



# **The cluttered battlefield of financial restructurings**

*An inquiry into the resolution of financial distress between 2013  
and 2017 for firms raising funds in Norwegian capital markets*

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This thesis was written as a part of the Master of Science in Economics and Business Administration at NHH. Please note that neither the institution nor the examiners are responsible – through the approval of this thesis – for the theories and methods used, or results and conclusions drawn in this work.

## Abstract

Following the 2014 oil price plunge, a large number of offshore firms have suffered from financial distress. Significantly lower revenues, combined with high debt levels has impaired oil-related industries' debt-servicing capabilities. As a result, many firms have defaulted on their debt obligations, sending the industries into a comprehensive wave of financial restructurings. In this thesis, we delve into the resolution of financial distress between 2013 and 2017, for firms that are financed through Norwegian capital markets, with the purpose of understanding the drivers, as well as the implications, of different restructuring outcomes.

The sample consists of 27 financial restructurings, involving debt restructuring and/or equity issues aiming to alleviate the mismatch between current debt obligations and available liquid assets. We evaluate the contributions of banks, bondholders, and shareholders in each case, and elaborate on deviations from the absolute priority rule. Further, we assess the financial state of the firms pre and post restructuring, including a view on what the firms can expect going forward. Moreover, we put extra emphasis on the attractiveness of being a shareholder through the restructuring processes.

Building on insights from key stakeholders and publicly available information, we show that resolution of financial distress varied significantly between cases. Still, certain trends were evident. Banks, being a large and powerful senior secured creditor, opted to extend maturities, while showing reluctance to incur losses on the outstanding. Conversely, both secured and unsecured bondholders providing senior debt were often converted to equity and/or partially redeemed in cash, while suffering significant losses. Further, new equity was often issued, mostly through private placements from the largest owners. As such, existing shares were greatly diluted. Finally, the share prices have taken a beating through the processes, although there are large differences between the cases. Yet, participating in the equity issues generally has proven to be profitable, due to significant discounts.

## Preface

This master's thesis concludes our Master's degree with specialization in Finance at the Norwegian School of Economics, except for some adventures abroad the forthcoming spring. Our time at NHH, including inspiring exchange semesters at Columbia University, have provided us with a sound theoretical background. Combined with professional work experience through internships, we have gained a solid foundation for writing this thesis. Applying our knowledge has been both challenging, exciting, and at times, we must admit, frustrating.

Working with financial restructurings has been inspiring and educative, preparing us for our careers going forward. The timeliness of our topic, visible through extensive media coverage and strong interest from professionals we have contacted, has been especially motivating.

Through the process of writing this thesis, we have received plentiful help and advice from people who deserve our thankful acknowledgements. First, we would like to thank our supervisor, Thore Johnsen, for his valuable insights into the processes of financial restructurings and the craft of writing a master's thesis. Further, we would like to thank Peter Hermanrud at Sparebank 1 Markets, for his guidance on how to assess shareholder returns through the process.

Moreover, we acknowledge our interviewees, as mentioned in the appendix, for their immense hospitality, interest in our topic, and confidence in our abilities. Our thesis would not have been the same without their invaluable contributions, and first-hand experience from financial restructurings. Especially, we thank Clarksons Platou Securities for inviting us to their Oslo OSV Forum 2017, providing insights from CEO's of three of our sample firms.

Finally, we must thank all professors, fellow students and colleagues whom have crossed our path over the past five years. They are the ones who truly have provided us knowledge, motivation, and wonderful memories.

Bergen, 15.12.2017

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# 1. Introduction

## Background for the restructuring wave

Towards the end of 2008, Brent crude oil traded at just over \$30 per barrel (U.S. Energy Information Administration, 2017). Having shown a strong upward trajectory for more than seven years, ending mid-2008 at about \$157 per barrel, oil prices found themselves in 2001 territory. Following the plunge, prices sharply recovered and were back north of \$100 per barrel in January 2011. Thereafter, they remained in the \$90-120 range for three and a half years. As a consequence of persistently high oil prices, oil companies ran massive exploration and production activity, driving revenues for associated service industries<sup>1</sup>. Simultaneously, companies within capital-intensive service industries increased investments to take advantage of E&Ps' aggressive production schemes (Sea Europe, 2017). Enthused by low interest rates and strong market outlooks, the service industries accumulated capital stock at a record-high frequency. Few operators appeared concerned with rising costs and incipient overcapacity. Exhibit 1.1 shows the development in the number of offshore vessels by delivery year in core offshore segments, and the average monthly Brent oil price from 2000 to 2020.

Exhibit 1.1: Number of vessels by delivery year in offshore industries & Brent oil price development



*Number of vessels by delivery year: Anchor handling tug supply, platform supply, offshore wind, construction support, drilling, and floating production vessels.*

*Brent oil price: Average monthly nominal Brent oil price, USD*

*Estimates towards the end of the period*

*Sources: Sea Europe & U.S. Energy Information Administration*

<sup>1</sup> Drilling, OSV, oil services, seismic

Then, in mid-2014, a new source of oil supply entered the market, in the form of U.S. shale plays (Amadeo, 2017). Oil prices tanked once again, effectively ending the optimism that had imbued the overall industry. Despite gaining positive momentum following the slump, the price drop sent the offshore industry into a draught (Stacey, 2016). Thus, the growth race turned into a competition to survive. Through the crisis, many firms entered financial distress and defaulted on their debt obligations, resulting in an industry-wide wave of financial restructurings.

In this paper, we focus on financial restructurings, which is a mean to resolve financial distress. It entails a reorganization of the capital structure, and may include issuance of equity and/or restructuring of debt and other liabilities. Restructuring of debt entails renegotiating debt contracts to ease payment obligations, through measures as deferral of interest payments or amortization, or reduction in the outstanding. Before taking on the main body of this thesis, we review some earlier research on the topic, followed by an explanation of our objectives.

## Literature review

While a large body of research on financial restructuring exists, most of the work within the field has focused on four main areas: bankruptcy resolution, bankruptcy costs, governance changes in the event of bankruptcy, and the effects of bankruptcy on stock prices (Giles, 2010). In this thesis, we aim to understand the outcomes of financial restructurings, deviations from the absolute priority rule, and stock returns for firms undergoing financial restructuring. Hence, this section addresses research on these topics. First, however, we assess papers on what functions financial restructurings serve.

### **The rationale behind financial restructurings**

An obvious question that needs to be addressed in the context of financial distress is why firms are financially restructured as opposed to being liquidated. One argument found in a number of papers is that liquidating firms will often lead to premature asset sales in depressed markets. In that case, creditors are prone to incur significant losses. Examples of papers discussing these dynamics include Harris and Raviv (1991), and Bolton and Scharfstein (1996).

Moreover, cost arguments have been raised in the literature. Even though financial restructuring processes are costly, they could be worth incurring because bankruptcy costs could be even higher (Giammarino, 1989). Another cost argument is also raised by Giammarino. Despite

having contractual agreements as for how to resolve financial distress in case of default, it is costly to enforce contracts, and the parties involved have asymmetric information. Therefore, as long as the value left with equity holders is lower than the costs of having them extinguished, both creditors and equity holders are better off with financial restructuring than liquidation.

## **Bank debt resolution**

Not surprisingly, banks seem disinclined to write off on their engagements. Asquith, Gertner and Scharfstein (1994) investigated a sample of 102 companies that issued high-yield bonds during the 1970s and 1980s and ended up in financial distress. They document that banks responded to financial distress in a number of ways, including waiving covenants, forcing acceleration of interest and principal payments in some cases, and leaving legroom for firms by deferring amortization and interest payments in others. However, their findings indicate that banks were highly reluctant to reduce the principal amount of their outstanding claims.

James (1995) elaborates on these findings using a sample of 102 resolved cases of financial distress, showing that banks' responses depend critically on the other parties involved. The paper documents that banks did not make concessions in any cases unless bondholders also restructured their claims. In a follow-up paper, James (1996) demonstrated that banks play a crucial role in debt restructurings by functioning as a facilitator of bond debt exchange offers. Compared to workouts in which banks did not participate, exchange offers accompanied by concessions from banks significantly increased the likelihood of successfully completing restructurings, and were associated with greater reductions in bond debt, as well as leading to less senior debt being offered to bondholders. Hence, James' works indicate that firms' debt structures affect the viability of different restructuring outcomes.

## **Bond debt resolution**

Franks and Torous (1994) investigate 82 firms either completing distressed exchanges<sup>2</sup> or undergoing Chapter 11 processes. In addition to documenting that deviations from the absolute priority rule were larger in the 45 cases where the resolution occurred out-of-court, cash was also less extensively used to redeem creditors in private workouts. The researchers show that senior bondholders were redeemed with a combination of cash (29%), new senior debt (38%),

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<sup>2</sup> Exchanging original debt claims for new debt claims, equity, or partial cash redemption. Usually results in losses for creditors

preferred stock (16%), and equity (13%). Junior bondholders, on the other hand, came out with a combination of common stock (67%), senior debt (11%), and junior debt (15%).

The previously mentioned study by Asquith, Gertner and Scharfstein (1994) shows that bond debt reduction is an important measure to avoid bankruptcy. In their sample, all those neither completing exchange offers for bond debt nor selling significant portions of assets went bankrupt. Moreover, the paper indicates that firms that were successful in lowering outstanding bond debt had significantly higher chances of avoiding bankruptcy later on. On the downside, however, the paper fails to address why some firms were able to launch successful exchange offers, while others were not. Regardless, it demonstrates the importance of lowering bond debt in financial restructuring processes.

Further, Gilson, John, and Lang (1990) provide descriptive statistics of a total of 169 resolutions of financial distress. Interestingly, in private workouts, the least common measure to resolve the financial distress was to extend maturities on outstanding bonds. The most common way to resolve financial distress privately was to issue equity and reduce total bond debt, which occurred in 74 % of the cases. Moulton and Thomas (1993) and Chatterjee, Dhillon and Ramirez (1995) have supported these findings.

### **Stock return of financially distressed firms**

There are multiple papers showing that stock returns of financially distressed firms underperform those of financially healthy ones. Dichev (1998) uses Altman's Z-score and Ohlson's O-score<sup>3</sup> on a sample covering the years 1981-1991, grouping firms into deciles, based on their Z- and O-scores. Both indicators show that the performance of firms with higher bankruptcy risk was significantly worse than that of its financially healthy counterparts. In fact, the paper shows that a strategy that equally weighted long positions in firms with low bankruptcy risk and short positions in firms with high bankruptcy risk earned an annualized return of 22.4 %.

Griffin and Lemmon (2002) find similar results, even after correcting for the stochastic structure of returns using a Fama-French 3-factor model. Their paper documents that financially distressed firms significantly underperform compared to firms that are financially healthy, and

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<sup>3</sup> The Z-score and the O-score are measures for predicting bankruptcy, predominantly using company-specific financial data

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that the relationship is driven by firms with low book-to-market ratios. Using an alternative method, Campbell, Hilsher and Szilagyi (2008) arrive at almost the exact same results.

According to von Kalckreuth (2005), three explanations have been put forward to explain why stocks of financially distressed firms underperform. Firstly, the markets may be malfunctioning. This would coincide with Griffin and Lemmon's mispricing argumentation (2002). However, it does not explain why stocks of financially distressed firms continuously underperform. Secondly, institutional investors may have preconceived aversions for distressed firms that does not consider their return potential. Finally, markets may be inefficient.

Eisdorfer, Goyal, and Zhdanov (2011), develop behavioral arguments for mispricing of financially distressed stocks. Since most distressed firms have negative earnings and suffer under both financial and operational pressure, standard valuation techniques such as discounting cash flows and multiples are not well-suited for such firms. This, combined with limited analyst coverage, suggests that few investors have the skills to value distressed stocks correctly. Employing an option-based model, and comparing results with market values, the researchers document larger anomalies in returns among distressed firms.

## **Deviations from the absolute priority rule**

The absolute priority rule (APR) states that no creditor or shareholder are entitled to receive their claims unless more senior claimholders have been redeemed in full (Giles, 2010). There is a large body of research on deviations from the APR. Examples include Franks and Torous (1994), Eberhart, Moore, and Rosenfeldt (1990), and Eberhart and Weiss (1998). The above-mentioned papers find that shareholders tend to end up with more than they hold legitimate claim to, and that the tendency reflects the encouragement of consensual restructurings as opposed to formal processes. Furthermore, according to Giles (2010), the tendency is stronger in jurisdictions where liquidation is less common, and where shareholders get to vote on the restructuring proposal.

Further, because indirect costs are, among other things, a function of time, short processes are preferred. Gilson, John, and Lang (1990) argue that holdout problems may occur if creditors or shareholders, to the extent that they are in a position to do so, wait for more favorable terms. Thus, according to Franks and Torous (1989), senior creditors are willing to allow deviations from APR in order to speed up the process and thereby avoid indirect costs.

## Research topic – what and why?

As documented in the literature review, a large body of research on financial restructurings exists. However, to our knowledge, few papers have been written based on Norwegian restructurings, highlighting the interests of, and outcomes for, different stakeholders. In this thesis, we delve into the restructurings that have taken place in the Norwegian scene for the past four years, for the purpose of understanding the resolution of financial distress in Norway.

The extensive media coverage of financial restructurings in Norway during the last few years makes this a timely and relevant choice of topic. Further, the prominent position of cyclical and asset-heavy industries in Norway increases the likelihood of reoccurrence of financial restructuring waves in the future. Thus, research on restructurings under Norwegian legislation is important, as it is scarce at the moment.

In addition to bringing new and sought-after data on restructurings, the recent restructuring wave in the Norwegian market also stands out from earlier restructurings due to the development of the Norwegian high-yield bond market since the early 2000s. This introduces a new aspect to Norwegian restructurings, as bondholders now are a significant stakeholder. Moreover, bondholders' entitlement to detailed public information regarding amendments to debt contracts leads to information-availability beyond what has been the case before.

Using a sample of 27 financial restructurings within the shipping and offshore space, we aim to map out what different stakeholders have contributed with and how the restructurings have affected the financial state of the companies. Further, we aim to understand the dynamics of the restructuring negotiations, and consider whether the solutions have honored seniority of claims in the capital structure. Finally, we offer extra attention to shareholders' returns during the restructuring period overall, as well as in subperiods.

Our thesis builds on publicly available information released in conjunction with financial restructuring processes, as well as financial statements and media coverage. Further, qualitative insights are developed based on interviews with stakeholders and advisors whom have been involved in the processes, as well as our own reflections.

Initially, we provide the theoretical groundwork of capital structure seniority, as well as a detailed description of the concept of financial restructurings. Thereafter, the interests of different stakeholders are considered, before we move on to assess how these interests have

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translated into stakeholder contributions in the restructuring solutions for our sample firms. Subsequently, we assess the financial state of the firms following the restructuring processes, and reflect on what has been achieved. Finally, we discuss the limitations of this thesis and provide a conclusion.

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## 2. Theory

This section introduces the theoretical backdrops deemed most relevant for this thesis. Firstly, theory on seniority of claims in the capital structure is presented. Then, we lay out the concept of financial restructuring in detail, including elaborations on the differences between U.S. and Norwegian restructuring processes, as well as an overview of a typical process.

### Seniority and the absolute priority rule

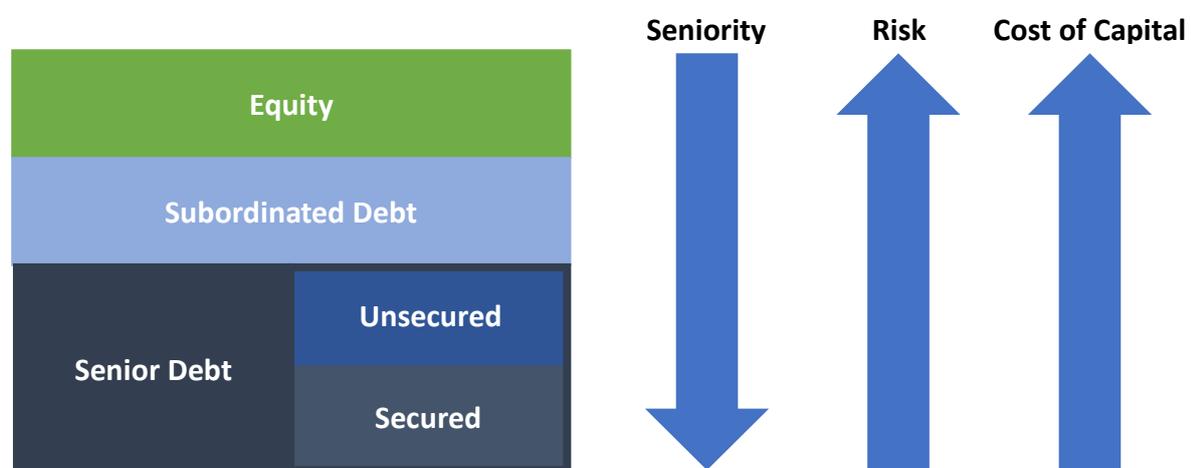
A firm's capital structure is the way it chooses to finance its operations and growth investments using different sources of funds. Broadly speaking, the sources of funds are senior secured debt, senior unsecured debt, subordinated debt, and equity, all of which may be split into subcategories. For instance, secured debt may consist of both bonds and bank debt. The seniority, or priority, of claims represents the order in which claimholders are entitled to the cash flows generated by the firm, and is linked to the absolute priority rule. More senior claimholders are entitled to be compensated in full as suggested by their contractual agreements before claimholders with lower seniority are entitled to payment.

In the event of bankruptcy and liquidation, the APR will follow the seniority of the capital structure to determine what share of the liquidation value that accrues to different claimholders. Clearly, claims with lower seniority has higher risk, and require higher returns, giving a higher cost of capital. Exhibit 2.1 demonstrates this relationship.

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Exhibit 2.1: Capital structure seniority, and the link to risk and cost of capital

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In Exhibit 2.1, there is a distinction between unsecured and secured debt within senior debt. If the financing is secured, some or all of the firm's assets serve as collateral in the event of default. Secured creditors have the right to seize the assets that represent their security, reducing the risk of their claims. However, if the value of the collateral does not cover the entire claim, the remaining claim has lateral seniority to senior unsecured debt.

A firm's asset value tends to follow the overall market development (Hotchkiss, Kose, Mooradian, & Thorburn, 2008). Therefore, in cyclical downturns, the value of assets will generally not resemble the values on which debt contracts were issued. Thus, due to the volatile nature of the industries covered in this thesis, claiming assets in the event of default will typically entail losses for the creditors (Bolton & Scharfstein, 1996; Harris & Raviv, 1991). An illustrative example from the dry bulk shipping market is found in a paper by Greenwood and Hanson (2013)<sup>4</sup>. In 2001, a five-year old Panamax was leased on daily rates of \$5,325 and could be purchased for \$14 million. Six years later, a similar boat had daily rates of \$61,000, and would cost a buyer \$89 million. By 2011, both daily rates and second-hand prices were close to 2001-levels again. Hence, not only does earnings fluctuate with the rates in the shipping and offshore industries, the market value of assets follows the same cyclical pattern.

## **Senior debt**

Senior debt has top priority, and may be secured or unsecured, with secured debt being posed to lower risk, and hence lower interest rates. Secured debt generally either takes the form of bank or bond debt. Except for debt including convertible features, creditors only hold claim on the face value of the loan, plus interest. Thus, the upside potential is fixed. In the Norwegian scene, banks are generally the providers of secured debt, while bonds predominantly are unsecured. In our sample, almost all interest-bearing debt is senior. Thus, all debt not explicitly classified as subordinated is senior, throughout this paper.

## **Subordinated debt**

Subordinated debt, often called junior debt, ranks below senior debt in the hierarchy, and thus has higher risk. It typically comes in the form of shareholder loans, loans from associated

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<sup>4</sup> Our sample does not include cases from the dry bulk market. However, the mechanisms of markets covered in this thesis are very similar, due to capital intensity and cyclicity.

companies, or as bonds. All mentioned sorts of subordinated debt can be found in our sample, both as a result of the restructurings and as parts of the initial capital structures of the firms.

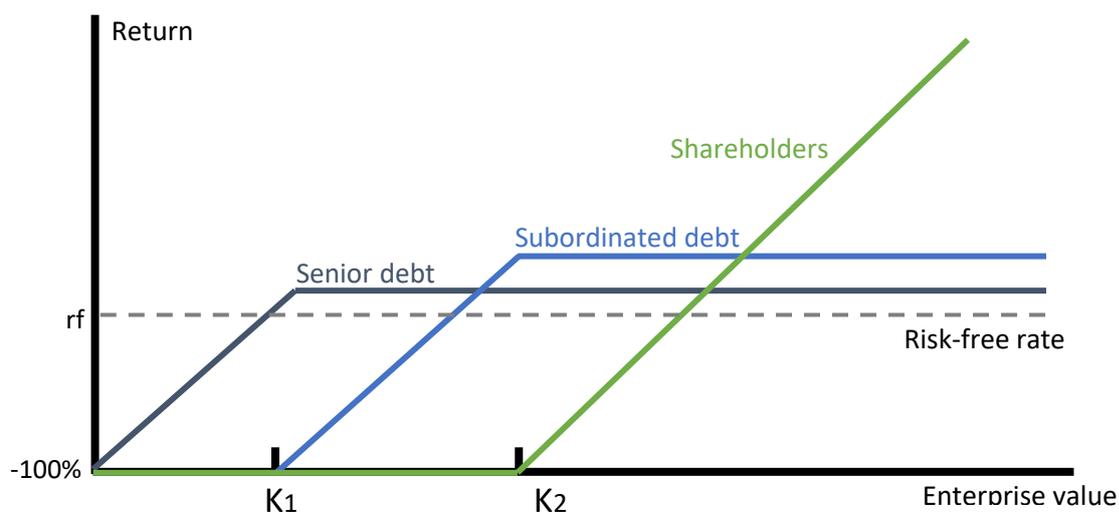
## Equity

Shareholders are the most junior claimholders, and only have rights to the firm's operating cash flows and assets once all other claimholders have received their contractually agreed payments. On the upside, however, the shareholders' claim is residual in the sense that once all more senior claimholders have received their rightful claims, the rest accrues to the shareholders. As such, the upside potential is unlimited. Again, there may be multiple subcategories of equity with different seniority. For instance, there may be preferred equity and common stock.

## A graphical approach

A complementary way of considering capital structure and seniority to enhance the understanding of restructuring negotiations and outcomes is to assess the positions of claimholders graphically. Exhibit 2.2 illustrates the return and priority of senior debt, subordinated debt, and shareholders. As shown, senior debt is repaid in full before subordinated debt receives any payment. Subordinated debt, again, is repaid in full before shareholders are compensated. Finally, the return potential for claimholders with lower seniority is higher. In a restructuring case, the enterprise value is typically below  $K_2$ , and possibly even below  $K_1$ . Thus, shareholders should theoretically lose all their value.

Exhibit 2.2: Illustration of capital structure seniority and returns for different claimholders

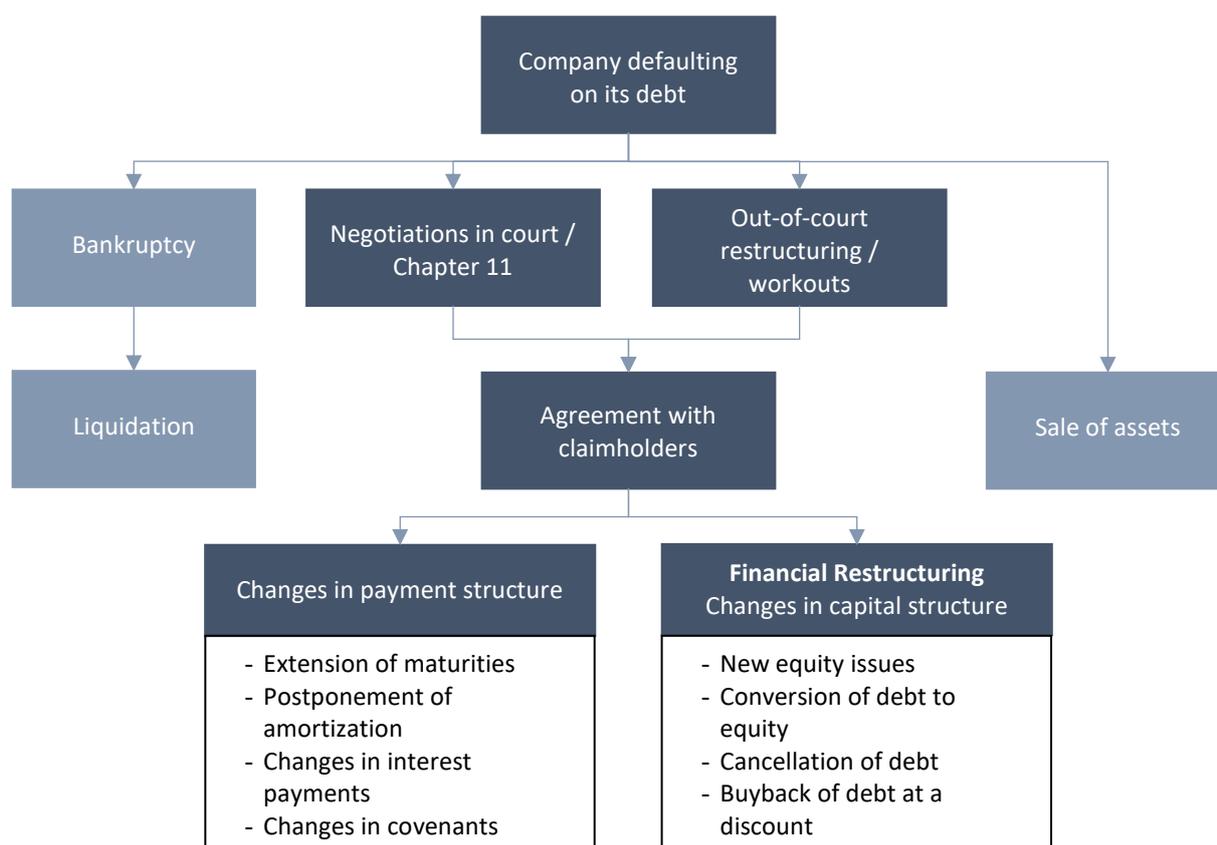


Not to scale

## Financial restructuring

As emphasized in the introduction, financial distress occurs when there is a mismatch between a firm's liquid assets and short-term debt obligations (Hotchkiss, Kose, Mooradian, & Thorburn, 2008), or when covenants<sup>5</sup> are breached. Generally, the process of rectifying the situation is initiated by the firm, and there are a number of measures it may take to resolve the problem (Gilson, John, & Lang, 1990). Exhibit 2.3 provides an overview of the different routes the firm may take to alleviate financial distress. One option is to sell assets and use the proceeds to meet debt obligations. However, as seen in the literature review, financially distressed firms often find themselves in depressed markets. Hence, the market value of assets typically reflects the enfeebled state of the industries in which the firms operate.

Exhibit 2.3: Overview of different options a firm has when defaulting on its debt



When the company's problems cannot be rectified by means of asset sales, or when doing so negatively impacts the firm's operating strategy, it has the option of negotiating with

<sup>5</sup> Contractually agreed conditions that require the borrower to meet certain requirements, as equity ratios for example.

claimholders to find a solution through changes in the payment structure or a financial restructuring. In this thesis, we define financial restructurings as a reorganization of a company's capital structure to resolve financial distress, including at least one of the following elements:

1. A minimum of 40 % dilution of existing shares through issuance of new equity
2. Reduction in outstanding nominal debt, or liabilities, without full repayment, either through cash payment below par, conversion of debt to equity or pure write-offs
3. A minimum of 25 % dilution of existing shares, and significant amortization reductions and/or extended maturities on existing debt.

Typically, the companies initially attempt to reach an agreement with claimholders through private negotiations outside the courtroom, in a so-called private workout. To the extent that stakeholders are unable to agree on a solution outside the courtroom, the company may file for protection under bankruptcy laws, and sort out the problem through a formal process in court. If so, an official judge may have significant power in forcing through a solution without approval from all stakeholders, depending on local legislation. All restructurings in our sample are private workouts, which is by far the most common option in Norway.

In the case where no solution that satisfies all claimholders with the opportunity to declare bankruptcy is found, the final option is bankruptcy, and an ensuing liquidation of the firm. Liquidation should occur when the liquidation value for creditors is higher than the value of a potential going concern. However, as emphasized, this is often not the case, as assets in distressed industries with limited alternative use have very low market value. In that case, a situation where the creditors let the company live through a financial restructuring, hoping for the market to recover, is likely to be a better solution for the creditors. Thus, we often see creditors opting for restructuring rather than liquidation, at least in cyclical industries.

By demanding changes in capital structure to include companies in our sample, we eliminate cases only involving changes in payment structure, which we consider refinancings rather than restructurings. Changes in payment structure typically include extension of maturities and/or postponements of amortization, and have the effect of easing liquidity requirements for the firm for a certain period. In more distressed cases, as those included under our definition of financial restructurings, changes in capital structure is necessary. Issuance of new equity, conversion of debt to equity, or plain discharge of debt are examples of such changes. In most cases, changes in capital structure are implemented in combination with complementary changes in payment

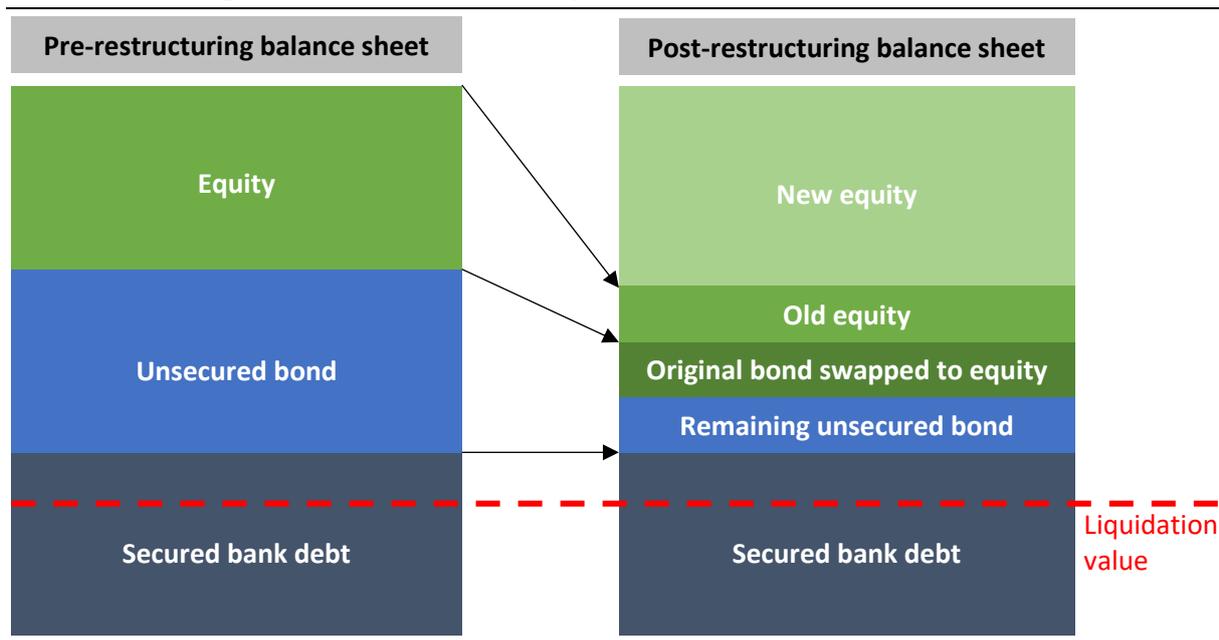
structure. Finally, while beyond the scope of this thesis, it is worth noting that organizational and operational restructurings also typically accompany a financial restructuring process.

The severity of the financial restructuring depends on the degree of financial distress that the company is in. This, of course, depends on the amount of debt obligations the company has, and what kind of cash flows it is expected to generate in the following years. The restructuring outcome also depends on how thoroughly the stakeholders want to solve the company's problems. For companies whom are in financial distress due to a cyclical downturn that is expected to pass, the stakeholders might want to just solve the most urgent problems and "kick the can down the road" without significant debt reductions. For companies with more permanent problems, a more severe restructuring might be needed. We will come back to what incentives the different stakeholders have, and what considerations they take, later in this paper.

## Example of a restructuring solution

Exhibit 2.4 shows an example of a typical financial restructuring involving changes in capital structure. We assume here that all liquidation value stems from assets used as collateral in bank financing. Notice first that the liquidation value is lower than the outstanding on the secured debt provided by the banks. As such, the banks will incur losses if the company is liquidated. Hence, if the banks deem it likely that the firm will be able to repay the debt in full at a later point in time, they will benefit from allowing the firm to restructure and continue its operations.

Exhibit 2.4: Example of a financial restructuring solution



The unsecured bonds are partly converted to equity, and suffer a haircut<sup>6</sup> relative to the nominal outstanding in the original bonds. Further, the old equity is diluted and now controls a significantly smaller share of the firm. This follows naturally, as existing shareholders do not hold legitimate claims on the firm's cash flows before more senior claimholders have been redeemed in full, according to the APR. However, as we often see in practice, existing shareholders are not completely diluted. Through this paper, we aim to evaluate how much value is left with existing shareholders, and address the causes of this tendency. Finally, new equity is issued in the restructuring, and the company is de-levered.

## Restructurings in Norway vs. the U.S.

As most comparable research is done on U.S. data, it is important to be aware of the institutional differences between Norwegian and American restructurings. The main difference is that most restructurings in the U.S. are negotiated in court, while private workouts dominate in Norway. There are several reasons for this tendency. For Norwegian companies, in-court restructurings are not a viable option, because the Norwegian legislation has obvious inadequacies with respect to yielding beneficial restructuring outcomes for the parties involved. For example, an in-court Norwegian restructuring composition requires cash payments of a minimum of 25 % of outstanding to all creditors. Also, the court has no power to differentiate between creditor groups or to force participation from secured creditors. Given the financial state of the firms for which a financial restructuring is necessary, this rule inhibits the attractiveness of formal processes<sup>7</sup>. In fact, the Norwegian bankruptcy law has been criticized for failing to provide measures for distressed firms to survive, as opposed to Swedish legislation and the U.S. bankruptcy code. (Bjerknes & Trumpy, 2017). Thus, the in-court restructuring system is rarely used in Norway.

For U.S. companies, on the other hand, in-court restructurings, termed Chapter 11, is a more feasible option. One important reason for this tendency is that U.S. companies can get bankruptcy protection under Chapter 11, meaning that the creditors cannot declare the company bankrupt. In Norway, the companies negotiate their own bankruptcy protection with creditors

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<sup>6</sup> A haircut is the difference between the nominal outstanding on pre-restructuring debt and the value distributed to creditors as part of the restructuring solution. Please refer to Appendix B for further explanation.

<sup>7</sup> According to lawyers at Wikborg Rein. Please refer to Appendix A for further information

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through a standstill agreement<sup>8</sup>. Further, in the U.S., it is harder for a single creditor to block a restructuring proposal. There are two reasons for this. First, the creditors are grouped into creditor classes. For example, secured creditors make up one class, whereas unsecured creditors make up another. Each class then needs 75 % approval to pass a proposal, leaving less room for individual creditors to pursue their own agenda. Second, the judge can force a solution upon stakeholders voting against the proposal if certain criteria are met. Another important difference lies in the feasibility of private workouts. U.S. companies typically need 90 % approval to amend the terms of a bond agreement out-of-court, impairing the chances of resolving the issue privately. In Norway however, only 2/3 approval is needed from bondholders in a private workout. Otherwise, although restructurings are solved formally in the U.S. and privately in Norway, most of the mechanisms of the negotiations are the same.

In terms of solution characteristics, using a sample of U.S. firms, Franks and Torous (1994) found that deviations from the APR were larger in cases that were resolved privately. Also, cash redemption of creditors was less extensively used outside the court room. These differences are important to have in mind when comparing our findings, which are all based on private workouts, to earlier research on Chapter 11 restructurings.

As for the state of firms that have completed financial restructuring processes, there are two differences to be aware of. Usually, companies that undergo Chapter 11 processes are successful in significantly reducing outstanding debt. As will be evident later in the thesis, there is substantially less reduction in debt for Norwegian firms completing private workouts. Also, the Chapter 11 process is very expensive and resource-demanding, and would not be suitable for many of the smaller companies in our sample. For example, Seadrill is estimated to spend a total of \$250 million on its restructuring process, including a Chapter 11 filing (Ånestad & Løvås, 2017).

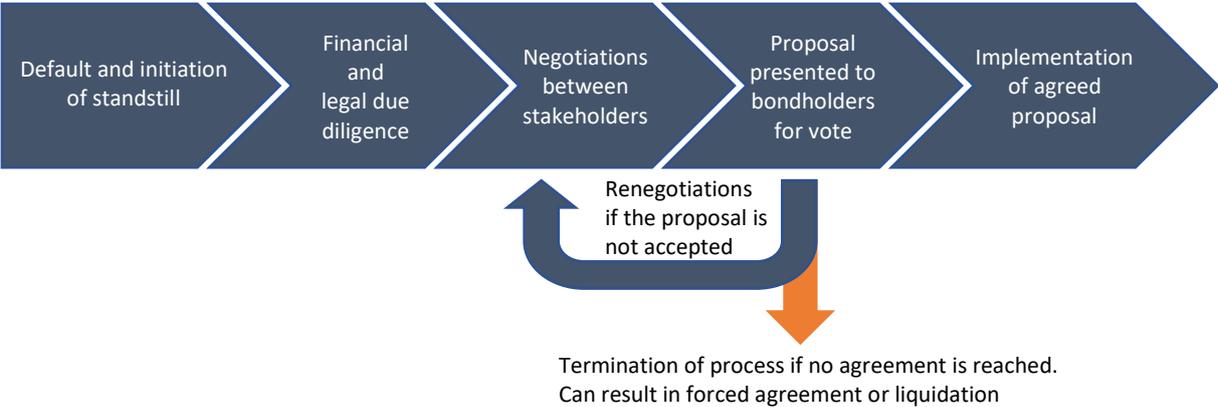
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<sup>8</sup> According to lawyers at Wikborg Rein. Please refer to Appendix A for further information

## Overview of the restructuring process

Although financial restructurings are very diverse, we attempt in Exhibit 2.5 to provide an overview of a typical financial restructuring, from initiation to implementation. The process typically starts with the company defaulting on its obligations or breaching covenants, followed by an announcement of a standstill agreement with creditors. A standstill agreement is a truce between the company and its creditors. Through the standstill, creditors agree not to receive interest payments and amortization, and not to declare the company bankrupt, until the situation has been resolved, or the standstill period ends. Following the standstill agreement, financial and legal advisors conduct due diligences on behalf of their clients, and negotiations commence.

Exhibit 2.5: Overview of a restructuring process



Present in the negotiations will typically be the board and management of the company, representatives from the bank, the Nordic Trustee representing bondholders, and the largest shareholders. Once the negotiating parties have come up with a solution proposal, the company will present the plan and summon to a bondholder meeting, as well as an extraordinary general meeting for shareholders. At their respective meetings, both groups of stakeholders vote on the proposal. Typically, the company will already have significant support within the different stakeholder groups when proposing the solution to the public. Should the proposal fail to obtain the necessary votes in favor of the plan, negotiations recommence with the objective to find a new solution. If no solution is found through out-of-court negotiations, the company might file for bankruptcy protection to resolve the situation in court. When a solution is approved by all groups of stakeholders, implementation follows. The implementation process depends on the adopted solution, and might include elements as equity issues and conversion of debt to equity. The time scope of the process can vary significantly, from a month to a year, or more.

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### 3. Data

In this section, we present the selection criteria used, and cases included in our sample, as well as the financial and operational state of the firms. Although financial restructurings come in many forms, this thesis is restricted to financial restructurings as defined in the section explaining the concept of financial restructurings. All companies in our sample have undergone, and completed, financial restructurings in the period 2013 to present<sup>9</sup>. We consider the restructurings completed once all elements of the solution are implemented. As mentioned, our definition excludes firms that have only changed payment structure through refinancing debt contracts, such as Odfjell Drilling (Jensen, 2016). It also excludes firms that have resolved distress through smaller equity issues, such as Petroleum Geo-Services (Parr, 2017).

Further, we restrict the sample to listed companies, that are listed on Oslo Stock Exchange and/or have Norwegian-listed bonds outstanding prior to the restructuring. Hence, our sample excludes privately held companies, as well as firms that raise capital exclusively outside Norway. These restrictions ensure the availability of public information and comparability of restructuring outcomes. Also, the process of analyzing the restructuring solutions is very time-consuming. Thus, limiting the scope of the thesis to companies that are financially dependent on Norwegian capital markets effectively allows us to evaluate the restructurings at the necessary level of detail.

To identify firms that have undertaken financial restructurings in the specified period, we have gone through stock exchange notices and media coverage. Through this exercise, we identified 27 financial restructurings, which are presented in Table 3.1. Evidently, offshore support vessel (OSV) operators dominate the sample, primarily through companies operating in the supply segment. However, it also includes oil services, E&Ps, and shipping companies. Notably, ElectroMagnetic GeoServices, Polarcus and Songa Offshore show up twice, indicating that they have completed two rounds of restructurings in the period. As the table shows, most restructurings were initiated post year-end 2014. This reflects the persistently challenging market conditions in oil-related industries, dating back to mid-2014. Further, the table indicates the elements incorporated in the restructuring solutions.

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<sup>9</sup> Present meaning November 2017.

Table 3.1: Sample overview

Company	Industry	Solution announcement	Solution characteristics
Awilco LNG	SHIPPING	18.05.2017	Equity
American Shipping Company	SHIPPING	02.12.2013	Extension, equity, conversion
Archer	OIL SERVICE	28.02.2017	Extension, equity, haircut
Avance Gas	SHIPPING	19.10.2016	Equity
Bergen Group	OIL SERVICE	27.10.2016	Equity, haircut
BW Offshore	OIL SUPPLY	22.05.2016	Extension, equity
DOF ASA	OIL SUPPLY	06.06.2016	Equity, conversion, haircut
Eitzen Chemical	OIL SUPPLY	22.12.2014	Conversion, haircut
ElectroMagnetic Geo-Services 1	SEISMIC	04.11.2015	Extension, equity, haircut
ElectroMagnetic Geo-Services 2	SEISMIC	23.03.2017	Equity, bond buyback, haircut
Farstad	OIL SUPPLY	03.02.2017	Extension, equity, conversion, haircut
Havila	OIL SUPPLY	08.11.2016	Extension, equity, conversion, haircut
Havyard	OIL SUPPLY	16.06.2016	Extension, equity, conversion
Interoil Exploration and Production	OIL (E&P)	23.12.2014	Extension, equity, conversion, haircut
Norwegian Energy company	OIL (E&P)	04.02.2015	Extension, equity, conversion, haircut
Petrolia	MULTIPLE (OIL)	22.11.2016	Conversion, haircut
Polarcus 1	SEISMIC	05.01.2016	Extension, equity, conversion
Polarcus 2	SEISMIC	09.02.2017	Extension, equity
Prosafe	OIL SUPPLY	06.07.2016	Equity, conversion, haircut
REM Offshore	OIL SUPPLY	22.08.2016	Extension, equity, conversion, haircut
Seabird Exploration	SEISMIC	28.01.2015	Extension, equity, conversion, haircut
Siem Offshore	OIL SUPPLY	11.06.2015	Extension, equity, haircut
Solstad Offshore	OIL SUPPLY	07.06.2016	Extension, equity
Songa Offshore 1	OIL SUPPLY	24.11.2013	Extension, equity
Songa Offshore 2	OIL SUPPLY	14.03.2016	Extension, equity, conversion
Teekay Offshore Partners	MULTIPLE (OIL)	18.05.2016	Extension, equity
Viking Supply Ships	OIL SUPPLY	29.08.2016	Extension, equity, conversion, haircut

Source: *Newsweb.no*

Table 3.2 provides an overview of the average operational and financial state of the companies prior to the restructuring processes. Also shown in the table are the maximum and minimum observations for the mentioned metrics, reflecting diversity within the sample. For a detailed description of each restructuring within our sample, please refer to Appendix F.

Noteworthy, the EBITDA margin was on average 25 %, which is low considering the extensive capital costs in the relevant industries. This reflects the fact that the restructurings were undertaken at times when the overall sector experienced a cyclical downturn. Further, the average gearing (Total Liabilities/Total Assets) in the sample was 82 %, ranging from 55 % to

129 %. Given the cyclical nature of the industries represented in the sample, we argue that these figures are quite aggressive, a view that is supported by several sources we have spoken to<sup>10</sup>.

Table 3.2: Operational and financial state of sample firms prior to restructuring solution announcement

	Last EBITDA-margin	Last profit-margin	Total Liabilities/ Total Assets	Z-Score	Secured Debt/ Unsecured Debt	P/NAV	Current Assets/ Current Liabilities
<i>Average</i>	25 %	-33,4 %	82 %	-0,39	2,57	0,24	0,85
<i>Min</i>	-84 %	-255 %	55 %	-4,27	0,00	-0,62	0,10
<i>Max</i>	96 %	149 %	129 %	1,85	17,10	2,21	2,41

*Book values, reported in the last annual/quarterly report prior to solution announcement.*

*Market Capitalization obtained from Bloomberg.*

*Total assets and Total Liabilities: As reported in balance sheets.*

*P/NAV = Market Capitalization / (Total Assets – Total Liabilities – Goodwill)*

*Z-score: A measure of credit-strength. Explained in Appendix D.*

*All 27 cases included*

As for the average Z-score of -0.39, it mirrors the severity of the financial distress the operators were experiencing pre-restructuring. According to Altman's original paper (1968), a Z-score below 1.8 indicates that the company is likely headed for bankruptcy<sup>11</sup>. Interestingly, the highest Z-score in our sample amounts to 1,85. The average secured-debt-to-unsecured-debt ratio was 2.57, implying that most of the debt was secured. Further, the low market-to-book ratios, averaging at 0.24, indicate investors' negative views on the companies. The last column, showing the relationship between current assets and current liabilities, weights in below 1, reflecting the mismatch between liquidity and short-term debt obligations.

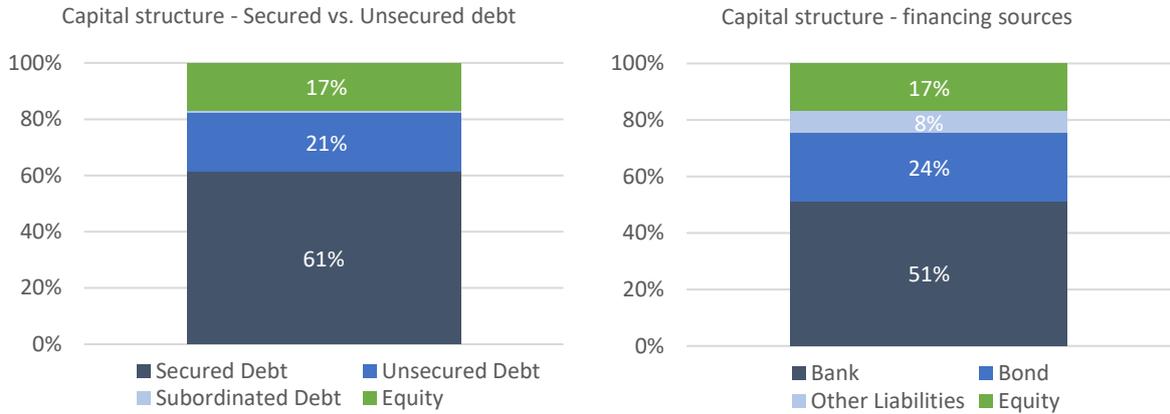
Exhibit 3.1 shows the firms' average capital structure before restructuring. On the left, debt is considered with respect to security and seniority. On the right, debt is distributed according to the source of financing. Due to aggressive financing strategies and declining share prices, debt constitutes 83 % of the firms' average capital structure before the solution announcements when measuring equity at market capitalization. The capital intensity of the industries in which the companies operate suggests extensive use of debt, since assets may function as collateral in debt agreements (Bennet & Donnelly, 1993). However, the cyclical, and highly volatile nature of the industries favors equity financing to facilitate for headwind.

<sup>10</sup> According to bankers we have interviewed. Please refer to Appendix A for further information

<sup>11</sup> The Z-score is explained in detail in Appendix E

As Exhibit 3.1 demonstrates, the capital structure appears to be similar, regardless of how debt is considered, as the lion’s share of bond debt was unsecured, whereas the majority of bank debt was secured. Specifically, bank debt constituted about 50 % of the financing on average. Further, equity measured at market value constituted just 17 %, and 23 % measured at book values, highlighting the substantial gearing. In fact, net interest-bearing debt relative to market capitalization weighs in at an average of 31 prior to the restructurings. Again, this emphasizes the aggressiveness of the financing strategies.

Exhibit 3.1: Capital structure overview – Market value of equity vs. Interest-bearing debt



*Equity measured at market capitalization just before solution announcement.*  
*Debt levels obtained from the last quarterly or annual report prior to solution announcement.*  
*Only interest-bearing debt/liabilities included.*  
*All 27 cases included.*

In sum, the sample consists of financial restructurings undertaken by firms operating in capital-intensive oil-related industries, primarily within the OSV-segment, between 2013 and 2017. Financially and operationally, they were in severe distress before restructuring, as exemplified by their low Z-scores, and other measures. Common for many of the firms constituting the sample is that they have used extensive debt financing to invest before the recent oil crisis. Compared to U.S. firms in the same industries, the sample firms were financed with more bank debt, less secured bond debt, less unsecured debt, and less equity (Clarksons Platou, 2016).

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## 4. Welcome to the room where everyone has a loaded gun

As mentioned in the explanation of the APR, there are contractual agreements and legislation in place to determine the distribution of value in the case of liquidation. Given that a restructuring follows default on obligations towards creditors, shareholders should not have the right to receive anything. This is also often virtually the case for unsecured bondholders, as most valuable assets are tied up as collateral for secured creditors. However, we see in practice that both unsecured creditors and shareholders are often left with significant value. In a private workout, the absolute priority rule need not be followed, as contract law allows the parties to agree on whatever they see fit. Still, as the absolute priority rule applies in the case of liquidation, it will have strong implications in the negotiations. Should it not be followed, senior stakeholders have the option of declaring bankruptcy and liquidating the firm, in which case the APR will be adhered to.

A restructuring negotiation can be viewed as a room where everyone has a loaded gun<sup>12</sup>. The allegory reflects that all stakeholders have significant leverage over the other parties. All banks, bondholders, other creditors, and shareholders must approve the restructuring proposal, and provide their signatures. Hence, the negotiation becomes a sort of chicken game<sup>13</sup>, wherein all stakeholders engage in a tug of war to usurp the biggest piece of pie possible. As such, stakeholders with no underlying value are negotiating the price of what has been called the world's most expensive signature<sup>12</sup>.

Another aspect of the restructurings in our sample is that many of the processes have coincided. Thus, many of the same stakeholders meet again in negotiations over different companies. This legitimates, at least to some extent, the threat from stakeholders without value in a single liquidation scenario. Further, the fact that one restructuring might have spillover-effects in terms of setting a standard for what can be expected in later restructurings can make negotiations more intense. Also, the repeated cases imply that there is a lot at stake for all stakeholders.

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<sup>12</sup> As phrased by Stian Tande Mortensen, Wikborg Rein

<sup>13</sup> A chicken game is a famous concept in game theory, where two players are driving on collision course. Whoever swerves is considered a chicken and loses, but if neither of them swerve, they both crash.

## The main parties of negotiations

In the following section, we introduce the most important stakeholders and participants in the negotiations, and elaborate on their incentives and perspectives. First, we assess the banks. Then, we turn our attention to The Norwegian Export Credit Guarantee Agency (GIEK), followed by bondholders, and shareholders. Finally, we consider other important parties in the negotiations. The insights in this section are highly influenced by interviews with several stakeholders and advisors whom have been involved in the restructurings in our sample<sup>14</sup>. At the discretion of our interviewees, it will generally not be specified who contributed with specific insights. However, we stress that several sources highlighted most insights.

### **Banks**

Banks usually provide senior secured debt, which is the most important source of financing for the sample firms, averaging at 51 % of the capital structure, when measuring equity at market value. Adding close customer relationships to the companies, it is clear why banks have a very prominent role in restructurings. Before a proposal is presented to other stakeholders, the banks spend months, or even more than a year, negotiating with the firm to find a solution. Typically, there are many banks contributing to financing, often from different countries with different legislation, which complicates the negotiations. The most extreme example is the ongoing restructuring of Seadrill<sup>15</sup>, with a total of 42 banks involved (Aga Nilsen, 2017). Approval from all banks and syndicates is needed to pass a restructuring plan, meaning that all banks have the power to force liquidation<sup>16</sup>.

When working on a restructuring solution, it is of high priority for banks to leave the company in a state where it becomes as creditworthy as possible. Financially, this entails offering the firm a sufficient runway<sup>17</sup> under the depressed market conditions, and positioning the firm to meet debt obligations when the market recovers. The softest measure the banks can impose to create runway is to amend and extend current debt agreements. This may entail covenant waivers, deferral of interest and amortization, and extending maturities.

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<sup>14</sup> See appendix A for a full list of interviewees.

<sup>15</sup> Seadrill is not in the sample as the negotiations were not concluded at the time of delivery of this thesis.

<sup>16</sup> Unless the company has bankruptcy protection, for example under the U.S. Chapter 11 legislation.

<sup>17</sup> Runway is the period a firm is able to operate under current market conditions without defaulting on debt obligations.

A more drastic alternative to extensions is for banks is to convert debt to equity, or to take possession of their collateral. However, banks shy away from such measures, as they consider themselves unqualified to own companies and assets. Specifically, banks do not possess the skill and capacity to operate firms or assets. Also, in seizing assets, banks will lose any backlog or contract tied to the asset. In a distressed OSV market for example, where many of our sample firms operate, a contract would be a substantial part of a vessel's value. Moreover, a partial write-off will generally be the result of conversion to equity or seizing assets. Due to Basel III/CRD IV regulation, a partial write-off on a loan engagement forces the bank to reclassify the remaining debt engagement to riskier asset classes when determining its risk-weighted asset measure<sup>18</sup> (European Banking Authority, 2017). This effectively lowers the bank's overall lending capacity.

Although banks usually are at the top of the capital structure and therefore have a strong position in the restructuring negotiations, they also have one big disadvantage in that they often have the most to lose. At the time restructuring negotiations commence, the value for shareholders and bondholders are often already largely and explicitly deteriorated, as stocks and bonds are continuously valued in financial markets. For banks however, a secondhand market does not exist to the same extent, and they still have a lot of value on their books. Further, as discussed, cyclical downturns do not facilitate a sellers' market for ships and other similar assets. Firms such as Farstad, DOF, and Siem Offshore, had as many as 60-70 vessels each. A liquidation and subsequent asset sale in one of these companies, would not exactly make a sellers' market for the banks. Thus, although the banks are a senior secured claimholder, unsecured and/or junior claimholders can put pressure on them, as they probably have the widest space of possible outcomes in terms of value.

Adding to financial aspects, operational aspects concerning corporate control and management are also very important. Banks strive to retain owners with industrial experience, long-term ownership perspective, and financial muscles to contribute with equity if necessary. Thus, banks typically favor large existing shareholders to contribute with new capital, at least if the main explanation behind the financial distress is the market conditions, and not poor management.

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<sup>18</sup> See Appendix C for a brief explanation of capital requirements and reclassification of loans for banks.

Further, the relational and reputational aspects are very important for the banks. Firstly, the customer relation is important because banks want to be chosen as creditor when the market returns. Moreover, the banks sell a variety of other services and products to its customers, from investment banking services to transaction services and pensions. Additionally, companies in our sample are often cornerstones of small communities along the coast, where banks provide private banking services, and thus have risk in terms of local housing markets. Secondly, the reputational aspect is important, as the largest banks in Norway are afraid of headlines in nationwide media saying they have forced bankruptcy and job losses on local communities.

In addition to being complex, banks' interests are not always aligned, and they often spend more time arguing between themselves over the restructuring solutions than with the company and other stakeholders. In the offshore industry, bank debt often takes the form of several small facilities with different assets as collateral, either through bilateral loans or small syndicates<sup>19</sup>. This arrangement is the result of firms taking on new bank facilities to finance newbuilds, rather than expanding the existing ones. Thus, the different banks and/or syndicates are not in the same position when entering the negotiations. This causes arguments over the quality of the respective banks' collateral. In our sample, ships are typically used as collateral, and they may differ on age, some might be on contract while others are stacked, etc. Banks thus engage in tough negotiations over who gets interest payments and amortization, and possibly who has to write off on the outstanding amount. The fragmented bank debt also complicates scrapping of ships, which is often necessary to achieve market recovery, as no bank wants to scrap their collateral while others keep theirs. Willingness to scrap ships also depends on scrapping value, which can vary significantly over time (May, 2016). Furthermore, the loan facilities often have different maturities, which is another source of conflict. An example would be whether all maturities should be extended by the same number of years, or be set to the same year.

## **GIEK**

The Norwegian Export Credit Guarantee Agency (GIEK) is an important party in the restructuring negotiations. GIEK provides long-term guarantees on behalf of the Norwegian state, on the same terms as the banks. For example, a Norwegian supply ship is typically

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<sup>19</sup> Bilateral loans are loans between one bank and a borrower. Conversely, syndicated/multilateral loans involve a group of banks.

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financed partly through debt with 30 % guarantee from a bank and 70 % guarantee from GIEK on pari passu<sup>20</sup> with the banks. Thus, GIEK bears significant risk in the restructurings, and is largely in the same position as the banks during the restructuring negotiations. Therefore, both GIEK and the banks argue that they generally have the same incentives and goals in the restructurings. However, there are certain differences that needs to be highlighted. Part of GIEK's mandate is to promote Norwegian export. Hence, it generally considers other aspects, as well as financials, when providing guarantees. However, in a restructuring negotiation, promoting Norwegian export is not of high priority. More importantly, in being a public agency, it does not need to have the same focus on maintaining customer relationships as the banks. Finally, GIEK is not subject to the same strict regulation. Despite some minor differences in incentives, GIEK will be treated as one of the banks when results are presented in this thesis. This is due to limited information on the distribution of debt between GIEK and banks within each specific case, and their highly coinciding interests.

## **Bondholders**

As creditors, bondholders differ from banks in many ways. However, it is important to separate between secured and unsecured bonds. While secured bond debt has many of the same characteristics as bank debt, unsecured bond debt differs critically. Unsecured bonds have no collateral, and thus typically receive little to nothing in a liquidation scenario, as the vast majority of assets generally are tied up as collateral for secured debt.

As opposed to banks, bondholders do not need to take customer relations and media reputation into consideration, and thus concentrate on the pure financial recovery play. Generating attractive returns and avoiding losses in each specific bond is their top priority, unless they have an industrial and strategic agenda. The view on whether this is best achieved through conversion to equity or extensions of maturities will likely differ between bondholders. In some cases, they are also given a choice between the two. For some bond funds, it could be problematic to hold shares, as it may conflict with their mandate. The Norwegian legislation, however, allows bond funds to hold shares. Fixed income funds can be comfortable holding converted shares for months if they consider it to be their best option. Moreover, bondholders do not need to worry about satisfying the capital requirements that are imposed on banks. On the other hand, most

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<sup>20</sup> Pari passu: Latin phrase describing a situation where creditors have equal seniority and rights to payment

bondholders are similar to banks with respect to their reluctance to hold ships or other illiquid assets. Still, there are examples of bondholders whom are interested in taking over the company themselves.

In terms of the negotiation processes, there are also several important differences. As mentioned, bondholders are often included later in the process than the banks. This is partly because bondholders have less strict and detailed loan agreements. Additionally, they often do not want to be included in the negotiations, as entering an inside position prohibits bondholders from trading in the company's bonds. Further, for bondholders to enter and exit an insider position, all information concerning the restructuring must be made public, which is undesirable for all stakeholders. Thus, most bondholders remain on the outside through most of the process. However, when a solution is proposed to the public, there is usually a significant group of bondholders whom have been taken on the inside to offer their support to the proposal. As mentioned, 2/3 majority is needed to amend bondholder agreements.

Another important distinction is that bondholders are a fragmented group of investors, with Nordic Trustee protecting their interests. The bondholders' identities are not public information, and anyone with some funds to invest can be a bondholder. This can cause a problem for other stakeholders if someone is blocking proposals without banks and the company being able to find out who they are, although this is a rare situation in Norwegian restructurings.

As anyone can invest in bonds, they can be a diverse group. The most obvious group of bondholders are fixed income funds or mixed funds. Further, there will be some private investors with a purely financial perspective. One group of investors that can complicate the restructuring process significantly for other stakeholders are vulture funds, who have invested solely to speculate in recovery of the bonds. However, these funds are as of now not as prominent in Norway as they are in the U.S., for example. A last possible group of bondholders that should be mentioned is industrial players with strategic motives regarding the company undergoing restructuring. An example is found in our sample, where Aker bought enough bonds in Rem to block any solution not involving Rem becoming a part of the Aker-controlled company Solstad Offshore (Aadland, 2016). This need not be a large investment, as the bonds usually trade at significant discounts, reflecting their expected recovery.

During the recent period of restructurings in the Norwegian market, there has been a lot of criticism in the media from certain bond investors (Linderud, 2016). Two arguments have been

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raised in the debate. Firstly, bondholders claim to have been sidelined in the negotiations. Secondly, they have criticized the restructuring outcomes, claiming to have been unheeded and forced to incur disproportionate losses compared to banks and owners contributing with new capital. There is no clear-cut answer to whether bondholders have reason to feel overlooked and poorly treated. However, as long as they receive more than they would in a liquidation scenario, it is just a question of how much they must be paid not to pull the trigger. Being vocal about the negotiations could also be part of some bondholders' negotiation tactics.

## Shareholders

As mentioned, the shareholders theoretically do not have the right to receive anything in a financial restructuring. However, they do hold a loaded gun given that a substantial number of new shares are issued as part of the restructuring, enabling them to block all restructuring plans. In a paper looking at deviations from the absolute priority rule in Chapter 11 restructurings in the U.S., Eberhart, Moore and Roenfeldt (1990) found that shareholders received 7,6 % more of total awarded value to all claimants than they should according to the APR. They raise the argument that management has the right to propose a solution first, and that management are inclined to favor equity. Furthermore, management has an information advantage over creditors. Although creditors in the U.S. have the option to force a cramdown<sup>21</sup>, where the APR must be followed, this entails a costly and lengthy valuation hearing which may not yield net positive effects for creditors. This is analogous to a Norwegian private workout in the way that management usually presents the first proposal, where the alternative to a workout, liquidation, can be very costly for the creditors. However, in a Norwegian out-of-court negotiation, the first proposal is by no means a "take it or leave it" offer, and is subject to negotiations with creditors. Also, whether management and board favor shareholders is unclear.

From a shareholder's point of view, the ability to delay a restructuring can be considered a call option. As negotiations may take up to two years, market recovery in that period is possible. As most shareholder value already is lost when negotiations commence, the upside potential associated with avoiding restructuring can be massive. Franks and Thorus (1989) portrayed the payments to shareholders in violation of APR as payment for this option. If there is any truth to the option argument, the shareholders can expect to receive more if they give up their option

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<sup>21</sup> A cramdown in the setting of a Chapter 11 restructuring occurs when the court forces a solution upon stakeholders not giving their approval. Secured creditors retain lien on collateral in a cramdown.

sooner rather than later. Eberhart, Moore and Roenfeldt (1990) find weak evidence of this through a negative relationship between the length of the bankruptcy proceedings and deviations from APR.

There are also case-specific details in our sample that provide existing shareholders with leverage. Many of the Norwegian ship owners, especially in the supply sector, are largely owned by families with valuable experience within the industries. As mentioned, banks are eager keep such owners, and favor them over bondholders when distributing ownership shares in the negotiations. As all shareholders in principal must be treated equally, this should also benefit other shareholders. To maintain their ownership share, large owners must generally contribute with new equity, and smaller shareholders usually get invited to participate in a repair issue.

Having considered the position of existing shares, we now turn attention to issuance of new equity. Supplying new equity is the owners' way to contribute in the restructurings. Regardless of who contributes, they will have a strong position in the negotiations, as new money is held higher than old (Flaaten G. , 2017). This entails that equity investors who are willing to contribute with a certain amount of capital are more appreciated than creditors who are willing to cut the principal on their debt by the same amount. There can be several reasons for this. Firstly, new equity often comes from the large existing owners that banks, and of course the owners themselves, want to keep within the company. Secondly, other claimholders hold no leverage over new potential investors, as they have no existing stakes in the firm.

When considering whether to invest new equity as part of the restructuring solution, a rational investor would consider the likelihood of financial distress occurring again before the market recovers. If the company needs another restructuring, new equity in the preceding restructuring will be lost, and one would have thrown good money after bad. On the other hand, if the market returns, it can be an immensely profitable investment. Thus, there is substantial risk and potentially high returns from investing in restructurings.

As mentioned, the ownership structure in many of the companies in our sample is characterized by having founding families as the largest owner. These owners often have additional incentives to financial profit. The company often represents the family silver, and owners are emotionally attached to the firm. Further, they often have strong relations to employees and local communities where they live. Such factors should not be underestimated when discussing why,

and how much equity, the existing owners are willing to invest in the companies. Additionally, they already have existing stakes in the company, which will be lost in the case of liquidation.

An alternative to issuing equity to existing shareholders could be to find new ones. Presumably, financial investors are likely to be skeptical towards investing substantial amounts in restructurings cases unless they are offered very attractive terms, due to the high risk involved. However, finding new industrial owners seems to be a more viable alternative, and many have requested more consolidation in the industry. One clear example is Aker's investment in Solstad Offshore, commencing their mission to build a large and powerful industry player. For an industrial owner, a company in a restructuring process can be a cheap M&A target, both for competitors and companies elsewhere in the value chain.

## Other important parties

### **Company - Management and board**

The management and board of the firm play an important role in the restructurings, in addition to running daily operations. They normally present the first proposal to banks, often with help from the advisory division of an investment bank. Moreover, management is responsible for communication with the public, and sharing further necessary information with stakeholders throughout the process. Most importantly, the management is responsible for building a positive investment case for equity investors and banks to believe in. That investment case will generally include an operational restructuring, involving significant cost cuts and other measures enabling them to survive in challenging market conditions. Whereas creditors seemingly offer little consideration to the costs related to restructurings, this is of higher priority for management. If competent enough, they can save significant values through being proactive and finding a solution themselves rather than through extensive use of advisors.

As mentioned, Eberhart, Moore, and Rosenfeldt (1990) argue that the company's management and board may favor the shareholders, as they have appointed them initially. Further, there is often a strong relationship between the largest owners and the management and board, as they work closely together. Additionally, the management and board often hold a significant number of shares themselves.

However, there are other factors drawing manager and board incentives towards alignment with creditors as well. Firstly, board members can be prosecuted and punished by law for running a company at the expense of the creditors. After speaking to participants in the restructurings, it seems clear that the board members are cognizant of their legal responsibilities. Another important factor to take into consideration for management and board is that they lose their jobs in the case of liquidation. Thus, as creditors are more likely force liquidation than shareholders, the board and management have incentives to pay close attention to their interests. Moreover, management has often been hired during times when market outlooks were drastically better. Consequently, management have higher wages than they can expect to find elsewhere in the market conditions prevailing in the restructuring period.

### **Customers, suppliers and other third parties**

Customers and suppliers are important in a restructurings process, because if a company is to continue operations after a restructuring, it is vital that these stakeholder relations are not damaged. Therefore, customers and suppliers are usually largely unaffected by the restructuring processes. In some cases, however, firms have ordered newbuilds from shipyards that they are unable to pay for. In such cases, the shipyard becomes a part of the restructuring as a creditor. In Rem Offshore, for example, the shipbuilder Vard received shares as compensation for a cancelled newbuilding. Similarly, Seabird Exploration converted outstanding charter hire to shares.

### **Financial and legal advisors**

Financial and legal advisors are highly involved in financial restructurings. Typically, both the firm, banks and the bondholders will engage legal and financial advisors. The total costs of advisors can become extremely high, and the costs are covered by the company, thus taking from the cake that the parties are negotiating on how to distribute. The most extreme example is the mentioned restructuring of Seadrill, with an estimated total of up to mUSD 250 in restructuring costs (Ånestad & Løvås, 2017). Although ostensibly ineffective, all stakeholders are entitled to representation and advice, and no stakeholders will save common money using advisors that are inferior to others'. Also, the fact that all stakeholders have representation with experience makes the negotiations more productive. Moreover, advisors have an important role in reality orientation of their clients, as they often have unrealistic expectations before entering negotiations. Thus, competent advisors increase the probability of finding a solution. After all,

it is worth spending 50 million to save a 500 million backlog. How extensively advisors are used will depend on what competencies lie within the company, and how hard it is to make all stakeholders agree to a solution.

## How stakeholders proceed to find a solution

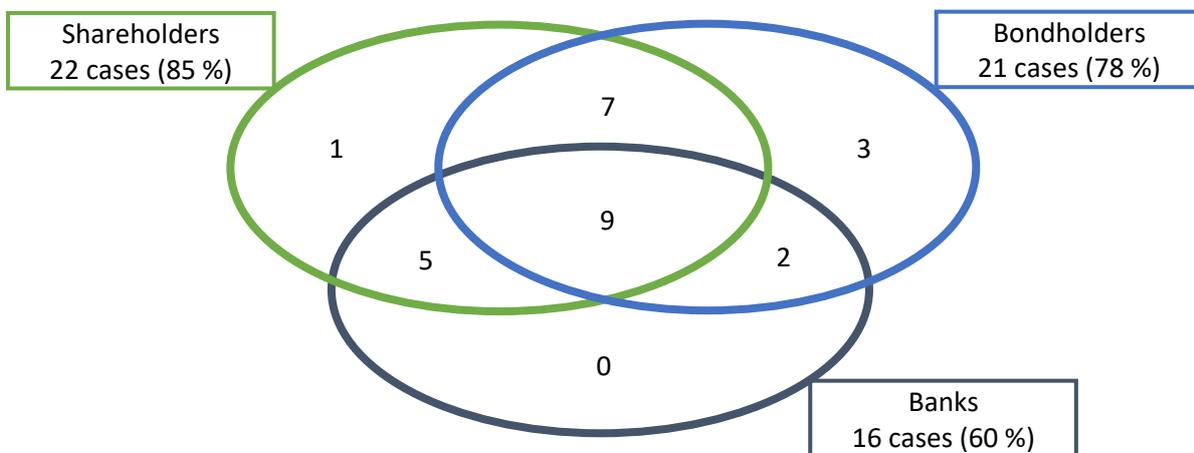
How the firms and its advisors proceed to find the specific restructuring proposal is extremely case specific, and there is no clear recipe. It depends heavily on the state of the company, which stakeholders are involved, etc. However, some common features are often present. First, stakeholders must agree on the extent of the runway the company needs before the market is expected to recover, enabling it to meet its debt obligations. Typically, new equity is issued by the largest shareholder conditional on them keeping some level of control. Often, the number of shares offered to converted bonds will depend on the demands set by the contributors of new equity. Further, a basis for calculating bond conversion might be the observed market prices. Conversely, valuation of bank debt is undisclosed by the banks, putting them in a favorable position in the negotiations. Although these common features are often used as a starting point, negotiations will dominate the final outcome of the process, according to our interviewees.

## 5. Restructuring contributions

### Overview

The following section examines the contributions of banks, bondholders, and shareholders, respectively. While each financing source's contribution is analyzed in detail below, Exhibit 5.1 provides an overview. Overall, shareholders contributed in 85 % of the cases, bondholders<sup>22</sup> in 78 %, and banks in 60 % of the cases.

Exhibit 5.1: Venn diagram showing contributions from the main claimholders, number of cases



*Shareholder contribution is defined as equity issue.*

*Bank and bondholder contributions are defined as one or more of the following: conversion, haircuts, reduced amortization, maturity extensions.*

*Contributions not included: Covenant changes, interest changes.*

As shown, there were no cases in which banks are the sole contributors. Considering banks' seniority and importance, this does not come as a surprise. Still, in five out of the 27 cases, creditors solved distress without new equity coming in. Further, banks and shareholders resolved financial distress without bondholders contributing in five cases as well. Of these five, only Siem Offshore and Polarcus2 had bonds outstanding. While ostensibly puzzling, banks' contributions in these two cases were limited to maturity extensions and reduced amortization<sup>23</sup> on imminent bank repayments, while bond maturities were already many years down the road. As such, our findings coincide with James' (1995) results, showing that banks do not incur losses on principal without bondholders taking similar measures.

<sup>22</sup> Secured bondholders are grouped with unsecured bondholders rather than banks, as their incentives and institutional environments are more aligned

<sup>23</sup> Reduced amortization means deferral of amortization payments, and not write-offs on the outstanding. The deferred installments are usually paid at maturity.

Owners and bondholders resolved financial distress in six of the 27 cases without banks contributing. In half of these cases, however, the firm had no bank financing when entering the restructuring process. Finally, the most common way of resolving financial distress was through contributions from all stakeholder groups, which occurred in more than one third of cases. However, not all companies had both bank and bond debt. Taking this into account, we find that all involved stakeholder groups contributed in 17, or 63 %, of the restructurings.

Table 5.1 indicates the number of cases in which banks, secured bondholders, and unsecured bondholders contributed, respectively. Banks mainly amended and extended debt obligations, whereas secured bonds and unsecured bonds incurred losses as part of the resolution of financial distress. In the following, we move on to evaluate the contributions of each financing source in detail.

Table 5.1: Overview of contributions from the main creditors, number of cases

	Banks	Secured bonds	Unsecured bonds
<i>Conversion</i>	2	1	8
<i>Cash redemption</i>	2	5	11
<i>Haircuts</i>	3	5	12
<i>Total debt reduction</i>	4	5	14
<i>Reduced amortization</i>	10	5	10
<i>Maturity extension</i>	11	1	8
<i>Total number of cases including creditor type</i>	21	7	21

*Conversion: Conversion of debt to equity.*

*Cash redemption: Partial or full cash repayment of debt.*

*Haircuts: Incurred loss on the original outstanding, as explained in Appendix B.*

*Total debt reduction: Reduction of debt through one of the three measures above.*

*Reduced amortization: Deferral of amortization, meaning postponement, and not permanent write-off.*

*Maturity Extension: Extended maturity of principal repayment.*

## Banks' contribution

In our sample, 21 of the 27 cases had bank debt as part of their capital structure, on average constituting 75 % of their interest-bearing debt. Thus, it is the most important source of financing in most cases. Although loan agreements on bank debt is not publicly available, it is evident from interviews that almost all bank debt related to the firms in our sample is secured. As discussed, banks are generally unwilling to reduce the nominal outstanding on their debt without getting repaid in full. Table 5.2 shows that there were two cases, Eitzen Chemical and Farstad Shipping, where banks converted debt to equity. In the former, the banks took control with 98 % of the shares after a 100 % debt reduction. In the latter, banks took a smaller ownership share after reducing 9 % of total bank debt.

In the two cases mentioned above, as well as in Bergen Group<sup>24</sup>, banks took haircuts on outstanding bank debt. In Bergen Group, banks were redeemed 50 % in cash, while writing off remaining debt. Archer was the only additional case involving partial cash redemption, although small at 4 %, however avoiding a haircut<sup>25</sup>. Thus, we find little use of cash redemption. In fact, just 0.2 % of all outstanding bank debt before restructuring was redeemed in cash. This is in line with expectations based on the firms' liquidity position at the time of restructuring.

We find total bank debt reduction ranging from 4 % in Archer to 100 % in Eitzen Chemical and Bergen Group. With an average total bank debt reduction of 10 %, firms keep 90 % of their bank debt in place. In nominal terms, which will be addressed later, we find that 95 % of total bank debt remains.

More often than reducing debt, banks extended maturities and deferred amortization, both of which were part of the solution in 48 % of the restructurings. The average amortization reductions were 19 % of outstanding when present, usually entailing 50-100 % deferral for two or three years post restructuring. Further, maturity extensions averaged at about two and a half years, ranging from one to five years. This allowed banks to maintain relationships to customers, while waiting for the market to recover.

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<sup>24</sup> BERGEN Group, Farstad, and Eitzen Chemical. Depending on the outcome of asset sales planned in Havila Shipping's restructuring, Havila is likely to become the fourth case. The asset sales of course imply some cash redemption.

<sup>25</sup> 4 % cash redemption to release Seadrill from guarantee obligations. Rest remains as bank debt.

Table 5.2: Outcome for bank debt – What happened to the outstanding?

<i>21 cases including bank debt</i>	Number of cases	Average	Average if present	Min if present	Max
<i>Conversion</i>	2	2 %	42 %	7 %	42 %
<i>Cash redemption</i>	2	3 %	27 %	4 %	50 %
<i>Haircuts</i>	3	5 %	38 %	7 %	58 %
<i>Total debt reduction</i>	4	10 %	53 %	4 %	100 %
<i>Reduced amortization (% of outstanding)</i>	10	9 %	19 %	7 %	34 %
<i>Maturity extension (years)</i>	11	1,4	2,6	1	5

*Conversion: Value of shares received as a percentage of original outstanding.*

*Cash redemption: Cash repayment as a percentage of original outstanding.*

*Haircuts: Incurred loss on the original outstanding, as explained in Appendix B.*

*Total debt reduction: Nominal amount reduced as a percentage of original outstanding.*

*Reduced amortization: Total amortization deferrals over the coming years as % of original outstanding.*

*Maturity Extension: Number of years that original maturity of the loan is extended, weighed average if several facilities.*

Summing up, banks have opted to amend and extend rather than incurring losses on the nominal outstanding. This coincides with earlier research on U.S. firms, for example by Asquith, Gertner and Scharfstein (1994). In addition to the measures highlighted above, banks have contributed with covenant changes and deferral of interest payments through standstill periods, in some cases over longer periods after the restructurings. Thus, there is little evidence of banks taking control of firms through debt conversion, or claiming collateral. This coincides with banks' declared reluctance to own companies and hard assets, as discussed in section 4.

## Bondholders' contribution

As emphasized in the section presenting the room with the loaded guns, certain bondholders have opposed the treatment they have received throughout the restructuring processes. However, bondholders have contributed with more than complaints to the restructurings. In the following, we provide a detailed overview of the restructuring outcomes for bondholders. Although solutions are very case-specific, we find maturity extensions, conversion to equity, and cash redemption to be regular alternatives. Also, amendments to bond agreements in the form of changes of covenants and interest rates are very common. First, we evaluate the outcomes for secured bondholders, before turning our focus to unsecured bonds.

## Secured bonds

Table 5.3 provides an overview of the restructuring outcomes for secured bondholders. Since there are only seven observations, the numbers should be treated with caution. As shown in the table, cash redemption was part of the solution in one of the cases. In this case, Eitzen Chemical, the entire bond was eliminated, through a cash repayment corresponding to 19 % of outstanding, in combination with 15 % conversion and 66 % haircut. Conversion to equity occurred in five of seven cases, as did haircuts.

Table 5.3: Outcome for secured bonds – What happened to the outstanding?

<i>7 cases including secured bonds</i>	Number of cases	Average	Average if present	Min if present	Max
<i>Cash redemption</i>	1	3 %	19 %	19 %	19 %
<i>Conversion</i>	5	9 %	13 %	2 %	27 %
<i>Haircut</i>	5	30 %	42 %	14 %	66 %
<i>Total debt reduction</i>	5	40 %	56 %	20 %	100 %
<i>Maturity extension (years)</i>	5	2,3	2,8	0,9	4,0

*When companies have several unsecured bonds outstanding, they are treated as one, although there are slight differences in solutions between bonds for a few companies.*

*Cash redemption: Cash repayment as a percentage of original outstanding.*

*Conversion: Value of shares received as a percentage of original outstanding.*

*Haircuts: Incurred loss on the original outstanding, as explained in Appendix B.*

*Total debt reduction: Nominal amount reduced as a percentage of original outstanding.*

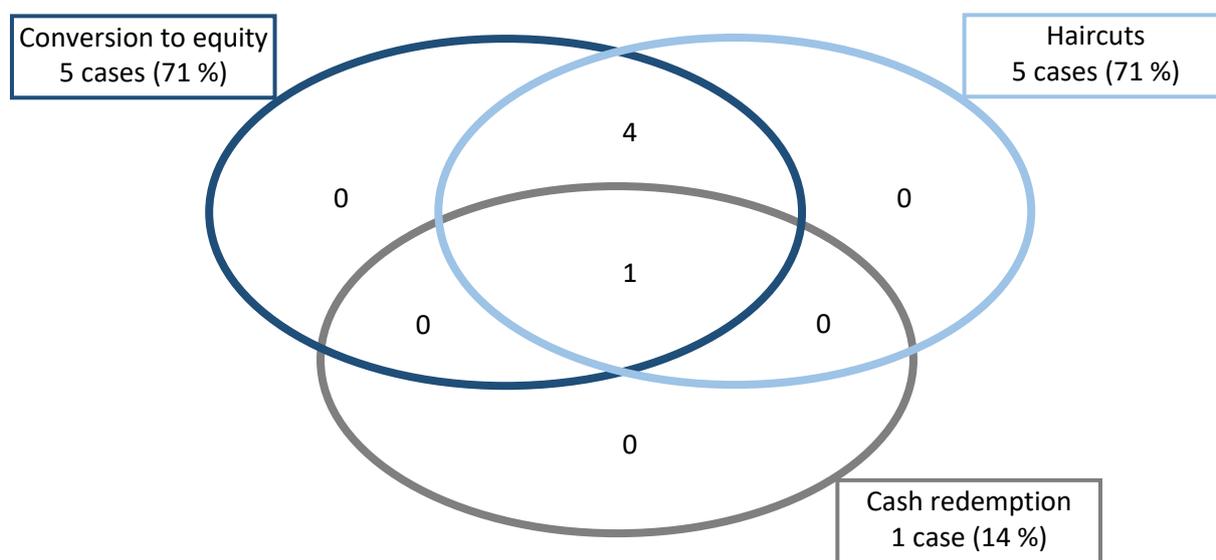
*Maturity Extension: Number of years that original maturity of the loan is extended.*

Comparing the results to those of banks, we find that measures causing debt reduction were more extensively used for secured bonds. Since secured bonds and bank debt are both secured, this may come as a surprise. One argument for explaining this tendency is that firms may issue secured bonds primarily when they are unable to raise funds using bank debt. If banks have shied away from such firms due to their risk profiles, the severity of their financial distress is likely to be greater, and the quality of their collateral lower. Further, bondholders have a shorter time perspective than banks, with less focus on the relational aspects. Thus, bondholders are more likely to take control of firms, or claim collateral, than banks. However, based on interviews with banks and bondholders, the main explanation seems to be that banks are more reluctant to write off on their engagements, as explained in section 4. Finally, maturity extensions from secured bondholders were more frequent than from banks, but similar in length.

Eitzen Chemical, the only case where both secured bonds and bank debt were reduced 100 %, shows no evidence of discrimination between the creditor classes. However, this assumes that there were no details in the respective lending agreements that would suggest otherwise. While banks were offered 42 % conversion to equity and 58 % haircut, secured bonds were redeemed with 19 % cash, 15 % conversion and 66 % haircut. While suffering a slightly larger haircut, bondholders were compensated with cash, which is generally preferred over shares.

The Venn diagram in Exhibit 5.2 provides an overview of the frequency of, and interaction between, different measures to reduce outstanding secured bond debt. Evidently, all cases involving debt reduction included haircuts and conversion to equity, while one case also involved cash redemption.

Exhibit 5.2: Venn diagram showing contributions from secured bondholders



## Unsecured bonds

Our sample includes 21 firms with unsecured bonds outstanding prior to restructuring, and Table 5.4 provides an overview their outcomes. As shown, cash redemption was part of the solution in eight out of 21 cases. In those eight cases, we find an average redemption of 11 % of outstanding, always in combination with haircuts, meaning that there were no cases of full cash redemption in our sample. From the perspective of unsecured bondholders, cash redemption represents a safe way of recovering value, compared to conversion. In some cases, therefore, unsecured bondholders have accepted larger haircuts in exchange for increased cash redemption as opposed to conversion. For example, bondholders in Viking Supply Ships

rejected and original proposal involving conversion, and later accepted cash redemption with a higher haircut. On the other hand, when opting for cash rather than equity, bondholders renounce the potential upside equity offers. As mentioned, fixed income funds can hold shares for months, waiting for share prices to recover. Conversion to equity was found in 11 cases, with an average of 27 % of the principal amount converted, ranging widely from 3 % to 75 %.

Table 5.4: Outcome for unsecured bonds – What happened to the outstanding?

<i>21 cases including unsecured bonds</i>	Number of cases	Average	Average if present	Min if present	Max
<i>Cash redemption</i>	8	4 %	11 %	4 %	18 %
<i>Conversion</i>	11	14 %	27 %	3 %	75 %
<i>Haircut</i>	12	29 %	51 %	3 %	92 %
<i>Total debt reduction</i>	14	47 %	71 %	9 %	100 %
<i>Maturity extension (years)</i>	10	1,7	2,6	57 %	5,3

*When companies have several unsecured bonds outstanding, they are treated as one, although there are slight differences in solutions between bonds for a few companies.*

*Cash redemption: Cash repayment as a percentage of original outstanding.*

*Value of shares received as a percentage of original outstanding.*

*Haircuts: Incurred loss on the original outstanding, as explained in Appendix B.*

*Total debt reduction: Nominal amount reduced as a percentage of original outstanding.*

*Maturity Extension: Number of years that original maturity of the loan is extended.*

Further, unsecured bondholders suffered haircuts in 12 cases, ranging from 3 % to 92 %. Interestingly, contingent on haircuts being part of the solution, the average was 51 %. In cases where total bond debt was reduced by 100 %, the average haircut amounted to a massive 71 %, thus implying a recovery of just 29 %. However, haircuts never came without compensation in the form of cash, shares, or both. Consequently, looking at haircuts in isolation offers a somewhat misleading picture of the recovery for bondholders, as shares may have been sold at higher prices than we have used in our calculations.

Summing up, unsecured bond debt was reduced in 14 out of the 21 cases. In these 14 cases, the average reduction was 71 % of outstanding unsecured bond debt. By contrast, the overall average reduction for all cases was 47 %. In nominal terms, we find a 37 % reduction in all pre-restructuring outstanding unsecured debt. Compared to the amend-and-extend tactics of banks, bondholders, both secured and unsecured, have contributed more to lowering overall debt, at least relative to their size. As such, bondholders' acceptance of incurring losses, unwillingly or not, has been important to address the issue of high debt levels in the industry.

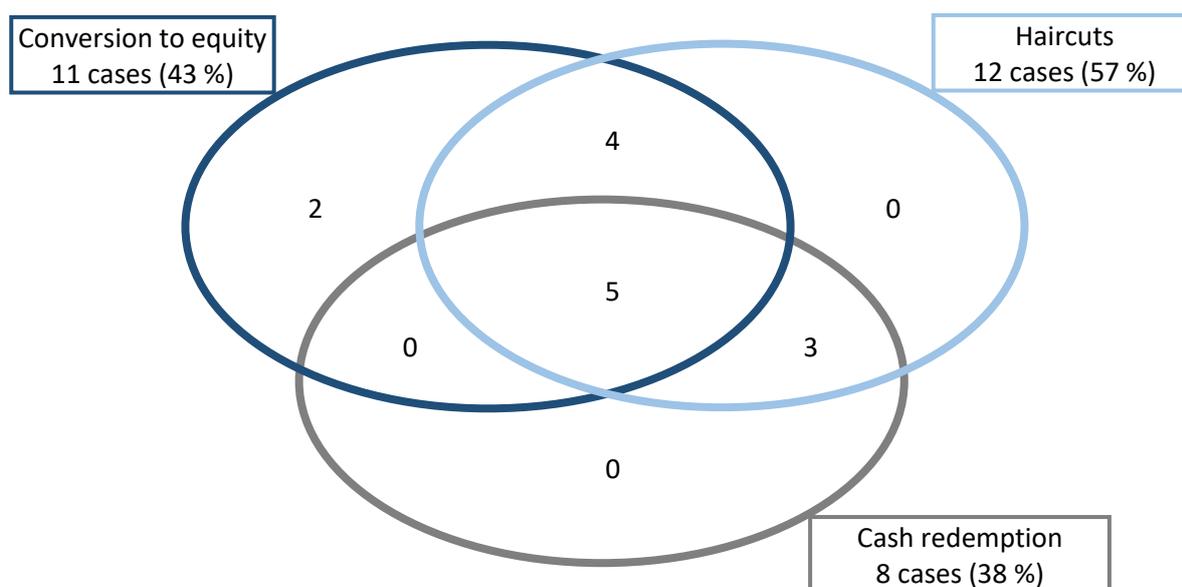
Comparing to the results for secured bonds, we observe the seemingly illogical result that conversion, haircuts, and debt reduction were more common when bonds were secured. Digging deeper, however, we find that these measures were never used for secured bonds unless unsecured bonds in the same company were even more severely affected, always resulting in a higher haircut for unsecured bonds.

Moreover, maturity extensions for unsecured bonds were offered in 10 out of 15 cases where bond debt remained post restructuring. On average, the extension offered was 1.7 years, slightly shorter than was the case for bank debt, most likely because bonds were eliminated in the cases with longer bank extensions.

Very often, conversion to equity and haircuts go hand in hand. Then, haircuts stem from bondholders receiving shares of lower value than the principal on the converted debt. As reduction in principal debt may be considered a payment for shares, it is interesting to assess how much bondholders paid for shares relative to providers of new equity. There were five cases involving both conversion of unsecured bonds and equity issues in our sample. In these cases, bondholders on average paid three times as much as equity investors for new shares, implying significant haircuts. Thus, we do find that new money was valued higher than old, as discussed in relation to the strong negotiation position of the providers of new equity.

Exhibit 5.3 provides an overview of the contributions of unsecured bondholders. As shown, haircuts were not suffered without compensation in the form of cash and/or conversion. Specifically, haircuts were used in combination with cash redemption in three cases, and with conversion in four. This naturally follows from the lack of liquidity in the firms. Further, there were two cases only involving conversion to equity. This is a more viable option since it both reduces debt, compensates bondholders, and allows the firm to withhold cash. The most common solution, however, involved all three measures, which happened in five cases.

Exhibit 5.3: Venn diagram showing contributions of unsecured bondholders



## Shareholders' contribution

To complete the picture, we need to assess shareholders' contributions to the restructuring processes. However, due to the residual nature of shareholders' claims, their contributions must be evaluated in a different manner than that of creditors. Shareholders' contributions are restricted to equity infusions. Here, we consider how much new equity was issued, and who came up with funds, as well as ownership shares post-restructuring.

### How much new equity was issued?

Equity was raised in 22 of 27 cases. On average, new equity coming in was about 1,6 times the market capitalization pre solution announcement. Further, Table 5.5 documents that on average, new equity only covered 10 % of net interest-bearing debt as of before the restructuring. As such, equity raised was, in isolation, insufficient to solve the long-term problem of high debt.

Table 5.5: Magnitude of new equity

22 cases involving new equity	Average	Max	Min
<i>New Equity / Market Capitalization</i>	164 %	632 %	24 %
<i>New Equity / NIBD</i>	10 %	29 %	3 %

*Market capitalization and NIBD measured as earlier, prior and as close as possible to solution announcement.*

As was the case with creditors, it appears owners were only willing to contribute to creating runway, and hope for market recovery. We argue that there are four main reasons why we did not see more equity being raised. Firstly, as creditors have not been willing to write off debt, existing owners have not been willing to put their money in the creditors' pockets. Secondly, adding to the high debt levels, the underlying market conditions in the sector still look distressed. Consequently, parties who have been involved in the processes have emphasized the difficulty associated with raising equity from other groups than existing owners<sup>26</sup>. Thirdly, the largest existing shareholders have contributed with most of the capital, and may have been unwilling to invite external owners to equity issues, in fear of losing ownership share. Lastly, many of the largest shareholders, often being founding families, have had limited capital to contribute. As discussed, our sample firms predominantly have used free cash flows for growth purposes, rather than paying dividends during cyclical booms.

Evident from Table 5.5, little equity was raised relative to debt obligations. Table 5.6, on the other hand, indicates that firms got almost all equity asked for. Further, it documents that most of the equity came from private placements. As firms do not disclose how much equity was sought in private placements, the 2 % missing on average are the result of rights issues not being fully subscribed. Interestingly, only 64 % of equity issues were fully subscribed. Hence, even though almost all equity in nominal terms was subscribed for, creditors might have wanted more to improve financial stability. Intuitively, we expect creditors to have requested as much equity as possible. However, this was weighed against both their wish to keep existing owners in control, and what they could get elsewhere without contributing more themselves.

Table 5.6: New equity relative to the desired contribution

<i>22 cases involving new equity</i>	<b>Average</b>	<b>Max</b>	<b>Min</b>
<i>New Equity / Equity Asked For</i>	98 %	100 %	88 %
<i>Private Placement / New Equity</i>	79 %	100 %	0 %

*New Equity is defined as total equity raised in equity issues.*

*Equity Asked For is the equity amount asked for by the firms in public placements or rights issues, as specified in stock exchange notices.*

*Private placement / New Equity indicates the share of new equity raised in private placements.*

<sup>26</sup> Please refer to Appendix A for further information on interviewees.

## Who contributed with new equity?

As suggested earlier, the largest existing shareholder<sup>27</sup> often contributed with new equity. Specifically, this happened in 19 of the 22 cases involving issuance of new equity. For those contributing, their average ownership share only decreased slightly, from 39 % to 37 %, indicating that the largest shareholders tended to maintain their ownership shares. Nine of the large shareholders contributing with new equity increased their ownership share, even though three of these restructurings involved conversion of debt to equity. If we allow for a minor dilution<sup>28</sup> of the largest shareholders, they maintained controlling positions in 13 cases. On average, equity from large shareholders constituted 42 % of total new equity, given that they contributed. As emphasized, contributors of new equity have a beneficial bargaining position in the restructurings. Bear in mind that large shareholders to a large extent negotiate on behalf of all shareholders, as there should be equal treatment.

In three of the cases, new large industrial owners were brought in, contributing between 60 % and 100 % of total new equity raised. In two of these, Solstad Offshore and Farstad Shipping, Aker obtained large ownership shares as part of their consolidation strategy in the OSV market. The final case with a new industrial owner was Andes Energia's entry into InterOil Exploration & Production, where they gained 51 % ownership share through a private placement not followed by a repair issue.

Of the total equity raised, about 70 % came from private placements. Apart from large shareholders and new industrial owners, the identities of those participating in private placements are largely undisclosed. Hence, there is low visibility with respect to who the other equity investors in the restructurings have been. Still, stock exchange notices, and interviews we have conducted, have given us pointers regarding the possible participants in private placement. To a large extent, participants in private placements have reportedly been existing shareholders other than the largest. Further, there are some investors whom the advisors in the restructurings have reached through their contacts and brokers. Examples include funds and private investors with an appetite for restructuring cases, who have expressed their interest.

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<sup>27</sup> Defined as largest owner with more than 10 % ownership share. Judgment is used when owners are controlled by the same people, such as the Archer case where Seadrill and Hemen are both controlled by John Fredriksen. When two equally large shareholders are present, they are treated as one when calculating numbers in this section.

<sup>28</sup> Less than 5 percentage points

The remaining equity has come from rights issues to all existing shareholders, which occurred in 19 of the 22 cases. Among the rights issues, 10 cases involved non-renounceable rights<sup>29</sup>. Thus, uninvited investors not holding existing shares had the opportunity to participate in nine equity issues, as we have not seen any public offerings in our sample. In these cases, however, we would expect the renounceable rights to be priced close to the difference between the issue price and the current share price, thus eliminating the possibly attractive opportunity to subscribe at low issue prices.

### **How much ownership was left for existing shareholders?**

In all 27 cases, new shares were issued. Shares were either distributed to providers of new equity, creditors converting debt to equity, or a combination of the two. Regardless, new shares issued diluted existing shares. As documented in Table 5.7, existing shareholders were diluted to the point where they on average held 33 % of shares post restructuring. However, as the table shows, post-restructuring ownership shares for existing owners ranged from 1 % to 100 %. Noteworthy, existing shareholders were left with less than 10 % in 10 cases. Still, it is evident that shareholders were always left with some value, despite stakeholders of higher seniority incurring losses. These results support previous findings, mentioned in the literature review.

As expected, new equity and conversion of debt caused vast dilution of existing shareholders. The average post-restructuring ownership share of 21 % when including debt conversion would be as low as 14 % had we excluded American Shipping Company and Havyard, two of the softer restructurings in our sample. However, we would expect the dilution effect to be stronger, as conversion tended to imply losses for creditors. Further analysis shows that existing shareholders were left with less than 10 % of the company in eight of the 13 cases in which debt was converted. Still, existing shareholders were plentifully compensated, since adherence to APR would imply complete deterioration of shareholder value, conditional on creditor loss.

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<sup>29</sup> A non-renounceable right cannot be traded

Table 5.7: Ownership shares for existing shares, new equity and creditors (% of total # of shares)

	All Cases (27 observations)			When New Equity (22 observations)			When debt conversion (15 observations)		
	Average	Max	Min	Average	Max	Min	Average	Max	Min
<i>Existing Shares</i>	<b>33 %</b>	100 %	1 %	<b>30 %</b>	75 %	1 %	<b>21 %</b>	90 %	1 %
<i>New Equity</i>	<b>43 %</b>	93 %	0 %	<b>55 %</b>	93 %	25 %	<b>35 %</b>	75 %	0 %
<i>Creditors</i>	<b>24 %</b>	98 %	0 %	<b>15 %</b>	61 %	0 %	<b>44 %</b>	98 %	10 %

*Existing shares are the outstanding shares before restructuring, while the two other categories are shares distributed to contributors of new equity and converted creditors respectively as part of the restructuring.*

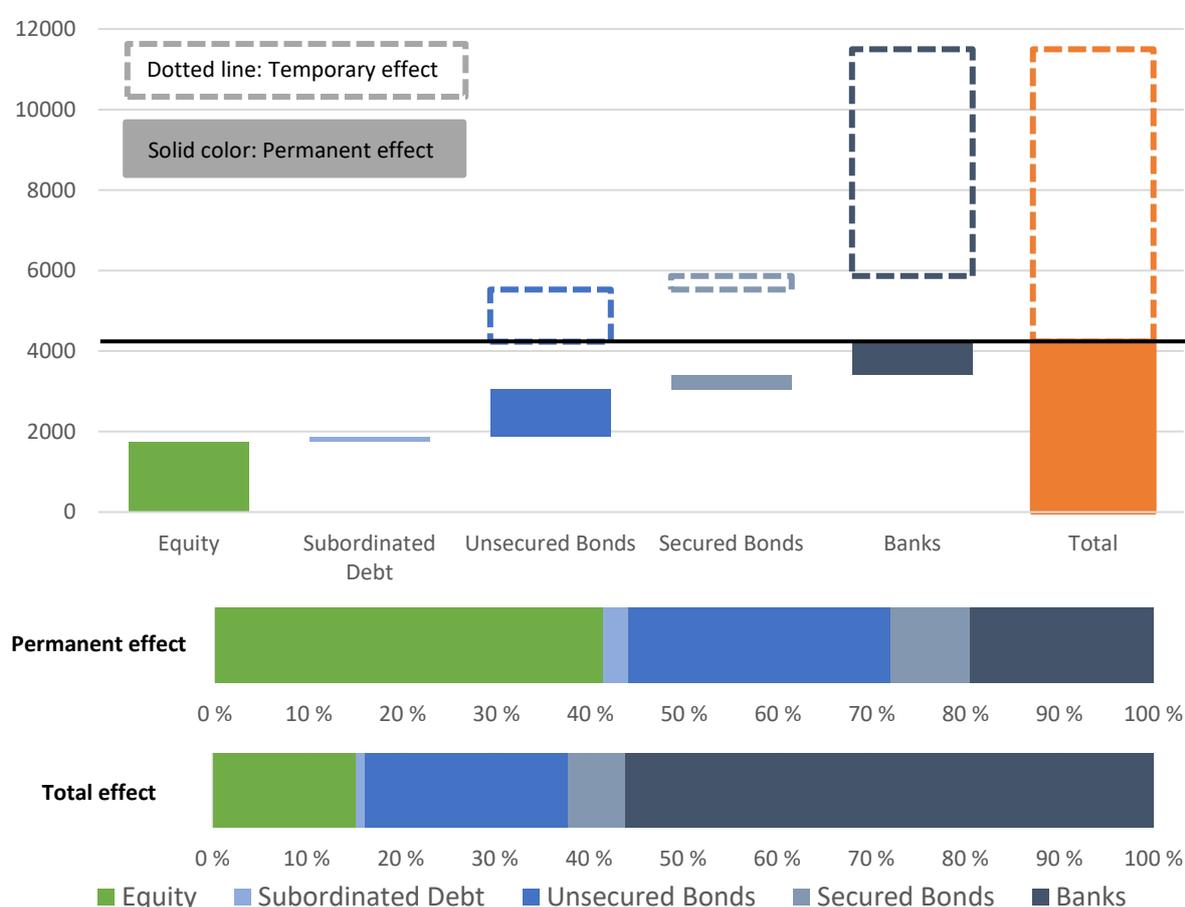
As seen in the second row of Table 5.7, the largest share of ownership, on average, was given to providers of new equity. This coincides with the discussion on the dynamics of the negotiations, arguing that new capital has considerable bargaining power. Thus, it is no surprise that new equity on average received more than 50 % of shares conditional on equity issues being part of the solution. This is also evident when looking at cases involving both new equity and debt conversion. However, in two cases<sup>30</sup>, creditor ownership shares were above 50 % following conversion, with a maximum of 61 %. Interestingly, these two restructurings were the only ones involving both conversion of secured debt and new equity, explaining the large ownership share given to creditors.

<sup>30</sup> Farstad Shipping and Seabird Exploration

## Who contributed the most?

Having looked at the different claimholders and their contributions individually, predominantly in percentage terms, Exhibit 5.5 presents their total nominal contribution. The solid color bars show the permanent contribution to reductions in net interest-bearing debt, through haircuts or conversion to equity from creditors, or equity issues. Further, the transparent bars enclosed by the dotted lines show temporary liquidity effects through maturity extensions and reduced amortization the first three years after restructuring. Lastly, the contribution bars below show the claimholders' relative contribution to permanent and total effects, respectively.

Exhibit 5.4: Liquidity contribution, permanent and temporary effects, by claimholder, mUSD, all cases



Data: All 27 cases in our sample included.

Y-axis in the top chart: mUSD

Contribution charts below: Percentage of total contribution by the respective claimholders.

Permanent effect: Permanent reduction of debt or infusion of equity, i.e. equity issues, conversion of debt or haircuts.

Temporary effect: Temporary payment deferrals the first three years, i.e. maturity extensions or reduced amortization.

Total effect: Sum of permanent and temporary effect.

Some amortization reductions span further than three years. Those are not included.

Not accounted for: Other debt and liabilities, like shareholder loans for example, are not included due to small amounts and the wish to isolate the most important claimholders. Further, changes in interest payments are not accounted for.

Looking at the permanent effects, equity comes out as the largest contributor with above 40 %. Although only three cases involved permanent contributions from banks, 20 % of permanent effects are ascribed to them. Noteworthy, the case of Eitzen Chemical is basis for 85 % of banks' overall permanent contributions. This goes to show that as banks generally are the largest creditor, they can potentially incur massive losses. Bondholders, on the other hand, are ascribed 28 %, from 12 cases involving permanent bond contributions.

Moving on to temporary contributions, we see that banks dominate. Their massive liquidity contributions through extensions and deferral of amortization exceeds the overall permanent contribution. Combining temporary and permanent effects, we thus find that banks were the largest contributor. However, their contributions generally are limited to just temporary effects, while other claimholders provided more permanent contributions. Further analysis on what implications their contributions have for the sample companies will follow in the next section.

## 6. Post-restructuring diagnosis

Having looked at different stakeholders' contributions, we now turn our attention to the composition of post-restructuring capital structures. This section dives into what the companies and other stakeholders have accomplished in terms of altering capital structure in the financial restructurings.

Table 6.1 presents operational and financial measures for firms pre- and post- restructuring, where the pre-restructuring measures are the same as those presented in Table 3.2. As seen, total liabilities as a percentage of total assets decreased by 18 percentage points, to 64 %. This was driven both by issuance of new equity and decreases in liabilities.

The Z-score, however, practically remained the same. The impact of EBIT, sales, and retained earnings, which all developed poorly, counteracted the reduction in liabilities. As the markets were still depressed the first quarter after completion of the restructurings, low Z-scores are no surprise. Continuation of the market downturn leads to an increasing number of ships and rigs going off contract, and slows the process of gaining new ones. Regardless, the Z-score indicates that the sample firms stand at risk of bankruptcy, even after completing the restructuring processes. Looking closer at the Z-scores in the individual cases, we find that Havyard is the only case with a Z-score above 1.8, indicating that the rest are likely to head for bankruptcy according to Altman (1968). This suggests that a second round of restructurings is imminent for many of the firms.

The relationship between secured and unsecured debt has changed, as unsecured debt has taken a heavier hit in the first round. Finally, the development of current assets over current liabilities, or quick ratio, indicates that short-term liquidity has improved.

Table 6.1: Operational and financial state of sample firms pre- and post-restructuring

<i>All cases (27 observations)</i>	Total Liabilities/ Total Assets	Z-Score	Secured Debt/ Unsecured Debt	Current Assets/ Current Liabilities
<i>Average before</i>	82 %	-0,39	2,57	0,85
<i>Average after</i>	64 %	-0,34	4.22	2.00

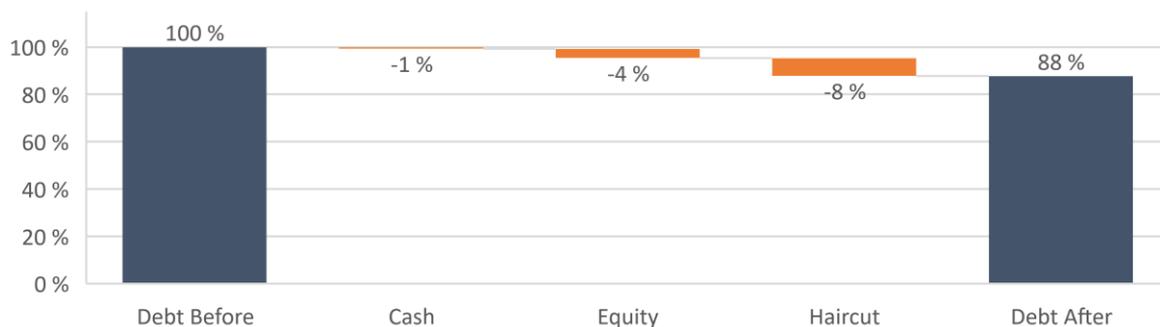
*Book values reported in first annual/quarterly report after restructuring implementation are used for computing averages after restructurings.*

*Book values reported in last annual/quarterly report prior to solution announcement are used to for computing averages before restructurings.*

## Debt reduction

Looking closer at the total debt reduction, or lack thereof, Exhibit 6.1 shows that 88 % of interest-bearing debt remains. The debt reduction consists of 4 % conversion to equity, 8 % haircut, and a bare cash redemption of 1 %. The low cash redemption intuitively relates to the liquidity problems in the sample firms. The fact that our sample firms only display a 12 % reduction in overall debt implies that the problem of excessive debt is not solved.

Exhibit 6.1: Total reduction in interest-bearing debt



*Equity:* The total value of shares distributed to creditors.

*Cash:* The total amount of cash repaid to creditors.

*Haircut:* Residual from original outstanding after deducting the three other categories. Thus, loss for creditors.

The chart in Exhibit 6.2 further breaks down the treatment of interest-bearing debt into bank debt, secured bonds and unsecured bonds<sup>31</sup>. Subordinated debt, and other unsecured senior debt, is excluded, due to its small size, low visibility, and the wish to isolate the most important creditors. The x-axis shows the relative size of the respective sources of debt prior to the restructurings. Bank debt constituted 81 % of total interest-bearing debt on aggregate. Unsecured bonds were the second largest source of debt, amounting to an aggregate of 15 %, followed by secured bonds at 3 %. The y-axis indicates the aggregate restructuring outcomes for original debt, highlighted by the respective colors. Thus, the area of each box represents the share of total interest-bearing debt before restructuring falling into each respective category.

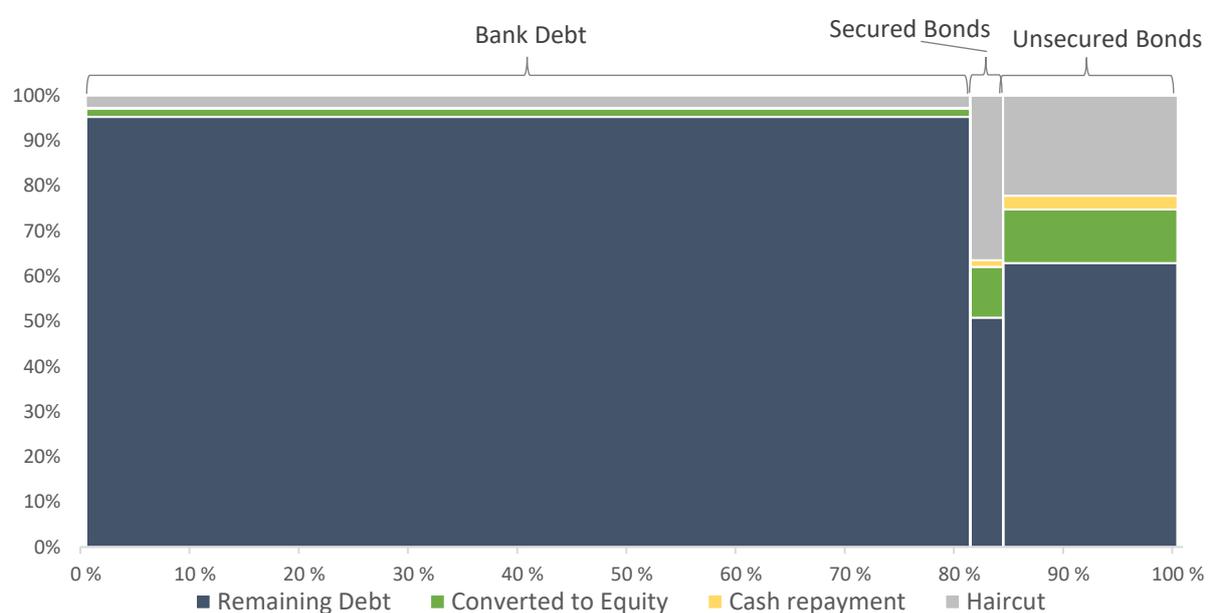
Noticeable from Exhibit 6.2 and the corresponding Table 6.2, bank debt largely dominates the chart, where 95 % of the original bank debt remains<sup>32</sup>. Thus, bank debt practically remains at pre-restructuring levels. Among the bondholders, debt reductions are more evident, primarily

<sup>31</sup> It is worth noting that some companies have decreased other liabilities as well, however the amounts are insignificant in comparison to the included creditors.

<sup>32</sup> Depending on the outcome of Havila's asset sales, the total bank debt is likely to decrease further, although not enough to have any significant impact on aggregate numbers.

through haircuts and conversion. Somewhat surprisingly, a larger share of secured bond debt is reduced than what is the case for unsecured bond debt. However, this is mainly driven by high conversion and haircuts in a few cases with secured bonds, including Eitzen Chemical, Norwegian Energy Company, and Seabird Exploration. Noteworthy, in all cases with reductions in secured bond debt, even larger reductions in unsecured bond debt are observed given that the firms had unsecured bonds. Further, as discussed earlier, secured bond debt was reduced substantially more than bank debt. The arguments of a possible difference in company risk, and banks' higher reluctance towards write-offs on their engagements, were emphasized.

Exhibit 6.2: The composition of, and outcomes for, creditor types in restructurings



**Basis:** The underlying numbers are the total nominal outstanding interest-bearing debt before restructurings, including all 27 cases.

**X-axis:** Shows distribution of outstanding debt across different debt classes before restructurings. Thus, bank debt constituted just above 80% of outstanding interest-bearing debt before restructurings.

**Y-axis:** Shows outcomes for the outstanding debt in the respective debt classes, highlighted by the respective colors. Corresponding numbers in Table 5.8, below. Thus, the dark area under bank debt shows that more than 90% of outstanding bank debt remained as outstanding bank debt after the restructurings.

**Remaining Debt:** The nominal outstanding that remains as outstanding debt. May have been extended maturities.

**Converted to Equity:** The total value of shares distributed to creditors.

**Cash repayment:** The total amount of cash repaid to creditors.

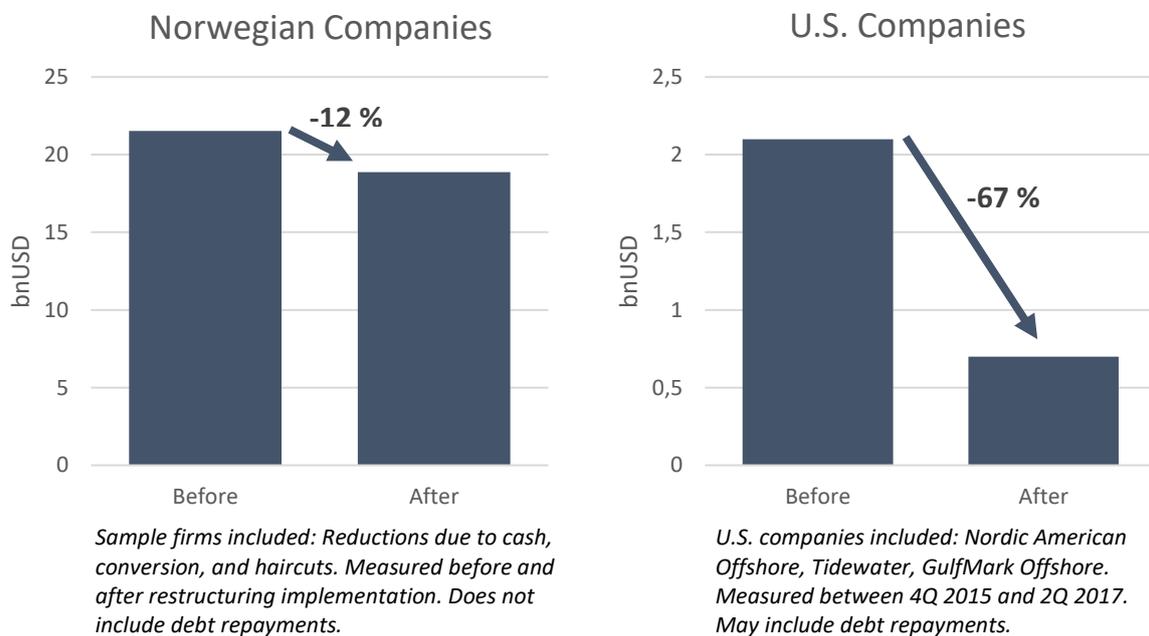
**Haircut:** Residual from original outstanding after deducting the three other categories. Thus, loss for creditors.

Table 6.2: Outcomes for debt classes in restructurings, numbers behind the Y-axis in Exhibit 6.2

All cases (27 observations)	Bank	Secured Bond	Unsecured Bond	Total (Exhibit 6.1)
Remaining Debt	95 %	51 %	63 %	88 %
Equity	2 %	11 %	12 %	4 %
Cash	0.2 %	2 %	3 %	1 %
Haircut	3 %	36 %	22 %	8 %

As emphasized in earlier sections, there are significant differences between restructuring proceedings in the U.S. and in Norway. Clarksons Platou Securities have investigated the debt reduction in restructurings of American firms operating in the OSV market (Flaaten, 2017), and Exhibit 6.3 compares Clarksons Platou's findings to our sample firms. As mentioned, the Norwegian firms have decreased interest-bearing debt by 12 %. The American firms, on the other hand, have decreased their debt by 67 %. Hence, there is a massive difference. Further, the amount of equity injected into the firms is similar relative to the original debt levels, but substantially higher relative to the new debt levels for the American companies.

Exhibit 6.3: Comparison of debt reduction in restructured firms, in Norwegian and the U.S.



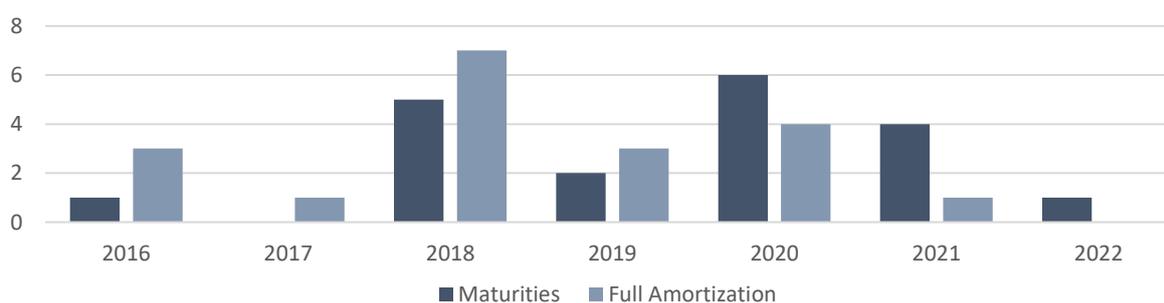
The fact that American companies have significantly lower debt levels post restructuring represents a competitive advantage once Norwegian firms' runway expires. Although equity also comes at a cost, we argue that American operators within the OSV market, having come out of restructuring processes with considerably lower debt levels, essentially will have lower breakeven rates. Thus, American firms may be able to compete for projects at lower rates than the Norwegian operators. To this argument, Solstad Farstad, DOF, and Havila argue that their high-spec, harsh environment fleets makes them better suited for North Sea projects (Solstad, Aase, & Sævik, 2017). Thus, they do not consider their American counterparts competitors.

However, our sample firms are also experiencing new competition from domestic firms with low leverage. S. D. Standard Drilling, controlled by finance heavyweights Øystein Stray Spetalen and Arne Fredly, is an example of a firm currently acquiring PSVs<sup>33</sup> at very low prices, financed with 100 % equity (Dixon, 2017). While Standard Drilling remains a small player for the time being, low costs and solid capital structure makes it a viable threat to our sample firms. Going forward, debt overhang may cause problems with respect to fleet renewal, putting the restructured firms at a disadvantage compared to financially healthy operators.

## Runway lenght

As we have established that the restructured companies still have problems with high debt levels, it is interesting to evaluate how long they have extended maturities. Exhibit 6.4 shows, by count, when the firms must start to fully service their debt through amortization, and when their first large balloon payments<sup>34</sup> are due as the debt reaches maturity. As we can see, the first large group of companies have maturities due in 2018. At the same time, others start fully servicing their debt. Hence, knowing that market conditions for our sample companies remains poor, some companies are likely to enter distress again already in 2018. Seabird Exploration is among these, and has issued new equity in the second half of 2017 to better their financial position<sup>35</sup>. The next cluster comes in 2020/2021, thus providing some companies with slightly longer runways. However, should the underlying market not have recovered sufficiently by 2020, a second extensive round of restructurings will inevitably take place.

Exhibit 6.4: Sample firms' runway length by count



*Y-axis: Count of firms.*

*X-axis: Year.*

*Maturities: When firms have their first large debt facility reaching maturity.*

*Full Amortization: When firms start to fully service their debt through amortization payments.*

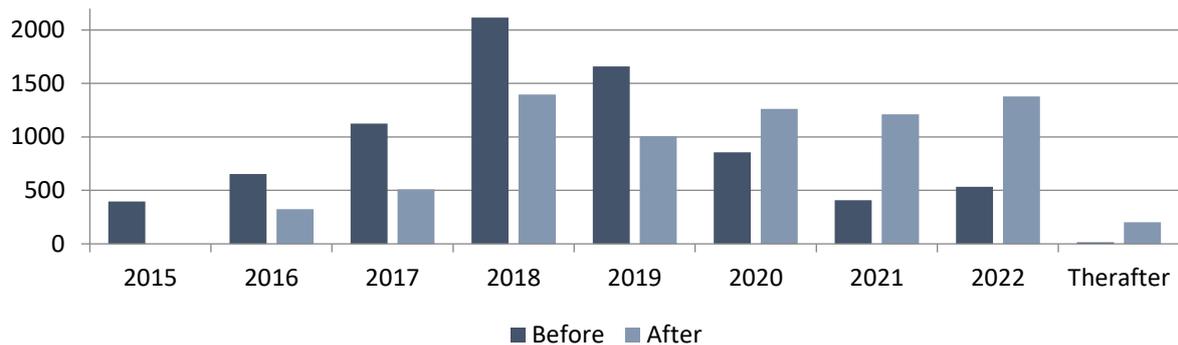
<sup>33</sup> Abbreviation for platform support vessel.

<sup>34</sup> A balloon payment is the payment of remaining outstanding debt at maturity.

<sup>35</sup> Not part of our sample as the solution was implemented too late.

Exhibit 6.5 shows the development in the aggregated debt maturity profile of a few selected companies. This includes both balloon payments at maturity and amortization for both bonds and bank debt. As we can see, the payment profile post restructuring is skewed towards the end of the time horizon, and most payments are due between 2018 and 2022. However, this chart again confirms the limited decrease in debt obligations for our sample firms.

Exhibit 6.5: Payment profiles for selected companies



Y-axis: Aggregate payment due in the respective year, mUSD.

X-axis: Year.

Included companies: BWO, PLCS1, PRS, REM, SIOFF, SOFF and VSS.

Not all companies included due to lack of publicly available information.

## Post-restructuring ownership distribution

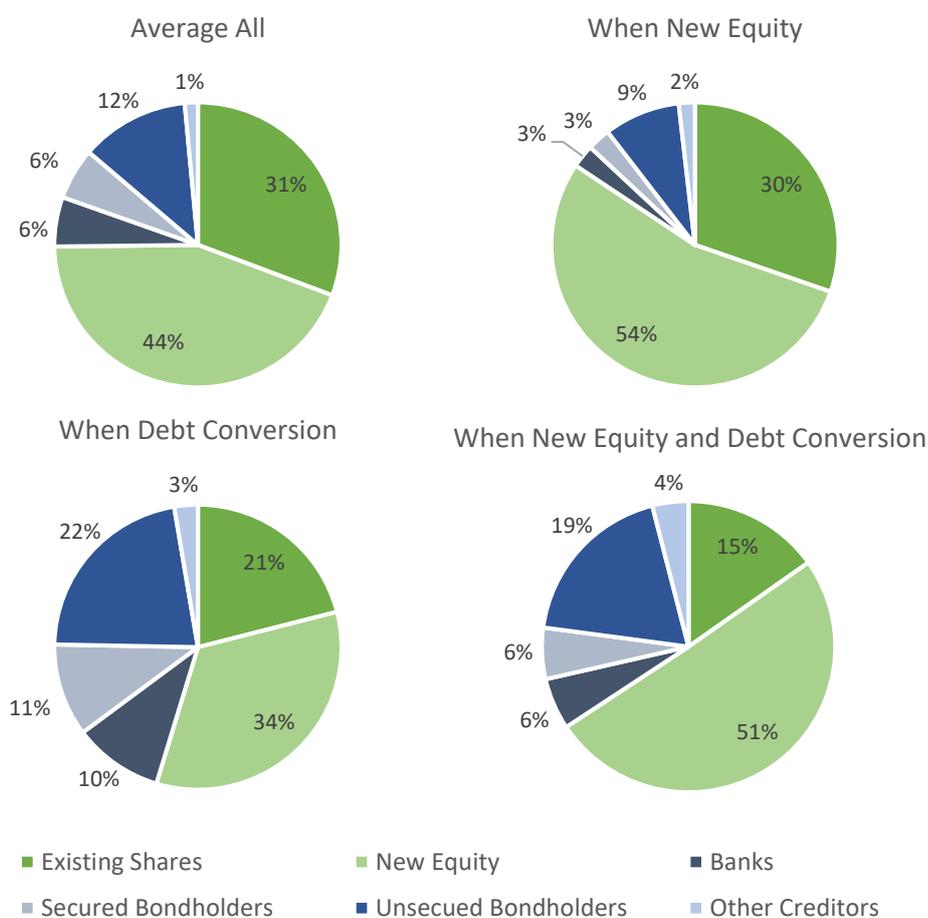
While ownership shares for existing shareholders and providers of new equity capital have been discussed in detail, Exhibit 6.6 includes the composition of creditor ownership. Evident from the pie charts, unsecured bondholders are left with greater ownership shares than secured creditors. The reason for this, as discussed above, is that unsecured debt is converted to equity more often than secured debt. The umbrella term Other creditors also end up with low ownership shares, due to small amount of converted debt and generally low seniority.

Nevertheless, the main message conveyed by the charts is that the control of the companies remains in the hands of equity investors. As emphasized, the equity investors by and large are the pre-restructuring owners, as they also have contributed with most of the new equity. In five cases<sup>36</sup>, all of which include conversion of secured debt, creditors combined end up with more than 50 % of the shares. In one of these cases, namely Farstad, the firm was quickly merged into Solstad, where creditors regained a minority ownership share. Eitzen Chemical was quickly

<sup>36</sup> Eitzen Chemical, Farstad, Norwegian Energy Company, Polarcus 1 and Seabird Exploration

sold by the banks and renamed Team Tankers, whereas Seabird Exploration and Polarcus have later had large equity issues resulting in equity holders regaining majority ownership. Norwegian Energy Company, however, has not issued equity since bondholders took majority ownership post restructuring. In this case, it is unclear how many of the converted bondholders remain as shareholders. Hence, even in the cases where creditors take control of firms, majority ownership is generally transferred back to equity investors quite shortly after. This confirms creditors' stated reluctance to hold shares.

Exhibit 6.6: Aggregate ownership shares post-restructuring for different restructuring scenarios



## What has been achieved in the restructurings?

Thus far, we have established that the problem of high debt levels among the restructured companies in our sample has not been solved. Therefore, let us in this section generalize a bit, and consider what actually has been achieved in excess of solving short-term liquidity problems. In section 4, regarding the room with loaded guns, we discussed how banks and equity owners have joined together in powerful alliances against unsecured bondholders with no little to no

value in a potential liquidation case. In realizing that banks and owners to a large extent have set the premises for the solutions, we consider what they have achieved through the processes.

Starting with banks, they have avoided write-offs on outstanding debt in almost all cases. Further, gearing has been slightly lowered, as new equity has been injected and bond debt has been reduced. Further, banks have avoided reputational damage through negative media coverage regarding bankruptcy and job losses in local communities. Also, according to sources we have spoken to, banks have succeeded in maintaining relationships to the restructured companies. On the downside, banks have deferred amortizations and interest payments. Finally, they apparently have provoked certain bondholder groupings, although we do not believe this is particularly concerning for banks.

As for owners, many of them have remained in control of their companies. Moreover, they have avoided liquidation and closure of their firms. This has come at the cost of contributing with new capital through very risky investments. Of course, many owners have suffered through dilution as well, which comes in addition to the extreme value loss related to the oil price fall prior to the restructurings.

Additionally, banks and shareholders have achieved some common goals. Firstly, they have been able to serve their customers and preserve backlogs. Most firms have also been able to avoid cancellations of newbuilds from suppliers. Moreover, significant reductions in bond debt have benefited both shareholders and banks, and have been shown to be important for avoiding bankruptcy and liquidation (Asquith, Gertner, & Scharfstein, 1994). On the flipside, both owners and banks may suffer from lowered interest in high-yield bonds from capital markets going forward. However, in our opinion, money inherently has short-term memory, and attractive returns will triumph over grudges.

Finally, it is important to highlight that one of the key drivers of the downturn, overcapacity, has not been addressed as part of the restructuring solutions, as banks have been very reluctant to let go of their collateral. Nevertheless, this is not to say that vessels have not been stacked over the past few years. According to Clarkson Platou Securities, 25 % of the total OSV fleet is stacked as of November 1<sup>st</sup> 2017, 20 % for more than one year (Holm, 2017). While the scrapping has remained low through the downturn, Clarksons Platou Securities argue that a significant number of vessels will never be reintroduced to the market, due to high reactivation costs and E&P companies' reported reluctance to contract previously stacked vessels. Thus, the

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capacity cuts could be larger than they appear to be based on scrapping rates. In our interview with Mons Aase, CEO of DOF ASA, he argued that it is impossible to determine how many of the stacked vessels will re-enter the market. It depends on how quickly and strongly demand increases when the market returns.

In conclusion, this round of restructurings arguably can be looked at as a success. On the upside, banks have come out of the processes with bruises and bandages, but with all limbs intact. Owners have on their side largely remained in business and control, and avoided liquidation. However, the restructuring outcomes have not addressed the pressing issue with extensive debt, and the solutions are therefore essentially a bet on a speedy market recovery. Nor have the solutions dealt with the overcapacity within the industries, which effectively hinders market recovery. Should this not occur, banks may have to amputate some limbs, and the owners might lose control of their companies.

Regarding bondholders, opinions seem to differ on how well they have fared through the restructurings. As mentioned, some bondholders have been vocal in the media about their discontent. Conversely, our interviewees have a different view, stating that bondholders have received plentiful compensation above their liquidation value for their signatures. Further, they have been compensated for years through higher returns for deliberately taking higher risk.

### **What is on the menu if firms come back for seconds?**

As the oil-related markets still look depressed, and debt levels still are high, many of our sample firms seem exposed to a second round of restructuring in the coming years. Hence, some reflections on what might happen in a potential round two are in place.

Although it is tempting to say that our findings will generalize to the next round, there can be important differences, some of which are already apparent. While bank debt practically is at the same levels as before, and the new equity will be gone by the time of potential new restructurings, the main difference is that there will be limited, or no, unsecured bond debt. In isolation, this will ease the processes for banks and shareholders, as they will have one less stakeholder to argue with. On the other hand, firms that are successful in reducing net debt have higher chances of avoiding bankruptcy and liquidation in the years following restructuring (Asquith, Gertner, & Scharfstein, 1994). Thus, implying that banks and shareholders must increase their contributions for capital structures to be sustainable following round two.

Moreover, all parties of the negotiations will come into the negotiations with more experience. Although some experienced bankers and advisors had been involved in restructurings before, several of our interviewees have pointed towards the learning effect from the current processes, and its favorable effect on a potential second round.

Even though some of the above-mentioned factors advocate a simpler round two, there are also complicating aspects drawing in the opposite direction. As documented, the largest contributors of new equity have been the largest existing owners. Further, our sample firms have historically reinvested rather than paying dividends to shareholders. This raises the question of whether the owners have the means to contribute with new equity in a potential round two. For those who do not, this brings new dynamics to the negotiations. Should the existing owners not have the necessary capital, the banks must look elsewhere if equity issues are to be as prominent as we have seen in the first round. Potential candidates to contribute with new equity are both industrial players or new financial investors.

Importantly, new investors are presumably more difficult to negotiate with for the banks. For an industrial player to consider M&A, it must outweigh the option of buying the assets from the banks at very low prices in a potential liquidation scenario. The mentioned merger between Solstad and Farstad stands as an example, where new industrial owners contributed with the lion's share of the equity issue in Farstad's restructuring, forcing equity conversion on parts of the bank debt. On the other hand, S.D. Standard Drilling is an industrial player that seemingly prefers acquiring distressed assets as opposed to investing in restructuring cases. On the downside, however, S.D. Standard Drilling must build their organization from scratch.

A final alternative to raise significant amounts of equity is to approach new financial investors, either through private or public equity offerings. However, that would require convincing investors of the attractiveness of investing in distressed firms. Although this has probably been the case in some private placements covered in this thesis, larger contributions are needed if existing shareholders shy away. Consensus among stakeholders we have interviewed is that they do not consider large scale public offerings to have been a realistic option in most of our sample<sup>37</sup>. Thus, the banks would have to give potential investors even more beneficial terms, through debt reductions, for this to be a viable option in a potential next round.

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<sup>37</sup> Please refer to Appendix A for a list of interviewees.

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Based on the arguments presented above, we have reason to believe that the banks will face more difficulty raising funds in a potential round two. However, we do not know the banks will want new equity to the same extent that they have wanted it in our sample. Other options would be to provide new loans, take over as owners, or liquidate the company. Which option is preferred will depend on the terms for raising equity. Further, it will depend on banks' belief in the industries at the time. Greater hopes for a recovery would increase the chance of further extensions and refinancings. As expected, banks are restrictive in sharing their plans for a potential round two. The incentives to extend rather than to incur losses immediately will be the same as in our sample. However, at some point, the banks might have had enough.

An interesting source of information on what the banks expect in going forward would be to look at how they value their remaining loans in the restructuring companies. As discussed, the banks will not give up this information on individual companies. However, it is possible to back out some information from reports by The Financial Supervisory Authority of Norway (Finanstilsynet, 2017). They map out exposure to the offshore sector for the five most prominent banks in the Norwegian offshore space, and find a total exposure of 62 bnNOK in companies which are subject to restructurings<sup>38</sup>. The banks' total impairments on this debt amounts to 8.2 bnNOK, or 13 % of their exposure, through provisions and realized losses. In our sample, we found 3 % haircut on bank debt, resembling the realized losses among the 13 %. Thus, banks have made further provisions, which are more than threefold the realized losses we have recorded, due to an expectation of additional losses on the remaining bank debt.

In conclusion, it is by no means certain that a possible round two of restructurings for our sample firms will play out in the same way as round one. The net balance sheet effects were negligible in many cases, and we saw few consolidations and new owners. A second round might lead to increased consolidation, losses for banks, and forced liquidation. Many would argue that such measures, followed by scrapping of vessels, are necessary for the industries to recover. The market outlooks at the time of the potential new restructurings will be pivotal, as it will impact the strategy of both creditors and new investors. At this point, we can only hope that the recover process gains pace, making a second round of restructurings unnecessary.

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<sup>38</sup> Two thirds of which are already implemented, while the rest are upcoming. Thus, our argument is conditional on the last third of the first round of restructurings not involving drastically higher haircuts on bank debt. Also, their sample probably includes companies that are not listed on a stock exchange.

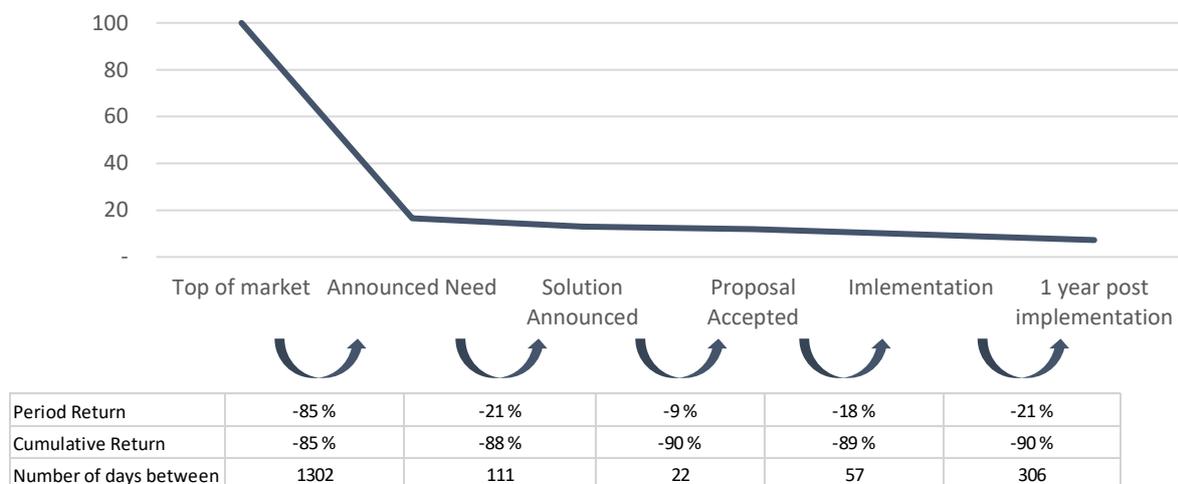
## 7. Investment case for shareholders

In this section, we assess the investment cases for shareholders. As will become clear, there are large differences in returns. We document the aggregated investment case, and shed light on specific examples. Initially, we consider share price development from the top of the market, defined as the highest share price during the cyclical upturn preceding the restructurings<sup>39</sup>, to a year post implementation<sup>40</sup>. Then, we assess stock return for specific subperiods.

### Top of market to one year after implementation

The graph in Exhibit 7.1 shows the average development in share prices between key events, rebased to 100 at the top of the market. Further, the corresponding table shows the share price development and number of days between the key events, as well as the cumulative return.

Exhibit 7.1: Average share price development from top of the market to one year post restructuring



*Period return: Share price change between the two key events.*

*Cumulative return: Cumulative return since top of market.*

*Number of days between: Number of days between the two key dates.*

*Top of market: Highest closing price during the bull market preceding the restructuring.*

*Announced Need, Solution Announced, Proposal accepted: Last closing price before key event.*

*Implementation: First closing price after implementation.*

As shown, the average share price drops by 85 % from the top of the market to the company announces the need to restructure. The negative development continues in every consecutive

<sup>39</sup> Typically 3-5 years before restructuring in our sample, as it mainly relates to the recent oil crisis. American Shipping Company stands out as starting their fall in 2008, relating to the financial crisis.

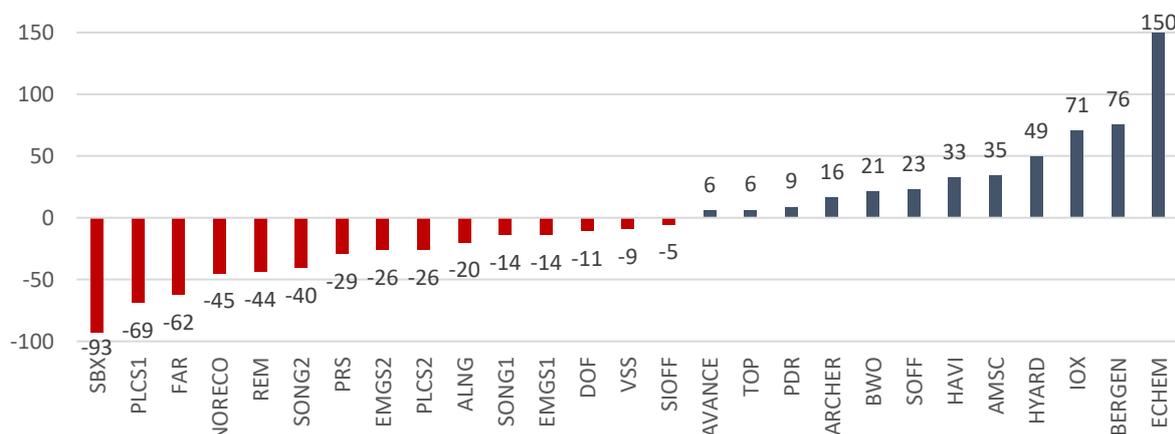
<sup>40</sup> Or as far possible in the cases where less than one year has passed since the solution was implemented.

period, coinciding with findings of papers cited in the literature review, documenting underperformance among financially distressed firms. Thus, on average, the share prices do neither increase in the periods where proposals are announced nor approved. The negative development continues towards implementation, and in the following year. However, this is only considering the share prices, without adjusting for the possibly beneficial rights issues. There are two main reasons for this negative tendency. Firstly, we know in hindsight that we have not seen much improvement in the oil-related industries. Secondly, a lot of creditors have received shares, and they are likely to offload their shares within the first year.

## Return from solution announcement to implementation

Considering shareholders' low seniority, they should incur the most severe losses among claimholders. In the previous section, we documented an average negative return of 88 % from the top of the market to solution announcement. Here, we turn attention to the period between the day before solution announcement and the day after implementation, to see whether the misery continues for shareholders throughout the restructuring process. Exhibit 7.2 shows the percentage return for the specified period, now including the option to subscribe in eventual equity issues<sup>41</sup>.

Exhibit 7.2: Percentage return from pre announcement to implementation (%)



Variance = 25 %, variance of the final returns presented in the graph.

Last closing price before solution announcement to close the first day after implementation, including subscription in equity through rights issues when present.

See Appendix E for tickers and corresponding full company names.

<sup>41</sup> When rights are issued, subscription to one's allocated number of shares is assumed. Thus, impacting returns as long as the issue price does not equal the share price at delivery.

The first thing to note from the chart is the massive spread in returns, from positive 150 % to negative 93 %. From an investor's perspective, there is immense risk associated with investing in a restructuring case. Even though the risk is high, we find no compensation in the form of high average returns, which weigh in at just 0 %. However, as this is based on few observations, we cannot conclude that the shares are not fairly priced upon solution announcement.

Further, our sample only includes firms that have announced, approved, and implemented restructuring solutions. The alternatives to approval and implementation are bankruptcy<sup>42</sup> or avoiding<sup>43</sup> a restructuring. However, we find that the companies usually communicated clearly that they were working on a proposal, and how the negotiations were proceeding, before announcing a solution. Whether there is a bias, and in what direction, is uncertain.

In addition to share price development between solution announcement and implementation, there are two main determinants of return in Exhibit 7.2. The first is the share price reaction to the solution announcement, where the expected solution is priced in. A similar analysis to the one presented in Exhibit 7.2, measuring return from the day after solution announcement shows similar results, with average return at -2 %. However, the variance of the returns falls by ten percentage points, reflecting decreasing uncertainty regarding solution characteristics. The second main determinant is the equity issue, and whether participation yields a positive return. We will address both these determinants of shareholder outcome in detail shortly.

Perhaps surprisingly, share price reactions to accepted proposals and implementation generally seem minor and random. In terms of accepted proposals, we find 1 % positive reaction on average, however with large deviations in a few cases. Havila for example, which had several proposals denied, reacted with a 30 % jump to bondholders' acceptance of what became the final solution. Further, share price reactions to implementation were almost non-existent. As implementation in most cases entailed issuance of a large number of new shares to a diverse group of investors with a short investment horizon<sup>44</sup>, this was somewhat unexpected. Focusing solely on cases with conversion of debt to equity, we find no immediate reaction, but an average fall of 8 % during the first week<sup>45</sup>. However, the average of -8 % is based on very few cases, in industries where share prices generally have fallen through the whole period. In the following

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<sup>42</sup> We might see bankruptcy instead of restructuring in the ongoing case of Norske Skog (Bjerknes & Kaspersen, 2017)

<sup>43</sup> Odfjell Drilling exemplified a case where restructuring was avoided at the last minute (Jensen, 2016).

<sup>44</sup> For example, creditors given shares after conversion, or investors speculating in issue price discounts.

<sup>45</sup> Recall Exhibit 7.2 stops measuring return the day after implementation, not including the week after.

weeks, the negative development does not continue. Still, we argue that one ought to be careful owning shares during the period after converted shares are distributed to creditors.

## Capital structure's impact on returns

As mentioned in the section regarding the contributions of secured bondholders, we might expect different solutions depending on the firm's source of secured debt financing. Specifically, bondholders are more inclined to take control of the company, while banks amend and extend, and bring in owners providing equity capital. An advantageous effect for shareholders of the secured bondholder approach is that it leads to greater debt reduction. On the flipside, however, it also leads to dilution and loss of the opportunity to participate in equity issues. As our sample includes only two companies, Norwegian Energy Company and Seabird Exploration, that were predominantly financed with secured bonds, we are cautious about drawing conclusions. Nonetheless, comparing these two firms with those primarily financed using bank debt is interesting. Evidently, Exhibit 7.2 reveals that the two are among the four worst performers. Table 7.1 compares the two to the rest of the sample. With substantial dilution and lack of rights issues<sup>46</sup>, existing shareholders did not fare well in these two cases.

Table 7.1: Comparison of cases with secured bonds as primary debt financing and the rest of the sample

	NORECO	SBX	Average others	Average all
<i>Return whole restructuring period</i>	-45 %	-93 %	5 %	0 %
<i>Existing Shares Ownership</i>	8 %	1 %	33 %	31 %
<i>Equity Rights Issue</i>	No	No	Mostly Yes	

*Return whole restructuring period: As in Exhibit 7.2*

Looking at other types of capital structures, whether companies have bank debt, unsecured bonds, or are mainly financed through leases, we do not find any noteworthy differences. More than half of the companies in our sample are primarily financed with a combination of bank debt and unsecured bonds, which leaves few observations for other types of capital structures.

<sup>46</sup> Seabird Exploration had a private issue targeted towards selected shareholders

## Solution characteristics' impact on returns

Obviously, the characteristics of the solutions will impact shareholder returns, as we will see in the next section regarding reaction to solution announcements. However, when looking at how characteristics impact the returns over the whole period, we do not find any conclusive results. Average returns with and without characteristics such as conversion of debt and equity issues do not differ much. As the solution characteristics often are known, at least to some extent, shares will be priced accordingly before announcement. Thus, we must dive deeper into the solution announcements and equity issues below to see whether we can draw some conclusions.

## Solution announcement

Exhibit 7.3 indicates share price reactions to the solution announcements in our sample. Notably, there are large variations between observations, and their average amounts to a negative 9 %. We see a clear picture of substantial losses in all the Norwegian oil supply and rig companies<sup>47</sup>, except for Solstad's positive reaction of 15 %, where Aker entered as a large and solid new industrial owner. Interestingly, an industrial owner also entered InterOil Exploration and Production<sup>48</sup>, another firm avoiding a negative reaction. Conversely, Farstad experienced a negative reaction despite solid new industrial owners in the form of Aker and Hemen, followed by a merger with Solstad. However, Farstad's solution differs from Solstad's as it included significantly greater dilution of shareholders<sup>49</sup>, through conversion of bank debt.

Eitzen Chemical experienced the most positive reaction, with a massive 134 % share price increase following announcement. Together with Norwegian Energy Company, they were the only companies where secured creditors took majority of the shares, 98 % and 92 % respectively, without new equity coming in. While ostensibly negative news, they need not be if liquidation was priced in. Among firms with positive reactions, we also find American Shipping Company and Havyard, involving minor debt conversions resulting in just 10 % dilution of existing shares. Among the remaining cases with positive reactions, the highest dilution was 60 %, indicating that they were softer restructurings.

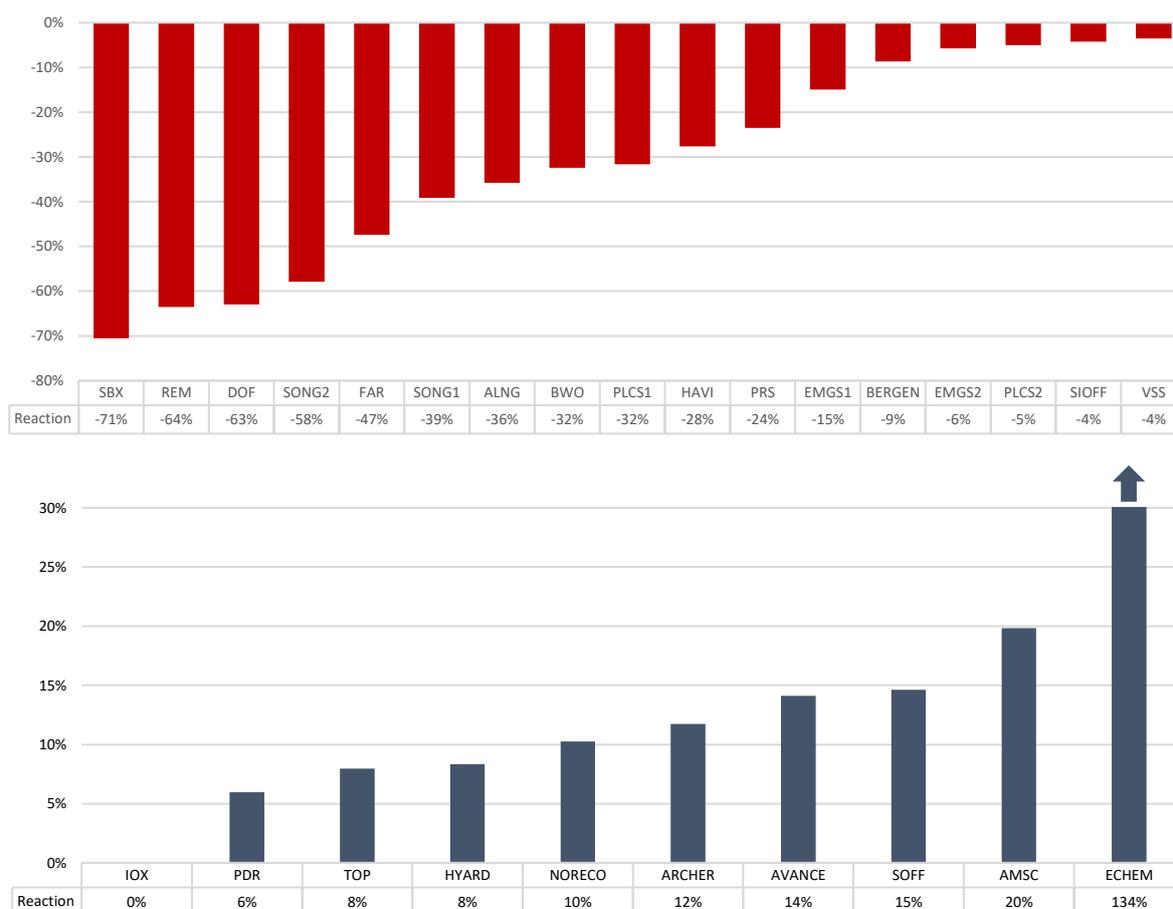
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<sup>47</sup> BWO, DOF, HAVI, PLCS (1 and 2), REM and SONG (1 and 2)

<sup>48</sup> Andes Energia

<sup>49</sup> 99 % dilution of existing shares in Farstad, and only 40 % in Solstad

Exhibit 7.3: Overview of share price reactions to solution announcements, 1 trading day



See Appendix E for tickers and corresponding full company names.

Summing up, we see that the heavy restructurings with substantial dilution of existing shareholders through new equity and conversion of unsecured debt generally resulted in negative share price reactions following announcement. However, supplementary positive news can draw in a positive direction. Also, the mentioned cases of Eitzen Chemical and Norwegian Energy Company showed how seemingly appalling solutions for shareholders can generate a positive reaction. This goes to show how important pre-announcement market expectations are to share price reactions, as always is when important announcements are made for listed companies. Further, operational news from the companies presented in conjunction with the restructurings solutions may have impacted share prices.

## Equity issue trade

In our sample, 70 % of the restructurings included rights issues involving all shareholders, either through a repair issue after a private placement, or as the main offering. This section seeks to evaluate the profitability of subscribing for shares in these rights issues, specifically pursuing a strategy we have termed the issue trade. The issue trade is performed in the following way:

1. Buy shares on the last trading day which gives shareholders subscription rights
2. Sell the original shares the following day, to reduce exposure to shares we have already established are falling on average during this period
3. Receive and exercise subscription rights
4. Sell the shares subscribed for the day after delivery

The first challenge of this trade is to know in advance the date on which you need own the share to be allocated subscription rights. As it turns out, that date is publicly known in advance in 12 of 19 cases involving a rights issue. Table 7.2 shows descriptive statistics for the issue trade. The column on the left shows data for trades where the last day to receive subscription rights was known in advance. The right column covers all issue trades, regardless of whether the last date on which one had to be a shareholder was known in advance.

Table 7.2: Descriptive statistics for the issue trade strategy

	Rights day known (12 observations)	All (19 observations)
<i>Average Return</i>	14 %	9 %
<i>Highest Return</i>	74 %	74 %
<i>Lowest Return</i>	- 19 %	-19 %
<i>Fraction Positive Return</i>	58 %	53 %
<i>Issue Price Discount</i>	54 %	46 %
<i>Capital Need/Share Price</i>	1,86	1,43
<i># of days</i>	56	55

*Return measures: Based on results from the issue trade explained above.*

*Issue price discount (average): Issue price relative to share price at last close before solution announcement.*

*Capital Need/Share Price (average): (Issue Price \* # of new shares per old)/Share price at the last day including rights.*

*In the calculation above, we have used the number of rights allocated to each share if the issue is fully subscribed.*

*# of days (average): Number of days between investment to receive subscription rights and sale of newly issued shares.*

As Table 7.2 demonstrates, the issue trade was profitable on average, especially in the cases where the last day including rights was known in advance. Again, we see large variation in the

results, and the distribution seems positively skewed. Specifically, five of the cases show higher returns in absolute terms, than the worst case of  $-19\%$ . Still, slightly more than half of the cases provide positive returns. Further, the issue price discount, measured relative to the share price on the day of the solution announcement, averages around  $50\%$ . Note, however, that in many cases, discounts had dwindled considerably when shares were delivered.

To predict which issue trades will be profitable, the issue price discount on the day when the decision of whether to buy the original share and participate in the issue can be appraised. On average, the issue trades that were profitable had an issue price discount of  $49\%$ , while the ones that gave negative return had an average issue price discount of  $25\%$ . These figures only include cases where the last day on which one had to own shares to receive rights was known.

Table 7.3 illustrates how return increases as we put restrictions on the strategy with respect to issue price discount. Evident from the table, the average returns were largely driven by the two most positive cases. However, the low number of observations implies that results must be treated with caution. Setting a limit at  $70\%$  discount might cause dismissal of attractive trades. Nevertheless, as we would intuitively expect, the table indicates that looking for the issue trades with large issue price discounts may yield high returns.

Table 7.3: Issue trade results with restrictions on issue price discount

<i>Discount &gt;</i>	Average return	Fraction positive	Number of cases	Average return excluded cases
<i>No restriction</i>	14 %	58 %	12	
<i>10 %</i>	19 %	78 %	9	- 3 %
<i>20 %</i>	21 %	71 %	7	3 %
<i>40 %</i>	32 %	80 %	5	1 %
<i>50 %</i>	38 %	75 %	4	1 %
<i>70 %</i>	74 %	100 %	2	2 %

Only cases where the last day including rights was known are included, as they are the only trades one could have performed as an outside investor.

Regarding the issue trade, it should be noted that shares in our sample often have limited liquidity. Thus, performing the issue trade will be challenging at high volumes. Determining how high volumes for which one could have performed the issue trades without moving prices enough to make them unattractive goes beyond the scope of this paper. Adding the fact that rights issues often come in the form of small repair issues, the issue trade is looks difficult for institutional investors. However, an institutional investor might be invited to participate in the

private placements with larger volumes. Still, an institutional investor participating in a private placement might not be invited to private placements again if dumping the shares shortly after delivery, as the other stakeholders are interested in owners with a longer time perspective. The profitability of participating in the equity issues with a longer time perspective will be discussed in the next section.

## Long-term perspective on participating in equity issues

The returns from subscribing in equity issues with a longer time perspective are a function of the discount in the issue price relative to the share price at delivery, and the share price development thereafter. When deciding whether to invest, the only observable indication of return is the issue price discount relative to the share price at whatever date one must subscribe. Depending on whether subscription is done through a private placement or rights issue, the share price reaction to announcement might come between deciding on subscription and delivery. Between subscription and delivery, as well as after delivery, the share price might of course be affected by any news concerning the company, the market it operates in, financial markets, global economy etc. Although company-specific factors, and other news, will affect the returns from subscribing in each individual issue, it is interesting to see how a strategy of subscribing in issues would pay off in the long run.

Exhibit 7.5 presents average returns from subscribing in the equity issues, and holding shares up to 100 days following delivery for all companies issuing equity. The lines show isolated accumulated returns, returns measured against the Oslo Stock Exchange Benchmark Index, and against industry-specific indices for each company. As expected, measuring against OSEBX gives substantially lower returns as the index has positive expected value. On the other hand, measuring against industry-specific indices makes very little difference. The exhibit shows that subscribing in all issues yielded approximately 25 % instant average return due to issue price discounts. After distribution, the average returns mostly remained in the 20-30 % interval until the last few days, where a couple of the best performing shares lost a lot of their previously gained returns<sup>50</sup>. Hence, the restructured firms perform decently on average the first 90 days, although we see the last few days how significantly the average was impacted by a few cases.

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<sup>50</sup> Bergen Group from above 200 % to 50 % return, and BW Offshore from 260 % to 220 %, heavily impacting the average.

Exhibit 7.5: Average return during the 100 days following issue



*Accumulated return measured against issue prices*

*Measuring against indexes: Accumulated average share returns – Accumulated index return*

*OSEBX: Oslo Stock Exchange Benchmark Index*

*Industry index: Either Oslo Shipping Index (OSLSHX) or OSLO Energy Equipment & Services Index (OSLESX)*

*100 days was chosen, as all observations have at least 100 days of data following equity issue.*

Table 7.4 extends the holding period from 100 days to one year after delivery of issue shares<sup>51</sup>. On average, the return has decreased in the extended period, even providing lower returns than OSEBX when including the issue price discount. In fact, more than half of the restructurings provided negative returns. Evident in the two columns to the right is the massive variation in returns among cases. Excluding BWO, which constitutes the maximum in all rows below, makes all average return measures negative. This emphasizes the riskiness posed by investments in these companies.

Table 7.4: Returns the first year following equity issue

<i>20 observations</i>	Fraction Positive	Average	Max	Min
<i>Accumulated share price return (excluding discount)</i>	30 %	-23 %	97 %	-82 %
<i>Accumulated Return (Including discount)</i>	45 %	6 %	374 %	-88 %
<i>Acc. Return vs. industry index (Including discount)</i>	40 %	5 %	361 %	-73 %
<i>Return vs. OSEBX (Including discount)</i>	30 %	-7 %	358 %	-92 %
<i>Issue price discount at delivery</i>	75 %	13 %	58 %	-43 %

*Excluding discount: Return measured relative to share price at the distribution date*

*Including discount: Return measured relative to the issue price in the equity issue*

*When one year of observations is not available, the latest day as of November 17<sup>th</sup>, 2017, is chosen.*

<sup>51</sup> Or as far as possible when one year of data is not yet available. Latest data update conducted November 17<sup>th</sup>, 2017

Subscribing in the equity issues may not look very attractive based on Table 7.4. However, there are certain factors that need to be considered to assess the attractiveness of subscribing in issues. Firstly, there is always the possibility of being able to pick the restructurings that give positive return. This, on the other hand, would go against the fundamentals of asset pricing theory, and efficient markets, as defined by Eugene Fama in his renowned paper (1970). Hence, picking winners is likely attributable to luck rather than skill. Still, in a restructuring scenario where the issue price is subject to negotiations, mispricing may very well occur, as financial theory is largely replaced by bargaining theory in the negotiations. Moreover, Esidorfer, Goyal and Zhdanoc (2011) argue that financially distressed stocks are mispriced due to the shortcomings of standard valuation techniques, combined with low analyst coverage. Secondly, subscribing in the issues can be viewed as a bet on market recovery. Evidently, this has not happened in the offshore market, while it undoubtedly would cause massive rises in share prices for our sample firms.

In conclusion, we find positive average return even though the desired market recovery remains forthcoming. Arguably, it is hard to imagine how the offshore market could have been any worse. Still, investors with a high tolerance for risk could find attractive investment opportunities amongst restructuring cases. Given market recovery, firms' high gearing should cause corresponding returns for investors, and the restructuring cases should outperform the index. The downside, of course, is the threat of a second round of restructuring or liquidation.

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## 8. Limitations and areas of further research

While the findings provide highly interesting insights into the processes and outcomes of the financial restructurings that has characterized the Norwegian shipping- and offshore sectors for the past 4-5 years, there are certain limitations to this thesis that need to be highlighted.

First and foremost, our sample consists of just 27 observations. While we do not want to see more restructuring cases, having additional observations would be beneficial, as it would facilitate more advanced statistical analyses. Extending the sample period back in time could provide additional observations. However, there were very few restructurings in Norway during the years preceding the recent oil crisis. Also, going too far back in time makes gathering information to the extent we have needed in this thesis difficult, partially due to the high-yield market not being particularly active in Norway prior its development back in the early 2000s.

Further, our sample is dominated by the cyclical and asset-heavy oil-related industries, two factors which both can have implications for the restructurings. For example, it is fair to say that the banks would have been less inclined to amend and extend if the underlying markets were not expected to improve at some point. Thus, the ongoing case of Norske Skogindustrier stands out as an interesting case to follow, given that they operate in an industry with more permanent problems.

Regarding our sample, the fact that we have focused on Norwegian restructuring should also be mentioned. As discussed, legislation concerning bankruptcy differs between countries, and all results thus might not generalize. Moreover, we have mentioned that capital structures tend to differ between Norway and the U.S. for example. Thus, we have few observations with secured bonds outweighing bank debt, as discussed earlier. Also, the ownership structures in many of our Norwegian cases are distinctive, as many are dominated by founding families with high affectional value connected to the firms. Additionally, many of the largest owners are highly involved in operations, and thus favored by banks.

As our thesis only include firms whose shares are publicly traded, one ought to be careful generalizing results to privately held companies. Private firms typically have less diversified ownership structures, and less liquid shares. This would affect the implications of being converted to equity for bondholders and other creditors, making this a less viable option. It could also impair the chances of raising equity capital, and lead to increased problems relating

to information asymmetries. All the above would essentially have an impact on the negotiation dynamics, and most likely restructuring outcomes. While specific cases were not mentioned during interviews with banks and attorneys, we are under the impression that the financial restructurings for privately held firms differ from those included in the sample, both in terms of the processes and the solutions.

What is more, the restructuring processes and outcomes vary greatly, and are highly case-specific. Thus, rather than relying too much on averages, looking at specific restructurings with similar characteristics might be a good idea, if one is to evaluate restructurings outside our sample. While theory often provides clear-cut answers, the real world is complex. If anything, this thesis demonstrates just that.

As discussed in the section regarding share price reaction to announcement, the fact that we have only included companies that we know survived the restructuring processes, may cause a bias. Thus, an interesting research topic would be to look at share price reactions to other potential outcomes, be it asset sales, liquidation, or avoidance of restructuring.

Finally, due to the wide-reaching scope of this thesis, there is room for more detailed research on certain areas. In addition to research on share price reactions as mentioned above, we would like to suggest a game-theoretical approach to the negotiations. However, that would probably require drastic simplifications. We also suggest further research on differences between restructurings in different countries, due to legislation and other institutional factors.

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## 9. Conclusions

Following an introduction to financial restructurings, the theoretical background, and dataset, this paper started by assessing qualitative aspects of the restructurings negotiations. The main insight was that junior and unsecured claimholders can use the threat of forcing liquidation to secure values they would not have been entitled to according to the absolute priority rule. This also became evident in the restructuring outcomes, as shareholders were left significant value, despite claimholders of higher seniority incurring losses. Thus, senior claimholders paid well for what we called the world's most expensive signature, in order to minimize their own losses. Further, it was highlighted that banks were very reluctant to incur direct losses on the nominal outstanding, and how they often favored shareholders over unsecured creditors, causing fury among certain bondholders. This was in part explained by the banks' desperation to get new equity issued, and in part by the large shareholders' importance for operations going forward. Thus, all existing shareholders were put in a favorable negotiation position when indispensable owners with capital to contribute were involved.

In terms of the solution outcomes, we saw that bank debt in large was amended and extended. For bondholders, both secured and unsecured, haircuts following conversion or partial cash redemption were regularly observed. Shareholders, on their part, contributed with new equity, and existing shares were substantially diluted. Ownership structures following restructurings thus were largely dominated by providers of new equity and converted creditors. Regarding whether long-term problems were solved, the answer is that debt levels remain high, and the firms are dependent on recovery in their respective markets to avoid further restructurings.

With a specific focus on shareholders' returns through the processes, we found that pre-crisis shareholder value in large was deteriorated before the restructurings occurred. In general, share price reactions to solution announcements were negative, while positive news as part of the solution in some cases drew the reactions to the positive side. Although depressing so far, the equity issues at low issue prices came as a treat for shareholders, as the equity was issued through rights issues. Subscribing to the equity issues proved to be profitable in most cases, due to issue price discounts. In the year following the equity issues, the share prices showed a negative development, as recovery in the underlying markets in which the firms operate remains forthcoming. It should also be noted that the returns by all measures, except the fall from the pre-crisis top, showed remarkable diversity, highlighting the high risks of investing in the restructuring companies.

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## Appendix

The appendices offer complements to the results presented in the thesis. Initially, we present our interview objects, before explaining calculations of haircuts, capital requirements and Altman's Z-score. Conclusively, as the majority of results in this thesis are presented on an aggregated level, we provide valuable nuances at the level of the individual companies. First, by providing company specific data which was basis for tables presented in this thesis, and then a one-pager summary of each individual restructuring solution.

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## Appendix A – Interview objects

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### Advisors

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Name: Marius Moursund Gisvold  
Title: Partner  
Firm: Wikborg Rein  
Date: 26. October 2017  
Location: Oslo

Name: Stian Tande Mortensen  
Title: Senior Lawyer  
Firm: Wikborg Rein  
Date: 26. October 2017  
Location: Oslo

Name: Simen Flaaten  
Title: Head of Fixed Income  
Firm: Clarksons Platou Securities  
Date: 27. October 2017  
Location: Oslo

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### Stakeholders

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Name: Roar Tveit  
Title: Senior Investment Manager  
Firm: Holberg Fondene  
Date: 20. October 2017  
Location: Bergen

Name: Jan Borø  
Title: Senior Vice President  
Agency: The Norwegian Export Credit  
Guarantee Agency (GIEK)  
Date: 26. October 2017  
Location: Oslo

Name: Knut Voraa | Thomas Nordahl  
Title: Head of Shipping & Offshore  
department in Bergen | Senior Vice  
President  
Bank: DNB  
Date: 19. October 2017  
Location: Bergen

Name: Jan Erik Klepsland  
Title: Vice President  
Bank: Nordea  
Date: 26. October 2017  
Location: Oslo

Name: Andreas Austrell  
Title: Senior Client Executive – Energy,  
shipping & offshore  
Bank: Swedbank Norge  
Date: 26. October 2017  
Location: Oslo

Name: Mons Aase  
Title: CEO  
Company: DOF ASA  
Date: 6. December 2017  
Location: Bergen

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## Appendix B – Explanation of haircut

Speaking of haircut in this thesis, we address the difference between the nominal outstanding on pre-restructuring debt and the value which is distributed to creditors as part of the restructuring solution. Thus, it is the direct loss that creditors incur. As companies never explicitly state haircuts in their announcements, the haircuts must be calculated. Thus, and explanation of how we have calculated haircuts is in place.

In the case of bond buybacks or partial cash redemption on bank debt, the calculation is straight forward. A buyback at a price of 70 % entails a 30 % haircut. Should only parts of the outstanding bonds be redeemed at a discount, we will present the nominal haircut on the redeemed bonds as a percentage of total outstanding before redemption as the haircut. Thus, if half the bonds are bought back at a price of 70 %, the haircut on outstanding debt will be 15 %.

When debt is converted to equity, the calculation depends on how one values the equity. We have chosen, when an equity issue coincides with the conversion, to use the issue price in the equity issue as the share value. Alternatively, a share price observed in the market at some date could have been used, providing a different answer if not coinciding with the issue price. If choosing a market based price, we identify two possible choices. Firstly, one could choose a price before announcement, as this is the price when the negotiations take place. However, we have seen that the share prices generally fall drastically before delivery of the shares. Instead, the share price at delivery could have been used. However, this price is not known, and thus not relevant, at the time of the negotiations. On the other hand, the issue price is constant, and represents the valuation that the providers of new equity set on the company's shares during the negotiations. Thus, we find the issue price to be the most sensible choice. In the few cases where equity is not issued, we use an observed market share price shortly after the solution is announced and priced in.

## Appendix C – Banking regulation and capital requirements

In this section, we provide a detailed explanation of key concepts of the Basel III directives and banking regulation in general. Norwegian banks are subject to Capital Requirements Directive (CRD) IV, in addition to supplementary local requirements from The Financial Supervisory Authority of Norway (FSA). The CRD directives consist of three pillars, the first of which deals with specific details regarding capital requirements (Basel III Compliance Professionals Association, 2017). It is this pillar we focus on here. However, it is worth mentioning that Pillar II concerns itself with internal capital reviews for the purpose of ensuring that each bank satisfies capital requirements, whereas Pillar III focuses on requirements for public disclosing of information to the market.

Pillar I comprises minimum requirements for Tier 1 Common Equity (CET 1), Tier 1, Tier 2, and leverage ratio that all banks must satisfy. CET 1 is the strictest classification, and includes ordinary shares, retained earnings, and certain reserves (The Common Reporting Framework, 2017). Tier 1 consists of CET 1, plus instruments and other liquid instruments, such as hybrid bonds (Investopedia, 2017). Tier 2 Capital includes the above-mentioned instruments and capital sources, as well as other, undisclosed reserves (Investopedia, 2017). Finally, the current leverage ratio requirement for Norwegian banks states that Tier 1 capital as a fraction of the bank's total exposure must not be lower than 3.0 % (Finanstilsynet, 2017).

The current requirements for each capital classification are provided in Exhibit A.1. Note that the risk-weighted assets are calculated using the bank's proprietary Internal Ratings-Based (IRB) models, that are not disclosed to the public, but must be approved by the FSA (Finanstilsynet, 2017).

Exhibit A.1: Capital requirements

Measure	Formula and requirement
CET 1	$CET\ 1\ ratio = \frac{CET\ 1\ capital}{Risk\ -\ weighted\ assets} \geq 14.0\%$
Tier 1	$Tier\ 1\ ratio = \frac{Tier\ 1\ capital}{Risk\ -\ weighted\ assets} \geq 15.5\%$
Tier 2	$Tier\ 2\ ratio = \frac{Tier\ 2\ capital}{Risk\ -\ weighted\ assets} \geq 17.5\%$
Leverage ratio	$Leverage\ ratio = \frac{Tier\ 1\ capital}{Total\ exposure} \geq 3.0\%$

## Appendix D – Altman’s Z-score

Altman’s Z-score is based on a multiple discriminant analysis, classifying firms into a priori groupings depending on their characteristics. The coefficients are set according to the prediction power with respect to bankruptcy. The ratios are chosen based on assessed importance in predicting bankruptcy. While several other ratios could have been included, multicollinearity would quickly become a problem. Hence, the chosen ratios are included to maximize the prediction power of the model, and minimize the multicollinearity problem.

The included variables are:

$$X_1 = \frac{\text{working capital}}{\text{total assets}}$$

$$X_4 = \frac{\text{market value of equity}}{\text{book value of debt}}$$

$$X_2 = \frac{\text{retained earnings}}{\text{total assets}}$$

$$X_5 = \frac{\text{sales}}{\text{total assets}}$$

$$X_3 = \frac{\text{EBIT}}{\text{total assets}}$$

$$Z = \text{Overall index}$$

Obtaining figures from the respective firm’s financial reports and market value of equity prior to the restructuring process, and using the formula yields the firm’s Z-score

$$Z = 1.2 * X_1 + 1.4 * X_2 + 3.3 * X_3 + 0.6 * X_4 + X_5.$$

Companies with Z-score above 3.0 have low likelihood of bankruptcy, whereas a Z-score below 1.8 signals high probability of entering financial distress.



Basis for Table 5.3: Outcome for secured bonds – What happened to the outstanding?

	ECHEM	HAVI	IOX	NORECO	PLCS1	PLCS2	SBX
<i>Cash redemption</i>	19 %	0 %	0 %	0 %	0 %	0 %	0 %
<i>Haircuts</i>	66 %	0 %	33 %	45 %	14 %	0 %	53 %
<i>Conversion</i>	15 %	0 %	2 %	13 %	6 %	0 %	27 %
<i>Total debt reduction</i>	100 %	0 %	35 %	47 %	20 %	0 %	80 %
<i>Maturity extension</i>		3,6	3,5	0,9	4,0	0,0	2,0

Basis for Table 5.4: Outcome for unsecured bonds – What happened to the outstanding?

	AMSC	BWO	DOF	ECHEM	EMGS1	EMGS2	FAR	HAVI	HYARD	NORECO
<i>Cash redemption</i>	0 %	0 %	10 %	4 %	18 %	6 %	0 %	15 %	0 %	0 %
<i>Haircuts</i>	0 %	0 %	50 %	92 %	5 %	3 %	72 %	85 %	0 %	73 %
<i>Conversion</i>	0 %	0 %	40 %	3 %	0 %	0 %	28 %	0 %	14 %	11 %
<i>Total debt reduction</i>	0 %	0 %	100 %	100 %	23 %	9 %	100 %	100 %	14 %	84 %
<i>Maturity extension</i>	3,0	2,2			3,0	0,0			1,5	0,0

	PDR	PLCS1	PLCS2	PRS	REM	SOFFI	SOFF	SONG1	SONG2	TOP	VSS
<i>Cash redemption</i>	0 %	0 %	0 %	14 %	8 %	0 %	0 %	0 %	0 %	0 %	13 %
<i>Haircuts</i>	0 %	45 %	0 %	68 %	50 %	0 %	0 %	0 %	5 %	0 %	59 %
<i>Conversion</i>	75 %	32 %	0 %	18 %	15 %	0 %	0 %	0 %	32 %	0 %	28 %
<i>Total debt reduction</i>	75 %	78 %	0 %	100 %	73 %	0 %	0 %	0 %	37 %	0 %	100 %
<i>Maturity extension</i>	0,0	4,2	0,0		5,3	0,0	2,3	2,3	1,3	0,6	

Basis for Table 5.5 and 5.6: Magnitude of new equity / New equity relative to the desired contribution

	ALNG	AMSC	ARCHER	AVANCE	BERGEN	BWO	DOF
<i>New equity/Market cap</i>	91 %	86 %	133 %	82 %	30 %	85 %	223 %
<i>New equity/NIBD</i>		16 %	13 %	12 %		6 %	5 %
<i>New equity/tot. liabilities</i>	10 %	15 %	10 %	10 %	6 %	4 %	4 %
<i>New equity/equity asked for</i>	96 %	94 %	338 %	100 %	100 %	100 %	88 %
<i>Private placement/new equity</i>	95 %	91 %	94 %	91 %	81 %	50 %	71 %

	EMGS1	EMGS2	FAR	HAVI	IOX	PLCS2	PRS
<i>New equity/market cap</i>	241 %	12 %	395 %	405 %	85 %	20 %	75 %
<i>New equity/NIBD</i>			6 %	4 %	13 %	15 %	10 %
<i>New equity/tot. liabilities</i>	36 %	27 %	5 %	3 %	7 %	10 %	9 %
<i>New equity/equity asked for</i>	100 %	100 %	100 %	100 %	100 %	90 %	100 %
<i>Private placement/new equity</i>	50 %	19 %	95 %	85 %	100 %	100 %	90 %

	REM	SBX	SIOFF	SOFF	SONG1	SONG2	TOP	VSS
<i>New equity/market cap</i>	181 %	85 %	109 %	60 %	164 %	192 %	32 %	83 %
<i>New equity/NIBD</i>	4 %	13 %	9 %	3 %	29 %	7 %	6 %	12 %
<i>New equity/tot. liabilities</i>	3 %	7 %	7 %	3 %	20 %	6 %	4 %	9 %
<i>New equity/equity asked for</i>	89 %	97 %	100 %	100 %	100 %	100 %	100 %	100 %
<i>Private placement/new equity</i>	100 %	100 %	52 %	88 %	91 %	83 %	100 %	76 %

Basis for Table 3.2 / Table 6.1: Operational and financial state of sample firms pre/post restructuring

	Total liabilities / Total assets		Z-Score		Secured / Unsecured debt		Current Assets / Current Liabilities	
	Before	After	Before	After	Before	After	Before	After
<i>ALNG</i>	68,9 %	67 %	0,12	-0,12	0,00	0,00	1,56	10,30
<i>AMSC</i>	92,8 %	77 %	0,20	0,34	2,12	17,36	0,35	1,85
<i>ARCHER</i>	97,3 %	79 %	-0,45	-0,60	2,10	2,76	0,92	1,83
<i>AVANCE</i>	60,4 %	56 %	0,96	0,06	17,10	30,99	2,41	5,38
<i>BERGEN</i>	84,8 %	41 %	0,21	0,55	0,07	0,00	0,89	1,69
<i>BWO</i>	72,3 %	70 %	0,27	0,35	1,49	1,44	0,86	1,21
<i>DOF</i>	80,9 %	67 %	0,66	0,52	3,17	10,86	0,78	1,20
<i>ECEM</i>	128,6 %	29 %	-1,12	-0,62	4,06	0,50	0,84	1,33
<i>EMGS1</i>	59,5 %	53 %	1,28	-4,54	0,00	0,00	0,79	1,91
<i>EMGS2</i>	70,6 %	82 %	-4,07	-4,51	0,00	0,00	1,83	1,41
<i>FAR</i>	92,7 %	-	-1,61	-	4,21	-	0,16	-
<i>HAVI</i>	92,3 %	88 %	-1,26	0,04	3,49	4,64	0,10	2,46
<i>HYARD</i>	68,8 %	61 %	1,85	2,50	0,10	0,09	1,16	1,28
<i>IOX</i>	107,2 %	82 %	-2,54	-1,55	3,31	3,41	0,32	1,28
<i>NORECO</i>	122,1 %	62 %	-0,57	1,05	1,53	0,47	0,23	1,47
<i>PDR</i>	54,7 %	41 %	-0,78	0,36	0,00	0,20	2,02	1,80
<i>PLCS1</i>	86,8 %	56 %	-2,32	-1,85	0,90	2,88	0,23	1,59
<i>PLCS2</i>	68,7 %	73 %	-1,85	-1,53	2,28	2,28	1,39	1,37
<i>PRS</i>	73,9 %	58 %	0,84	0,54	2,95	6,51	0,19	1,94
<i>REM</i>	81,5 %	-	0,79	-	3,26	-	0,18	-
<i>SBX</i>	129,0 %	68 %	-4,27	-1,91	1,15	0,71	0,26	0,68
<i>SIOFF</i>	66,0 %	65 %	0,61	0,09	2,39	2,54	1,00	1,54
<i>SOFF</i>	75,1 %	71 %	0,20	0,49	4,22	3,75	1,01	2,21
<i>SONG1</i>	58,5 %	51 %	0,63	0,45	1,11	0,61	0,90	1,63
<i>SONG2</i>	82,4 %	79 %	-0,33	0,36	2,27	3,18	0,66	0,89
<i>TOP</i>	78,7 %	78 %	0,37	0,36	1,53	1,37	0,58	0,72
<i>VSS</i>	56,9 %	59 %	1,54	0,74	4,66	9,01	1,41	1,06

Basis for Table 7.2: Descriptive statistics for the issue trade strategy

	ALNG	AMSC	ARCHER	AVANCE	BERGEN	BWO	DOF	EMGS1	EMGS2
<i>Return</i>	-19 %	25 %	18 %	7 %	20 %	74 %	3 %	1 %	-10 %
<i>Issue Price Discount</i>	-43 %	-13 %	-13 %	-6 %	-12 %	-83 %	-12 %	-38 %	-39 %
<i>Capital Need / Share Price</i>	0,57	0,22	0,27	0,23	0,24	2,15	9,48	3,48	1,10
<i>Holding Period</i>	56	52	58	29	120	24	29	26	3
<i>Rights date known?</i>	No	No	No	No	Yes	Yes	Yes	Yes	Yes

	FAR	HAVI	PLCS2	PRS	REM	SIOFF	SOFF	SONG1	SONG2	VSS
<i>Return</i>	0 %	74 %	-11 %	7 %	-19 %	0 %	-2 %	-12 %	24 %	-7 %
<i>Issue Price Discount</i>	-83 %	-91 %	-18 %	-48 %	-69 %	2 %	-9 %	-50 %	-62 %	-9 %
<i>Capital Need / Share Price</i>	1,05	1,39	0,83	1,85	1,06	0,12	0,14	1,65	0,62	0,71
<i>Holding Period</i>	46	57	60	120	65	35	83	75	71	44
<i>Rights date known?</i>	No	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes

Basis for Table 7.4: Returns the first year following equity issue

<i>Excl./incl. issue price discount</i>	ALNG	AMSC	ARCHER	AVANCE	BERGEN	BWO	DOF	EMGS1	EMGS2	FAR
<i>Accumulated return (excl.)</i>	4 %	-26 %	-31 %	7 %	-20 %	98 %	-14 %	-35 %	-46 %	-59 %
<i>Accumulated Return (incl.)</i>	14 %	11 %	-11 %	14 %	68 %	374 %	-10 %	-30 %	57 %	-60 %
<i>Acc. Return vs. industry index (incl.)</i>	15 %	3 %	-4 %	-6 %	73 %	361 %	-23 %	-53 %	42 %	-58 %
<i>Return vs. OSEBX (incl.)</i>	4 %	2 %	-24 %	-9 %	56 %	358 %	-31 %	-45 %	43 %	-76 %
<i>Discount at delivery</i>	9 %	33 %	23 %	6 %	52 %	58 %	4 %	7 %	7 %	-3 %

<i>Excl./incl. issue price discount</i>	HAVI	PLCS2	PRS	REM	SBX	SIOFF	SOFF	SONG1	SONG2	VSS
<i>Accumulated return (excl.)</i>	-54 %	-68 %	-51 %	-46 %	-82 %	2 %	-57 %	-40 %	37 %	-78 %
<i>Accumulated Return (incl.)</i>	4 %	-74 %	-47 %	-44 %	-88 %	1 %	-46 %	109 %	-36 %	-78 %
<i>Acc. Return vs. industry index (incl.)</i>	10 %	-68 %	-61 %	-41 %	-55 %	11 %	-64 %	99 %	-8 %	-73 %
<i>Return vs. OSEBX (incl.)</i>	-9 %	-88 %	-72 %	-58 %	-81 %	-2 %	-70 %	96 %	-51 %	-92 %
<i>Discount at delivery</i>	55 %	-22 %	7 %	3 %	-43 %	-1 %	21 %	6 %	35 %	0 %

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## **Appendix F – One-pager summaries of each sample firm**

In this appendix, we provide a one-page summary of each individual restructuring in our sample. The summary includes information regarding contributions from the main stakeholders, some return measures, as well as debt reductions, capital structure and ownership structure. The one-pagers are sorted in alphabetical order.

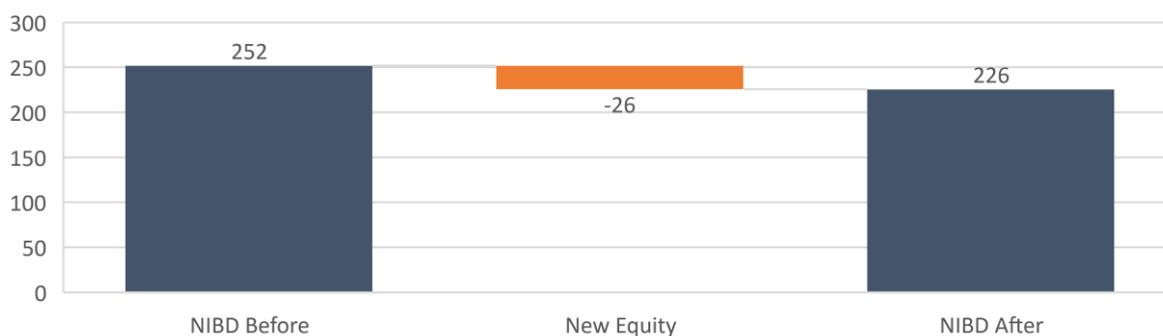
## Awilco LNG

Industry:	Shipping LNG	Return top of market to announcement: - 80 %
Solution Announced:	18.05.2017	Reaction to solution announcement: - 36 %
Implemented:	13.07.2017	Return implementation to latest date: 4 %
Full Debt Service/Maturities:	2019/2019	Issue participation return (to latest): 14 %

### Stakeholders (mUSD)

<b>Equity:</b> <ul style="list-style-type: none"> <li>• 25 in private placement, largest owner 50 % of that</li> <li>• Repair issue of 1.4 (asked for 2.33)</li> <li>• Issue price discount 43 % at announcement, and 9 % at delivery</li> </ul>	<b>Bondholders:</b> <ul style="list-style-type: none"> <li>• No bonds in the company</li> </ul>	<b>Banks:</b> <ul style="list-style-type: none"> <li>• No bank debt in the company</li> </ul>
<b>Other Comments:</b> <ul style="list-style-type: none"> <li>• Creditors are financial leases, classified below as other liabilities</li> <li>• Agreed on 30 deferred charter hire with Teekay as part of the restructuring, payable at maturity in late 2019</li> </ul>		

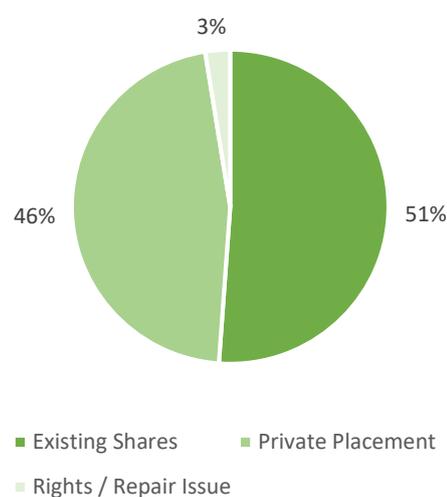
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



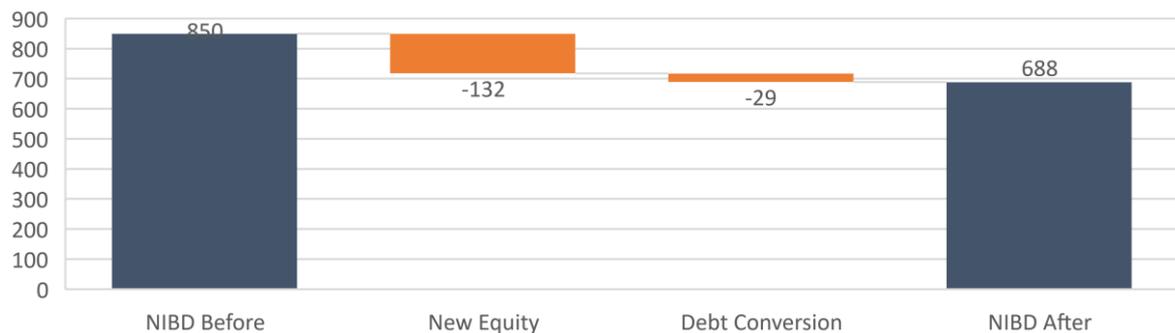
# American Shipping Company

Industry:	Shipping	Return top of market to announcement: - 75 %
Solution Announced:	02.12.2013	Reaction to solution announcement: 20 %
Implemented:	03.01.2014	Return implementation to 1 year after: - 26 %
Full Debt Service/Maturities:	2021/2021	Issue participation return (1 year): 11 %

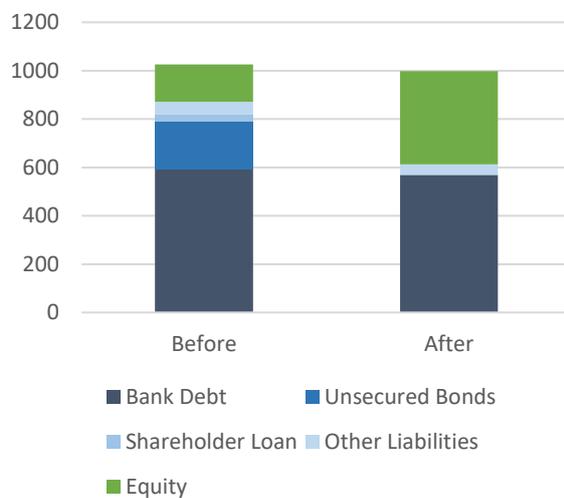
## Stakeholders (mUSD)

<b>Equity:</b> <ul style="list-style-type: none"> <li>• 120 issued in private placement</li> <li>• 13 in repair issue (asked for 20)</li> <li>• Issue price discount 13 % at announcement, and 33 % at delivery</li> </ul>	<b>Bondholders:</b> <ul style="list-style-type: none"> <li>• ~200 outstanding in an unsecured bond</li> <li>• 3 years extension</li> <li>• Option to extend maturity further from 2018 to 2021 subject to certain requirements</li> </ul>	<b>Banks:</b> <ul style="list-style-type: none"> <li>• ~600 outstanding</li> <li>• Bank debt untouched in the restructuring</li> </ul>
<b>Other Comments:</b> <ul style="list-style-type: none"> <li>• Shareholder loan of 30 converted to equity</li> <li>• Agreement with banks to relax dividend restrictions</li> </ul>		

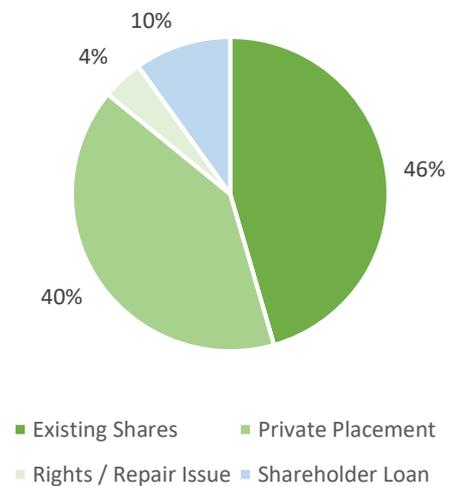
## Changes in Net Interest-Bearing Debt (mUSD)



## Capital Structure (mUSD)



## Ownership Structure after



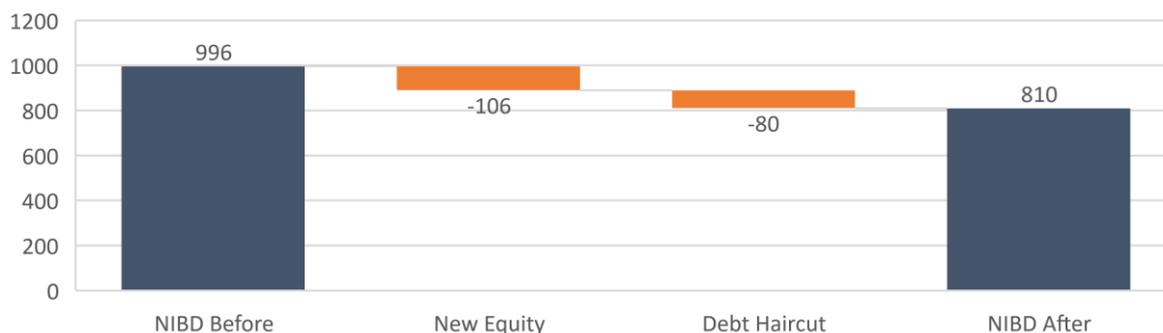
## Archer

Industry:	Oil services	Return top of market to announcement: - 97 %
Solution Announced:	28.02.2017	Reaction to solution announcement: 12 %
Implemented:	27.04.2017	Return implementation to 1 year after: - 31 %
Full Debt Service/Maturities:	2020/2020	Issue participation return (1 year): - 11 %

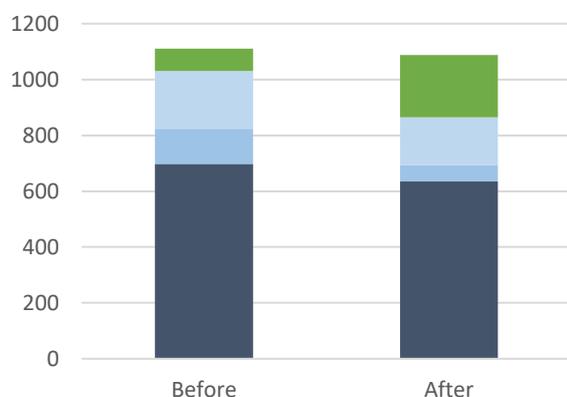
### Stakeholders (mUSD)

<b>Equity:</b> <ul style="list-style-type: none"> <li>Issued amount: 106</li> <li>Private placement (100), subsequent offering (6)</li> <li>Issue price discount 13 % at announcement, and 23 % at delivery</li> </ul>	<b>Seadrill Shareholder Loan:</b> <ul style="list-style-type: none"> <li>125 outstanding, additionally 21 in accrued interest and fees</li> <li>Converted into a new bond with 45 outstanding, rest is haircut</li> </ul>	<b>Banks:</b> <ul style="list-style-type: none"> <li>~700 bank debt: 3-year extension</li> <li>Repayment of 28, which amounts to 10 % of Seadrill guarantee, releasing Seadrill from all guarantees</li> </ul>
<b>Other Comments:</b> <ul style="list-style-type: none"> <li>Under-subscription of 40,4 % in repair issue</li> <li>Covenant reliefs and dividend restrictions</li> <li>Archer and Seadrill fully separated through restructuring process</li> </ul>		

### Changes in Net Interest-Bearing Debt (mUSD)

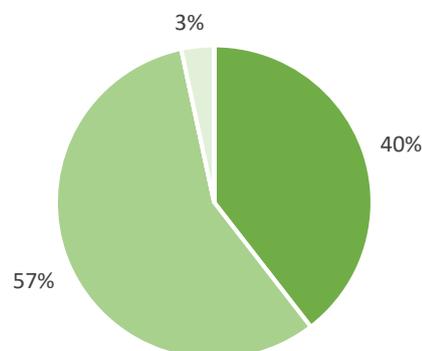


### Capital Structure (mUSD)



■ Bank Debt      ■ Subordinated Debt  
■ Other Liabilities      ■ Equity

### Ownership Structure after



■ Existing Shares      ■ Private Placement  
■ Rights / Repair Issue

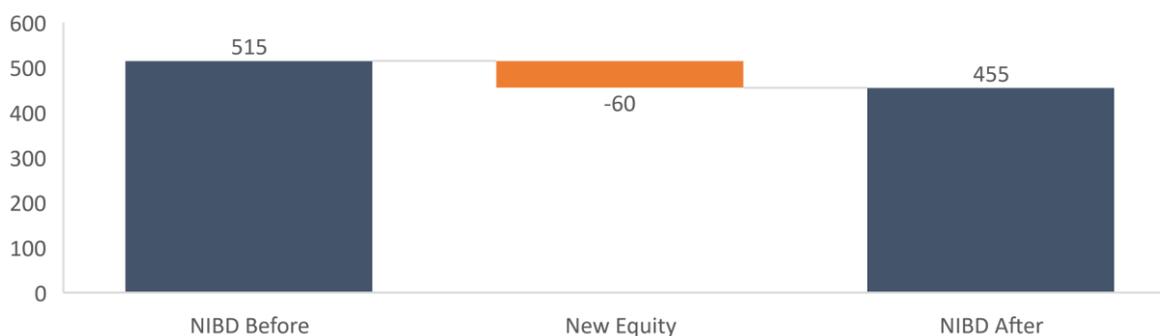
## Avance Gas

Industry:	Shipping	Return top of market to announcement: - 89 %
Solution Announced:	19.10.2016	Reaction to solution announcement: 14 %
Implemented:	18.11.2016	Return implementation to 1 year after: 7 %
Full Debt Service/Maturities:	2016/2021	Issue participation return (1 year): 14 %

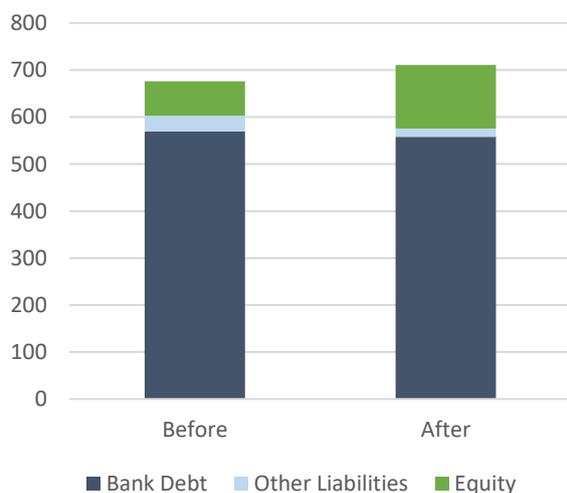
### Stakeholders (mUSD)

<b>Equity:</b> <ul style="list-style-type: none"> <li>Issued amount: 497,5</li> <li>Combination of private placement (455) and repair issue (42,5)</li> <li>Issue price discount 0 % at announcement, and 6 % at delivery</li> </ul>	<b>Bondholders:</b> <ul style="list-style-type: none"> <li>No bonds</li> </ul>	<b>Banks:</b> <ul style="list-style-type: none"> <li>~600 outstanding</li> <li>No extension</li> <li>55 in reduced amortization (10 %)</li> </ul>
<b>Other Comments:</b> <ul style="list-style-type: none"> <li>Private placement for shareholders with more than 63,000 shares</li> <li>Significant over-subscription in repair issue</li> <li>Note no discount at announcement of restructuring plan, and 6 % at issuance</li> </ul>		

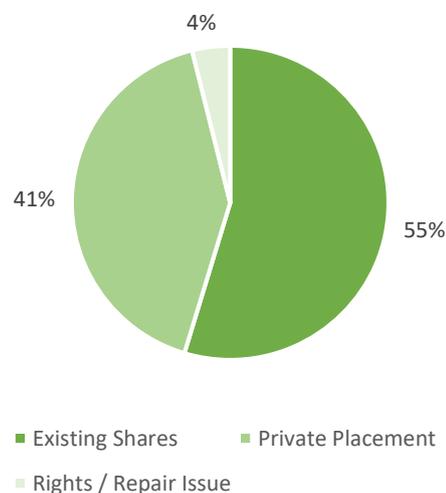
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



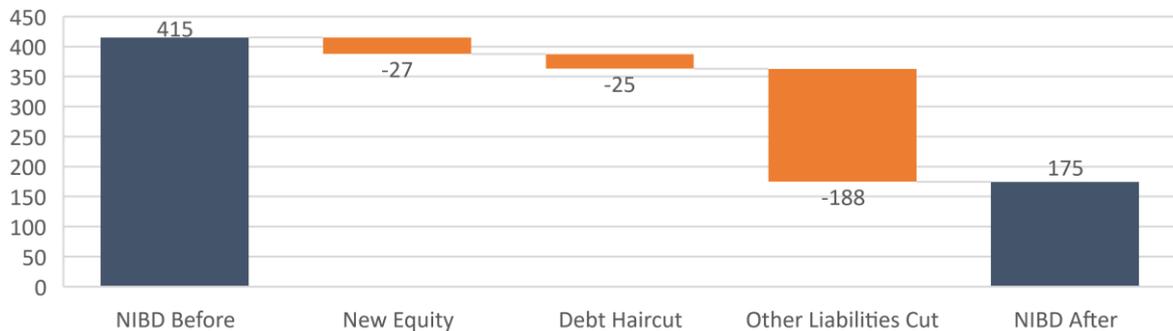
## Bergen Group

Industry:	Oil Service	Return top of market to announcement: - 84 %
Solution Announced:	27.10.2016	Reaction to solution announcement: - 9 %
Implemented:	17.03.2016	Return implementation to latest: - 20 %
Full Debt Service/Maturities:	2018/2018	Issue participation return (to latest): 68 %

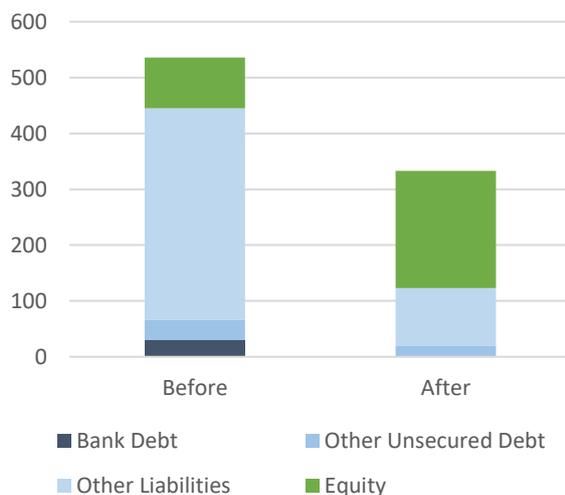
### Stakeholders (mNOK)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>• 22 in private placement, and 5.3 in repair rights issue</li> <li>• Issue price discount 20 % at announcement, and 52 % at delivery</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>• No bonds in the company</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>• ~30 outstanding</li> <li>• 50 % cash repayment, and the remaining 50 % haircut</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>• Shareholder loan of 20 with 50 % haircut and 50 % cash repayment</li> <li>• Agreement to cut 188 in other short-term liabilities</li> </ul>		

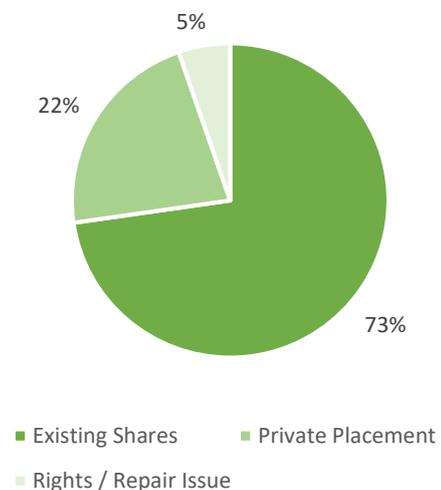
### Changes in Net Interest-Bearing Debt (mNOK)



### Capital Structure (mNOK)



### Ownership Structure after



## BW Offshore

Industry:	Oil Supply	Return top of market to announcement: - 91 %
Solution Announced:	22.05.2016	Reaction to solution announcement: - 32 %
Implemented:	22.07.2016	Return implementation to 1 year after: 103 %
Full Debt Service/Maturities:	2018/2020	Issue participation return (1 year): 374 %

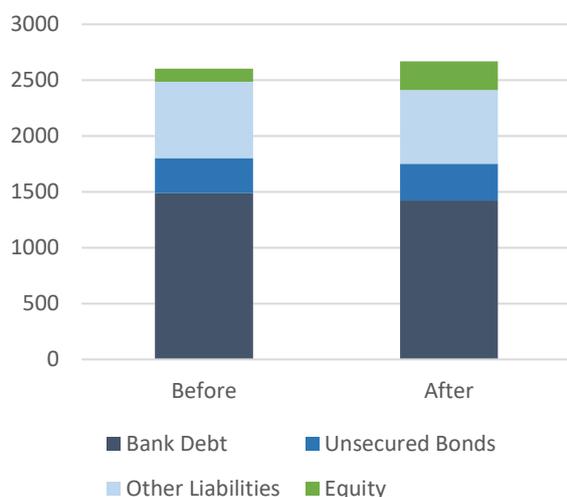
### Stakeholders (mUSD)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>• 100 new equity issued</li> <li>• All tradable subscription rights at pro rata basis, main shareholder subscribing</li> <li>• Issue price discount 93 % at announcement, and 58 % at delivery</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>• 325 outstanding unsecured bond debt</li> <li>• Average 2,2-year maturity extension until 2020-2022, with 20-30 % partial repayment at original maturity</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>• ~1500 outstanding bank debt</li> <li>• Two-year maturity extension on 850 corp. facility</li> <li>• Reduced amortization of 278 up to Q3 2018</li> <li>• Covenant changes</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>• Restrictions on dividends and bond buybacks</li> <li>• Total liquidity effect of 500 throughout 2020 until 2020</li> </ul>		

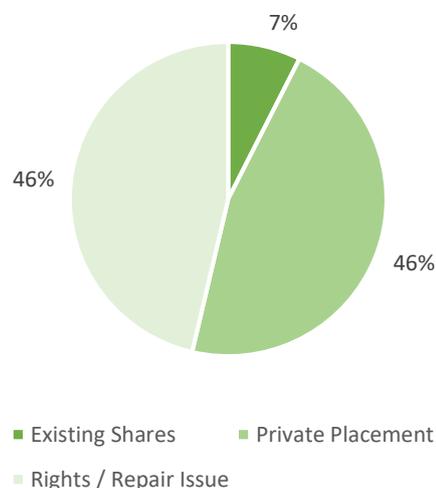
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



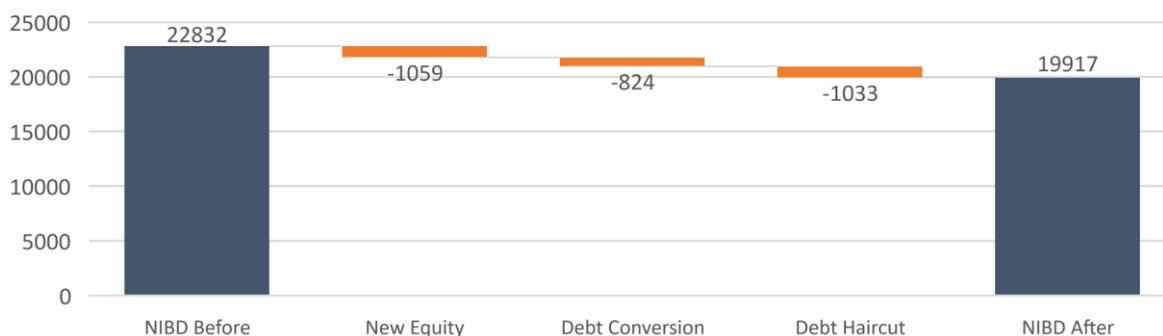
## DOF ASA

Industry:	Oil Supply	Return top of market to announcement: - 94 %
Solution Announced:	06.06.2016	Reaction to solution announcement: - 63 %
Implemented:	12.08.2016	Return implementation to 1 year after: - 25 %
Full Debt Service/Maturities:	2019/2021	Issue participation return (1 year): - 10 %

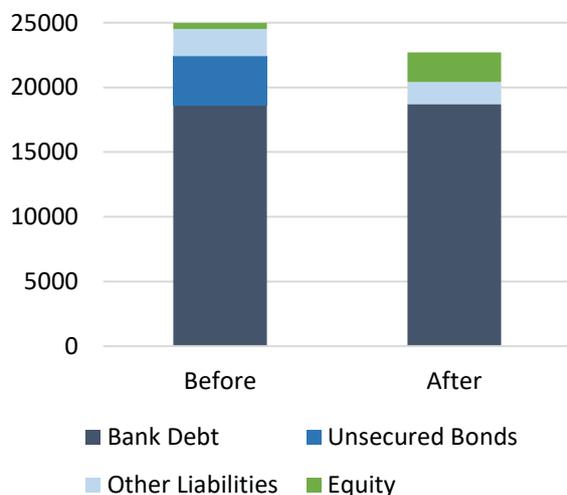
### Stakeholders (mNOK)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>1059 rights issue, asked for 1200, 750 from Møgster</li> <li>Issue price discount 77 % at announcement, 4 % at delivery</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>2065 in unsecured bonds before restructuring</li> <li>All bonds 50 % haircut, 40 % conversion and 10 % cash buyback using issue proceeds above 850 (209)</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>18705 outstanding bank debt</li> <li>1300 reduced amortization first three years, 75 % of original amortization plan</li> <li>Amortization reduction on all non-Brazilian vessels</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>Total liquidity effect of 4500 the first 5 years</li> <li>DOF Rederi restructured, not Norskan and DOF Subsea which are also part of DOF ASA</li> <li>New restructuring including equity issue (500) announced in November 2017. Related to maturities in DOF Subsea</li> </ul>		

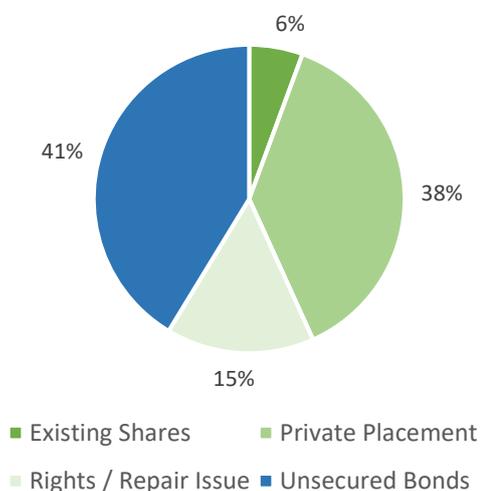
### Changes in Net Interest-Bearing Debt (mNOK)



### Capital Structure (mNOK)



### Ownership Structure after



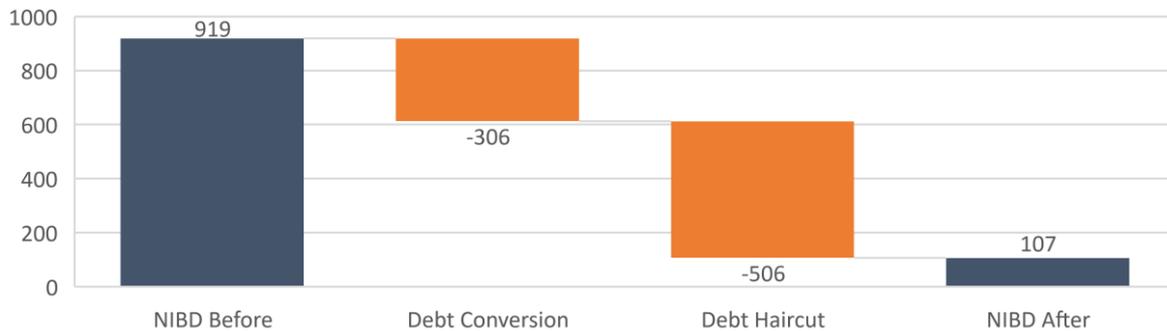
## Eitzen Chemical (Team Tankers)

Industry:	Shipping	Return top of market to announcement: - 99 %
Solution Announced:	22.12.2014	Reaction to solution announcement: 134 %
Implemented:	29.01.2015	Return implementation to 1 year after: - 1 %
Full Debt Service/Maturities:	#N/A	Issue participation return (1 year): #N/A

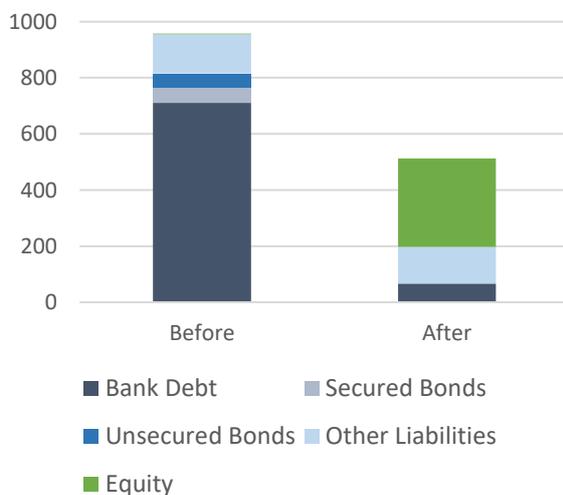
### Stakeholders (mUSD)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>• No new equity issued</li> <li>• Compulsory acquisition of shares from Team Tankers (NewCo)</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>• Secured bond: 60 outstanding, 19 % cash, 15 % conversion, 66 % haircut</li> <li>• Unsecured bond: 55 outstanding, 4 % cash, 3.5 % conversion, 92.5 % haircut</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>• ~700 outstanding</li> <li>• 5 % cash, 33 % conversion, 62 % haircut</li> <li>• 100 raised in new loan for NewCo</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>• Banks took over the company, and it was relisted as Team Tankers after two months</li> <li>• Only case in our sample with this extent of losses for the banks</li> </ul>		

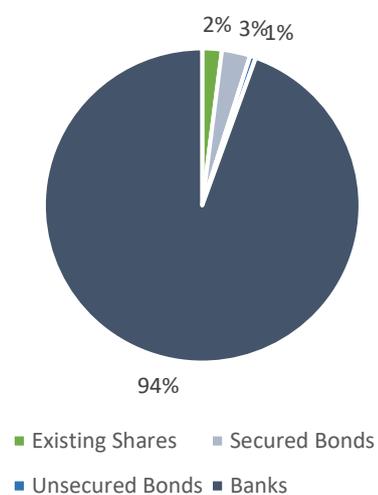
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



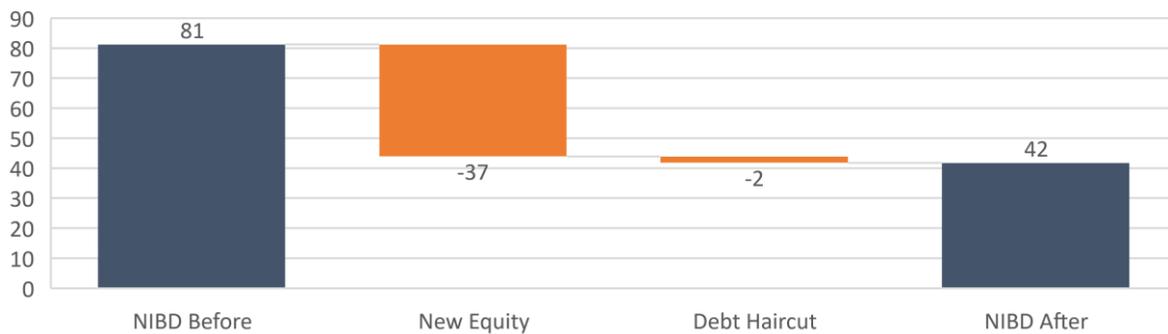
## Electromagnetic Geoservices (1)

Industry:	Seismic	Return top of market to announcement: - 97 %
Solution Announced:	04.11.2015	Reaction to solution announcement: - 15 %
Implemented:	22.12.2015	Return implementation to 1 year after: - 39 %
Full Debt Service/Maturities:	2019/2019	Issue participation return (1 year): - 30 %

### Stakeholders (mUSD)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>• 37 in new equity (278 NOK) in a rights issue, with tradable rights, fully subscr.</li> <li>• Issue price discount 63 % at announcement, 7 % at delivery</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>• Unsecured bond with 47 outstanding (350 mNOK)</li> <li>• Three-year extension</li> <li>• 18 % cash, 5 % haircut after partial buyback at 80 % of par. Rest remains bond</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>• No bank debt in EMGS at the time</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>• Siem and Perestroika (Fredrik Mohn) contributing heavily with 50 % in the issue after buying rights</li> <li>• New round of restructuring in EMGS in 2017</li> </ul>		

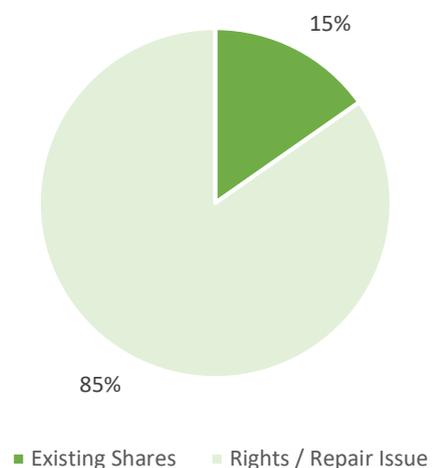
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



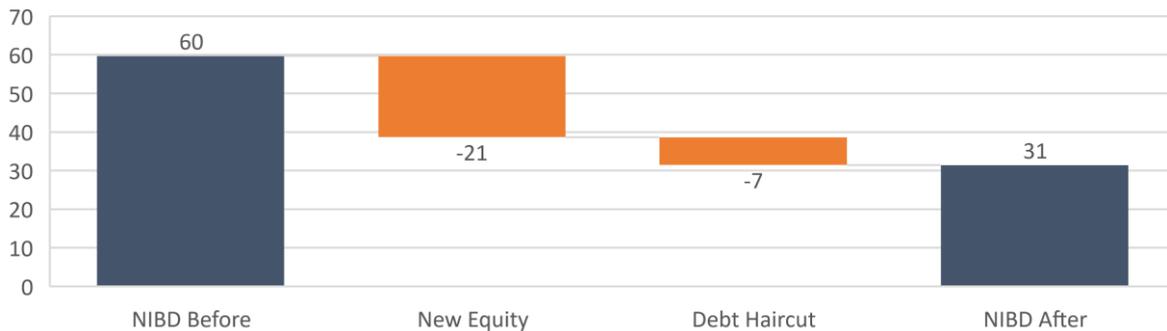
## Electromagnetic Geoservices (2)

Industry:	Seismic	Return top of market to announcement: - 99 %
Solution Announced:	23.03.2017	Reaction to solution announcement: - 6 %
Implemented:	22.06.2017	Return implementation to last date: 46 %
Full Debt Service/Maturities:	2019/2019	Issue participation return (to last date): 57 %

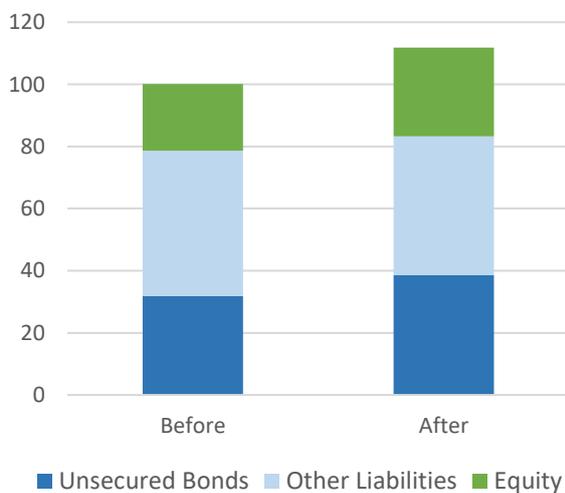
### Stakeholders (mUSD)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>• 21 in new equity (178 NOK) in a rights issue, with tradable rights, fully subscr.</li> <li>• Issue price discount 56 % at announcement, 7 % at delivery</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>• Unsecured bond with 32 outstanding (270 mNOK)</li> <li>• Three-year extension</li> <li>• 6 % cash, 3 % haircut after partial buyback at 70 % of par. Rest remains bond</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>• No bank debt in EMGS at the time</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>• Siem and Perestroika (Fredrik Mohn) contributing again, this time 59 % of the issue</li> <li>• Very similar to the first restructuring</li> </ul>		

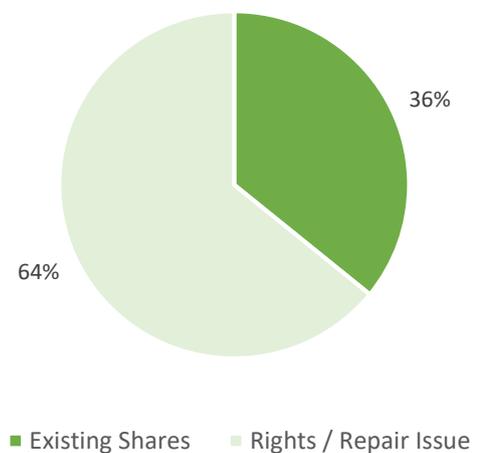
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



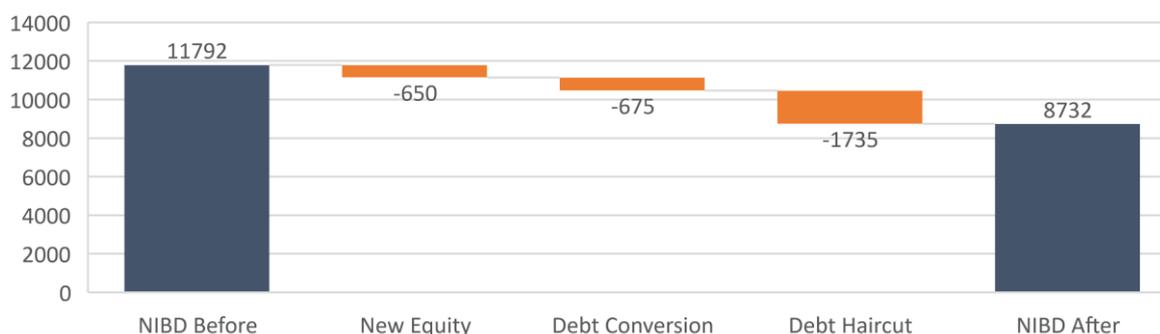
## Farstad Shipping

Industry:	Oil Supply	Return top of market to announcement: - 98 %
Solution Announced:	06.02.2017	Reaction to solution announcement: - 47 %
Implemented:	02.03.2017	Return implementation to 1 year after: - 59 %
Full Debt Service/Maturities:	2021 (SOFF)	Issue participation return (latest): - 60 %

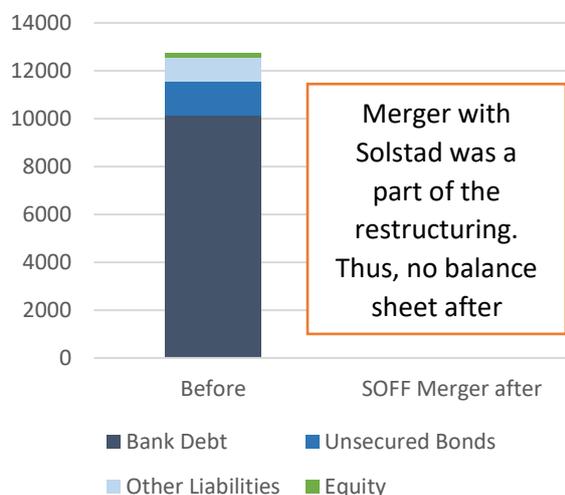
### Stakeholders (mNOK)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>• 621 from private placements, Aker and Hemen (421), Bondholders (150), Farstad &amp; Tyrholm (50)</li> <li>• 40 in repair rights issue</li> <li>• Issue price discount 92 % at announcement, 0 at delivery</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>• 1400 outstanding in unsecured bonds</li> <li>• 28 % conversion, 72 % haircut</li> <li>• Invited to participate in private placement</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>• ~10 000 outstanding</li> <li>• 940 of outstanding 28 % converted and 72 % haircut</li> <li>• NPV 271 of deferred future interest converted at 100 %</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>• Shiplease conversion: 70 outstanding at same terms as bond, 90 NPV future lease at same terms as future bank interest</li> <li>• Farstad merged with Solstad as a part of the restructuring</li> </ul>		

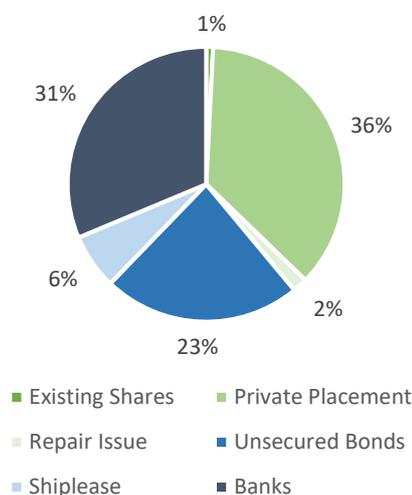
### Changes in Net Interest-Bearing Debt (mNOK)



### Capital Structure (mNOK)



### Ownership Structure after



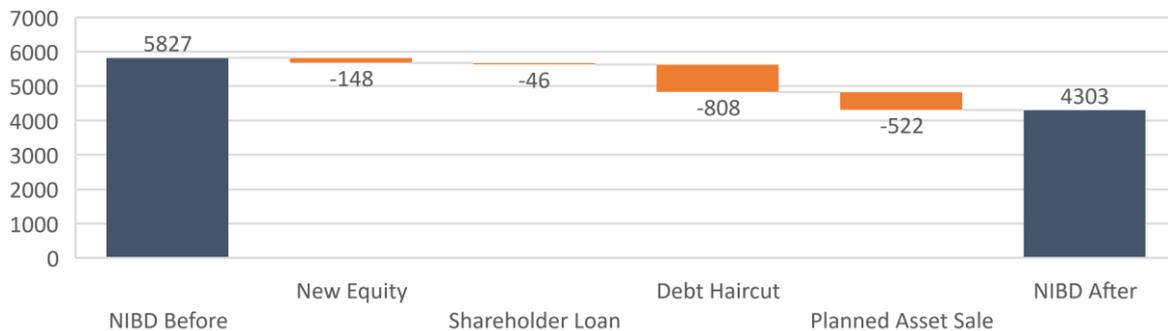
# Havila Shipping

Industry:	Oil Supply	Return top of market to announcement:	- 98 %
Solution Announced:	09.11.2016	Reaction to solution announcement:	- 28 %
Implemented:	02.03.2017	Return implementation to latest:	- 54 %
Full Debt Service/Maturities:	2020/2020	Issue participation return (latest):	4 %

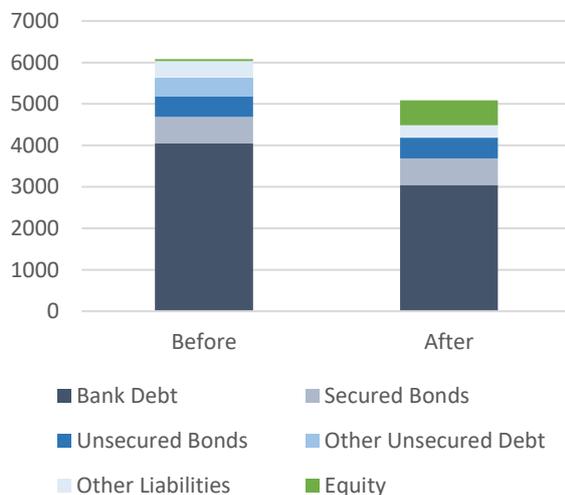
## Stakeholders (mNOK)

<b>Equity:</b> <ul style="list-style-type: none"> <li>• 118 from largest shareholder in private placement, and 30 in repair issue</li> <li>• Issue price discount 92 % at announcement, and 55 % at delivery</li> </ul>	<b>Bondholders:</b> <ul style="list-style-type: none"> <li>• 800 unsecured bond: 15 % cash and 85 % haircut</li> <li>• 635 secured bonds: ~3,5 year extension, and accrued interest: ~50 % converted and ~50 % haircut (undisclosed amount)</li> </ul>	<b>Banks:</b> <ul style="list-style-type: none"> <li>• ~4000 outstanding</li> <li>• 3-year extension</li> <li>• 1000 reduced amortization</li> <li>• Accrued interest ~50 % converted and ~50 % haircut (undisclosed amount)</li> </ul>
<b>Other Comments:</b> <ul style="list-style-type: none"> <li>• 46.2 in unsecured and interest-free shareholder loan from the largest shareholder. Treated as reduction in NIBD in chart below.</li> <li>• 135 in accrued interest, for secured bondholders and banks, converted at a price twice as high as the issue price</li> </ul>		

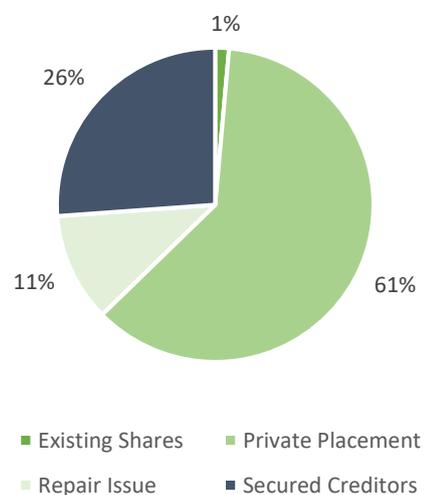
## Changes in Net Interest-Bearing Debt (mNOK)



## Capital Structure (mNOK)



## Ownership Structure after



## Havyard Group

Industry:	Oil Service	Return top of market to announcement: - 79 %
Solution Announced:	16.06.2016	Reaction to solution announcement: 8 %
Implemented:	05.09.2016	Return implementation to 1 year after: 64 %
Full Debt Service/Maturities:	2018/2018	Issue participation return (1 year): #N/A

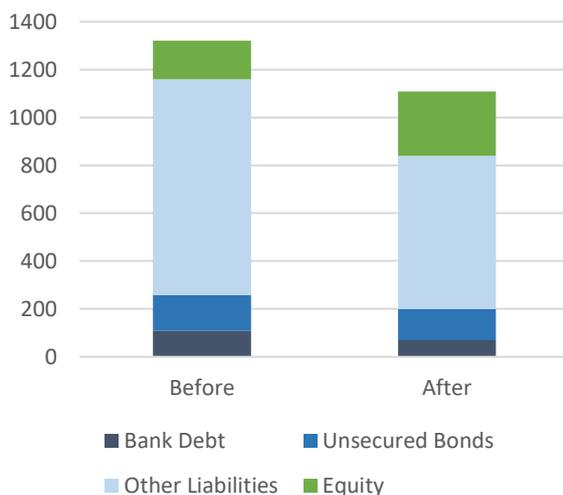
### Stakeholders (mNOK)

<b>Equity:</b> <ul style="list-style-type: none"> <li>• No equity issue</li> <li>• Existing share keep 90 % control</li> </ul>	<b>Bondholders:</b> <ul style="list-style-type: none"> <li>• 150 outstanding in unsecured bond</li> <li>• 14 % conversion</li> <li>• 1,5 year extension to December 2018 on remaining bond</li> </ul>	<b>Banks:</b> <ul style="list-style-type: none"> <li>• 74 outstanding</li> <li>• Not involved in restructuring</li> </ul>
<b>Other Comments:</b> <ul style="list-style-type: none"> <li>• Dividend restrictions imposed</li> <li>• Maximum borrowing limit reduced to 150</li> </ul>		

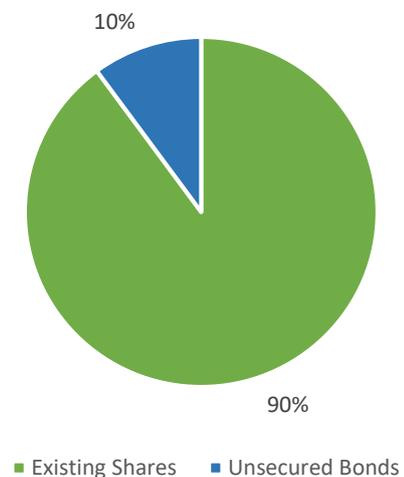
### Changes in Net Interest-Bearing Debt (mNOK)



### Capital Structure (mNOK)



### Ownership Structure after



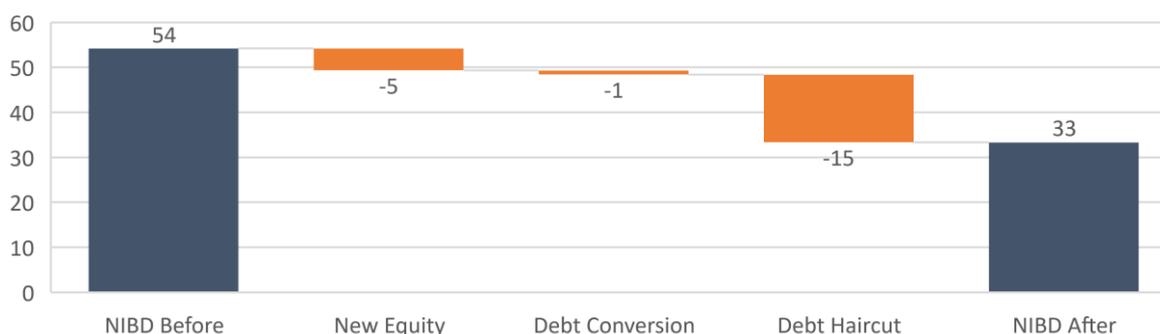
## InterOil Exploration and Production

Industry:	Oil E&P	Return top of market to announcement: - 99 %
Solution Announced:	22.12.2014	Reaction to solution announcement: 0 %
Implemented:	25.03.2015	Return implementation to 1 year after: - 34 %
Full Debt Service/Maturities:	2020/2020	Issue participation return (1 year): #N/A

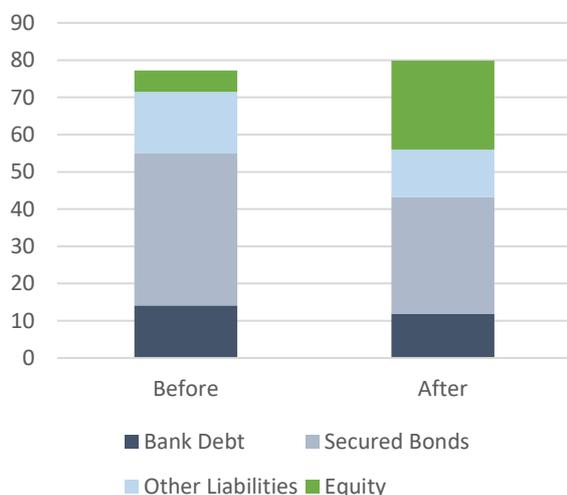
### Stakeholders (mUSD)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>• 5 in private offering from new industrial owner Andes Energia, giving them 51 % control post restructuring</li> <li>• 35 % discount in offering</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>• ~40 outstanding in a secured bond</li> <li>• 2 % conversion and 28 % haircut</li> <li>• Remaining bond placed in a new bond with 4 years extension</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>• Bank debt not involved in the restructuring</li> <li>• Andes Energia as new owner contributes to easier bank financing later</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>• Secured debt to Proseis AG of ~6: 66 % haircut, and the remaining placed in a new bond with the remaining bond</li> <li>• Andes Energia is an E&amp;P company focused onshore in South America</li> </ul>		

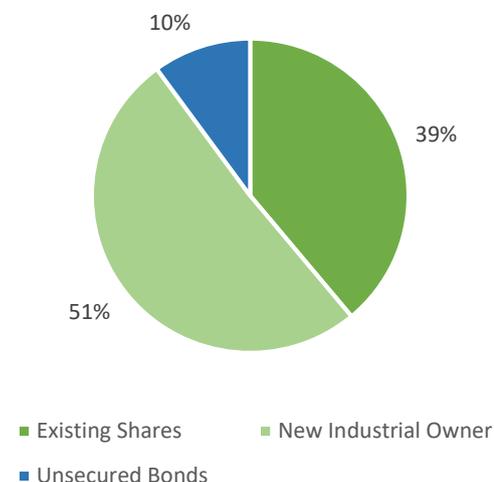
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



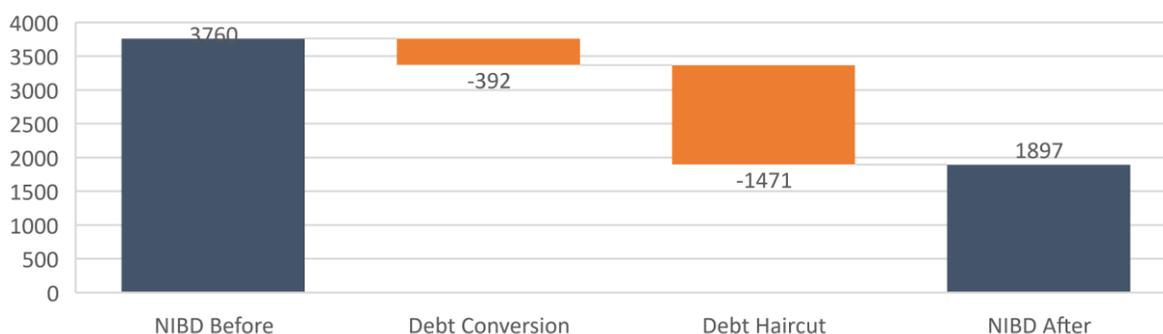
# Norwegian Energy Company

Industry:	Oil E&P	Return top of market to announcement: -100%
Solution Announced:	04.02.2015	Reaction to solution announcement: 10 %
Implemented:	25.03.2015	Return implementation to 1 year after: - 23 %
Full Debt Service/Maturities:	2018/2018	Issue participation return (1 year): #N/A

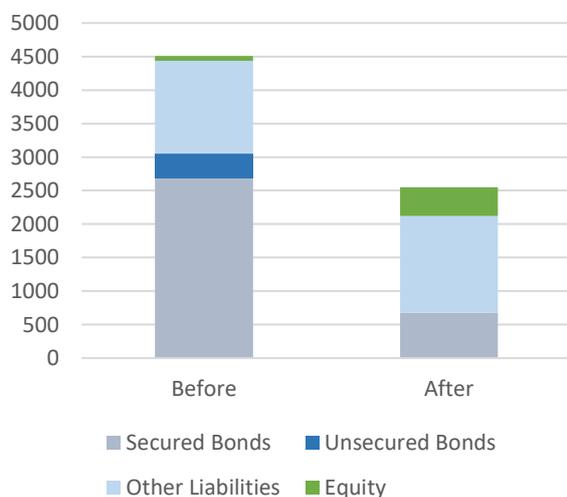
## Stakeholders (mNOK)

<b>Equity:</b> <ul style="list-style-type: none"> <li>No equity issue</li> <li>Existing owners diluted to holding 8 % of the company, after creditors take the majority</li> </ul>	<b>Unsecured Bondholders:</b> <ul style="list-style-type: none"> <li>~370 outstanding unsecured convertible bond</li> <li>73 % haircut, 11 % conversion, 16 % remains in new bond</li> </ul>	<b>Secured Bondholders:</b> <ul style="list-style-type: none"> <li>~2700 outstanding secured bonds, with different security and treatment</li> <li>~1-year extension on average</li> <li>Average: 45 % haircut, 13 % conversion, and the rest remains as bond debt</li> </ul>
<b>Other Comments:</b> <ul style="list-style-type: none"> <li>No bank debt in the company</li> <li>Top secured bond (618) remains 100 % with 1.25 years extension</li> <li>Remaining of the secured bonds with lower priority and the unsecured convertible converted to new secured bond</li> </ul>		

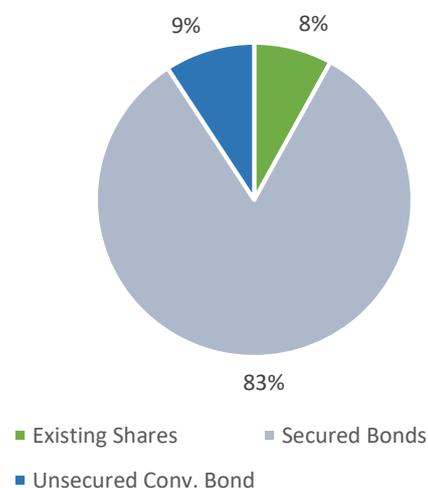
## Changes in Net Interest-Bearing Debt (mNOK)



## Capital Structure (mNOK)



## Ownership Structure after



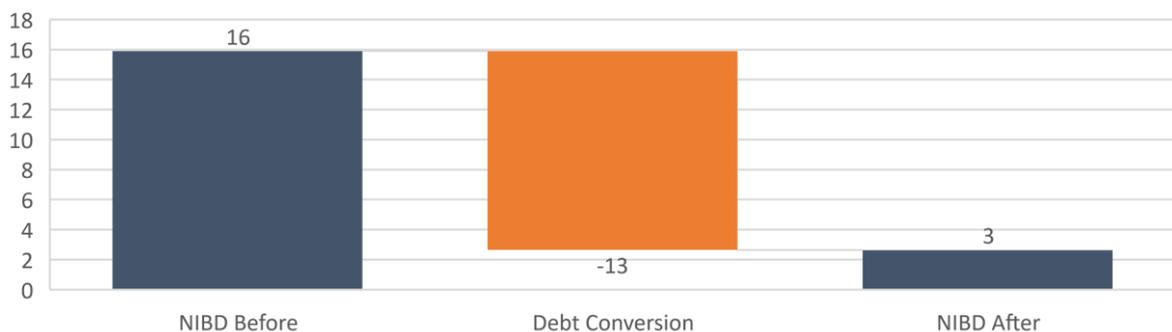
## Petrolia

Industry:	Multiple (oil)	Return top of market to announcement: - 70 %
Solution Announced:	22.11.2016	Reaction to solution announcement: 6 %
Implemented:	24.01.2017	Return implementation to 1 year after: - 26 %
Full Debt Service/Maturities:	2017/2019	Issue participation return (1 year): #N/A

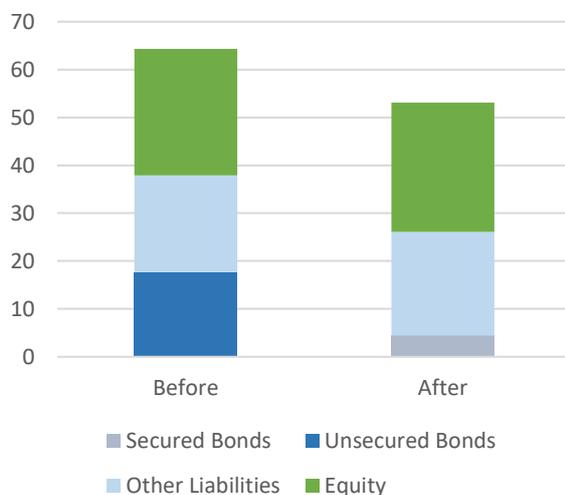
### Stakeholders (mUSD)

<b>Equity:</b> <ul style="list-style-type: none"> <li>• Equity issue not part of restructuring solution</li> <li>• Existing shares diluted to holding 51 % post restructuring</li> </ul>	<b>Bondholders:</b> <ul style="list-style-type: none"> <li>• 18 unsecured bond: 75 % converted</li> <li>• Constituted 49 % of PDR shares post-restructuring</li> </ul>	<b>Banks:</b> <ul style="list-style-type: none"> <li>• No bank debt</li> </ul>
<b>Other Comments:</b> <ul style="list-style-type: none"> <li>• Converted shares have 1-year lock-in period</li> <li>• Net interest-bearing debt almost 0 post-restructuring</li> </ul>		

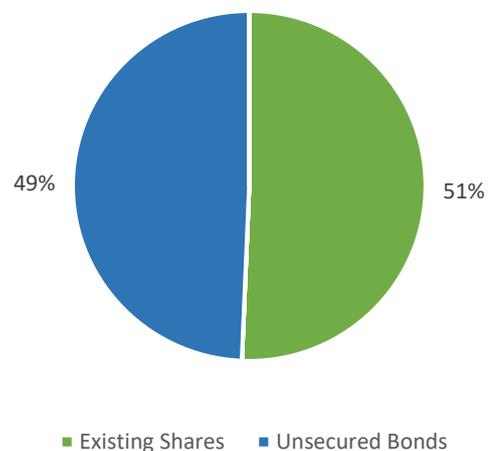
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



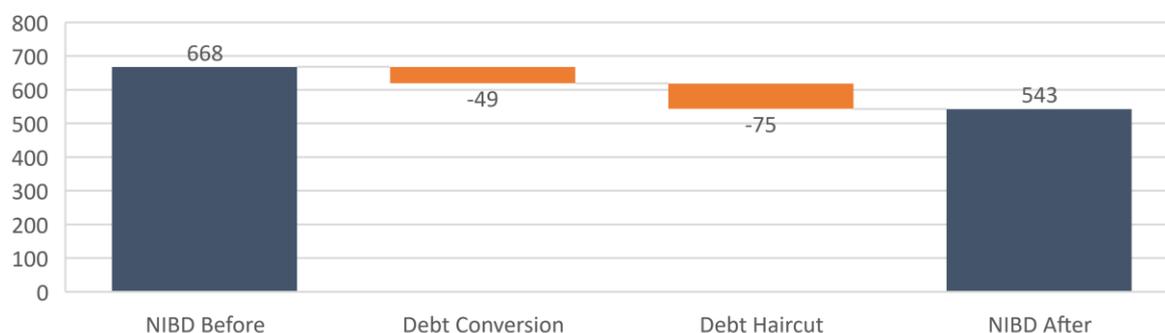
## Polarcus (1)

Industry:	Seismic	Return top of market to announcement: - 79 %
Solution Announced:	05.01.2016	Reaction to solution announcement: - 32 %
Implemented:	05.10.2016	Return implementation to 1 year after: - 62 %
Full Debt Service/Maturities:	2018/2022	Issue participation return (1 year): #N/A

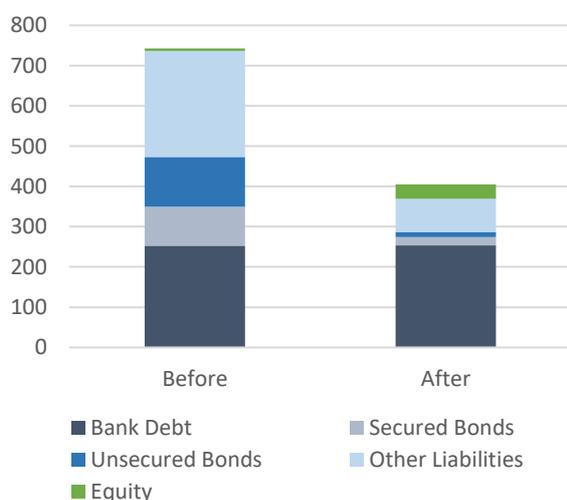
### Stakeholders (mUSD)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>Equity issue not part of the restructuring solution</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>134 unsecured bonds: 45 % haircut and 32 % conversion</li> <li>102 convertible secured bond: ~4-year extension, 14 % reduced amortization, 14 % haircut, 6 % conversion</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>~250 outstanding</li> <li>5-year extension</li> <li>24% reduced amortization</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>Unsecured bondholders are given a choice between high call and no equity, and low call and some equity</li> <li>Bond haircuts based on share price at delivery (0.6 NOK) due to artificially low conversion price</li> </ul>		

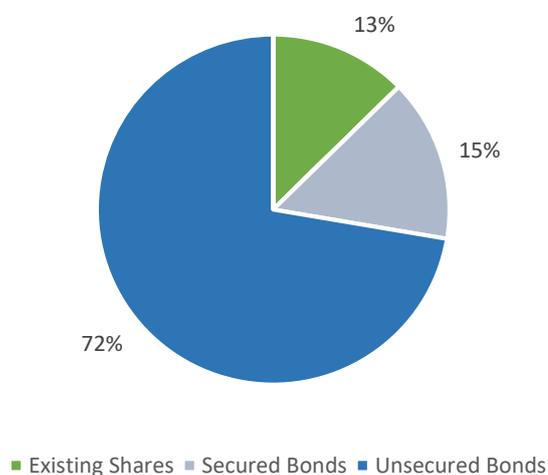
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



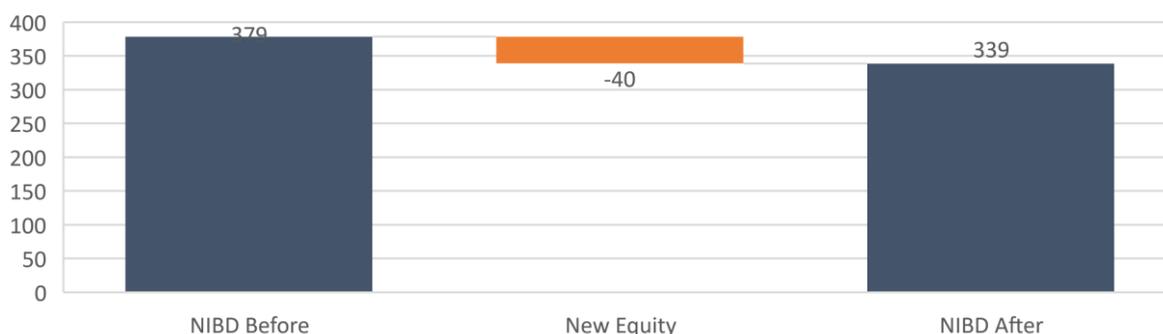
## Polarcus (2)

Industry:	Seismic	Return top of market to announcement: - 95 %
Solution Announced:	09.02.2017	Reaction to solution announcement: - 5 %
Implemented:	10.04.2017	Return implementation to 1 year after: - 68 %
Full Debt Service/Maturities:	2018/2022	Issue participation return (1 year): - 74 %

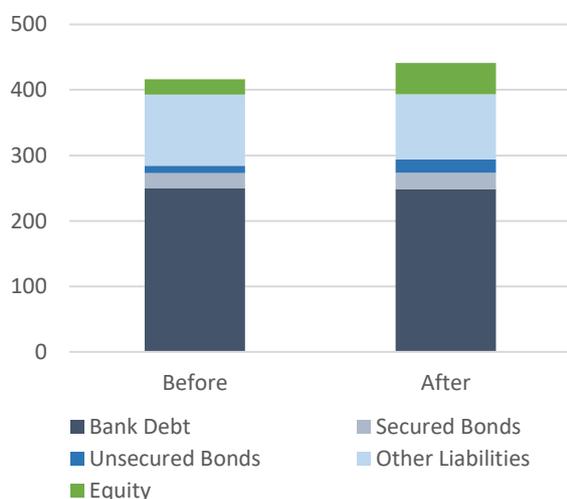
### Stakeholders (mUSD)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>Equity issue: ~40</li> <li>Private placement (40) and repair issue (~0,2)</li> <li>Issue price discount 17,5 % at announcement, and overprice ~22 % at delivery</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>11 unsecured bond: Not affected in this round</li> <li>~24 secured bond: Not affected in this round</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>~250 outstanding</li> <li>Not further extended – 5 year extension in round 1 from the year before</li> <li>12 % reduced amortization</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li style="width: 50%;">Repair issue far from fully subscribed</li> <li style="width: 50%;">Fragmented ownership structure</li> <li style="width: 50%;">Not surprising given discount</li> <li style="width: 50%;">Largest owner (Zickerman Holding) contributed 3% in private placement</li> </ul>		

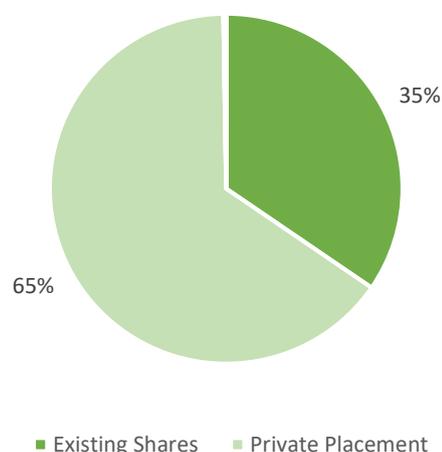
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



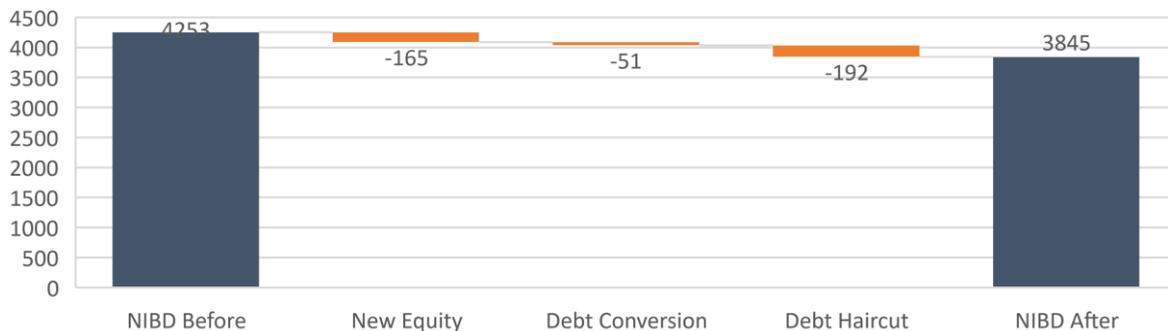
## Prosafe

Industry:	Oil service	Return top of market to announcement: - 99 %
Solution Announced:	06.07.2016	Reaction to solution announcement: - 24 %
Implemented:	09.11.2016	Return implementation to 1 year after: - 64 %
Full Debt Service/Maturities:	2020/2021	Issue participation return (1 year): - 47 %

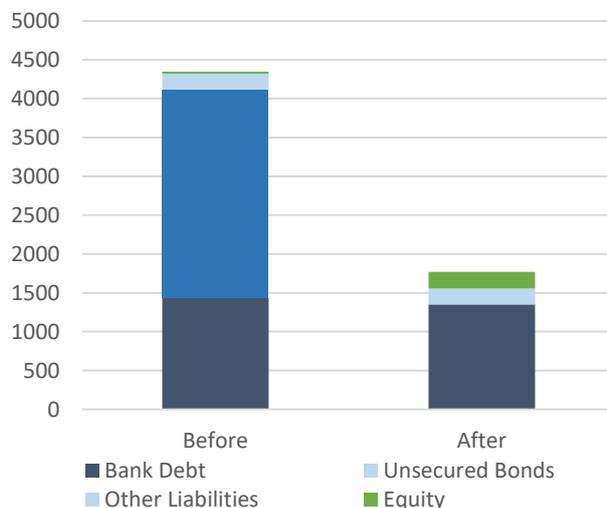
### Stakeholders (mUSD)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>• Issued amount: 165</li> <li>• Private placement (150), subsequent offering (15)</li> <li>• HitecVision subscribed 58%</li> <li>• Issue price discount 72% at announcement, and 7% at delivery</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>• 280 unsecured bonds outstanding</li> <li>• All bonds: 76% haircut, 20 % conversion and 14 % cash redemption</li> <li>• Thus: 100 % bond reduction</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>• ~500 outstanding</li> <li>• 33% reduced amortization</li> <li>• Otherwise unaffected by restructuring plan</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>• Fully subscribed equity issue</li> <li>• One of few cases with private equity owners present in the restructuring process (HitecVision)</li> </ul>		

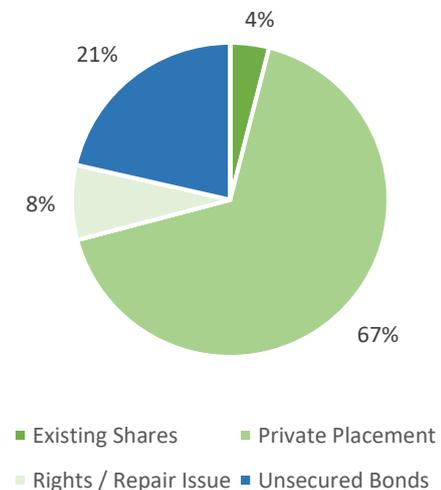
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



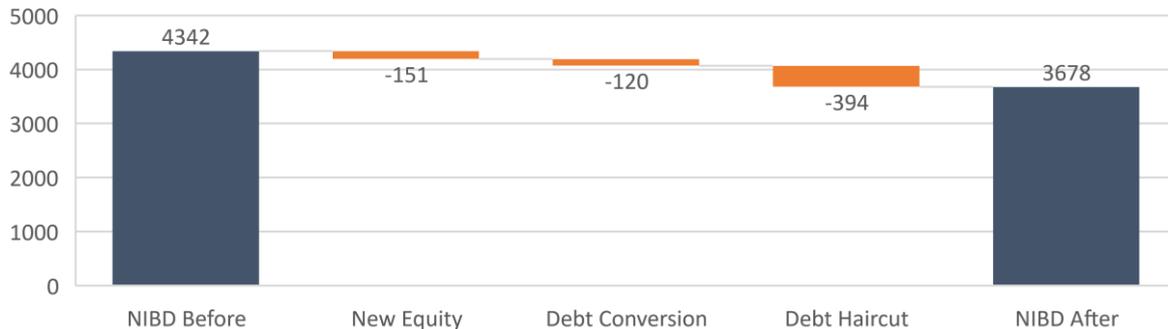
## REM Offshore

Industry:	Oil Supply	Return top of market to announcement: - 94 %
Solution Announced:	22.08.2016	Reaction to solution announcement: - 64 %
Implemented:	14.12.2016	Return implementation to 1 year after: - 62 %
Full Debt Service/Maturities:	2020/2020	Issue participation return (to latest): - 44 %

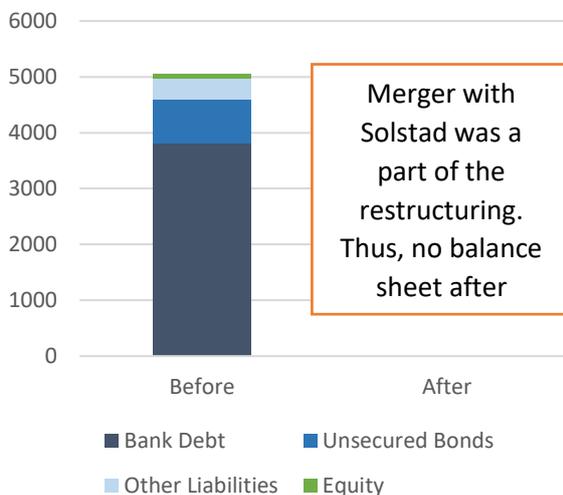
### Stakeholders (mNOK)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>150 from Åge Remøy in private offering</li> <li>Repair issue of max 20, only 1 was subscribed for</li> <li>Issue price discount 79 % at announcement, and 3 % at delivery</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>790 unsecured outstanding in two different bonds</li> <li>~5 years extension</li> <li>50 % haircut, 15 % conversion and 8 % cash, with the rest remaining in a new secured bond</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>~4000 outstanding</li> <li>3.5 years extension</li> <li>1300 reduced amortization</li> <li>Covenant waivers</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>Aker blocked the first restructuring proposal through buying more than 1/3 of one bond, in order to force merger with Solstad.</li> <li>4 % ownership share to Vard after cancellation of a newbuild</li> </ul>		

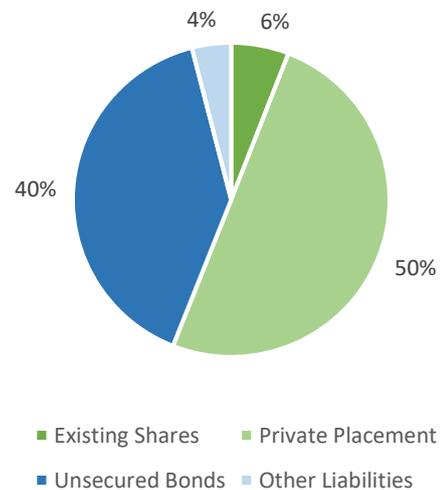
### Changes in Net Interest-Bearing Debt (mNOK)



### Capital Structure (mNOK)



### Ownership Structure after



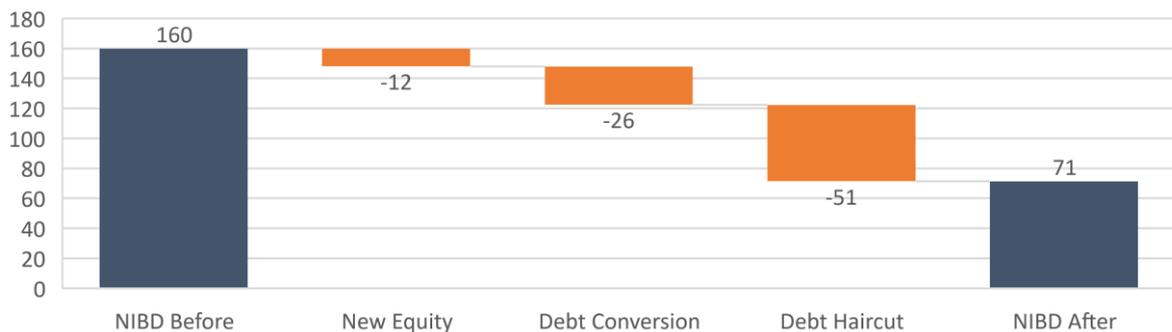
## Seabird Exploration

Industry:	Seismic	Return top of market to announcement: - 91 %
Solution Announced:	28.01.2015	Reaction to solution announcement: - 71 %
Implemented:	07.05.2015	Return implementation to 1 year after: - 82 %
Full Debt Service/Maturities:	2017/2018	Issue participation return (1 year): - 88 %

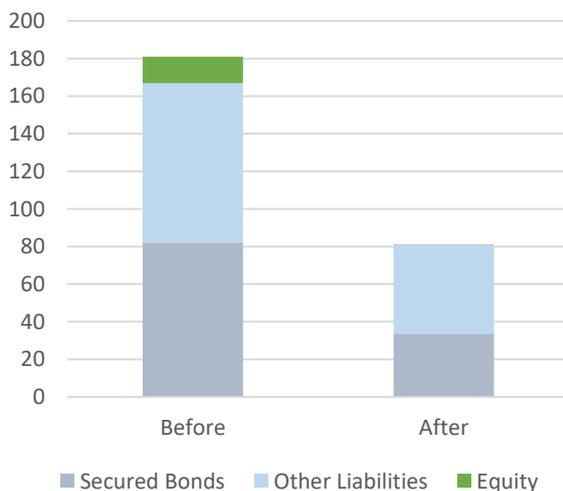
### Stakeholders (mUSD)

<b>Equity:</b> <ul style="list-style-type: none"> <li>Issue amount: 12</li> <li>100 % private placement</li> <li>Issue price discount 90 % at announcement, and overpriced by 43 % at delivery</li> </ul>	<b>Bondholders:</b> <ul style="list-style-type: none"> <li>81 secured bond outstanding:</li> <li>53 % haircut, 27 % converted, total bond debt reduction 80 %</li> <li>~2 year extension on remaining bond</li> </ul>	<b>Banks:</b> <ul style="list-style-type: none"> <li>No bank debt</li> </ul>
<b>Other Comments:</b> <ul style="list-style-type: none"> <li>15 shareholder loan got exact same treatment as the outstanding bond</li> <li>Negative share price development led to substantial overprice of 43 % at delivery of issue shares</li> </ul>		

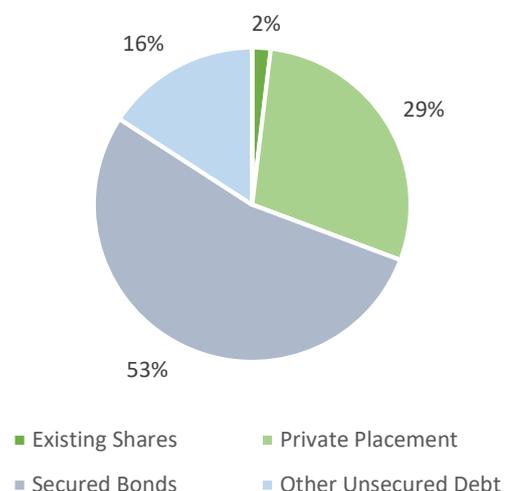
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



## Siem Offshore

Industry:	Oil supply	Return top of market to announcement: - 85 %
Solution Announced:	11.06.2015	Reaction to solution announcement: - 4 %
Implemented:	18.09.2015	Return implementation to 1 year after: 2 %
Full Debt Service/Maturities:	2018/2018	Issue participation return (1 year): 0,6 %

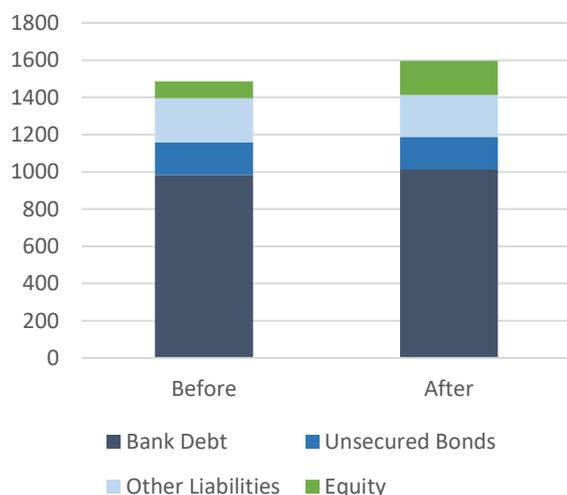
### Stakeholders (mUSD)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>• Raised 100 in a rights issue</li> <li>• Fully underwritten by Siem (contributed with 52 % in the end)</li> <li>• Issue price discount 5% at announcement, and overprice of 1% at delivery</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>• ~160 outstanding in two different unsecured bonds, maturing in 2018 and 2019</li> <li>• Bonds unaffected by the restructuring</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>• ~1,000 outstanding</li> <li>• ~300 bank facility extended maturity of 3 years</li> <li>• Otherwise unaffected</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>• Siem j.a.r.l. almost doubled ownership share through the process, controlling ~62% of the firm post-restructuring</li> <li>• Existing shares keep 46 % control, due to avoidance of debt conversion</li> </ul>		

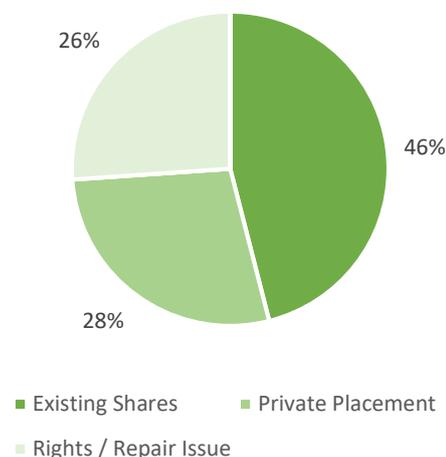
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



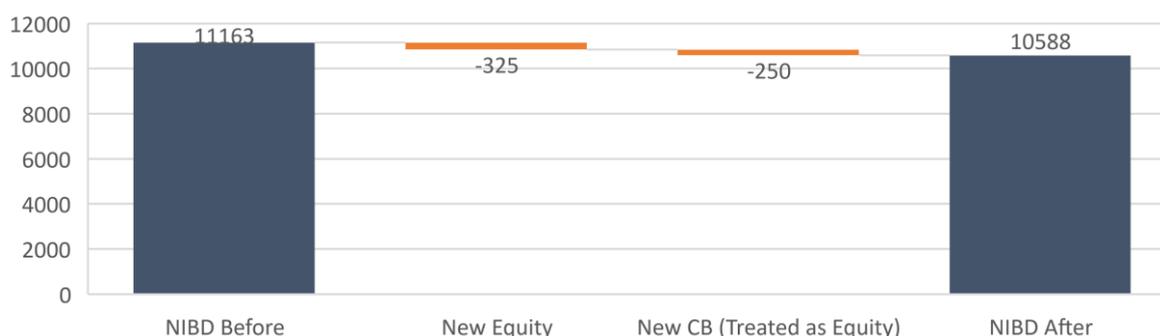
## Solstad Offshore

Industry:	Oil Supply	Return top of market to announcement: - 90 %
Solution Announced:	07.07.2016	Reaction to solution announcement: - 56 %
Implemented:	04.10.2016	Return implementation to 1 year after: - 69 %
Full Debt Service/Maturities:	2021/2021	Issue participation return (1 year): - 46 %

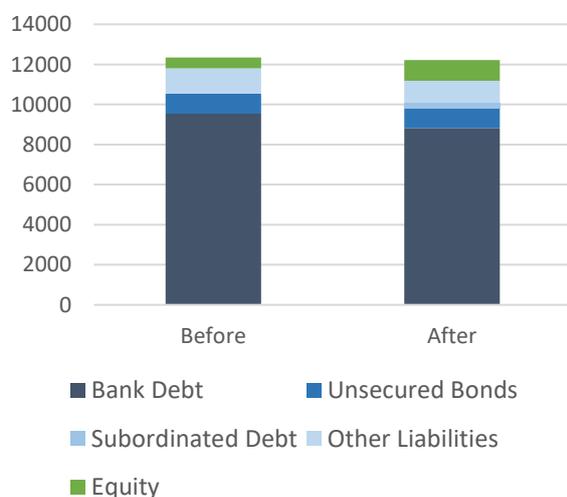
### Stakeholders (mNOK)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>• New equity from Aker (250) and Solstad Family (35)</li> <li>• 40 in repair rights issue</li> <li>• Issue price discount 4 % at announcement, 21 % at delivery</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>• 1000 outstanding in unsecured bond</li> <li>• 2,25 years extension and amortization reduction</li> <li>• 250 in new convertible bond from Aker</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>• 9500 outstanding</li> <li>• 5-year term for all, meaning 2,17 years average extension</li> <li>• 3110 in reduced amortization the next five years, last two years optional</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>• Aker coming in as a new large industrial owner through pure equity and CB</li> <li>• Aker coming in was the start of consolidations with REM and Farstad</li> </ul>		

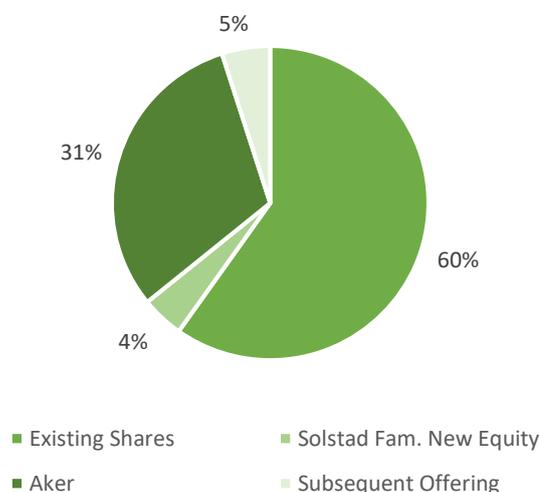
### Changes in Net Interest-Bearing Debt (mNOK)



### Capital Structure (mNOK)



### Ownership Structure after



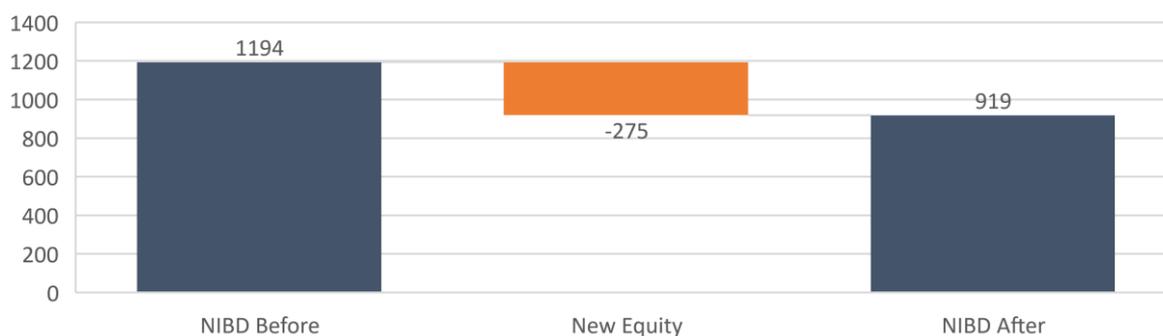
## Songa Offshore (1)

Industry:	Rig contractor	Return top of market to announcement: - 86 %
Solution Announced:	22.11.2013	Reaction to solution announcement: - 39 %
Implemented:	05.02.2014	Return implementation to 1 year after: - 40 %
Full Debt Service/Maturities:	2016/2020	Issue participation return (1 year): - 36 %

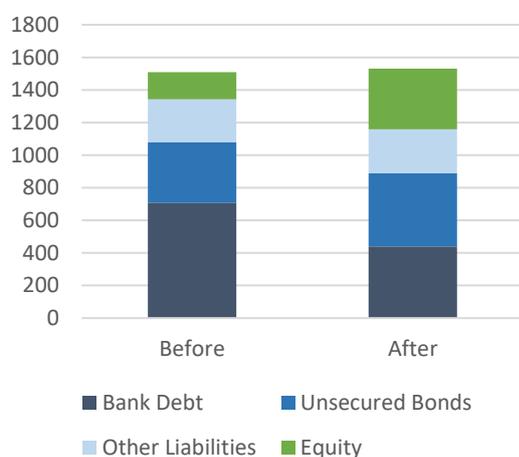
### Stakeholders (mUSD)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>• Private placement of 250</li> <li>• Subsequent offering of 25</li> <li>• Issue price discount at announcement: 50 %</li> <li>• Issue price discount at distribution: 6 %</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>• ~350 outstanding in two unsecured bonds</li> <li>• Volume-weighted extension of 2.4 years</li> <li>• No conversion or haircut</li> <li>• Covenants on existing bonds amended slightly</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>• Outstanding bank debt of ~700</li> <li>• Extended for 1 year</li> <li>• Amortization reduced by 56 the next couple of years</li> <li>• Otherwise, bank debt unaffected</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>• Equity issue fully guaranteed by Perestroika</li> <li>• Convertible bond at face value 150 issued as part of the restructuring</li> <li>• To the extent Perestroika held more than 1/3 of convertibles, converted shares would have no voting rights</li> </ul>		

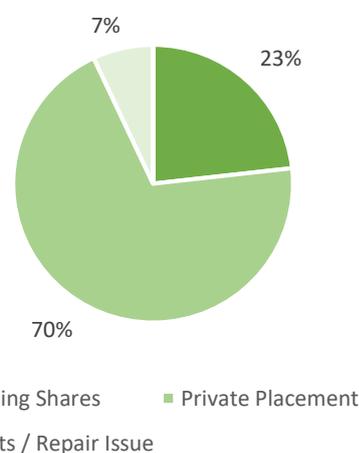
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



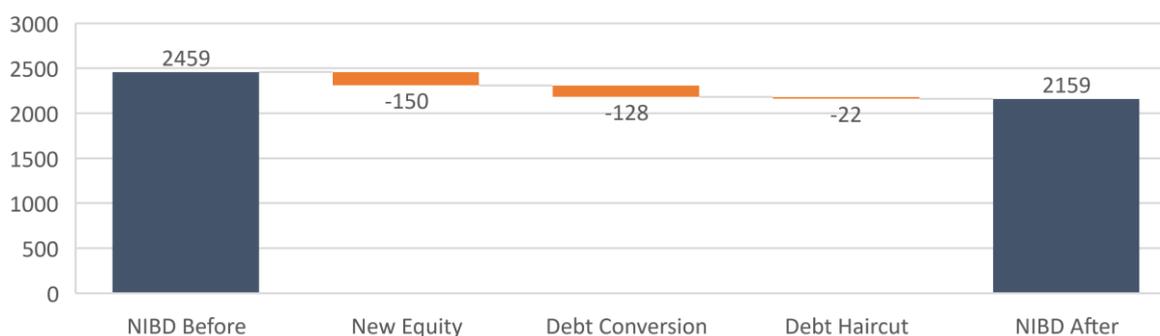
## Songa Offshore (2)

Industry:	Rig contractor	Return top of market to announcement: - 98 %
Solution Announced:	15.03.2016	Reaction to solution announcement: - 15 %
Implemented:	23.06.2016	Return implementation to 1 year after: 37 %
Full Debt Service/Maturities:	2016/2020	Issue participation return (1 year): - 109 %

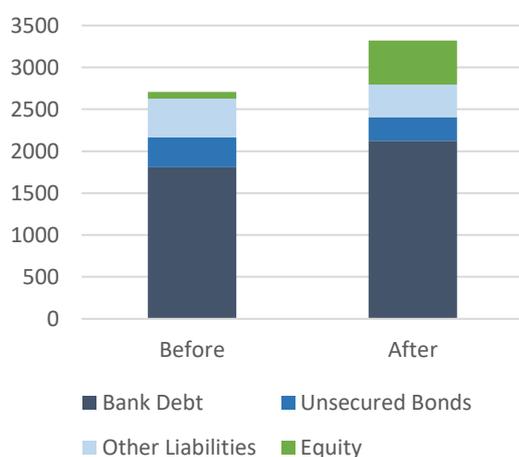
### Stakeholders (mUSD)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>• 150 issued in a convertible bond, treated here as equity</li> <li>• 91,5 from Perestroika in the CB</li> <li>• 25 in straight equity through a repair rights issue</li> <li>• 35 % discount at delivery</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>• Two unsecured straight bonds with ~250 outstanding, suffered two years extension</li> <li>• Convertible bond of 150 which was new in the previous restructuring: 15 % haircut and 85 % conversion</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>• Outstanding bank debt of ~1800</li> <li>• Left untouched in the restructuring</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>• The new convertible bond included warrants of shares equal to 35 % of the new CB, exercisable on anniversaries of CB issue</li> <li>• Perestroika's ownership share 44 % post-restructuring, down from previous 49 %</li> </ul>		

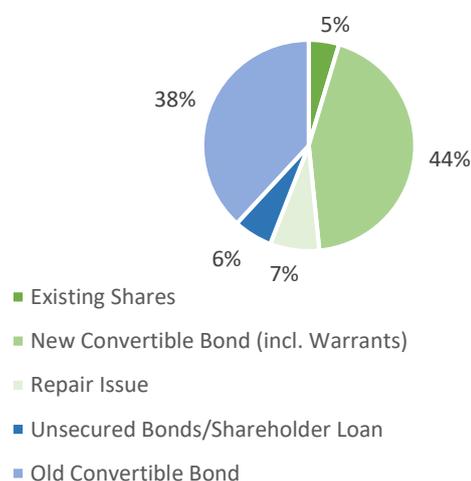
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



## Teekay Offshore Partners

Industry:	Multiple (Oil)	Return top of market to announcement: - 84 %
Solution Announced:	19.05.2016	Reaction to solution announcement: 8 %
Implemented:	02.06.2016	Return implementation to 1 year after: - 47 %
Full Debt Service/Maturities:	2018/2018	Issue participation return (1 year): #N/A

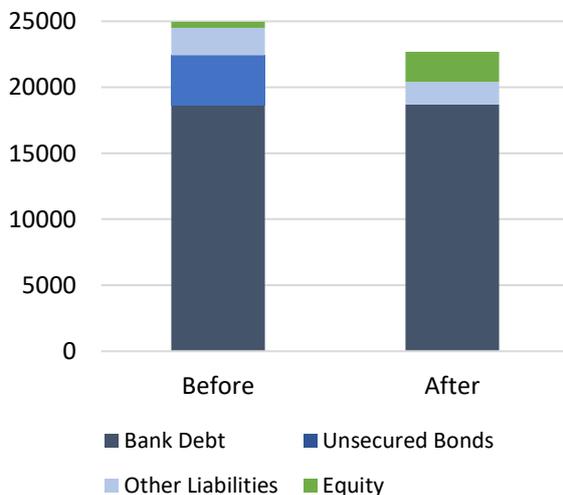
### Stakeholders (mUSD)

<p><b>Equity:</b></p> <ul style="list-style-type: none"> <li>• Raised 200</li> <li>• Private placement targeted towards Teekay Corporation and owners of preferred series-D shareholders</li> <li>• Fully subscribed</li> </ul>	<p><b>Bondholders:</b></p> <ul style="list-style-type: none"> <li>• 4 unsecured bonds with combined ~600 outstanding</li> <li>• Two bonds were affected by a two-year extension and reduced amortization</li> </ul>	<p><b>Banks:</b></p> <ul style="list-style-type: none"> <li>• Outstanding debt of ~2700, not affected by restructuring</li> <li>• Commercial banks committed 723 in new loan financings, as well as extensions/restructurings of existing derivative contracts</li> </ul>
<p><b>Other Comments:</b></p> <ul style="list-style-type: none"> <li>• Subordination of 200 TK corp. loan, and extension beyond 2018 (&gt;2 years extension)</li> <li>• 80% cut in dividends to all LP equity</li> <li>• Deferred contracts on two rigs until affected bonds have matured</li> </ul>		

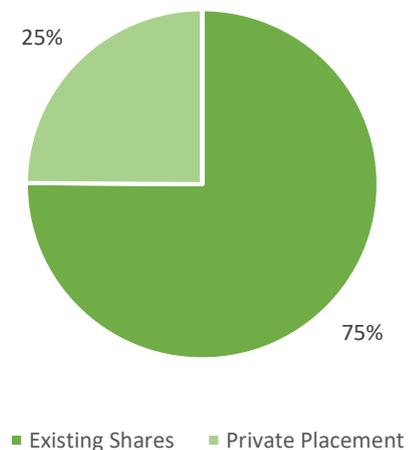
### Changes in Net Interest-Bearing Debt (mUSD)



### Capital Structure (mUSD)



### Ownership Structure after



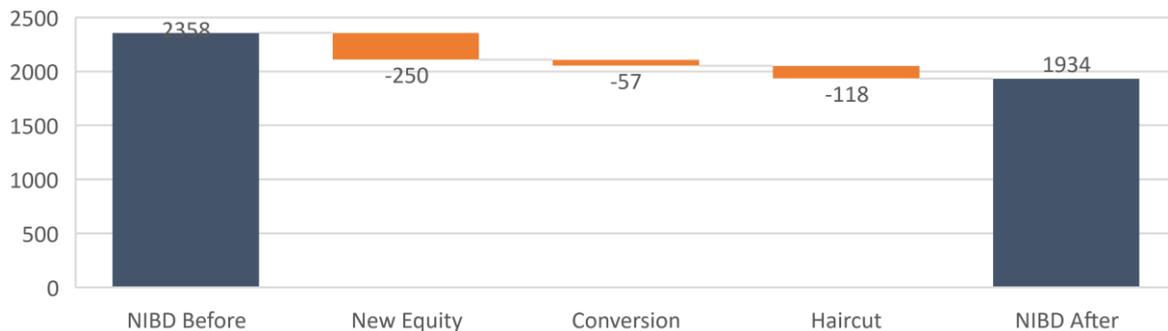
# Viking Supply Ships

Industry:	Oil supply	Return top of market to announcement: - 95 %
Solution Announced:	29.08.2016	Reaction to solution announcement: - 4 %
Implemented:	17.01.2017	Return implementation to 1 year after: - 77 %
Full Debt Service/Maturities:	2018/2020	Issue participation return (1 year): - 78 %

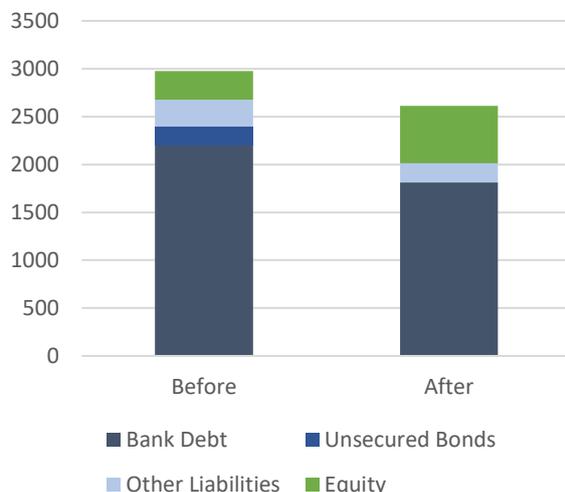
## Stakeholders (mNOK)

<b>Equity:</b> <ul style="list-style-type: none"> <li>• Issued amount: 250</li> <li>• Type of Issue: Rights issue</li> <li>• Kistefos subscribed for 76,4 % of issues shares</li> <li>• Issue price discount at announcement: 11 %</li> <li>• Share price equal to issue price at delivery</li> </ul>	<b>Bondholders:</b> <ul style="list-style-type: none"> <li>• Unsecured outstanding bond: face value 200 pre-restructuring.</li> <li>• 59 % haircut, 28 % conversion, and 13 % cash</li> <li>• Thus, a total bond debt reduction of 100 %</li> </ul>	<b>Banks:</b> <ul style="list-style-type: none"> <li>• Outstanding: ~1800</li> <li>• Extensions: 2 years</li> <li>• Amortization reduction: 24 %</li> </ul>
<b>Other Comments:</b> <ul style="list-style-type: none"> <li>• First proposal, involving less haircut, but no cash redemption, downvoted by bondholders</li> <li>• Bondholders able to exit position in full through the accepted restructuring plan</li> </ul>		

## Changes in Net Interest-Bearing Debt (mNOK)



## Capital Structure (mNOK)



## Ownership Structure after

