to Titman (2014), the firm's free cash flow (FCF) is equal to the sum of the cash flows available to be paid to the firm's creditors (creditor cash flows) and owners (Free cash flow to equity). Thus, a firm's FCF can be written as:

$$\begin{matrix} Firm \\ FCF \end{matrix} = \begin{matrix} Creditor \\ Cash\ Flows \end{matrix} + \begin{matrix} Equity \\ FCF \end{matrix}$$

Where,

$$\begin{matrix} Creditor \\ Cash\ Flows \end{matrix} = \underbrace{\begin{matrix} Interest \\ Expense \end{matrix} - \begin{matrix} Interest \\ Tax\ Savings \end{matrix}}_{\begin{matrix} After - Tax \\ Interest\ Expense \end{matrix}} + \underbrace{\begin{matrix} Principal \\ Payments \end{matrix} - \begin{matrix} New\ Debt\ Issue \\ Proceeds \end{matrix}}_{\begin{matrix} Net\ Debt\ Proceeds \\ (Change\ in\ Principal) \end{matrix}}$$

As shown in the formula below, a firm's free cash flow is calculated by deducting the cost of goods sold, operating expenses and depreciation expenses to revenues in order to obtain the earnings before interest and taxes (EBIT). Please note that interest expenses are excluded from this calculation because the objective is to obtain the cash flow available to pay all the firm's sources of financing, including both its creditors (principal + interest) and equity investors. Following this, net income is the result of EBIT less taxes. Furthermore, depreciation expenses must be added back to net income because it is a noncash expense. Finally, investments in new long-lived assets (CAPEX) typically referred to as property, plant and equipment (PPE), and additions to operating net working capital (NWC) must be deducted from net income. Thus, a firm's free cash flow can also be defined as:

$$FCF_t = \underbrace{\left[(R_t - C_t - E_t - DA_t)x\left(1 - \frac{Tax}{Rate}\right)\right]}_{Net\ Income_t} + DA_t - CAPEX_t - \Delta NWC_t$$ [Equation 5]

Where,

R = Firms Revenues
C = Cost of goods sold
E = Operating Expenses
DA = Depreciation & Amortizacion
$CAPEX$ = Capital Expenditures
ΔNWC = Change in operating net working capital

So, Free Cash Flow to Equity (FCFE) can be estimated as:

$$FCFE = \frac{Net}{Income_t} + DA_t - CAPEX_t - \Delta NWC_t + Net\ Debt\ Proceeds_t$$ [Equation 6]

Where,

$$CAPEX_t = Net\ PPE_t - Net\ PPE_{t-1} + Depreciation\ Expense_t$$ [Equation 7]

$$\begin{matrix} Operating\ Net \\ Working\ Capital \end{matrix} = \left[\begin{pmatrix} Current \\ Assets \end{pmatrix} - \begin{pmatrix} Cash\ and \\ Marketable\ Securities \end{pmatrix}\right] - \left[\begin{pmatrix} Current \\ Liabilities \end{pmatrix} - \begin{pmatrix} Current\ Portion\ of \\ Interest - Bearing\ Debt \end{pmatrix}\right]$$ [Equation 8]

$$Net\ Debt\ Proceeds = \frac{Principal}{Payments} - \frac{New\ Debt\ Issue}{Proceeds}$$ [Equation 9]

More clearly, FCFE can be presented as follow:

(+) Net Income
(+) Depreciation expense
+/(-) Increase (Decrease) in long-term liabilities
+/(-) Increase (Decrease) in short-term liabilities
+/(-) Increase (Decrease) in deferred income taxes
(-) Δ in NWC
(-) CAPEX
(=) Equity Free Cash Flow (FCFE)

Titman (2014) lists the following three steps to estimate the value of equity:

1. Estimate the amount and timing of the expected equity free cash flow.

2. Estimate a risk-appropriate discount rate, which is the equity required rate of return.
3. Discount the cash flows by calculating the present value of the estimated equity FCFs using the equity discount rate to estimate the value of the equity.

2.3.3. Residual Earnings Analysis

The Residual Earnings Analysis model allows us to estimate the extra value omitted in the balance sheet by calculating the present value of forecasted residual earnings. Thus, the value of a firm's equity is the sum of its book value and the present value of forecasted residual earnings. This model is designed to prevent making the mistake of paying for earnings that do not add value.

"If one forecasts that an asset will earn a return on book value greater than its required return – positive residual earnings – it must be worth more than book value; there is extra value added"

(Penman, 2013)

"If a firm can earn only a normal rate of return on its book value, the investors should be willing to pay no more than book value for its shares"

(Palepu, Healy and Peek, 2010)

The idea behind this is that shareholders buy earnings. If you analyze P/B ratio, for example, you will notice that this determines the expected return on book value based on future earnings. Although a firm should invest in its activities while producing more earnings, these investments add value only if earnings from them exceed its required return.

Then, firm's equity value can be expressed as:

$$Value\ of\ equity\ (V_0^E) = B_0 + \frac{RE_1}{\rho_E} + \frac{RE_2}{\rho_E^2} + \frac{RE_3}{\rho_E^3} + \cdots \qquad \text{[Equation 10]}$$

Where,

B_0 = Current book value of equity
ρ_E = 1 + Required return for equity (r_E)
RE = Residual earnings

$$Residual\ Earnings = (ROCE - r_E)xBook\ value\ of\ common\ equity \quad \text{[Equation 11]}$$

or

$$RE_t = [ROCE_t - (\rho_E - 1)]B_{t-1} \quad \text{[Equation 12]}$$

The Residual earnings model compares return on common equity (ROCE) to the required return, $\rho_E - 1$. The difference between them is expressed in the amount of money when it is multiplied by the book value at the beginning of the period.

Penman (2013), states the following steps for a residual earnings valuation:

1. Identify the book value in the most recent balance sheet.
2. Forecast earnings and dividends up to a forecast horizon.
3. Forecast future book values from current book values and your forecasts of earnings and dividends.

$$Book\ value = Beginning\ book\ value + Earnings - Dividens \quad \text{[Equation 13]}$$

4. Calculate future residual earnings from the forecasts of earnings and book values.
5. Discount the residual earnings to present value.
6. Calculate a continuing value at the forecast horizon.
7. Discount the continuing value to present value.
8. Add 1, 5 and 7.

2.3.4. Cost of Equity

The cost of equity is the rate of return the investors expect to earn by putting their capital into the firm, buying its stock. The investor expects a return higher than the investment to compensate the risk taken. This rate of return is needed to value Statoil's share price using the model of Residual Earnings Analysis and Discounting Free Cash Flow.

There are two approaches used to calculate the cost of equity. One is the Capital Asset Pricing Model (CAPM) which consists of the sum of the systematic risk that cannot be diversified, such as interest rate changes, recessions, wars, etc. and the unsystematic risk taken by buying a specific stock which is affected by firm-specific events such as product defects, lawsuits, etc. The other approach is derived from the Gordon Model which calculates the internal rate of return that makes the present value of an estimated dividend stream equal to the firm's stock price.

In this research, the cost of capital is calculated using the traditional CAPM approach. Thus, the equation to use is the following:

$$r_e = r_f + \beta_e(r_m - r_f) \quad \text{[Equation 14]}$$

$\boldsymbol{r_f} =$ Risk free rate, is typically the current yields on the domestic treasury securities. As the cost of equity is used to discount a distant cash flow of Statoil, a 10-year maturity is used as the risk free rate.

$\boldsymbol{\beta_e} =$ Firm's beta represents the sensitivity of the equity returns to the return on the overall market portfolio. It can be calculated by computing the averages of equity betas of comparable firms and adjusting it for differences in the financial structure, or by regressing the firm's excess stock returns on the excess returns of a market portfolio. A firm's beta can be expressed as the following equation:

$$\beta_{firm} = \frac{COVAR(r_{firm}, r_m)}{VAR(r_m)} \quad \text{[Equation 15]}$$

Because the common stocks of Statoil are publicly traded, the last method is used to calculate its beta.

$\boldsymbol{(r_m - r_f)}$ = Risk premium, is the difference between the rate of return on market portfolio and the risk free rate. In other words, it is the slope of the Security Market Line which represents the linear relationship between risk and return. According to Titman (2014), “Historical data suggest that the equity risk premium for the market portfolio has averaged 6% to 8% a year over the past 75 years. However there is a good reason to believe that this estimate is far too high. In fact, the equity risk premium according to recent estimates lies in the range of 3% to 4%” and further suggests an equity risk premium for the market of 5%. Therefore this thesis will follow the recommendation of using a 5% risk premium in the calculation of Statoil’s cost of equity.

2.3.5. Growth rate

In terms of valuation, a growth rate measures the firm’s capacity to increase its residual earnings by having sustainable growing sales, sustainable profit margin and improving asset turnover. Forecasting growth is a very uncertain aspect of valuation and the share price is very sensitive to changes in growth rate.

CHAPTER 3

Oil and Gas Industry and Statoil ASA

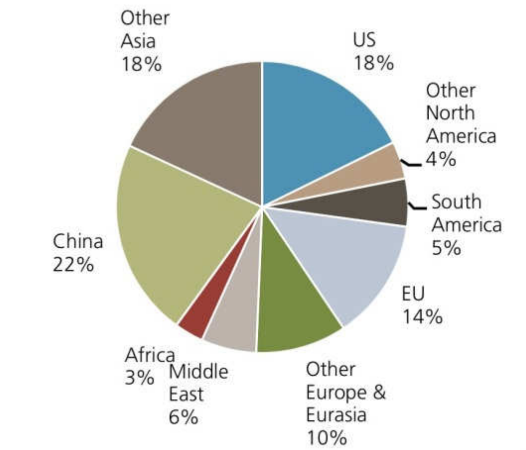
3.1. Oil and Gas Industry

According to the U.S. Energy Information Administration (EIA), oil represents the most important source of energy, accounting for 36 per cent of total energy consumption in the world, while natural gas accounts for 26,1 per cent. Dependence on oil and gas importation can even be seen as a security issue by countries that do not have local reserves (or production capabilities) and need to import oil from politically unstable areas of the world.

3.1.1. Energy (and hydrocarbon) demand

During the last few years, China has been the main energy consumer in the world (22% oil production) closely followed by the United States (18%) and the European Union (14%). Other countries in Asia consume another 18% of global energy (BP Statistical Review of World Energy June 2013).

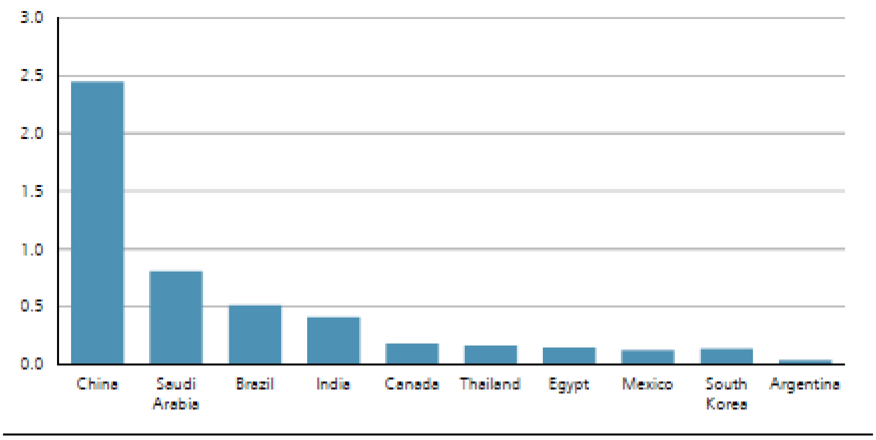
Figure 4: Global energy consumption by geography



Source: BP Statistical Review 2013

Oil demand is strongly affected by global economy growth indexes; the increase in oil demand in 2012 was estimated to be 20 mm barrels/day with China having the biggest rise (near 2,5 mm barrels/day) followed by Saudi Arabia and Brazil (see Figure 5). The major increase in oil demand is located in emergent economies where China is considered to be the most important driver of price increases in recent years (the growth consumption of China has been 10% for the past 10 years). The 10-year growth rate in world energy consumption is 2.9% within the OECD (Organisation for Economic Co-operation and Development) compounding at 0.1% versus 5.7% in non-OECD markets. Remarkably, by 2010 Saudi Arabia is expected to become the 3rd largest energy consumer in the world behind China and the USA.

Figure 5: Oil demand growth by country 2012-20 (Mbbl/d)



Source: IEA, UBS

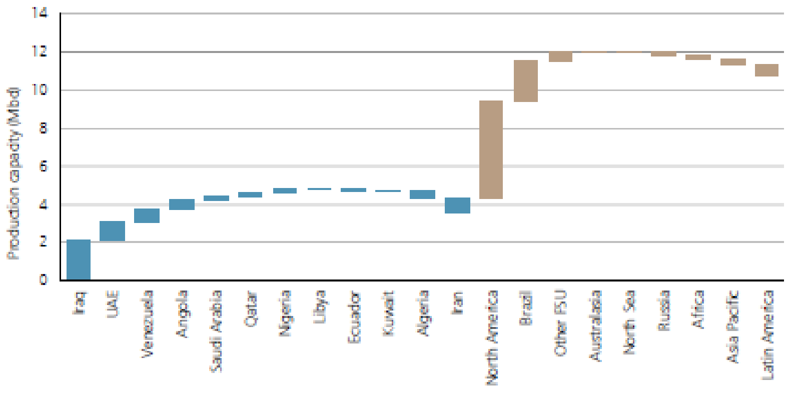
In all foreseen scenarios, energy consumption is expected to grow in the long term (to 2035) driven primarily by improvement in non OECD economic indexes and the rise in the world population. Meanwhile, it is commonly accepted that energy consumption in the OECD will decline.

3.1.2. Supply of oil and gas

Until the mid- 1960s, worldwide activity in oil and gas production and commercialization were strongly influenced by seven private companies known as “the seven sisters” (ESSO, Shell, BP, Mobil, Chevron, Gulf Oil Co, Texaco); however the strong influence of these companies in the global oil market started declining between1960-1970 with the creation of a cartel amongst oil producing countries called the OPEC (Organization of Petroleum Exporting Countries) which became increasingly important in the production and supply of hydrocarbons worldwide. Nowadays, according to the BP Statistical review of world energy 2013, supply of oil and gas is shared between OPEC and non OPEC countries where OPEC supply averaged 30.6Mbb/d and the total non-OPEC supply averaged 54.4 mbd in the first half of 2013.

Russia is one of the larger producers in the world and a major exporter to Western Europe. In addition, after the fall of communism, Russia's rapid production growth was one of the major suppliers of consumption growth in the rest of the world. More recently, the main growth in supply capacity has been driven by the USA “shale oils”, and Canada oil- sands; both of them non-conventional oil sources that have become viable due to specific technological developments (see Figure 6).

Figure 6: Supply Capacity Growth by Country 2012-20 (Mbbl/d) Waterfall



Source: IEA, Wood Mackenzie, UBS (Production capacity for OPEC members)

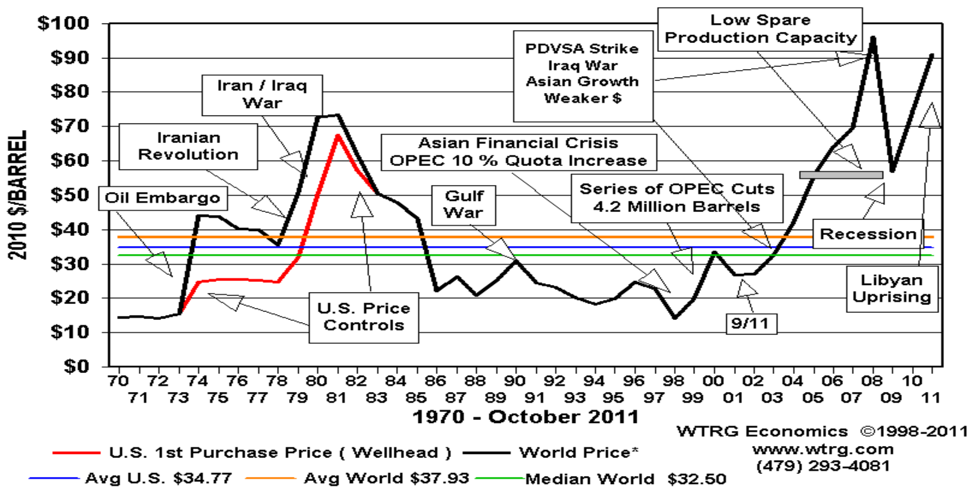
According to the BP statistical review of world energy Jun 2013, the main producers of oil worldwide are Saudi Arabia: (11.530 mbpd), the Russian Federation (10.643 mbpd) and the USA: (8.903 mbpd); however the top three oil consumers of the world according the same report are the USA: (18.555 mbpd), China (10.221mbpd) and Japan (4.714 mbpd).

3.2. Price formation

Oil is traded worldwide in commodities markets. There are many different types of crude oil produced in different locations worldwide, however, the oil market is benchmarked mainly for two different types of oil (which differ in physical-chemical composition). West Texas Intermediate (WTI), also known as Texas light sweet, is a grade of crude oil described as light because of its relatively low density, and sweet because of its low sulfur content. Brent Crude is a major trading classification of Earnings Before Interest and Taxes Earnings Before Interest and Taxes crude oil that serves as a major benchmark price for purchases of oil worldwide. Brent Crude is sourced from the North Sea, and comprises Brent Blend, Forties Blend, Oseberg and Ekofisk crudes (also known as the BFOE Quotation). Brent Crude oil is also known as Brent Blend, London Brent and Brent petroleum. Oil price is rated in barrels (1 barrels = 159 liters in normal conditions).

Oil price is very sensitive to political events. An overview of oil price variation during different political crisis worldwide from 1970 to 2011 can be observed in Figure 7.

Figure 7: Crude Oil Prices 1947 – October 2011



Source: www.wtrg.com

During the last decades of the 20th century until the present day, OPEC has had a strong influence on oil price formation. Even though OPEC countries do not have complete control of oil prices currently, they still constitute a strong factor due to the impact of its production on the global market.

The performance of oil and gas prices depends on many factors; in politically stable conditions the price is driven by worldwide supply and demand (mainly in future commodity markets); at least as far as price variations are located inside a pre-defined band, beyond which OPEC countries (and other players) are expected to take action to control the price.

One of the most important factors determining price is the level of petroleum inventories in the U.S. and other consuming countries (mostly OECD). Until spare capacity became an issue, inventory levels provided an excellent tool for short-term price forecasts. Although not well publicized, OPEC has for several years depended on a policy that amounts to world inventory management. Their focus is on total petroleum inventories including crude oil and petroleum products, which is a better indicator of prices than oil inventories alone. The USA strategic reserve has a declared inventory of 691,5 millions of barrels and is the biggest oil reserve in the word. It is the largest emergency supply in the world with the capacity to hold up to 727 million barrels; this equates to 36 days of oil at current daily US consumption levels of 19.5 million barrels per day.

Figure 8: US strategic reserve

STRATEGIC PETROLEUM RESERVE INVENTORY					
CURRENT SPR INVENTORY AS OF May 09, 2014					
SWEET	SOUR				TOTAL
261.9 million bbls	429.7 million bbls	*			691.5

SPR OIL MOVEMENTS in Millions of Barrels					
MONTH	EXCHANGE BARRELS		DRAWDOWN BARRELS		NET MOVEMENT
Jan-14	0.0				0.0
Feb-14	0.0				0.0
Mar-14	0.0		**		0.0
Apr-14		A	2.6		2.6
May-14		A	2.4		2.4

( ) = Barrels released from SPR

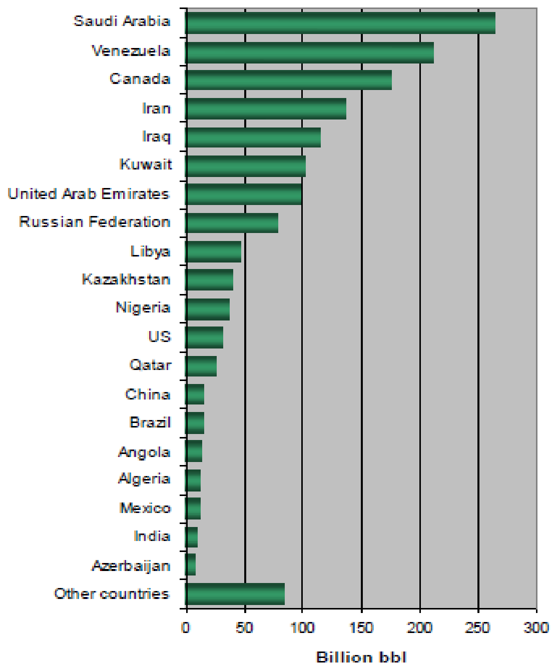
* Totals may change due to rounding
** 40,000 barrels were delivered in March
A - Test Sale 2014

Source: www.spr.doe.gov/dir/dir.html (May 18, 2014)

It is widely accepted today, as seen for example in the WTRG Economics Newsletter (http://www.wtrg.com/prices.htm), that speculation in the futures market was a component of price increases over the last decade (the amount of impact of future speculative transactions in the oil price formation is however not determined) with the number of futures contracts on NYMEX increasing at over ten times the rate of increase of world petroleum consumption. In recent years, the ICE Brent contracts grew at a higher rate than NYMEX.

Another important factor in oil price formation is the level of global reserves; after all, hydrocarbons are a not renewable source of energy. According to experts such as Prof. Jonas Odland (UIS), "for today most of the easily producible oil and gas has already been found and produced or is in the process of being produced. Current focus is the deep offshore area beyond the continental shelf where water depths reach some 3000 meters". Given the difficulty of oil production in such conditions, technology is also playing an important role in increasing the quantity of global proved reserves and current production with the development of new technology. Worldwide proved reserves as of 2010 is show in Figure 9.

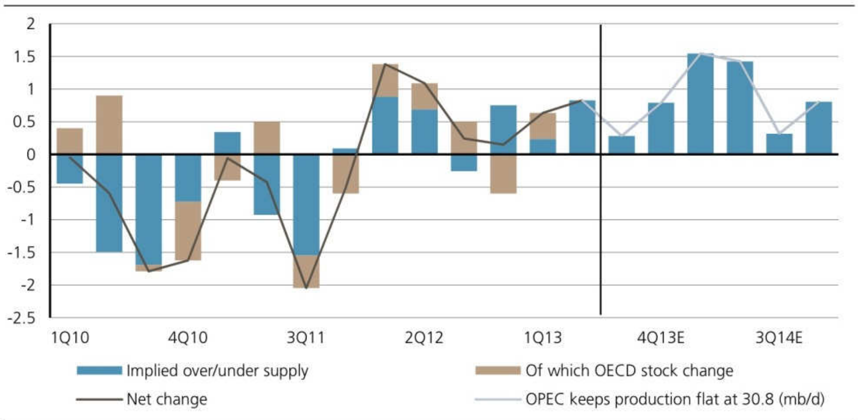
Figure 9: Proved Oil Reserves by End of 2010



Source: Prof. Jonas Odland (UiS) as part of course "Offshore Field Development"

The oil price has remained high in the last few years and according to several studies is predicted to grow in the near future. As the result of the high sensitivity of prices, it is difficult to predict future trends. However UBS (Global Oil & Gas Analyzer) in their last annual publication in September 2013 forecasted “a steady decline in the crude price as a consequence to the excess of supply’s growth over the incremental demand” (see Figure 10 and 11).

Figure 10: Market balance and stock change (Mbbls/d)



Source: UBS, IEA

Figure 11: Crude Oil Price Forecast ($/bbl)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Brent	110.93	111.37	107.73	100.00	95.00	92.00	92.00	92.00	92.00	92.00
WTI	95.11	94.15	95.40	93.50	89.00	86.00	86.00	86.00	86.00	86.00

Source: UBS estimates

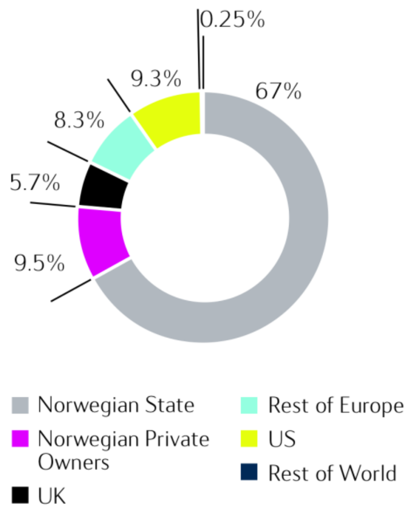
It is well known that any valuation relies on any particular view of the world. In this sense, any change in oil price will affect the valuation of Statoil. However, taking into consideration that oil price is very sensitive to different difficult to predict factors, and after a general evaluation of some elements such as consumption, demand, reserves and general macroeconomics conditions, for simplicity and balancing the upsides and downsides of this evaluation, a flat oil price has been chosen for use in this research.

3.3. Statoil ASA

Statoil is a multinational integrated oil and gas company with its headquarters in Stavanger, Norway. It started its activities on 18 September 1972 under the name “Den norske stats oljesilskap AS” owned by the Norwegian State. In 2001, it changed the name to Statoil ASA and became a public limited company traded on the Oslo and New York Exchange and in 2007, Statoil merged with Hydro’s oil and gas division.

The company currently operates in more than 30 countries and has approximately 23,000 employees worldwide. As of 2013, the Norwegian State owns 67 per cent of its total shares, while the rest is publicly traded on the Oslo Stock Exchange as STL and on the New York Stock Exchange as STO.

Figure 12: Distribution of shareholders



Source: Statoil’s Annual Report on Form 20-F 2013

Statoil’s operation covers activities in exploration, development and production of oil and gas (upstream segment) and refining, marketing and trading of crude oil, natural gas and related products (downstream segment). For the full year 2013, Statoil produced an average 1 217 million barrels of oil-equivalent per day.

3.3.1. Strategy

As of end 2012, Statoil's strategy was to deliver profitable production growth with a safe environment. To this end, its strategy focused on the following elements:

- Revitalize Statoil's legacy position on the NCS
- To build offshore clusters
- Developing into a leading exploration company
- Increasing their activity in unconventional resources
- Creating value from a superior gas position
- Continuing portfolio management to enhance value creation
- Utilizing oil and gas expertise and technology to open new renewable energy opportunities

At the end of 2013, the firm made some strategic changes focusing on improvement in cash flow and profitability. In order to achieve this improvement, its core goals included:

- Increase capital efficiency by introducing a reduction in capital expenditure (CAPEX) in about 8% from previous estimates.
- Maintain return on average capital employed (ROACE) at the same level of 2013 based on an oil price of USD 100 per barrel.
- Increase equity production by around 2% Compound Annual Growth Rate (CAGR) of 2013 level rebased for divestments and redetermination.
- Continue creation of a large portfolio of exploration assets.
- Increase returns by optimization of projects.

Although the purpose of the present thesis is primarily focused on the behavior of the market share price of Statoil when maintaining its strategic behavior without major variations (as has been until 2013), the notorious strategy change produced in late 2013 also needs to be addressed in this research. It is also interesting to note that during the writing of this thesis Statoil announced its new strategic plan which was developed in order to create growth and value- essentially one of the main objectives of this thesis. In a more detailed context, the present thesis can also be utilized to highlight important questions regarding the sustainability of Statoil given the current global strategy and its effect on the company in the near future.

3.4. Comparable companies

In this work, Statoil's stock performance is comparable with the following peer group:

Chevron: an American energy corporation with its headquarters in California (USA). It operates in more than 180 countries and has approximately 61 900 employees worldwide. Its upstream activities include exploration & production of oil and natural gas. Its downstream activities cover manufacturing, products and transportation of fuels, lubricants and additives. In 2013, Chevron produced an average 2 597 million barrels of oil-equivalent per day.

Conoco Phillips: an American multinational energy company with its headquarters in Houston, Texas (USA). It operates in 27 countries and has approximately 18 400 employees worldwide. Its operations include exploration, production, transportation and marketing of crude oil, natural gas, natural gas liquids, liquefied natural gas and bitumen. During 2013, the company produced an average 1 502 barrels of oil-equivalent per day.

Total: a French multinational integrated oil and gas company with its headquarters in Courbevoie, Paris. It operates in more than 130 countries and has almost 99 000 employees worldwide. They are organized into three interrelated business segments: upstream (oil exploration and production and activities involving natural gas), marketing & services and refining & chemicals. The average daily oil and gas production was 2 299 thousand barrels oil-equivalent for the full year 2013.

Shell: a global group of energy and petrochemical companies with its headquarters in The Hague, Netherlands. It operates in more than 70 countries and has approximately 92 000 employees around the world. Its upstream activities include exploration and extraction of crude oil and natural gas, liquefied natural gas (LNG) and converting natural gas to liquids (GTL). Its downstream activities cover refining, marketing and transport of a range of refined products. The company produced 3,2 million barrels of oil-equivalent per day in 2013.

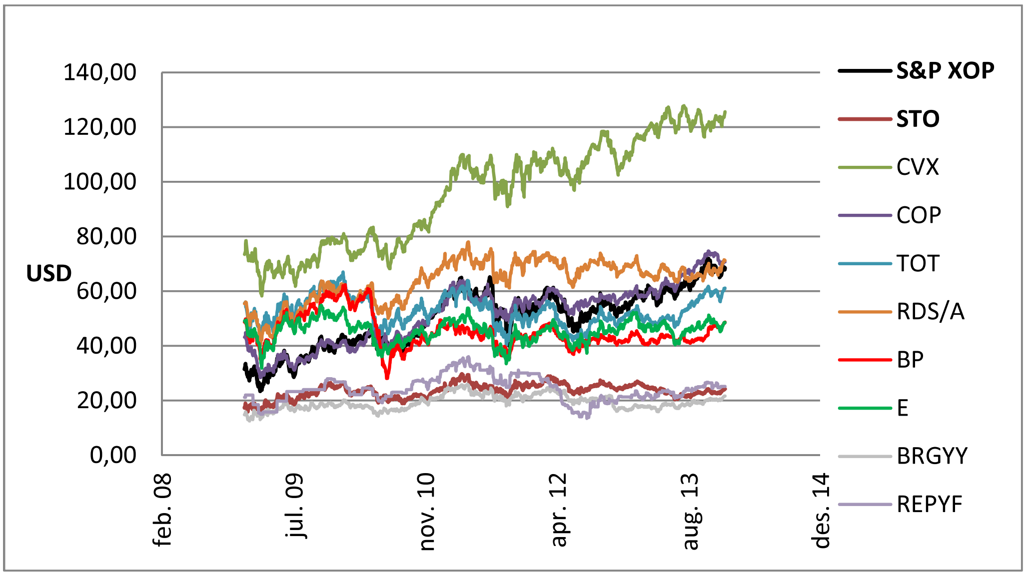
BP: a British multinational integrated oil and gas company with its headquarters in London, United Kingdom. It operates in around 80 countries and has more than 80 000 employees worldwide. BP's operations include activities in upstream and downstream segments. Its upstream segment include activities in oil and gas exploration, field development and production and its downstream segment focused on fuels, lubricants and petrochemicals. In 2013, the company produced 3 230 million barrels of oil-equivalent per day.

ENI: an integrated energy company with its headquarters in Roma, Italy. It operates in 85 countries and has approximately 82 300 employees around the world. ENIs activities include finding, producing, transporting and marketing oil and gas. During 2013, ENI produced 1619 million barrels of oil-equivalent per day.

BG Group: an international exploration, production and LNG company with its headquarters in Reading, United Kingdom. It has operations in more than 20 countries with around 5 500 employees. BG group operations cover activities in upstream and downstream segments. Upstream activities include exploration & production (E&P) plus liquefaction operations associated with integrated LNG, and downstream activities cover liquid natural gas (LNG) shipping & marketing. In 2013, BG group produced 633 thousand barrels of oil-equivalent per day.

Repsol: an integrated global energy company with its head office in Madrid, Spain. With operations in more than 30 countries it has 600 employees. Its operations include activities in both upstream and downstream segments. Its upstream activities cover exploration and production and its downstream activities include refining, marketing, liquefied petroleum gas (LPG), chemicals and new energy. Its net production reached 346 thousands of barrels oil-equivalent per day (kboed) in 2013.

Figure 13: STO vs. S&P XOP and Peer Group



Source: Data collected from www.nasdaq.com

CHAPTER 4

Analysis of the Information

4.1. Valuation of Statoil ASA using Method of Comparable

The three steps listed in Chapter 2, point 2.3.1. are applied in this section. First, a peer group was selected; Chevron, Conoco Phillips, Total, Shell, BP, ENI, BG Group and Repsol. Then, different measurements from all these companies were calculated in order to compute different ratios to value Statoil based on its peer group.

The multiples selected to value Statoil are: EV/DACF, EV/EBIT, EV/EBITDA, P/B, P/S and P/E. Definitions for these multiples are given in section 2.3.1. in Chapter 2. The estimation of all values needed to compute these indicators are shown below.

Because some companies in the peer group present their financial reports in different local currencies, in this calculation all values are presented in USD using the exchange rate as of December 31, 2013:

1 USD	=	6,069	NOK
1 Euro	=	1,378	USD
1 NOK	=	0,165	USD

Market Capitalization (Market Cap.)

Market capitalization is defined by the number of outstanding shares times the market value. It was calculated using information updated on December 31st, 2013 (see Table 1). The number of outstanding shares and the value of market capitalization are expressed in millions.

Table 1: Calculating Market Capitalization

	Statoil (STL)	Chevron (CVX)	Conoco Phillips (COP)	Total (TOT)	Shell (RDS/A)	Shell (RDS/B)	BP (BP)	ENI (E)	BG Group (BRGYY)	REPSOL (REPYF)
Share Price	24,13	124,91	70,65	61,27	71,27	75,11	48,61	48,49	21,69	25,13
Outstanding shares	3 188,65	1 903,66	1 227,71	2 377,68	1 967,98 140 257,93	1 220,21 91 649,97	3 073,46	1 819,09	3 410,09	1 324,52
Market Cap.	**76 942**	**237 786**	**86 738**	**145 680**	**231 908**		**149 401**	**88 208**	**73 965**	**33 285**

Source: Data collected from www.bloomberg.com

Enterprise Value (EV)

The EV is obtained by applying equation 1 given in section 2.3.1.1. of Chapter 2. Market capitalization values are taken from the calculation above (Table 1) and debt and cash and equivalents values are taken from the companies' financial reports 2013. Enterprise value's calculations are shown below in Table 2.

Table 2: Calculating Enterprise Value

Million (USD)	Statoil (STL)	Chevron (CVX)	Conoco Phillips (COP)	Total (TOT)	Shell (RDS)	BP (BP)	ENI (E)	BG Group (BRGYY)	REPSOL (REPYF)
Market Value	76 942	237 786	86 738	145 680	231 908	149 401	88 208	73 965	33 285
Debt	30 086	20 334	21 662	45 716	44 562	48 192	35 212	17 529	24 307
Cash and equivalents	14 055	16 245	6 246	20 178	9 696	22 520	7 482	6 208	8 132
EV	**92 974**	**241 875**	**102 154**	**171 219**	**266 774**	**175 073**	**115 938**	**85 286**	**49 460**

Source: Data collected from www.nasdaq and firms Annual Report Form 20-F 2013

Debt-Adjusted Cash Flow (DACF)

The DACF is calculated using equation 2 presented in Chapter 2, section 2.3.1.1. All values used in this calculation are taken from the companies' financial reports 2013. See this computation in Table 3 below.

Table 3: Calculating DACF

Million (USD)	Statoil (STL)	Chevron (CVX)	Conoco Phillips (COP)	Total (TOT)	Shell (RDS)	BP (BP)	ENI (E)	BG Group (BRGYY)	REPSOL (REPYF)
Net Income before minorities	6 459	21 597	12 502	11 932	16 526	23 758	6 832	2 450	2 062
Depreciation & Amortization	11 929	14 186	7 963	12 441	21 509	15 471	16 285	10 830	3 443
Exploration Expenses	2 966	1 861	1 232	2 250	5 278	3 441	91	711	920
Non-cash items of associates	-	-	-	-	-	-	-	-	236
Post-tax net interest charge	560	-	340	724	808	840	3 298	160	693
Post- tax pension interest cost	-	-	-		-	377	-	-	-
Income/cash flow of peripheral assets	-	-	1 178		-	-	-	245	
DACF	**21 914**	**37 644**	**20 859**	**27 346**	**44 121**	**43 887**	**26 505**	**13 906**	**7 354**

Source: Data collected from firms Annual Report Form 20-F 2013

Table 4 presents the values needed to compute the multiples. These multiples are displayed in Table 5. Market capitalization, enterprise value and debt-adjusted cash flow are obtained from previous tables. Values of EBIT, EBITDA, book equity, sales and earnings are taken from companies' financial reports 2013.

Table 4: Different values to build indicators

(Million USD)	Statoil (STL)	Chevron (CVX)	Conoco Phillips (COP)	Total (TOT)	Shell (RDS/A)	BP (BP)	ENI (E)	BG Group (BRGYY)	REPSOL (REPYF)
Market Cap.	**76 942**	237 786	86 738	145 680	231 908	149 401	88 208	73 965	33 285
EV	**92 974**	241 875	102 154	171 219	266 774	175 073	115 938	85 286	49 460
DACF	**21 914**	37 644	20 859	27 346	44 121	43 887	26 505	13 906	7 354
EBIT	**25 621**	14 308	13 834	28 079	35 234	31 769	12 244	3 667	3 542
EBITDA	**37 550**	50 091	21 268	40 520	56 743	45 279	28 529	10 681	7 067
Book Equity	**58 657**	150 427	52 492	103 197	181 148	130 407	85 987	31 960	38 463
Sales	**102 057**	220 156	54 413	261 116	451 235	379 136	158 008	19 192	75 332
Earnings	**6 459**	21 597	9 215	11 932	16 526	23 758	6 832	2 450	1 263

Source: Data collected from www.nasdaq.com and firms Annual Report Form 20-F 2013

Table 5: Indicators

	Statoil (STL)	Chevron (CVX)	Conoco Phillips (COP)	Total (TOT)	Shell (RDS/A)	BP (BP)	ENI (E)	BG Group (BRGYY)	REPSOL (REPYF)	Average
EV/DACF	4,24	6,43	4,90	6,26	6,05	3,99	4,37	6,13	6,73	**5,61**
EV/EBIT	3,63	16,90	7,38	6,10	7,57	5,51	9,47	23,26	13,96	**11,27**
EV/EBITDA	2,48	4,83	4,80	4,23	4,70	3,87	4,06	7,98	7,00	**5,18**
P/B	1,31	1,58	1,65	1,41	1,28	1,15	1,03	2,31	0,87	**1,41**
P/S	0,75	1,08	1,59	0,56	0,51	0,39	0,56	3,85	0,44	**1,12**
P/E	11,91	11,01	9,41	12,21	14,03	6,29	12,91	30,19	26,35	**15,30**

Source: Calculations based on information collected from firms Annual Report Form 20-F 2013

The average of multiples obtained in Table 5 is applied to the corresponding measures of Statoil. The multiples corresponding to Statoil shown in the first column were calculated for the purpose of comparing them with the average of its peer group, but of course were not included in the average in the last column. Table 6 displays the valuation of Statoil applying the multiples calculated above.

Table 6: Valuing Statoil's share

	Statoil (STL)	Value per share (USD)	Value per share (NOK)
Value bases on EV/DACF	122 859	38,53	233,85
Value bases on EV/EBIT	288 752	90,56	549,60
Value bases on EV/EBITDA	194 664	61,05	370,52
Value bases on P/B	82 678	25,93	157,37
Value bases on P/S	114 738	35,98	218,39
Value bases on P/E	98 824	30,99	188,10
Average Value	**150 419**	**47,17**	**286,30**
# Outstanding shares	**3188,65**		

Source: Calculations based on information collected from firms Annual Report Form 20-F 2013

An average value per share of 286,3 NOK was obtained utilizing individual share values calculated using different multiples.

4.2. Calculating Cost of Equity

A **risk free rate** of 3,1% was established by computing the average of daily Treasury 10 year's rate for 2013 published by US Department of the Treasury.

The **beta** was calculated by applying the equation 15 given in section 2.3.4. Daily data from S&P were recompiled for the period February 2009 - December 2013.

$$\beta_{STL} = \frac{0{,}000185347}{0{,}000139763} = 1{,}33$$

At the time this calculation was made (March 2013), NYSE had published a beta for Statoil of 1,34.

A **market risk premium** of 5% was used in this calculation in accordance with the explanation in section 2.3.4.

Having gathered this information; the risk free rate, beta and market risk premium rate, these numbers were entered into equation 14 resulting in a cost of equity of 9,8%.

$$E(r_{STL}) = 3{,}1\% + (1{,}34 * 5\%) = 9{,}8\%$$

This figure will be used in the following two methods.

4.3. Valuation of Statoil ASA using Discounting Cash Flow Method (DCF)

The three steps listed in point 2.3.2. are calculated in this section. In order to follow these steps, the following estimations are required:

- A Pro forma income statements (4.3.1)
- CAPEX (4.3.2)
- Change in net working capital (4.3.3)
- Net debt proceeds (4.3.4)
- After-tax interest expenses (4.3.5)

The assumptions considered for these estimations are explained at each point. The Equity Free Cash Flow (FCFE) projection for the next 5 years (2014-2018) is given in Table 21. The discount rate used to calculate the present value of the expected FCFE is the cost of capital obtained in the previous section (4.2.).

4.3.1. Pro Form Income Statements

The pro forma income statement assumes Statoil ASA is going to maintain an average for its operations as in the recent past. Therefore, this pro forma is calculated; in general, using the average percentage variation of the last 5 years of accounting as it is shown in Table 7. However, Table 8 presents the estimation of net financial items which were considered using different assumptions because they did not reflect a good estimation using the historical average variation base. Therefore, for this estimation, the average of its absolute value was used instead.

For projecting income tax the average historical effective tax rate was used. This calculation is presented in Table 9. Finally, Table 10 lays out a pro forma income statement under the assumptions discussed above.

Table 7: % Variation in income statement

	For the year ended 31 December					Average of Δ
	2 009	**2010**	**2011**	**2012**	**2013**	
Total revenues and other income	465,4	529,9	670,0	722,0	637,3	
% Change in Total revenues…		13,9 %	26,4 %	7,8 %	-11,7 %	**9,1 %**
Purchases [net of inventory variation]	(205,9)	(257,4)	(320,1)	(364,5)	(307,5)	
% Change in Purchases…		25 %	24 %	14 %	-16 %	**11,9 %**
Operating expenses	(57,0)	(57,6)	(59,7)	(61,2)	(75,0)	
% Change in Operating expenses		1 %	4 %	3 %	23 %	**7,5 %**
Selling, general and administ. expenses	(10,3)	(11,1)	(13,2)	(11,1)	(9,2)	
% Change in Selling, general…		8 %	19 %	-16 %	-17 %	**-1,6 %**
Deprec., amort. and net impairm. losses	(53,8)	(50,7)	(51,4)	(60,5)	(72,4)	
% Change in Depreciation, amort…		-6 %	1 %	18 %	20 %	**8,2 %**
Exploration expenses	(16,7)	(15,8)	(13,8)	(18,1)	(18,0)	
% Change in Exploration expenses		-5 %	-13 %	31 %	-1 %	**3,2 %**

Source: Calculations using information collected from Statoil's Annual Report Form 20-F 2013

Table 8: Average historic value of net financial items

	For the year ended 31 December					Average
	2 009	2010	2011	2012	2013	
Net financial items	(6,8)	(0,5)	2,0	0,1	(17,0)	(4,4)

Source: Calculation using information collected from Statoil's Annual Report Form 20-F 2013

Please note that even though "Net financial items" values for 2009 and 2013 seem like they are due to special circumstances, they are included in the average because they arise mainly from "Foreign exchange gains (losses)" and "Gains (losses) derivative financial instruments", and similar levels can be expected at any year for both these items.

Table 9: Income tax rate

	For the year ended 31 December					Average
	2 009	2010	2011	2012	2013	
Income before tax	114,9	136,8	213,8	206,7	138,2	
Income tax	(97,2)	(99,2)	(135,4)	(137,2)	(99,2)	
Effective tax rate	0,846	0,725	0,633	0,664	0,718	0,717

Source: Calculations using information collected from Statoil's Annual Report Form 20-F 2013

Table 10: Pro Forma Income Statements

FORECASTED INCOME STATEMENT (in NOK billion)	2013	Growth rate	2014E	2015E	2016E	2017E	2018E
Total revenues and other income	637,3	9,1 %	695,2	758,4	827,3	902,4	984,4
Purchases [net of inventory variation]	(307,5)	11,9 %	(344,1)	(385,1)	(430,9)	(482,2)	(539,6)
Operating expenses	(75,0)	7,5 %	(80,6)	(86,6)	(93,0)	(100,0)	(107,4)
Selling, general and admin. expenses	(9,2)	-1,6 %	(9,0)	(8,9)	(8,8)	(8,6)	(8,5)
Deprec, amort. and net impairm. losses	(72,4)	8,2 %	(78,4)	(84,8)	(91,8)	(99,4)	(107,5)
Exploration expenses	(18,0)	3,2 %	(18,6)	(19,2)	(19,8)	(20,4)	(21,0)
Total operating expenses	(482,1)		(530,7)	(584,5)	(644,3)	(710,6)	(784,1)
Net operating income	155,2		164,5	173,8	183,0	191,8	200,3
Net financial items	(17,0)		(4,4)	(4,4)	(4,4)	(4,4)	(4,4)
Income before tax	155,2		160,1	169,4	178,5	187,4	195,9
Income tax	(99,2)	0,717	(114,8)	(121,5)	(128,0)	(134,4)	(140,5)
Net income	56,0		45,3	47,9	50,5	53,0	55,4
# Outstanding shares	3,188		3,188	3,188	3,188	3,188	3,188
Earnings per share (in NOK)	12,5		14,2	15,0	15,8	16,6	17,4

Source: Calculations based on information collected from Statoil’s Annual Report Form 20-F 2013

4.3.2. CAPEX

One of the changes in Statoil’s strategy for 2014 was explained by Helge Lund, president and CEO of Statoil, in the 4th quarter 2013 presentation. He announced a scaled-back expectation in capital expenditure by more than USD 5 billion from 2014 to 2016, mainly due to asset sales in 2013 (around 2/3 of its projects). Despite this expectation, the calculation of CAPEX is based on the average percentage variation of historical accounting. As discussed in Chapter 1, the purpose of this work is to analyze the flat trend in Statoil’s share price for the last few years. For that reason, it was considered important to use the historical accounting as reference to estimate the future. However, it is interesting to look at

Statoil's share price considering the changes it has planned for the near future. This can be discussed later in section 4.6. when analyzing the new strategic impact.

Values for CAPEX were determined by applying equation 7 set out in section 2.3.2. First, averages of percentage variation in property plant and equipment (PPE) were computed (see Table 11). Then, percentages of depreciation expense related to property, plant and equipment were measured for the last five years in order to obtain its average (see Table 12). Finally, the average percentage variation in both PPE and depreciation expenses were considered to project CAPEX to the future (see Table 13).

Table 11: % variation in Property Plant and Equipment (PPE)

	At 31 December					Average in Δ
	2009	**2010**	**2011**	**2012**	**2013**	
Property, plant and equipment	342,5	351,6	407,6	439,1	487,4	
% Change in PPE		2,6 %	15,9 %	7,7 %	11,0 %	9,3 %

Source: Calculation using information collected from Statoil's Annual Report Form 20-F 2013

Table 12: Depreciation expense

	At 31 December					Average
	2009	**2010**	**2011**	**2012**	**2013**	
Property, plant and equipment (PPE)	342,5	351,6	407,6	439,1	487,4	
Depreciation expenses	53,8	50,7	51,4	60,5	72,4	
% Depreciation expenses to PPE	15,7 %	14,4 %	12,6 %	13,8 %	14,9 %	14,3 %

Source: Calculation using information collected from Statoil's Annual Report Form 20-F 2013

Table 13: CAPEX projection

	2013	**2014E**	**2015E**	**2016E**	**2017E**	**2018E**
Property, plant and equipment (PPE)	487,4	532,7	582,3	636,4	695,6	760,3
Depreciation expense	72,4	76,1	83,2	90,9	99,4	108,7
$CAPEX_t$ ($PPE_t - PPE_{t-1}$ + Depreciation)	**120,7**	**121,5**	**132,9**	**145,3**	**158,8**	**173,6**

Source: Calculations based on information collected from Statoil's Annual Report Form 20-F 2013

4.3.3. Change in net working capital

To calculate net working capital, equation 8 presented in section 2.3.2. was applied. To this end, Table 14 shows the average percentage variation for previous years in inventories, trade and other receivables as well as trade and other payables, which were needed to project them to the future. After obtaining the estimation of inventories, trade and other receivables as well as trade and other payables for future years, changes in net working capital were computed (see Table 15).

Table 14: % Variation in working capital items

	At 31 December					Average in Δ
	2009	2010	2011	2012	2013	
Inventories	20,2	23,6	27,8	25,3	29,6	
% Change in Inventory		17,0 %	17,5 %	-8,9 %	17,0 %	10,7 %
Trade and other receivables	59,0	74,8	103,3	74,0	81,8	
% Change in Trade, other receivables		26,8 %	38,0 %	-28,3 %	10,5 %	11,8 %
Trade and other payables	60,1	73,7	94,0	81,8	95,6	
% Change in Trade, other payables		22,8 %	27,5 %	-12,9 %	16,9 %	13,5 %

Source: Calculations using information collected from Statoil's Annual Report Form 20-F 2013

Table 15: Δ in working capital estimation

	2013	2014E	2015E	2016E	2017E	2018E
Inventories	29,6	32,8	36,2	40,1	44,4	49,1
Trade and other receivables	81,8	91,4	102,2	114,2	127,6	142,6
Trade and other payables	95,6	108,5	123,2	139,9	158,9	180,4
Working Capital	15,8	15,6	15,2	14,4	13,1	11,4
Δ in Working Capital		**-0,2**	**-0,5**	**-0,8**	**-1,2**	**-1,8**

Source: Calculations based on information collected from Statoil's Annual Report Form 20-F 2013

4.3.4. Net debt proceeds

Net debt proceeds were determined as the change in both short and long-term finance debt as shown in Table 17 and Table 18. Future projections for both items were calculated using an average percentage variation assumption (see Table 16).

Table 16: % Variation in Finance debt

	At 31 December					Average in Δ
	2009	2010	2011	2012	2013	
Finance debt long-term	96,0	99,8	111,6	101,0	165,5	
% Change in long-term debt		4,0 %	11,8 %	-9,5 %	63,9 %	17,5 %
Finance debt short-term	8,2	11,7	19,8	18,4	17,1	
% Change in short-term debt		43,9 %	69,2 %	-7,3 %	-7,1 %	24,7 %

Source: Calculations using information collected from Statoil's Annual Report Form 20-F 2013

Table 17: Net debt short-term proceeds estimation

	2013	2014E	2015E	2016E	2017E	2018E
Finance debt short term	17,1	21,3	26,5	33,1	41,2	51,4
Net debt proceeds		4,2	5,2	6,5	8,2	10,2

Source: Calculation based on information collected from Statoil's Annual Report Form 20-F 2013

Table 18: Net debt long-term proceeds estimation

	2013	2014E	2015E	2016E	2017E	2018E
Finance debt long term	165,5	194,5	228,7	268,8	316,0	371,4
Net debt proceeds		29,0	34,1	40,1	47,2	55,4

Source: Calculation based on information collected from Statoil's Annual Report Form 20-F 2013

4.3.5. Deferred income tax

Deferred tax is calculated by computing the difference between deferred tax liabilities and deferred tax assets. Deferred tax liabilities was projected using the average percentage variation of historic accounting. By contrast, deferred tax assets was projected using the average absolute value from historic accounting because it did not reflect good estimators using the average percentage variation assumption. These are displayed in Table 19. Table 20 exhibits the future projection for both items as well as the difference between them and the change.

Table 19: Assumptions to project deferred tax

	At 31 December					Average
	2009	2010	2011	2012	2013	
Deferred tax liabilities	76,3	78,1	82,5	81,2	71,0	
% Change in def. tax liabilities		2,3 %	5,7 %	-1,6 %	-12,6 %	-1,5 %
Deferred tax assets	2,0	1,9	5,7	3,9	8,2	4,3

Source: Calculations using information collected from Statoil's Annual Report Form 20-F 2013

Table 20: Δ Deferred income taxes

	2014E	2015E	2016E	2017E	2018E
Deferred tax liabilities	71,0	69,9	68,8	67,8	66,7
Deferred tax assets	(8,2)	(4,3)	(4,3)	(4,3)	(4,3)
Net deferred tax	62,8	65,6	64,5	63,4	62,4
Δ Net deferred tax		**2,8**	**(1,1)**	**(1,1)**	**(1,0)**

Source: Calculations based on information collected from Statoil's Annual Report Form 20-F 2013

Finally, after collecting all previous calculations, Table 21 displays a free cash flow to equity projected to 5 years. As previously explained in chapter 2, FCFE is discounted by the 9,8% cost of equity to obtain its present value. Estimated free cash flow for 2018 is the last year of FCFE projection but it is not the last FCFE for Statoil. Therefore, terminal value represents the value of the remaining FCFE for all years beyond 2018. Here, a constant FCFE following the end of the planning period is assumed because estimations in income statement result in a growing FCFE, however it is difficult to maintain long-term, so a growth equal to zero beyond 2018 was used in order to avoid speculation and inflation of the resulting share value. Therefore the perpetuity equal to Statoil's FCFE for 2018 is computed by dividing FCFE for 2018 by the cost of capital of 9,8% (56,8 / 0,098 = 579,7). Next, the present value of terminal value was calculated and added to the total present value of FCFE. The result, which is the value of Statoil's equity, was divided by the number of outstanding shares concluding in a value per share of 165,7 NOK.

Table 21: Equity Free Cash Flow projection and share price valuation

FORECASTED CASH FLOW (in NOK billion)		2014E	2015E	2016E	2017E	2018E
Net Income		45,3	47,9	50,5	53,0	55,4
(+) Depreciation expense		76,1	83,2	90,9	99,4	108,7
Increase (Decrease) in long-term liabilities		29,0	34,1	40,1	47,2	55,4
Increase (Decrease) in short-term liabilities		4,2	5,2	6,5	8,2	10,2
Increase (Decrease) in deferred income taxes		2,8	(1,1)	(1,1)	(1,0)	(1,0)
(-) Δ in NWC		0,2	0,5	0,8	1,2	1,8
(-) CAPEX		(121,5)	(132,9)	(145,3)	(158,8)	(173,6)
(=) Equity Free Cash Flow (FCFE)		36,0	37,0	42,6	49,1	56,8
Discount factor ($1{,}098^t$)		1,098	1,206	1,324	1,453	1,596
Present Value of FCFE		32,8	30,7	32,2	33,8	35,6
Total present value of FCFE	165,0					
Terminal Value						579,7
Present Value of Terminal Value	363,2					
Value of Equity	528,2					
# Outstanding shares	3,188					
Value per share	**165,7**					

Source: Calculations based on information collected from Statoil's Annual Report Form 20-F 2013

4.4. Valuation of Statoil ASA using Residual Earnings Approach (RE)

In this section a valuation of Statoil's shares is made using a RE approach. As discussed in Chapter 2, section 2.3.3., this method is based on the precept that investments add value only if they earn above their required return. Therefore, the residual earnings model compares return on common equity (ROCE) to the required cost of equity and shows the difference in the amount of money by multiplying it by the equity book value at the beginning of the period.

The steps established in the above mentioned section of Chapter 2 have been followed. First, an equity book value of 356 billion NOK was taken from Statoil's balance sheet 2013. Then, Forecasted earnings per share (EPS) have been taken from Table 10 "Pro Forma Income Statements" and forecasted dividends per share (DPS) are estimated in Table 23 using the average percentage variation from historical accounting presented in Table 22.

Table 22: % variation in historical dividend per share (DPS)

	At 31 December					Average in Δ
	2009	2010	2011	2012	2013	
DPS	6,00	6,25	6,50	6,75	7,00	
		4,2 %	4,0 %	3,8 %	3,7 %	**3,9 %**

Source: Calculations using information collected from Statoil's Annual Report Form 20-F 2013

Table 23: Dividend per share (DPS) estimation

	2014E	2015E	2016E	2017E	2018E
DPS	7,3	7,6	7,9	8,2	8,5

Source: Calculations based on information collected from Statoil's Annual Report Form 20-F 2013

The remaining steps, from 3 to 8, are displayed in Table 24, below. After forecasting book value per share (BPS) using equation 13 as explained in Chapter 2, ROCE was calculated by dividing EPS by BPS for the previous year. Then, residual earnings (RE) were determined by applying equation 11 presented in Chapter 2 and discounted at the cost of capital (9,8%) to obtain its present value. The continuing value is the forecasted residual earnings beyond 2018 and is calculated by dividing residual earnings of the last planning year (2018) by the cost of capital because a zero growth rate was established per the DCF method valuation. The sum of the present value of residual earning for the planning period (2014-2018) and the present value of the continuing value are added to the BPS of 2013 to obtain a value per share of 146,4 NOK.

Table 24: Valuation of Statoil using RE method

	2013	2014E	2015E	2016E	2017E	2018E
EPS		14,2	15,0	15,8	16,6	17,4
DPS		7,3	7,6	7,9	8,2	8,5
BPS	111,7	118,6	126,1	134,0	142,5	151,4
ROCE		12,7 %	12,7 %	12,6 %	12,4 %	12,2 %
RE (9,8% charge)		3,259	3,405	3,485	3,491	3,410
Discount factor ($1{,}098^t$)		1,098	1,206	1,324	1,453	1,596
Present value (PV) of RE		2,968	2,824	2,633	2,402	2,137
Total PV of RE	13,0					
Continuing value (CV)						34,798
Present value of CV	21,8					
Value per share	**146,4**					

Source: Calculations based on information collected from Statoil's Annual Report Form 20-F 2013

4.5. Analysis of Valuations

Analyzing the result of the "Comparables" valuation, it is remarkable that utilization of different multiples will lead to substantially different results in the estimated value of Statoil's share. It is notable that the highest individual value is given by the EV/EBIT multiple yielding a value per share of 549,6 NOK, while the lowest is given by the P/B ratio resulting in a value of 157,37 NOK per share with an average of all the individual indicators of 286,3 NOK. As of December 31, 2013, Statoil's share was traded at 147,0 NOK, which according to the results of this valuation is highly undervalued even compared to the lowest value obtained. This suggests that Statoil is trading below the average. This result is significant because the calculated average represents a theoretical value 95% higher than the market price. Referring back to Table 5, it is notable that all the multiples of Statoil are below the average. The conclusion is that Statoil is not an attractive option for investors to include in their portfolio because it does not produce good indicators compared with companies in the same industry. Moreover, if Statoil continues with its operations as in the past, this situation will be sustained and Statoil will not provide an attractive return for market participants.

The DCF method reveals a value per share of 165,7 NOK. As explained earlier, this is assuming Statoil is going to maintain an average of its operations as in the past. In this sense, this result reflects a cheap stock market price for Statoil, as in the “Comparables” valuation, but at a lower level. However, a share value of 165,7 NOK represents a value 12,7% higher than the market price of 147 NOK. As discussed in section 4.6. of this Chapter, share value is very susceptible to a number of factors, for example; growth rate, cost of capital and oil price. Taking a look at that section, a variation of 1 percentage point in the growth rate results in a variation between 12,8% and 19,4% in the theoretical share value.

The result obtained from the RE valuation shows a value per share of 146,4 NOK, which is to say, equal to the stock market. This result is interesting because it highlights that, even when Statoil is not undervalued by the market, no major growth in its profitability is expected in the future and the behavior of its share price looks like a fixed rent asset to investors. In this case, the stock price of Statoil can be considered its correct value (according to this evaluation method). Providing no major incentives to investors can explain the reason for the flat-behavior of Statoil share in recent years.

4.6. Strategic Analysis

The objective of the present thesis is not to provide a strategic analysis for future Statoil actions, but rather the motivation and objectives are as described in the first chapter.

However, during the writing of this thesis, Statoil publically announced (early 2014 during the presentation of the Capital Market Update in London) the implementation of several structural measures to meet the exigencies of the current market. This announcement has been a source of much discussion (even regarding the social impact) and for that reason it is necessary to evaluate, at least at a preliminary stage, the effect on the financial behavior of the company.

One focus of the new Statoil strategy is to improve its value creation. To achieve this, they have planned to scale-down CAPEX, which will allow the company to save around USD 5 billion during the period 2014 - 2016 (approximately 10 milliards NOK per year), from ~ 120 milliards NOK to ~ 110 milliards NOK per year from 2014. It is interesting to enter this strategy into the valuation and see the impact on its share value. Changing CAPEX as planned by Statoil for the next couple of years and keeping the other variants constant, causes a positive impact in its share value. Increasing from 165,7 NOK to 246,0 NOK reflects a good improvement of 48% as shown in Table 25. It is notable that in this scenario where CAPEX is reduced, FCFE increases over time and it can be viewed as the return on the CAPEX for previous years including the one that was down-scaled. To adjust for this effect, a negative growth rate of two percent (-2%) was established beyond 2018. All these calculations are shown in Table 25.

Table 25: Share price valuation adjusting CAPEX as planned by Statoil

FORECASTED CASH FLOW (in NOK billion)		2014E	2015E	2016E	2017E	2018E
Net Income		45,3	47,9	50,5	53,0	55,4
(+) Depreciation expense		74,7	79,1	83,1	86,5	89,5
Increase (Decrease) in long-term liabilities		29,0	34,1	40,1	47,2	55,4
Increase (Decrease) in short-term liabilities		4,2	5,2	6,5	8,2	10,2
Increase (Decrease) in deferret income taxes		2,8	(1,1)	(1,1)	(1,0)	(1,0)
(-) Δ in NWC		0,2	0,5	0,8	1,2	1,8
(-) CAPEX		(110,2)	(110,5)	(110,8)	(110,4)	(110,7)
(=) Equity Free Cash Flow (FCFE)		45,9	55,3	69,2	84,7	100,5
Discount rate		1,098	1,206	1,324	1,453	1,596
Present Value of FCFE		41,8	45,9	52,3	58,2	63,0
Total present value of FCFE	261,2					
Terminal Value						835,0
Present Value of Terminal Value	523,2					
Value of Equity	784,4					
# Outstanding shares	3,188					
Value per share	**246,0**					

Source: Calculations based on information collected from Statoil's Annual Report Form 20-F 2013

Another important strategy to achieve value creation is to increase returns by optimizing projects. To see the effect of this strategy in the share value, a reduction of 10% of some costs for 2013 was applied in the estimation of 2014. Entering this strategy into the valuation, Table 26 lays out this reduction in purchases, operating expenses and exploration expenses because these are directly related to operating activities. Table 27 shows the valuations using the DCF method applying the costs adjustment.

Table 26: Adjustment in costs

FORECASTED INCOME STATEMENT (in NOK billion)	2013	2014E	2015E	2016E	2017E	2018E
Purchases [net of inventory variation]	(307,5)	(312,8)	(350,1)	(391,7)	(438,4)	(490,6)
Operating expenses	(75,0)	(73,3)	(78,7)	(84,6)	(90,9)	(97,7)
Selling, general and admin. expenses	(9,2)	(9,0)	(8,9)	(8,8)	(8,6)	(8,5)
Deprec., amort. and net impair. losses	(72,4)	(78,4)	(84,8)	(91,8)	(99,4)	(107,5)
Exploration expenses	(18,0)	(16,9)	(17,4)	(18,0)	(18,5)	(19,1)
Total operating expenses	(482,1)	(490,4)	(539,9)	(594,9)	(655,8)	(723,4)

Source: Calculations based on information collected from Statoil's Annual Report Form 20-F 2013

Table 27: Share price valuation adjusting costs

FORECASTED CASH FLOW (in NOK billion)		2014E	2015E	2016E	2017E	2018E
Net Income		56,7	60,5	64,5	68,5	72,6
(+) Depreciation expense		76,1	83,2	90,9	99,4	108,7
Increase (Decrease) in long-term liabilities		29,0	34,1	40,1	47,2	55,4
Increase (Decrease) in short-term liabilities		4,2	5,2	6,5	8,2	10,2
Increase (Decrease) in deferred income taxes		2,8	(1,1)	(1,1)	(1,0)	(1,0)
(-) Δ in NWC		0,2	0,5	0,8	1,2	1,8
(-) CAPEX		(121,5)	(132,9)	(145,3)	(158,8)	(173,6)
(=) Equity Free Cash Flow (FCFE)		47,4	49,6	56,6	64,6	74,0
Discount rate		1,098	1,206	1,324	1,453	1,596
Present Value of FCFE		43,2	41,1	42,7	44,5	46,4
Total present value of FCFE	217,8					
Terminal Value						755,0
Present Value of Terminal Value	473,1					
Value of Equity	690,9					
# Outstanding shares	3,188					
Value per share	**216,7**					

Source: Calculations based on information collected from Statoil's Annual Report Form 20-F 2013

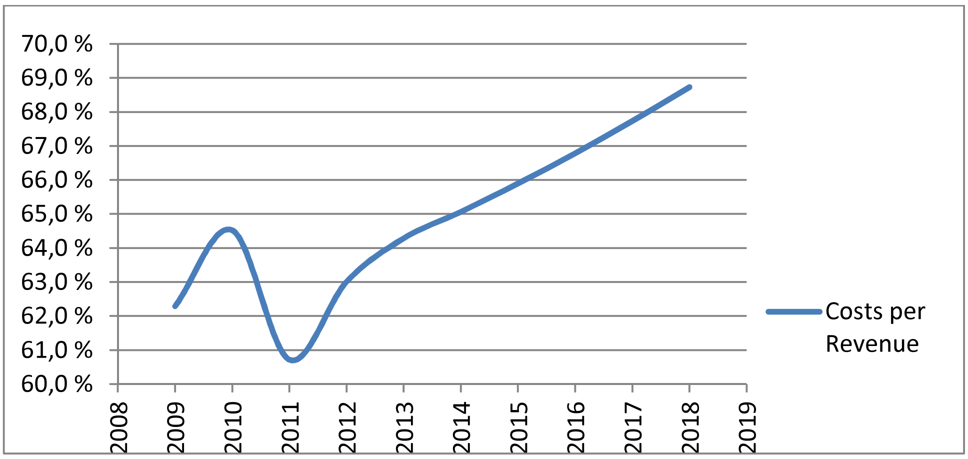
The result of this revised valuation show that Statoil's new strategy will have a positive impact on its share value, improving it from 147,0 NOK (current stock price at December 31th, 2013) to between 216 NOK and 246 NOK depending on the considered scenario.

4.7. Strategic weaknesses

Although a formal study of Statoil's strategic weaknesses is not part of the objective of this research, it is important to mention two weaknesses that have become apparent during the development of this thesis. These factors are merely identified and recommended as a subject for further evaluation.

Increasing in the percentage of operative costs versus Revenues: As shown in Figure 14, despite a reduction in 2010 in the middle of the Financial Crisis; the impact of operative cost on revenues is expected to increase from roughly 65% (currently) to roughly 69% in 2018. It would be interesting to assess how this increasing cost will impact the revenue and potentially even the viability of Statoil. It will be important to understand where this increasing cost is coming from, and what can be done by the company to reduce this tendency without affecting oil production. Evaluation of these issues requires dedicated research, time and resources that are far beyond the scope of this thesis.

Figure 14: % Costs per Revenue



Source: Calculations using information collected from Statoil's Annual Report Form 20-F 2013

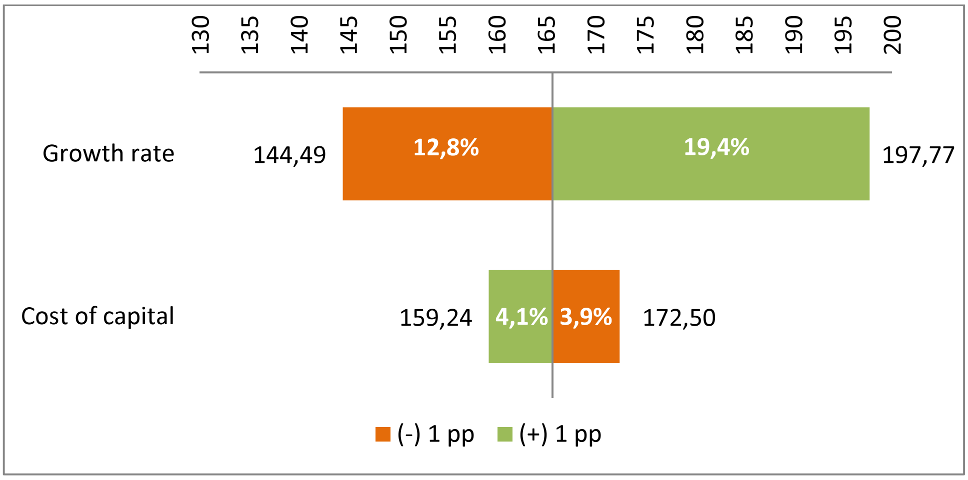
Oil Prices: The present thesis has been developed using a period of stabilized oil prices of around 100 USD per barrels as a base. As of December 31st 2013, the Brent indicator value was 109 USD (average 107 USD during 2013) and it is expected to continue around this value in the foreseen future. However, it is very well known that oil prices are strongly dependent on political factors and extreme variations cannot be ruled out. The sensitivity of Statoil to oil prices and how this affects the relation of cost per revenues shown in Figure 14 would make an interesting topic for a future research project. Once more the evaluation of this issue requires dedicated research, time and resources that are far beyond the objectives of this thesis.

4.8. Share value's sensitivity

In terms of valuation, a growth rate measures the firm's capacity to increase its residual earnings by having sustainable growing sales, a sustainable profit margin and improving asset turnover. Forecasting growth is a very uncertain aspect of valuation and the share value is very sensitive to its changes. As can be seen in Figure 15, if growth drops by 1 percentage point (pp), the share value falls by 12,8%, from 165,7 to 144,49. If the growth rate increases by 1 pp, the share value increases 19,4%, from 165 NOK to 198,8. This effect on the share value is shown in Figure 15.

The share value is also sensitive to the changing cost of capital, but to a lesser extent than a change in growth rate. When cost of capital increases 1 pp, the share value falls from 165 NOK to 159,2 NOK (4,1%). Conversely, when the cost of capital decreases 1 pp, the share value increases from 165 NOK to 172,5 NOK (3,9%)

Figure 15: Share value's sensitivity



Source: Calculations based on information collected from Statoil's Annual Report Form 20-F 2013

CHAPTER 5
Conclusions

5.1. Conclusions

In general, the valuation of an oil company is extremely dependent on the forecast of oil prices. Due to the sensitivity of oil prices to political factors in extremely volatile areas of the world, it is common practice when evaluating an oil company to evaluate several different oil price scenarios. In the present thesis, however, the main driver was the perception that the value of Statoil has been undervalued by the stock market in recent years and to explore what Statoil can do in order to increase its value. Given this framework, different valuations of Statoil were achieved using the last five years of operations as a base, and forecasting the following five years considering macroeconomic factors to be constants or uniform behavior. Under this assumption, extreme variations in oil prices and dramatic macroeconomic changes are not part of the analysis and oil prices are not specially considered in the valuation (even though the Statoil revenues are a key factor in the valuations and revenues come directly from the sale of hydrocarbons).

Not emphasizing variations in oil prices for the present thesis is considered correct given that the main objective centers on the past behavior of Statoil under stable conditions and oil prices have been stabilized (around 100 USD/barrel) during the relevant period. Furthermore, no dramatic variations are expected in the near future.

To this end, the value of Statoil's share was calculated utilizing three different methods; Discounted Cash Flow (DCF), Residual Earnings (RE) and the method of Comparables (Comps). The results are summarized in the following table:

Table 28: Results obtained

Valuation Method	Calculated share value	Comments
COMPS	286 NOK	Theoretical shared value 94,6% above current market price. Statoil looks to be under evaluated by 94,6%.
DCF	165,7 NOK	Theoretical shared value 13% above current market price. Statoil looks to be under evaluated by 13%.
RE	146,4 NOK	Theoretical shared value identical to current market price.
Current market prices (at 31-12-2013)	147 NOK	

Source: Calculations based on information collected from Statoil's Annual Report Form 20-F 2013

The following conclusions are immediately apparent from the table above:

- Based on Discounted cash flow (DCF); theoretical share value is 13% above current market price. Statoil looks to be undervalued by 13%. However, this value may not be considered significant particularly when considering the sensitivity of share value to, for example, growth rate. In this case, 1 pp variation in growth rate results in a variation of theoretical share value between -12,8% to 19,4%. According to this argument, Statoil's share value calculated using DCF may be considered to be equal to the market price.
- Based on Residual earnings (RE); the theoretical share value is identical to the current market price.
- Based on Comparables (COMPS); the theoretical share value is 94,6% above the current market price. Statoil looks to be undervalued by 94,6%

According to the figures above, the share value calculated using RE and DCF can be considered consistent, and far from the result obtained using COMPS. The result of COMPS calculations indicate that Statoil`s value is lower than companies in its peer group. Considering all the figures above, it can be deduced that Statoil market share price is consistent with real company value, but Statoil has a comparatively low price when compared with other oil companies. However, the new strategy announced by Statoil at the beginning of 2014 should have a positive impact on the share value raising it between 48% to 68% (from a current price of 147 NOK to between 216 and 246 NOK depending on the scenario considered). When valuing the effects of the new strategy on share value, two scenarios were evaluated separately; 1) reducing CAPEX by 8% from previous estimates (CAPEX 2013 = 120,7 NOK) and 2) reducing costs by 10% through a comprehensive improvement program. The result obtained in the first scenario was a share value of 246 NOK and 216,7 NOK in the second. Statoil, however, is currently applying both scenarios simultaneously, which would be expected to have an even more positive effect on its share value. The expected increase in Statoil share value due its new strategy answers the main question of this thesis -what can be done by Statoil in order to improve their share value.

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APENDIX

Apendix A: Statoil Financial Statements 2013

CONSOLIDATED STATEMENT OF INCOME

		For the year ended 31 December				
(in NOK billion)	Note	2 009	2010	2011	2012	2013
Revenues		462,5	527,0	645,4	704,3	619,4
Net income from associated companies		1,5	1,1	1,3	1,7	0,1
Other income	4	1,4	1,8	23,3	16,0	17,8
Total revenues and other income	3	465,4	529,9	670,0	722,0	637,3
Purchases [net of inventory variation]		(205,9)	(257,4)	(320,1)	(364,5)	(307,5)
Operating expenses		(57,0)	(57,6)	(59,7)	(61,2)	(75,0)
Selling, general and admin. expenses		(10,3)	(11,1)	(13,2)	(11,1)	(9,2)
Deprec., amort. and net impair. losses	11, 12	(53,8)	(50,7)	(51,4)	(60,5)	(72,4)
Exploration expenses	12	(16,7)	(15,8)	(13,8)	(18,1)	(18,0)
Total operating expenses		(343,7)	(392,6)	(458,2)	(515,4)	(482,1)
Net operating income	3	121,7	137,3	211,8	206,6	155,2
Net foreign exchange gains (losses)		2,0	(1,9)	(0,6)	0,8	(8,6)
Interest income and other financial items		3,7	3,2	2,2	1,8	3,6
Interest and other financial expenses		(12,5)	(1,8)	0,4	(2,5)	(12,0)
Net financial items	8	(6,8)	(0,5)	2,0	0,1	(17,0)
Income before tax		114,9	136,8	213,8	206,7	138,2
Income tax	9	(97,2)	(99,2)	(135,4)	(137,2)	(99,2)
Net income		17,7	37,6	78,4	69,5	39,0
Attributable to equity holders of the company		17,7	38,0	78,8	68,9	39,9
Attributable to non-controlling interests			(0,4)	(0,4)	0,6	(0,6)
Basic earnings per share (in NOK)	10	5,75	11,97	24,76	21,66	12,53
Diluted earnings per share (in NOK)	10	5,74	11,94	24,70	21,60	12,50

CONSOLIDATED BALANCE SHEET

		At 31 December				
(in NOK billion)	**Note**	**2009**	**2010**	**2011**	**2012**	**2013**
ASSETS						
Property, plant and equipment	11	342,5	351,6	407,6	439,1	487,4
Intangible assets	12	54,3	43,2	92,7	87,6	91,5
Investments in associated companies		9,4	9,0	9,2	8,3	7,4
Deferred tax assets	9	2,0	1,9	5,7	3,9	8,2
Pension assets	19	2,7	5,3	3,9	9,4	5,3
Derivative financial instruments	25	17,6	20,6	32,7	33,2	22,1
Financial investments	13	13,3	15,4	15,4	15,0	16,4
Prepayments and financial receivables	13	4,2	3,9	3,3	4,9	8,5
Total non-current assets		446,1	450,8	570,5	601,4	646,8
Inventories	14	20,2	23,6	27,8	25,3	29,6
Trade and other receivables	15	59,0	74,8	103,3	74,0	81,8
Current tax receivables		0,2	1,1	0,6		
Derivative financial instruments	25	5,4	6,1	6,0	3,6	2,9
Financial investments	13	7,0	11,5	19,9	14,9	39,2
Cash and cash equivalents	16	25,3	30,5	40,6	65,2	85,3
Total current assets		117,0	147,6	198,1	183,0	238,8
Total assets		563,1	643,3	768,6	784,4	885,6
EQUITY AND LIABILITIES						
Shareholders' equity		198,3	219,5	278,9	319,2	355,5
Non-controlling interests		1,8	6,9	6,2	0,7	0,5
Total equity	17	200,1	226,4	285,2	319,9	356,0
Finance debt	18, 22	96,0	99,8	111,6	101,0	165,5
Deferred tax liabilities	9	76,3	78,1	82,5	81,2	71,0
Pension liabilities	19	21,1	22,1	27,0	20,6	22,3
Provisions	20	55,8	68,0	87,3	95,5	101,7
Derivative financial instruments	25	1,7	3,4	3,9	2,7	2,2
Total non-current liabilities		250,9	271,3	312,3	301,0	362,7
Trade and other payables	21	60,1	73,7	94,0	81,8	95,6
Current tax payable		41,0	46,7	54,3	62,2	52,8
Finance debt	18	8,2	11,7	19,8	18,4	17,1
Derivative financial instruments	25	2,9	4,2	3,0	1,1	1,5
Total current liabilities		112,1	136,3	171,1	163,5	166,9
Total liabilities		363,0	416,9	483,5	464,5	529,6
Total equity and liabilities		563,1	643,3	768,6	784,4	885,6

CONSOLIDATED STATEMENT OF CASH FLOWS

		For the year ended 31 December		
		2013	2012	2011
(in NOK billion)	Note			
Income before tax		138,4	206,7	213,8
Depreciation, amortisation and net impairment losses	11,12	72,4	60,5	51,4
Exploration expenditures written off		3,1	3,1	1,5
(Gains) losses on foreign currency transactions and balances		4,8	3,3	4,2
(Gains) losses on sales of assets and other items	4	(19,9)	(21,9)	(27,4)
(Increase) decrease in non-current items related to operating activities		8,8	(7,4)	(0,7)
(Increase) decrease in net derivative financial instruments	25	11,7	(1,1)	(12,8)
Interest received		2,1	2,6	2,7
Interest paid		(2,5)	(2,5)	(3,1)
	-			
Taxes paid		(114,2)	(119,9)	(112,6)
Adjustments for working capital items				
(Increase) decrease in inventories		(1,1)	0,8	(4,1)
(Increase) decrease in trade and other receivables		(11,9)	10,8	(14,3)
Increase (decrease) in trade and other payables		9,7	(7,0)	20,4
Cash flows provided by operating activities		101,3	128,0	119,0
Additions through business combinations		0,0	0,0	(25,7)
Additions to property, plant and equipment		(103,3)	(94,8)	(84,2)
Capitalised interest paid		(1,1)	(1,2)	(0,9)
Exploration expenditures capitalised and additions in other intangibles		(10,0)	(16,4)	(7,2)
(Increase) decrease in financial investments		(23,2)	(12,1)	3,8
(Increase) decrease in non-current loans granted and other non-current items		0,0	(1,9)	(0,5)
Proceeds from sales of assets and businesses	4	27,1	29,8	29,8
Cash flows used in investing activities		(110,4)	(96,6)	(84,9)
New finance debt		62,8	13,1	10,1
Repayment of finance debt		(7,3)	(12,2)	(7,4)
Dividends paid	17	(21,5)	(20,7)	(19,9)
Net current finance debt and other		(7,3)	1,6	4,5
Cash flows provided by (used in) financing activities		26,6	(18,2)	(12,7)
Net increase (decrease) in cash and cash equivalents		17,5	13,2	21,4
Effect of exchange rate changes on cash and cash equivalents		2,9	(1,9)	(0,2)
Cash and cash equivalents at the beginning of the year (net of overdraft)	16	64,9	53,6	32,4
Cash and cash equivalents at the end of the year (net of overdraft)	16	85,3	64,9	53,6