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Kicking the can down a dead-end street

*An inquiry into the role of banks in financial restructurings of
Norwegian offshore companies after the 2014 oil price collapse*

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Master's Thesis, Financial Economics

NORWEGIAN SCHOOL OF ECONOMICS

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

This paper examines the role of banks in the financial restructurings of Norwegian offshore companies following the steep fall in oil prices starting in June 2014. Developing the work of Torstensen and Rasmussen (2017), we delve into the resolution of financial distress in 11 OSV companies from 2015 to 2018, aiming to understand the role of banks as main creditors in financial restructurings. Further, based on insight from key stakeholders, we discuss the outlook for bank behaviour in future restructurings. Analysing the restructuring outcomes, we show how bank debt is practically unchanged from the level prior to the restructurings. Instead of nominal reductions, the banks have opted to amend and extend current loan terms. Although partially compensated through debt converted to equity and cash redemptions, bondholders have seen their claims being greatly reduced. Moreover, in most cases, equity infusions came in form of private placements from the largest existing owners, significantly diluting other shareholders. As such, banks have favoured large existing shareholders at the expense of other unsecured claimholders, violating the assumption of absolute priority. As we believe the current decline in the OSV industry is just as much a structural crisis as it is a cyclical downturn, we argue that it is essential that banks opt for scrapping of vessels and enhanced industry consolidation when resolving financial distress in the future. Nevertheless, recent restructurings provide indications of banks being neither prepared nor willing to address the fundamental issue of overcapacity in the market.

Preface

This thesis represents the completion of our Master of Science in Financial Economics at the Norwegian School of Economics (NHH).

Our time at NHH, combined with professional work experience through internships in both oil and gas consultancy and equity research, have provided us with a solid foundation for writing this thesis. Despite being challenging at times, working with financial restructurings in the offshore industry has also been hugely inspiring. Throughout our years of taking the bus from Bergen city centre to NHH, we have passed by hundreds of offshore ships docked, waiting for work. Little did we know that these exact vessels would be the topic of the thesis that brings our years of study in Bergen to an end.

Throughout the process of writing this thesis, we have received considerable help and support from people who deserve our grateful acknowledgements. First, we would like to thank our supervisor, Thore Johnsen, for invaluable discussions and insight into financial restructurings. Moreover, we extend our gratitude to our interviewees for their immense hospitality and interest in our topic. Without our interviewees, our thesis would be completely different. We also extend our appreciation to Hagland Offshore and Stamdata for providing us with data.

We would also like to thank our fellow students and friends, being the ones who have truly given us knowledge, motivation and priceless memories during our tenure here at NHH. Finally, we thank our families for all their love and encouragement. In the last months, they have involuntarily gained a lot of knowledge about the Norwegian offshore sector.

Bergen, December 2019

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1. Introduction

All good things must come to an end

By the summer of 2014, the price of one barrel of Brent Crude oil was \$110. After the heavy drop in prices following the financial crisis of 2008, oil prices had rapidly recovered and remained in the range of \$80-120 between 2010 and 2014. Encouraged by high prices, oil companies invested heavily in exploration and production (E&P) activity. Consequently, industries associated with the E&P companies took advantage of the situation, experiencing a massive uplift in revenues.

Simultaneously, ship owners along the west coast of Norway had acquired offshore support vessels (OSV)¹ on a large scale to meet what seemed like an ever-increasing demand for oil-service products. Despite increasing costs and emerging overcapacity, there were few signs of companies fearing a downturn, substantiated by an increasingly financially geared fleet of vessels. Banks, bondholders and investors all jumped on the bandwagon.

During the summer of 2014, a new source of oil, the US shale oil, entered the market. This happened at the same time as global demand for oil fell due to western countries looking to shift away from fossil fuels and the growth rate in emerging markets slowed down. In the months that followed, the flood of new oil supply caused a collapse in the price of crude (Stacey, 2016). Despite recovering somewhat during the spring of 2015, the crude price bottomed out at around \$30 per barrel in January 2016.

As the oil price dropped, the E&P companies were desperate to protect their own bottom line. This essentially meant paying their suppliers less, causing a formidable decline in day rates for the oil-service industries. Consequently, firms found themselves defaulting on the debt accumulated during the heyday a few years earlier. Since the oil price collapse, a string of financial restructurings has weighed heavily on the OSV companies. Today, the industry continues to struggle under a mountain of debt and a significantly oversupplied market.

¹ In this thesis, we define OSVs as oil-service vessels such as supply ships, AHTSs, subsea and seismic vessels.

From companies accumulating vessels at a record-speed going into the 2010s, OSVs are now to be found laid up all the way along the west coast of Norway. Exhibit 1.1 shows the development in the number of cold-stacked OSVs operating in the North Sea, and the average monthly Brent Crude oil price from 2013 to present. Evidently, the growth in the number of laid-up ships from the summer of 2014 to the winter of 2017 was formidable. During the last 18 months, the demand side has picked up somewhat. However, the number of vessels still rusting away along the coast is significant, illustrative of ship owners' continuing depressed situation today.

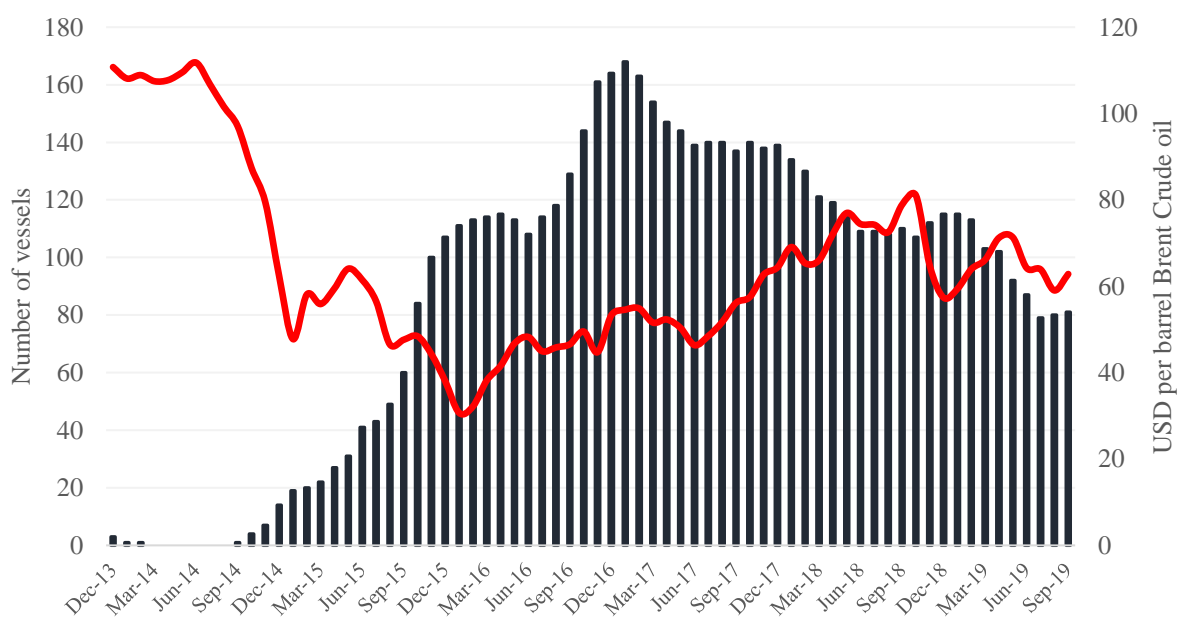


Exhibit 1.1 – Number of cold-stacked North Sea OSVs (black) and Brent crude price development (red)

Source: Hagland Offshore and U.S. Energy Information Administration

In this paper, we focus on the wave of financial restructurings in the Norwegian offshore industry following the oil-price collapse starting mid-2014. Through a thorough review of restructurings in the offshore industry, we aim to understand the outcomes of the restructuring processes that have already occurred. Further, we focus on what is yet to come, as a majority of the companies in the OSV segments are still suffering under substantial indebtedness, unprofitable margins and a fundamentally skewed market balance.

Particularly, our emphasis is on the behaviour of banks in these processes. As the principal provider of financing to the offshore industry during the upswing, these banks became equally exposed to losses when the market turned sour. Today, banks are considered as holding the key not only to the survival of the financially distressed companies, but also to finding a financially sustainable future for the whole OSV industry.

Litterature review

Academic research on financial restructuring has been concentrated in four areas: bankruptcy resolutions, bankruptcy cost, governance changes in bankruptcy and the effects of bankruptcy on stock prices. Our thesis, however, seeks to examine the outcomes of financial restructurings, and in particular the role of banks in these processes – their considerations and contributions. This section provides an insight into relevant research literature on financial reorganisations of companies and the role of banks as key claimholders in these restructurings.²

Why restructure and not liquidate?

The inevitable question every board faces when deciding the fate of a financially distressed company is whether the company should be restructured or file for bankruptcy. One of the most important determinants in this regard relates to the bankruptcy costs. Out-of-court restructurings³ are often expected to be less costly than filing for bankruptcy (Giammarino, 1989), hence, the greater the cost savings, the greater the incentives for claimholders to settle through a restructuring process.

Gilson, John and Lang (1990) examine the determinants of the choice of restructuring privately versus bankruptcy proceedings. Of their distressed firms, 80 restructured their debt out of court, while the remaining 89 had to file for bankruptcy. The study finds that the probability for successful restructurings is higher when there are fewer distinct classes of debt outstanding and a greater proportion of the debt is issued by banks. Moreover, the higher the proportion of intangible assets in a firm, the greater the likelihood for succeeding in a private workout due to the value of such assets likely being eroded through asset sales and limited customer demand (Hotchkiss, John, Mooradian, & Thorburn, 2008).

Franks and Torous (1994) document, consistent with Giammarino (1989), that there is greater firm value to share in restructurings than in bankruptcy. They also find that senior creditors

² The purpose of this section is not to provide a comprehensive review of all literature, but rather to highlight certain areas of research relevant to our analysis.

³ Throughout the thesis, we will use the terms out-of-court restructurings, private workouts and workouts interchangeably. All terms, however, refer to the situation when a company negotiates the terms of outstanding debt with its claimholders outside the courtroom, and/or not as part of any bankruptcy proceedings.

are more willing to forego a greater share of the value in restructurings than in bankruptcy proceedings, violating the absolute priority rule. Further, they document how creditors, in all classes, to a larger extent convert their debt to equity in restructurings (9% of firm value), while the magnitude of these deviations is much smaller in bankruptcy negotiations (2% of firm value).

Asset liquidity and whether fire sales exist

As our thesis examines financially distressed companies in asset-heavy industries, it is particularly interesting to examine the importance of asset liquidity in restructurings. Shleifer and Vishny (1992) focus their paper on the economy and industry-wide determinants of asset liquidity and, as such, how asset liquidity is a key contributing factor to the cost of financial distress. They argue that distressed firms are likely to sell off assets at a time when the best potential buyers, most likely firms in the same industry, are financially distressed as well, contributing to even more depressed prices.

Shleifer and Vishny (1992) emphasise that the issue of illiquidity is particularly relevant in cyclical industries, as industry buyers of cyclical assets are constrained because they are hit by the same macroeconomic shocks. These conclusions are in line with later research done by Bolton and Scharfstein (1996), suggesting that due to the volatility in cyclical industries, claiming assets in the event of default typically requires creditors to take haircuts on outstanding debt.

Further, Pulvino (1998) addresses several of the abovementioned issues. He finds that not only do financially distressed sellers receive discounted prices on their assets due to the depressed state of the industry, the bankruptcy status of the seller appears to further influence the outcome, lowering the prices as buyers exploit the desperate nature of the seller.

The anatomy of financial distressed companies

Asquith, Gertner and Scharfstein (1994) find in their paper that sales of major assets are vital means in order to avoid bankruptcy. Only three out of 21 companies that sell above 20% of their assets subsequently file for bankruptcy, compared to 49% of firms selling no or fractional parts of their asset base. Further, asset-selling companies are more likely to complete a successful debt exchange (62% vs. 28%). The proceeds from asset sales are most commonly used to pay off senior private debt.

Leverage at the industry level is negatively correlated with asset sales (Asquith et al., 1994). As our data sample primarily consists of firms operating in asset-heavy and highly leveraged industries, this should imply that few of the firms are expected to sell off assets. Moreover, asset prices are likely to be realised at a discount due to depressed market conditions. This is due to a limited number of potential buyers, consistent with the research by Shleifer and Vishny (1992).

Asquith et al. (1994) document that bank lenders respond to financial distress in various ways, including requiring accelerated payments and reducing further lending. They also find that banks are commonly observed to waive current financial covenants such as extending maturity on the debt and/or delaying interest payments, rather than take a haircut on outstanding principal.

When do banks take equity in debt restructurings?

James (1995) adds to the results of Asquith et al. (1994) and shows how banks make concessions on outstanding debt only conditional upon junior debtholders accepting to restructure their claims. In general, banks are more willing to forgive principal and convert debt to equity when a smaller fraction of the debt is held by public creditors. These two studies suggest that the key to avoiding bankruptcy is the ability to restructure public claims, not private debt.

In his follow-up paper, James (1996) demonstrates the importance of bank participation in out-of-court restructurings, as it facilitates public debt exchange offers. Compared to restructurings where banks take no action, the study finds that exchange offers which include banks reducing principal have a significantly higher likelihood in succeeding, as well as they involve greater reductions of outstanding public debt and less senior debt offered to the bondholders (Hotchkiss et al., 2008).

Validation of the absolute priority rule in restructurings

The absolute priority rule (APR) states that no creditor or shareholder can receive anything of value under a restructuring plan unless all senior claimholders have been made whole (Gilson et al., 1990). A vast number of studies have documented patterns of how financial distress is resolved, and how violations of the APR are frequently occurring in order to successfully reach agreement with all claimholders. There are several studies exhibiting strong deviations from

the APR, particularly pointing to the tendency of shareholders ending up with more than they hold legitimate claim to.

The priority of claims is violated for three-quarters of the Chapter 11 cases in Franks and Torous (1989). Moreover, Longhofer (1997) states that violations of APR are commonplace also in out-of-court workouts. Similarly, Torstensen and Rasmussen (2017) consistently find deviations from absolute priority in Norwegian financial restructurings following the oil price collapse in 2014.

Research topic – why, what and how?

In this section, we briefly explain the motivation behind our choice of topic and the objectives of this thesis. Further, we introduce our methodical approach and the structure of our thesis.

Evident from our literature review, considerable research has been done on the topic of financially distressed companies. However, we have not found many papers written on the topic of Norwegian financial restructurings, nor have we discovered literature particularly emphasising the role of banks in such processes. In passing, we came across a thesis written by Jørgen Torstensen and Magnus Rasmussen in 2017, dealing with financial restructurings. Their thesis, although somewhat more focused on shareholder value and equity strategies, sparked an interest in the topic of financial restructurings and the factors determining banks' behaviour in these negotiation processes.

There has been extensive media coverage of financial restructurings in the Norwegian offshore industry in the last few years. Interestingly, the recent wave of Norwegian restructurings distinguishes itself in that of being the first Norwegian restructuring wave where the distressed companies are significantly financed with capital from the Norwegian high-yield bond market. As a result, we have noted that the media coverage has included several stories sharing bondholders' vocal frustration over unfair treatment from, amongst others, banks. Hence, a thesis aiming to understand the outcomes, and the relationships between banks and other stakeholders, in these restructuring processes would make for a timely and relevant choice of topic.

We will examine the role of banks in financial restructurings of offshore companies following the steep fall in oil prices starting in June 2014. By analysing the outcomes of 18 financial

restructurings, our purpose is to understand the contributions and considerations of banks in particular in these processes. As it seems likely that new rounds of restructurings will occur in the near future, we also put a particular emphasis on the role of banks in contributing to solving the fundamental issue of overcapacity troubling the OSV industry.

Our thesis builds on public information released in conjunction with financial restructuring processes, as, for instance, engagement of financial advisors, summons to bondholders' meeting, notice of extraordinary general meeting or restructuring solution announcements. In addition, we have gone through our sample firms' financial statements and annual reports, as well as having read news articles covering each case. Moreover, qualitative insight into the topic of restructurings has been developed through interviews with stakeholders and regulators involved in such processes, as well as our own reflections.

Initially, we introduce a theoretical foundation on the topics of capital structure, seniority of claims and the concept of financial restructurings, upon which we will build our thesis. Next, we present our data sample. Thereafter, we discuss the role of banks in financial restructurings and elaborate on the determinants of bank behaviour in these processes. Subsequently, we analyse how these considerations have translated into contributions in our sample restructurings, but also place an emphasis on what has not been done and what is yet to come. Finally, we discuss the limitations of our thesis and provide a conclusion.

2. Theory

In this chapter, we will introduce the theoretical backdrops we consider most relevant for this thesis. Firstly, we present theory on capital structure and seniority of claims. Here, we also address the impact of a company's debt being private or publicly disbursed. We then embark on the challenge of understanding the complexity of financial restructurings. Lastly, we provide an overview of a typical financial restructuring.

A company's capital structure

A company must choose the way in which it finances its operations and growth investments, using private or public debt, equity or through issuance of other securities. The relative proportions of debt and equity that a company has outstanding, constitute the company's capital structure. In general, the sources of funds are senior debt, subordinated debt and equity.

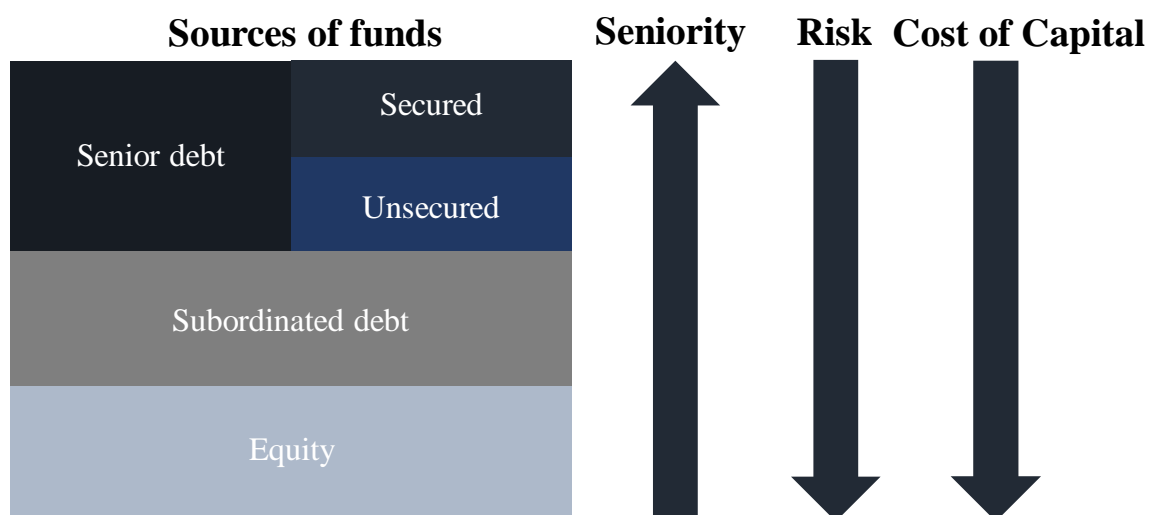


Exhibit 2.1 – Capital structure and seniority of claims

Exhibit 2.1 illustrates the distinction between secured and unsecured debt. The primary difference is the presence of collateral, an asset taken as security in the case of non-payment. Secured creditors have the right to seize this collateral in the event of a default. If the value of the collateral is insufficient to cover the entire claim, a secured claimant has seniority over an unsecured, regardless of both claimholders being senior. Hence, as lower seniority means higher risk, such claims require higher returns, yielding higher cost of capital.

Senior debt

Senior debt has the highest priority, and can be both secured and unsecured, with the secured debt carrying less risk and thus lower interest rates. Senior debt generally comes as bank loans or bonds. Excluding convertible debt, creditors only hold claim on the face value of the loan, plus interest. As such, the return on the debt is capped by the contractually agreed terms, and consequently the upside potential is limited. In our sample, almost all interest-bearing debt is senior.

Subordinated debt

Subordinated debt, often referred to as junior debt, is any debt that falls behind senior debt. Given its lower priority during payback, subordinated debt carries greater risks and hence higher interest rates. Subordinated debt is typically shareholder loans, loans from associated companies, or bonds. All these abovementioned sorts of subordinated debt can be found in our sample.

Equity

Shareholders are lowest on the priority ladder, only having rights to the company's cash flow after all creditors have received compensation for their respective claims. As such, shareholders carry the greatest risk in the event of non-payment, and consequently also require the highest return. However, for a shareholder, claims can be considered as the residual once all creditors are paid, hence providing an unlimited upside gain during good times for a company. As with debt, there are many subcategories of equity, including preferred and common stock.

Seniority of claims and the absolute priority rule

The seniority of these sources of funds represents the order in which claimholders are entitled to the cash flow generated by a company. Claim seniority becomes especially applicable for a company's stakeholders during times of financial distress and is linked to the absolute priority rule. The APR denies any claimholder a stake in the securities of a reorganised firm, until more senior claims have been fully compensated (Franks & Torous, 1989). Hence, claimholders holding senior debt will be entitled to payment in full before holders of claims with lower seniority can be compensated.

In the event of bankruptcy and liquidation, APR implies that each claimholder's distribution depends on the seniority of their claim and the total amount of proceeds received from the liquidation of the company's assets (Hotchkiss et al., 2008).

Eberhart and Weiss (1998) argue that the APR is explicitly or implicitly assumed in many seminal finance models. For instance, Black and Scholes (1973) show how equity can be considered a call option on the underlying value of the firm. The face value of the debt can be viewed as the stock's exercise price and the debt's maturity as the option's time to maturity.⁴ Using this analogy, if the firm value is below the face value of the debt at maturity, the stock – or firm, rather – is out of the money, and bankruptcy occurs. The APR is thus followed as shareholders receive nothing when the bondholders have not been paid in full.

Jones (2010) argues that the absolute priority rule is more honoured in breach than in observance. This is consistent with empirical findings, as discussed in our literature review. A usual explanation for APR violation is found in cases where parties in the liquidation negotiations want a speedy process. Thus, any compensation violating APR can be seen as payment of a claimholder's option to stall or complicate a restructuring. In addition, violations in terms of favourable outcomes for equity holders are often driven by the quest to increase value-creation for the post-restructured company. For instance, experienced owners could be able to derive more value from assets than other claimholders would through liquidation. Key historic violations of APR relevant for this thesis include the shipping crisis of the 1970s and the financial crisis of 2008.

Financial restructurings

A firm is in financial distress at a given point in time when the liquid assets of the firm are not sufficient to meet the current requirements of its hard contracts (Hotchkiss et al., 2008), or when covenants⁵ are breached. There are a number of mechanisms available for firms in terms of rectifying the mismatch of liquidity and obligations. Exhibit 2.2 provides an overview of the different routes the firm may take to resolve financial distress.

⁴ Assuming the debt to be zero-coupon.

⁵ Contractually agreed conditions that require the borrower to meet certain requirements, i.e. maximum debt-equity ratio.

One option is selling off company assets in order to increase liquidity. However, unless the distressed company struggles for some idiosyncratic reason, such as mismanagement, the depressed market implies that potential buyers within the same industry are likely to have cash flow problems of their own, putting downwards pressure on the asset prices limiting gain from the sale.

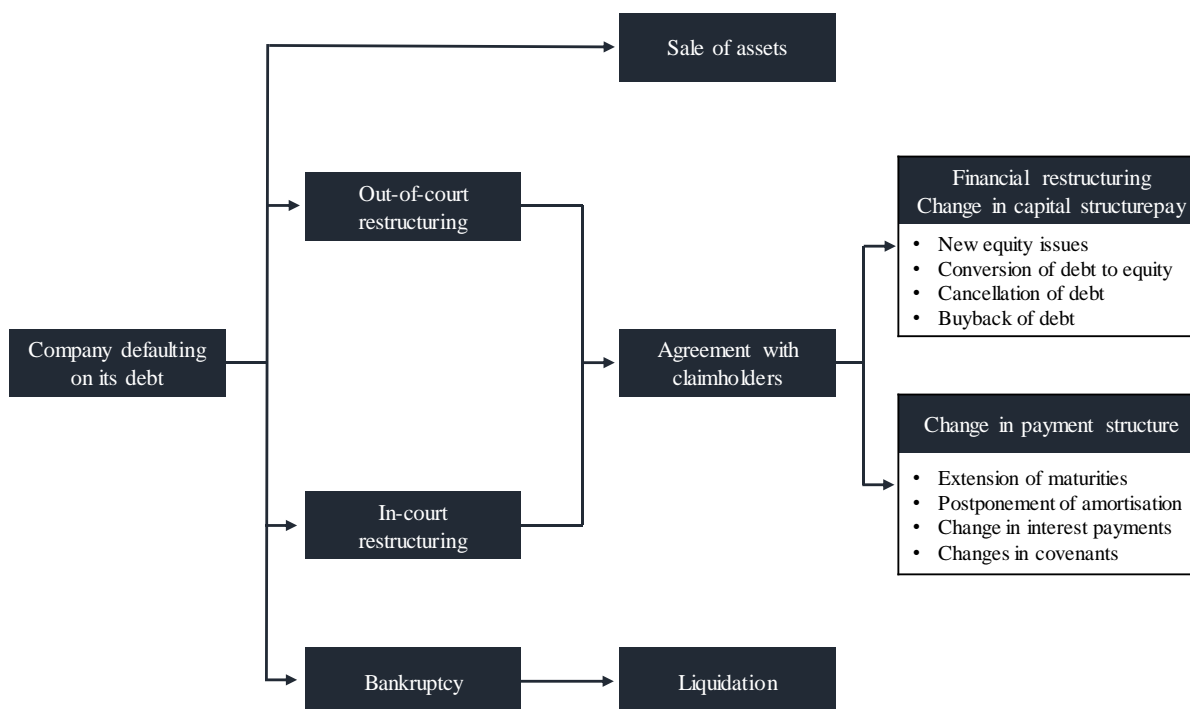


Exhibit 2.2 - Options for a financially distressed firm defaulting on its debt

If an asset sale does not provide sufficient headroom to rectify the mismatch between liquidity and debt obligations, or if selling off assets negatively impacts the operational strategy of the company, the company can seek to renegotiate the terms of its outstanding debt with the claimholders. This can be done out of court or through negotiations in court.

As this thesis develops the work of Torstensen and Rasmussen (2017), we will use a similar definition of financial restructuring to that used in their thesis. A financial restructuring occurs if the reorganisation of the company's capital structure includes one or more 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 amortisation reductions and/or extended maturities on existing debt.

Most companies initially seek to reach an agreement with their creditors through negotiations out of court. If such an agreement is not feasible outside the courtroom, the company may file for protection under bankruptcy laws, and solve the issues through formal court proceedings. As Skudal and Vartdal (2017) explain, the Norwegian bankruptcy law lacks several tools that are commonly observed in out-of-court restructurings and imposes strict demands.⁶ Thus, in-court debt settlement proceedings are an unattractive solution for many companies. All restructurings in our data sample are private workouts, which is by far the most common option in Norway.

When going through negotiations with its creditors, inside or outside the courtroom, a company seeks relief from burdening debt obligations endangering the company's ability to further exist as a going concern. In our thesis, we distinguish between two ways of renegotiating the terms of outstanding debt – a company can refinance and/or restructure. The former relates to a change in the payment structure of the debt and a restructuring refers to a change in the capital structure of the company, where the severity of which is arguably greater in the latter negotiation process. A refinancing of the company would typically include extensions of maturity, postponements of amortisation, temporarily reduced interest and/or amended covenants, measures which would effectively ease the company's short-term liquidity obligations. In more distressed cases, such as those included under our definition of financial restructurings, changes in the capital structure are necessary. Issuance of new equity, conversion of debt to equity, or cancellation of debt are examples of such changes. It is important to note that significant restructurings, including all of the cases in our sample, also include changes in payment structure. Hence, refinancing and restructurings often coincide.

It may be that the company is impossible to save. If no solution is found amongst claimholders having the power to enforce bankruptcy, the only route forward is through bankruptcy proceedings, which effectively means liquidating the firm. Liquidation should only occur if the value of the assets is higher than the firm as a going concern, but the values of assets in

⁶ For a more detailed explanation, we refer to the section on Norwegian bankruptcy regulations in Chapter 4.

depressed markets are often depressed themselves. As such, we clearly see a tendency in claimholders opting for restructurings instead of liquidating financially distressed companies.

The magnitude and complexity of a financial restructuring greatly differ between cases, and depend on the degree to which the company is financially distressed, for example in terms of the amount of debt outstanding relative to the cash flow generation in the coming years. Another important determinant of the severity of the restructuring process is the willingness amongst stakeholders to act in order to resolve the distressed situation permanently. If the financial distress is due to cyclical downturns that are expected to pass in due course, creditors are probably not incentivised to forego significant portions of their claim. However, if the downturn turns out to be lasting, an inadequate initial restructuring could be succeeded by new rounds of restructurings, which are most likely to be even more costly for the claimholders. We will discuss these considerations and incentives going into financial restructurings in greater detail later in this paper.

Example of a financial restructuring

Financially distressed companies typically find themselves in the position of being heavily burdened by debt in combination with a rapidly diminishing cash flow from operations. Simultaneously, the value of their assets will also be affected due to the depressed nature of their industry. Experiencing such permanent financial challenges, significant amendments to the loan terms must be implemented for the company in order to survive as a going concern.

At this stage, commonly observed financial restructuring measures from the creditors include interests paid as Payment-In-Kind (PIK)⁷ and implementation of cash sweep mechanisms⁸, conversion of debt, conversion of current bonds in more favourable bonds, and repayment of outstanding bonds in the market at a discount to face value (Skudal & Vartdal, 2017). At the same time as debtholders discharge on their debt, shareholders are also expected to contribute to the survival of the company. Thus, creditors will often insist that equity investors provide new cash through issuance of new equity.

⁷ PIK means that interests are paid as additional claims to the company, thus, reducing the cash flow effect of the loan.

⁸ Cash sweep mechanisms imply that interest is only paid in the case of a positive cash flow generation.

Exhibit 2.3 shows an example of a typical financial restructuring involving some of the measures available to claimholders to change the capital structure in order to ensure the survival of the company. Note that we assume a liquidation value of the company's assets to be below the amount of debt outstanding. As such, if the banks find it likely that the company will be able to repay the debt at a later time, they will benefit from allowing the firm to restructure.

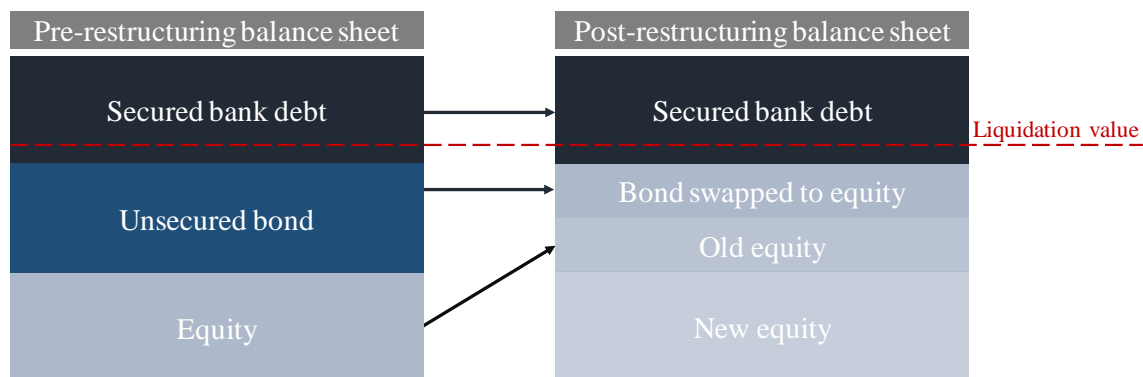


Exhibit 2.3 – Example of a financial restructuring solution involving new equity and debt conversion

The positive effects of the new capital from equity issuance and debt conversion are immediately visible on the company's balance sheet. Additionally, reduced financial expenses improves the firm's liquidity position. However, in terms of claimholder structure, unsecured bondholders now find their debt claim converted to equity following the restructuring, also suffering a haircut relative to the nominal outstanding of the original bonds. Further, they have been relocated from a creditor position, with a contractually agreed right to repayment and interests, to a shareholder position only entitled to the company's cash flow after the remaining creditors have received compensation for their claims. Similarly, the downside for existing shareholders is that they are heavily diluted in the restructuring and now hold claim to a substantially smaller portion of the cash flow generation of the company.

Overview of the restructuring process

As emphasised, the complexity of financial restructurings varies between cases. Exhibit 2.4 tries to conclude the theoretical section of financial restructurings by illustrating the process of a typical restructuring, from initiation to implementation.

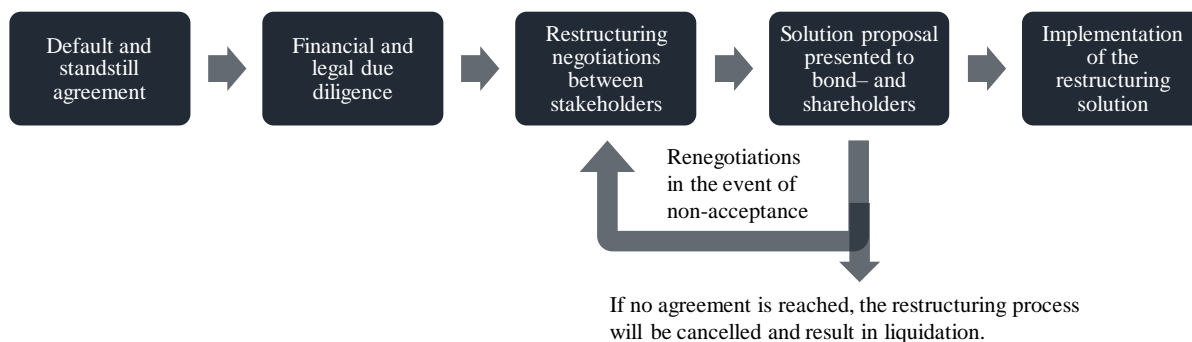


Exhibit 2.4 – Overview of a typical restructuring process, from initiation to implementation

A typical initiation of a financial restructuring is that the distressed company defaults on its debt obligations, or breaching its covenants. Due to cross-default clauses in loan agreements, this could lead to a default on all outstanding loans. Following default or a covenant breach, the company will ask its creditors for a standstill, which is an agreement between the company and its creditors whereby the creditors agree not to take action to collect or enforce their debts for a period of time in which a restructuring strategy is formulated. Following the standstill agreement, both sides of the negotiation immediately ask their financial and legal advisors to conduct due diligences, and the restructuring negotiations commence.

Present in these negotiations are typically the board and management of the distressed company, representatives from the bank, Nordic Trustee, on behalf of the bondholders, given that the company has outstanding bond debt, as well as the largest shareholders of the company. Once a proposal for a restructuring solution is agreed upon, the company will announce the plan, and subsequently summon bondholders to a meeting and call for an extraordinary general meeting for shareholders. In their respective meetings, the claimholders vote on the deal proposed by the company. Following a potential rejection of the proposal, renegotiations will commence in order to find a new solution. If no solution is found out of court, the company might file for bankruptcy protection to resolve the situation in court.

The company, however, has usually received acceptance for the solution proposal from a significant portion of the stakeholders before announcing it publicly, reducing the probability of the proposal being rejected by the general meeting or by bondholders. When a solution is accepted by all groups of stakeholders, implementation immediately follows. The implementation process depends on the proposed solution, and often includes issuance of new equity and conversion of debt to equity. As a result, the time scope of the whole restructuring process varies significantly, from within a few months to a year or more.

3. Data sample

In this chapter, we present the restructuring cases included in our sample, as well as the financial and operational state of the firms prior to the restructurings.

Although resolutions of financial distress come in many forms, this thesis is restricted to restructurings as defined and introduced in the section explaining the concept of financial restructurings. All the companies in our data sample have gone through and completed one or several financial restructurings in the period 2015 to the present. We consider the restructurings completed once all elements of the solution are implemented. As emphasised, our definition distinguishes between refinancing and restructurings. Thus, we have excluded firms that have solely changed the payment structure of outstanding debt and firms that have resolved the distressed situation through smaller equity issues.

Our thesis focuses on Norwegian OSV companies, and includes companies operating supply ships, AHTSs, subsea and seismic vessels. Further, we restrict the sample to only include companies that are listed on the Oslo Stock Exchange, thus excluding privately held companies, as well as firms that operate exclusively in the capital markets outside Norway. Given the time-consuming nature of analysing the restructuring processes, by limiting the scope of our thesis to OSV companies that are financially dependent on Norwegian capital markets, we effectively allow ourselves to evaluate the restructurings at the necessary level of detail.

To identify the restructuring cases, we have selected companies based on the sample from Torstensen and Rasmussen (2017) which fit the criteria of our thesis. Further, we have gone through stock exchange notices and media coverage to find additional restructuring cases in the last two years, or cases that were not covered in their thesis. As our thesis also seeks to understand the current situation of our companies given the restructurings undertaken, we exclude companies which have gone through restructurings and subsequently been delisted from the Oslo Stock Exchange, due to shortage of public information after the delisting. Olympic Ships is an example of such a company.

We have identified a total of 18 financial restructurings, which are presented in Table 3.1. As evident from the table, most offshore companies experienced significant financial distress in the wake of the oil price collapse in 2014, consequently having to undergo financial

restructurings post year-end 2014. Notably, Electromagnetic Geoservices, Polarcus, Seabird and Siem show up more than once, meaning that the companies have gone through several restructuring processes. This illustrates the persistently difficult market that oil-related industries have gone through. Moreover, it underscores that restructurings are not necessarily synonymous with uncomplicated, profitable turnovers.

Cases	Offshore segment	Solution announcement	Solution characteristics
Seabird Exploration	Seismic	28.01.2015	Extension, haircut, conversion, equity
Siem Offshore	Supply	11.06.2015	Extension, equity
Electromagnetic Geoservices	Seismic	04.11.2015	Extension, haircut, equity, buybacks
Polarcus	Seismic	05.01.2016	Extension, conversion
Dof	Supply	06.06.2016	Haircut, conversion, equity, buybacks
Solstad Offshore	Supply	07.06.2016	Extension, equity
Rem Offshore	Supply	22.08.2016	Extension, haircut, conversion, equity
Havila Shipping	Supply	08.11.2016	Extension, haircut, conversion, equity
Farstad Shipping	Supply	03.02.2017	Extension, haircut, conversion, equity
Polarcus 2	Seismic	09.02.2017	Extension, equity
Eidesvik Offshore	Supply	01.03.2017	Extension, conversion, equity, buybacks
Electromagnetic Geoservices 2	Seismic	23.03.2017	Haircut, equity, buybacks
Siem Offshore 2	Supply	29.03.2017	Extension, haircut, equity
Seabird Exploration 2	Seismic	26.05.2017	Extension, conversion, equity
Polarcus 3	Seismic	28.01.2018	Extension, haircut, conversion, equity
Electromagnetic Geoservices 3	Seismic	02.03.2018	Equity
Oceanteam	Supply	26.04.2018	Conversion
Seabird Exploration 3	Seismic	24.05.2018	Equity

Table 3.1 – Overview of our sample firms

Source: Newsweb

Table 3.1 also indicate elements of the restructuring solutions of each case. Evidently, most restructurings, and 13 out of our 18 sample cases, involve extensions of the maturity profile of the outstanding debt. Similarly, in 10 of our sample cases, outstanding debt, mostly public bonds, was converted to equity. Interestingly, in all but two of our restructuring cases, shareholders had to contribute with capital through issuance of new equity.

Table 3.2 shows the average operational and financial state for our sample prior to the restructuring process. The table also show the minimum and maximum observations for our companies, reflecting large variation in the multiples within the sample.⁹

⁹ A more detailed overview of each restructuring process can be found in Appendix C.

	<i>Last EBITDA margin</i>	<i>EBITDA / NIBD</i>	<i>Debt / Capital</i>	<i>Z-score</i>	<i>Secured debt / Unsecured debt</i>	<i>P/NAV</i>	<i>Current assets / Current liabilities</i>
<i>Average</i>	26%	15%	76%	-1,66	2,85	0,41	0,41
<i>Min</i>	-133%	-128%	27%	-10,52	0,00	-0,11	0,10
<i>Max</i>	51%	73%	173%	1,28	15,15	1,51	1,83

Table 3.2 – Financial and operational state of our sample firms pre-restructuring

The offshore sector is a highly capital-intensive industry. An average EBITDA margin on 26% implies that 74% of the revenue is operating expenses. Considering the large amount of capital investments in fixed assets in the industry, the EBITDA margin is low. Further, the EBITDA to net interest-bearing debt indicates what percentage of debt the companies in our sample are able to cover on current earnings. On average, this ratio is 15%, clearly reflecting the challenging times in the offshore industry. Moreover, the debt-to-capital ratio ranges from 27% to a maximum of 173%. Arguably, these observations are quite aggressive and an indicator of why our sample companies default on their loans, subsequently ending up in a restructuring process.

A Z-score¹⁰ below 1.8 means that the company is likely headed for bankruptcy (Altman, 1968). Thus, the average Z-score of -1.66 in our sample demonstrates the critical situation the companies were experiencing after the oil price collapsed in 2014. It is worth mentioning that low earnings render a low Z-score, which explains why Seabird had a Z-score of -10.52, five points lower than the second worst. The sample average secured-debt-to-unsecured-debt ratio was 2.85, implying that most of the debt in the industry was secured. Further, the price-to-net-asset-value indicates that investors are only prepared to pay \$0.41 on average per \$1 net assets. The far right column shows that the current ratio on average is clearly below 1, underscoring how our sample companies experience difficulties meeting their short-term debt obligations.

Exhibit 3.1 shows the companies' average capital structure prior to the restructuring. On the left, debt is distributed according to the source of financing, while the right relates to security.

¹⁰ Altman's Z-score is explained in detail in Appendix A.

Debt constitutes 84% of the company's average capital structure before the restructuring process, measuring equity at market capitalisation.

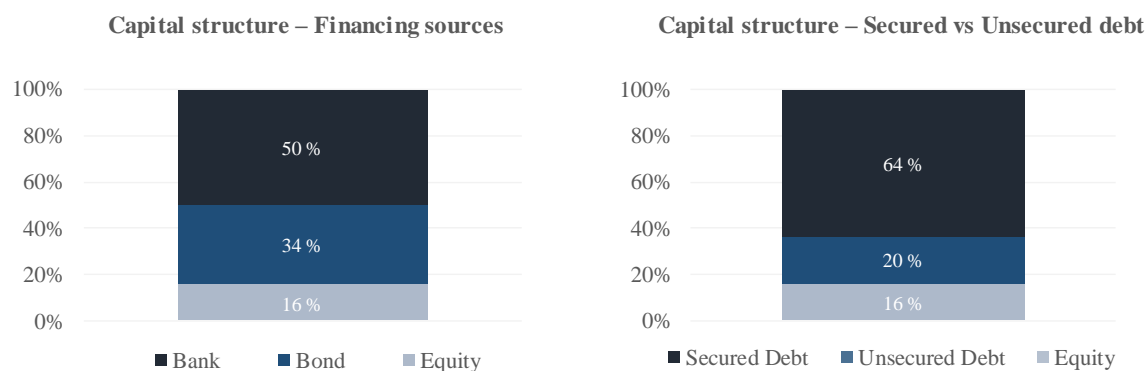


Exhibit 3.1 – The average capital structure of our sample firms prior to restructuring

As Exhibit 3.1 shows, bank debt is the prominent financing source in our sample. On average, half the capital structure consists of bank debt, while the other half is made up of bond debt and equity, with a share of 34% and 16%, respectively. Equity measured at book-value amounts to 25%. The low proportion of equity compared to debt gives evidence to the substantial gearing in the industry. In addition, the net interest-bearing debt to market capitalisation adds up to an average of 26 and underpins the aggressive financing strategies. The majority of the sample debt is secured. Of the 84% debt in the sample capital structure, secured and unsecured debt hold 64% and 20%, respectively.

To sum up, our sample consists of 11 OSV companies that have undertaken one or more financial restructurings from 2015 to present. These firms were in severe financial distress before they started their restructuring-process, as exemplified by the sample's overall depressed Z-score, debt service coverage ratio, and the other measures provided in Table 3.2. As mentioned, with an equity averaging around 16%, many of the firms used extensive debt financing to invest before the crude oil price collapsed in 2014.

4. Banks' considerations in restructuring processes

Bank debt is the main source of funding for Norwegian offshore companies¹¹, and it is evident from our interviews that almost all bank debt related to our sample firms is secured. Hence, being secured lenders on the top of the capital structure, banks are a critical component in every restructuring process of a financially distressed company. As our thesis specifically aims to explore the role and contributions of banks in the restructuring processes of Norwegian offshore companies, this chapter outlines the main considerations of banks in these processes. Firstly, we will introduce a model of four key aspects in forming bank behaviour in a restructuring process, from which we derive our further discussions. Then we will look in further depth into these areas, seen from a bank's perspective.

The insights in this chapter are highly influenced by interviews with claimholders, advisors and regulators frequently involved in financial restructurings. Out of discretion towards our interviewees, we will not specify who contributed with specific insights. However, we would emphasise that several sources highlighted most insights.

Determinants of bank behaviour in financial restructurings

After thorough investigations of our sample restructurings, as well as valuable insight from our interviewees, we recognise that the outcome of a financial restructuring, in terms of which measures are included in the implemented solution, is largely dependent on four key aspects. We argue that the four main determinants of bank behaviour are the current financial status of the distressed firm, the targeted capital structure post-restructuring, the banks' legal options and the stakeholder dynamics, as shown in Exhibit 4.1¹².

¹¹ Out of our sample firms, bank debt averages at 50% of the capital structure when measuring equity at market value.

¹² The model is inspired by one presented in: Experiences from Financial Restructurings - "A Practitioner's View" during the JUC Network for Restructuring & Insolvency Conference, 12.02.18 (Jakob Irgens, DNB).

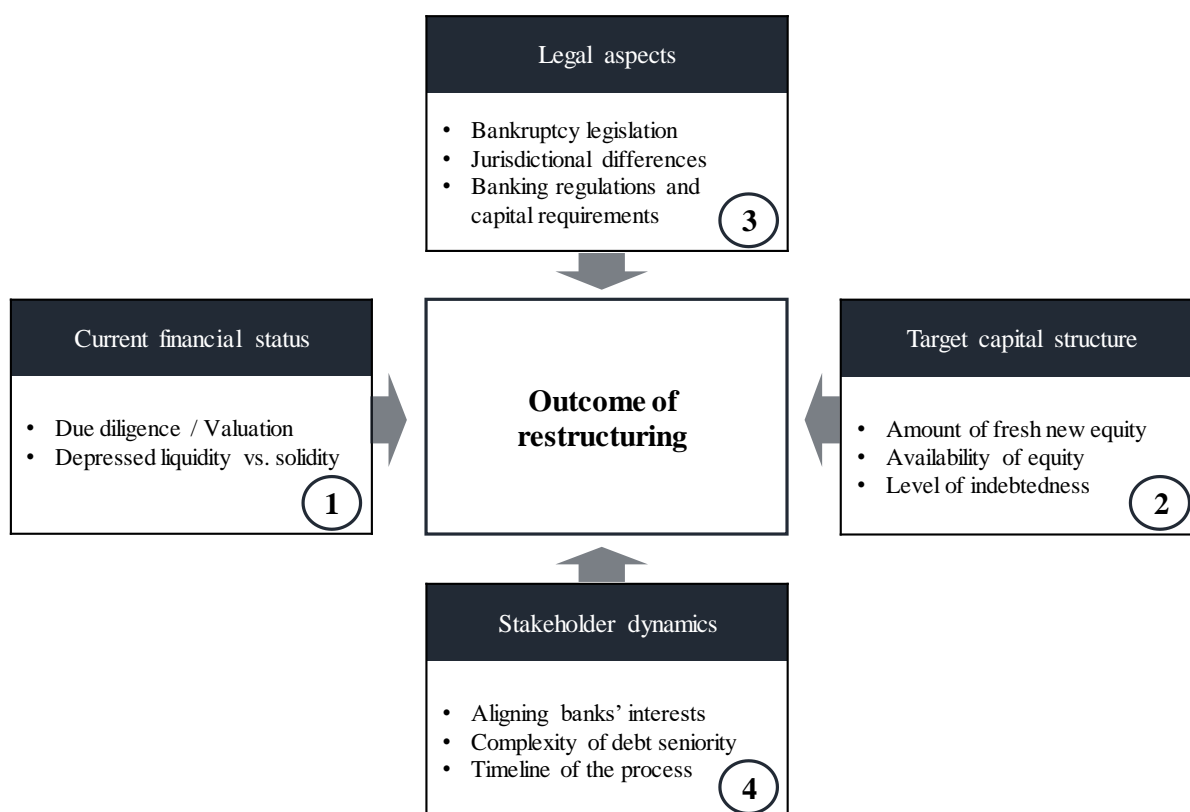


Exhibit 4.1 – The four key determinants of bank behaviour in a financial restructuring

When initiating a restructuring process of a company to which it has outstanding claims, it is critical for a bank to find an accurate financial diagnosis of the distressed firm. Similarly, the bank has to find a sustainable target capital structure of the company post restructuring which enables the firm to survive the current downturn and facilitates growth when the market eventually improves. At the same time, other relevant aspects affecting the choice of initiated measures include the legal options available to the banks and, most importantly, the interactions with other stakeholders in the process.

Existing financial status vs. targeted capital structure post-restructuring

In order to fully comprehend the financial situation of the distressed company, a bank spends a significant amount of time in the early stages of restructurings, together with their financial advisors and other banks in the syndicate, on thorough due diligence. Given the liquidity-constrained nature of a restructuring company, considerable time is spent estimating values of the vessels and the company's contracts' ability to generate cash flow. Banks and other creditors will have to agree on some underlying operational assumptions of the market going forward during these valuation procedures. This can prove challenging due to conflicting

incentives amongst banks with different exposure, maturity and seniority within the syndicate. We will elaborate further on such stakeholder dynamics later in this chapter.

When working on a restructuring solution, it is of high priority for banks to turn the company to a state where it becomes as creditworthy as possible. Thus, finding a sustainable level of debt and designing a future capital structure enabling the company to remain a going concern is vital. Interestingly, the incentives for banks in this process are somewhat conflicting with those of company management and investors. As banks only hold claim on the face value of the loan, plus interest, the return on the debt is capped to the contractually agreed terms. This limits the upside potential if the company is successfully and profitably restructured. Considering this, banks are not willing to forego more outstanding debt than critically necessary for the company to resolve the distressed financial situation. Moreover, for banks to waive claims, they typically demand the owners to contribute as well, often requiring the company's post-restructured capital structure to contain substantial new fresh equity. The availability of this equity is also a relevant aspect in forming the outcome of the restructuring. Generally, the banks strive to retain financially robust owners with industrial experience and long-term perspective to contribute with equity if necessary. Thus, banks will typically prefer that the existing shareholders contribute with new equity.

After going through the financials of the distressed company, having worked closely with financial advisors and other banks involved in the process, the banks should be able to assess the extent to which the situation is a matter of depressed liquidity or solidity, as well as which measures are necessary to remedy the situation. Depressed liquidity implies that banks can impose somewhat softer measures, offering the firm sufficient runway¹³ to weather the storm until the market recovers. Such measures include amending and extending current debt agreements, and may entail covenant waivers, rescheduling of interest and amortisation, and extending maturities. However, if the current market conditions do not improve significantly during the extension period, these deferrals are likely to end up as so-called "kick the can"-solutions, referring to situations where the restructurings do not rectify the mismatch between current liquidity and debt obligations, but solely postpone the issues pending a market upswing.

¹³ The period a firm is able to operate given the current market conditions without defaulting on its debt.

More drastic alternatives to extensions are annulments of debt or taking possession of the collateral. However, particularly related to the latter, banks shy away from such measures as they do not consider themselves qualified to own assets as they do not possess the skill or capacity to operate the vessels. Moreover, in taking the asset, the banks will also lose any backlog or contract tied to it. As emphasised, in a distressed OSV market, a contract would be a substantial part of a vessel's value. In addition, considering that companies like Dof, Farstad and Siem operated as many as 50-70 vessels each pre-restructuring, taking collateral in order to sell the ships to other industry players would obviously not create a seller's market, further depressing prices.

Consequently, the most viable option of cancelling outstanding debt is by conversion of debt to equity, effectively taking an ownership position in the firm. One can argue that banks, *ceteris paribus*, should be instrument agnostic and thus indifferent to holding an equivalent amount of debt in equity. However, similarly to seizing assets, banks typically do not possess the competencies to derive value from a shareholder position, nor is a bank necessarily mandated to change the bank's relationship with the distressed company from being a lender to becoming a major shareholder. If the bank converts to equity, in terms of value conservation, it also immediately risks that the stock market expects it to inevitably sell the converted shares in the market. This would again put a downward pressure on the stock as long as the bank retains its ownership position. Another reason why banks prefer to own debt instead of equity is due to capital requirements imposed by the authorities. Due to regulations on capital adequacy, when lending out, Norwegian banks will have to have equity coverage of 16.5%. On the other hand, if banks were to convert debt to equity, the loan turns to an investment and the bank must have a 100% equity coverage. Naturally, holding stocks is relatively more expensive, and thus correspondingly unattractive.

The majority of our sample companies' financing is bank debt. A company usually has several banks providing financing and, naturally, the banks are normally exposed to several companies within the same sector. In terms of the latter, this arguably provides the banks with a unique possibility to dictate terms throughout an industry if restructurings are needed in several companies within the same industry. Considering the OSV industry, a particular emphasis is placed on the market balance and the oversupply of vessels. Being universal creditors, banks are in pole position to address these issues when restructuring the companies. Measures targeting these issues are, for example, scrapping of vessels and enhanced consolidation. However, there are also some drawbacks with being extensively exposed throughout an

industry. As both the financial industry and the industrial communities in Norway, especially in the offshore sectors, are quite small, the terms given to different companies are rather transparent. Thus, if banks were to give favourable terms to one company, they would essentially be forced to give equal treatment to all the firms in the same industry. Clearly, this is particularly pressing if considering reducing outstanding debt, as the cancellation of debt in one case would effectively lead to banks having to cut elsewhere as well. This mechanism was brought up to date in autumn 2019 when DNB published a stock notice regarding a loan loss provision of NOK 1 billion related to an unspecified customer. The initial opinion in the market was that this was linked to ongoing offshore restructurings, and the share price reacted down 3% on the news, effectively reducing the market value of the bank by NOK 6 billion. Arguably, this overreaction illustrated the notion that misfortunes never come singly, and that if DNB takes losses in one offshore restructuring, the fear is that it has to do so in all of them.

It is worth mentioning that the perception of a financial restructuring as solely negative for the banks does not necessarily provide a nuanced picture of the financial outcomes for the banks involved in such processes. During these processes, banks can choose to provide additional financing, either by taking over another bank's exposure or extending and increasing existing credit lines pending the outcome of the restructuring. Increasing the exposure to distressed companies also comes with significant risk and, as is evident from our interviews, does only occur in cases related to shortage of liquidity rather than cases involving lack of solidity.

The legal aspects

There are several legal aspects affecting the behaviour of banks in financial restructurings, including procedural regulations and differences in jurisdiction, as well as capital requirements and banking regulations.

Norwegian bankruptcy legislation

Under Norwegian bankruptcy legislation, a financially distressed company has two alternatives to bankruptcy: a voluntary debt settlement or a compulsory debt settlement. The former can include the tools suggested by the law¹⁴, as well as any measure the stakeholders

¹⁴ In particular, court-mandated tools are (i) deferment of payment, (ii) a reduction of debt, and (iii) a liquidation of the debtor's assets with an equal reduction in the debtor's debt (Skudal & Vartdal, 2017).

involved see fit. Solutions in a compulsory debt settlement, however, are severely restricted to only containing the tools suggested by the law. In addition, it requires a minimum dividend of 25% to all unsecured creditors. Hence, from a bank's point of view, the legislation is made in order to protect junior lenders and will not sufficiently compensate secured creditors. To implement a solution negotiated in court, a voluntary debt settlement requires a unanimous vote in favour of the proposed restructuring solution, while the compulsory debt solution requires three-quarters of the votes from all affected creditors. Thus, as the voluntary debt settlement is challenging to achieve and the compulsory settlement is usually deemed highly unreasonable, the in-court restructuring alternatives are largely perceived by banks as a choice between two evils.

Notably, Skudal and Vartdal (2017) find that Norwegian bankruptcy legislation does not facilitate a high firm survival rate. In fact, of their 26 sample firms undertaking in-court settlement procedures, only four survived the restructurings. This is consistent with the findings of Villars-Dahl's Norwegian Official Report (2016), which found that 81% of the 114 debt settlements that proceeded in the Norwegian bankruptcy court between 2006 and 2015 ended in company bankruptcy. The report concludes that in order to increase the number of successful in-court debt settlements, the Norwegian bankruptcy laws must provide more flexibility for larger reconstructions of the companies.

A third option in Norwegian bankruptcy legislation is filing for bankruptcy proceedings. However, this process is also considered highly dysfunctional by banks. Bankruptcies usually involve an official receiver liquidating the firm's assets on behalf of the creditors. The receiver is often accused of spending extensive amounts of time identifying priorities and distributing the values across creditors. Conversely, if the official receivers deem the process too messy, as would probably be the case in a process involving a number of old supply vessels, they can easily abandon the collateral back to the banks. As emphasised, fire sales of assets do not exactly create a seller's market. The lack of productive methods available in court substantiates the banks' unwillingness to go through courtroom proceedings, favouring private workouts instead.

Jurisdiction differences on bankruptcy legislation

Due to the unpredictable nature of the outcomes in Norwegian bankruptcy legislation, both bondholders and shareholders will use the threat of the company filing for bankruptcy as

leverage in restructuring negotiations with the secured banks. Conversely, the banks will have similar leverage in threatening to go through in-court proceedings in a different jurisdiction.¹⁵ In other countries, such as in the US, in-court restructuring is a more feasible option for banks as the procedures are significantly more structured and because it is more difficult for single creditors to block a restructuring proposal. There are two main reasons for this. Firstly, all creditors are grouped into various creditor classes based on seniority, for instance, secured and unsecured creditors belong to separate classes. Subsequently, each class needs three-fourths approval to pass a proposal, thus leaving less room for individual creditors to throw a spanner in the works for the collectively agreed solution proposal. Secondly, in what is called a “cram down”, the judge can approve a plan even though some creditors are objecting to it. For the cram down to be approved, the judge must be convinced that the solution proposal complies with certain criteria, essentially being that it is feasible, has honest intentions and is applicable by law. Moreover, the judge must be convinced that the restructuring will not be subject to a subsequent restructuring or liquidation shortly following implementation.

Capital requirements and banking regulations

Banks are subject to regulations and capital requirements influencing their behaviour in financial restructurings. The EU Capital Requirements Directive (CRD IV) introduces requirements for equity, long-term funding and liquidity (DNB, 2018). CRD IV comprises three pillars, the first of which concerns capital adequacy and risk assessment, and is thus particularly relevant when considering restructurings.

Exhibit 4.2 provides the requirements for each of the three capital classifications of Pillar 1, as well as the leverage ratio requirement by the Financial Supervisory Authority of Norway (FSA). Notably, the risk-weighted assets are computed using the banks’ proprietary internal ratings-based (IRB) models. These models are not publicly disclosed, but must be approved by the FSA.

¹⁵ Given that there are formal and legal grounds for the company being eligible for judicial proceedings abroad.

<i>Measure</i>	<i>Formula and requirement</i>
CET 1	$CET\ 1\ ratio = \frac{CET\ 1\ capital}{Risk\ -\ weighted\ assets} \geq 14.5\%$
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	$Leverage\ ratio = \frac{Tier\ 1\ capital}{Total\ exposure} \geq 5.0\%$

Exhibit 4.2 – Capital adequacy requirements for Norwegian banks

Source: The Financial Supervisory Authority

Due to CRD IV regulations, if banks were to partially write-off on a loan engagement through a restructuring, they would also have to reclassify any remaining debt associated with the original loan to a riskier asset class when calculating its risk-weighted asset measure. Such reclassifications effectively lower the banks' lending capacity, emphasising banks' reluctance to write off on outstanding debt.

In terms of banks reporting losses and impairments, the new IFRS 9 regulations introduce a model based on evaluations of expected losses. IFRS 9 replaces the old "incurred loss model" under IAS 39, which assumed that all loans will be repaid until evidence to the contrary, known as a trigger event, is identified. Hence, under IFRS 9, losses are recognised earlier than in the incurred loss model. In contrast, impairments after IAS 39 have been heavily criticised as being reported too late and being too small. This was on the agenda particularly in the aftermath of the financial crisis of 2008. As with debt issued to other cyclical industries, the probability of offshore firms defaulting is largely dependent on the macroeconomic fluctuations. Consequently, based on the new model, the latest downturn in the OSV industry should arguably affect the banks' balance sheets, and could in turn impact measures included in the restructuring solution.

When calculating expected credit losses, the banks' reporting must reflect an unbiased evaluation of a range of possible outcomes and their probabilities of occurrence. Moreover, this assessment must be based on reasonable and supportable information about past events, current conditions and forecasts of future economic conditions (PWC, 2017). In practice, the banks are required to identify different scenarios related to the outcome of the debt issued to the offshore companies, and evaluate the probabilities of these scenarios up against each other. An assessment includes macroeconomic assumptions, as well as industry-specific forecasts, typically from financial analysts and shipbrokers. Shipbrokers also have a particularly relevant

role in determining the value of the vessels used as collateral in the vast majority of loans issued to the industry.

Stakeholder dynamics

Parties regularly engaged in financial restructurings have described the process to us as negotiations involving chaos, game theory and unexpected use of atomic bombs. Somewhat more diplomatically phrased, one of our interviewees referred to restructurings as “never a dull moment”. Regardless, restructurings require stakeholders with often completely different priorities and agendas to agree on a solution protecting the company from a value destructive bankruptcy. However, designing a restructuring which saves the company at the same time as it preserves all stakeholders’ interests is fairly unrealistic. Thus, finding a solution in which there is an equal level of dissatisfaction is probably the best stakeholders can hope for.

As Exhibit 4.3 illustrates, in order to prevent destruction of values for the restructuring firm, there must be an internal balance between the different stakeholders involved in the process. Banks, usually on the top of the capital structure having first priority in restructurings, hold a key role in securing such balance. In the following section, we will elaborate on the different dynamics banks’ experience with other stakeholders participating in the restructuring.

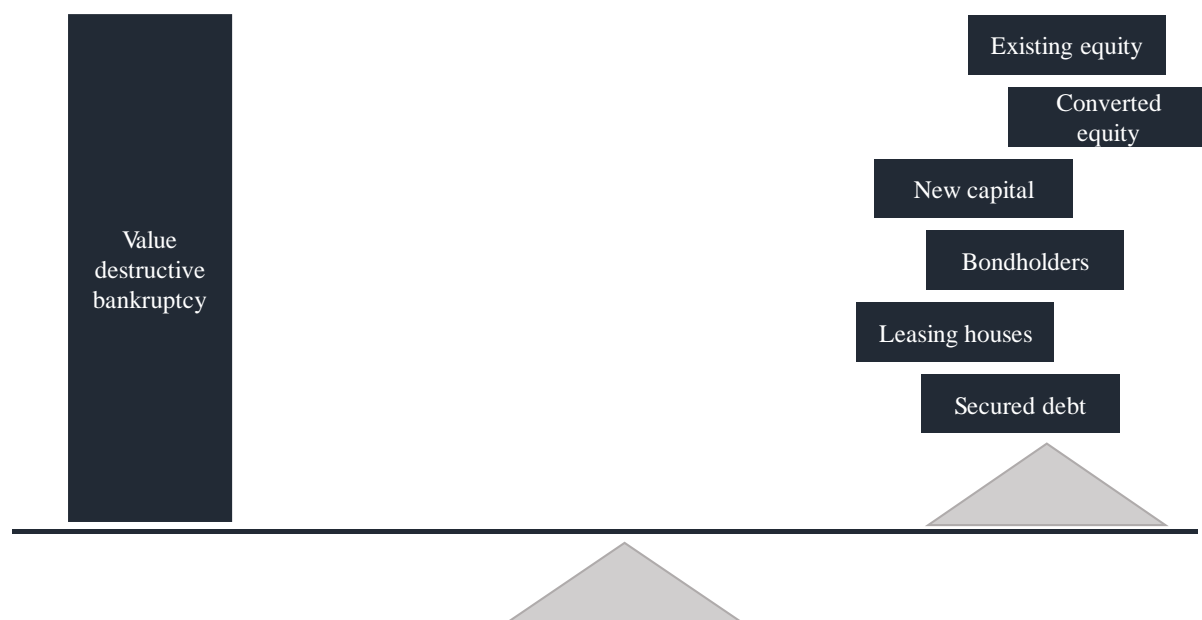


Exhibit 4.3 – Balancing stakeholder interest in financial restructurings

Other banks

From our interviews, we find that the most time-consuming part of the restructuring process for a bank is often to align interests with the other banks holding claim to the distressed company. The conflicts are primarily due to financial exposure, risk ability and willingness, and a bank's strategy going into the restructurings.

In the OSV industry, bank debt often takes the form of several small facilities, using vessels as collateral. Rather than expanding existing credit lines, the company takes on new facilities when financing new vessels. Consequently, a company operating 40 vessels might have an equal amount of bank facilities. Given that these vessels are not necessarily acquired at the same time, each facility will probably involve different gearing profiles as older vessels have had cash-flow generation over a longer period of time paying down on the loans. Hence, when working towards collective measures within the banking syndicate, for instance reducing interest payments and amortisation, the various banks might have rather conflicting interests in terms of which reductions seem fair to the respective banks. In addition, the loan facilities often have different maturities. This could trigger arguments between banks on whether all facilities should be extended equally with the same number of years, or if all maturities should be set to the same year. Furthermore, consistently financing with new facilities also leads to disagreements over the quality of the respective banks' collateral, as the vessels differ in age, operating status and availability to customers (i.e. on contract, warm-stacked, cold-stacked)¹⁶.

Within a banking syndicate, there are likely to be banks with conflicting strategies and mandates. Some of our sample firms are up for new rounds of restructurings, and have publicly expressed that banks' unwillingness to remain exposed to the offshore industry have made it difficult to refinance existing debt. As such, if a bank holds the OSV-industry as an "exit"-sector, this would obviously be challenging for the rest of the syndicate as other banks risk suffering haircuts on outstanding debt or buy out the exiting bank's exposure. In order to accept taking over the risk, the acquiring banks will demand a significant discount, about which the exiting bank is generally reluctant. Hence, in processes with such clear fronts up against each other within the banking syndicate, a restructuring is more likely to end with

¹⁶ A warm-stacked vessel is laid up for an expected period of less than twelve months. The machinery on board is operative in case a sudden recommissioning is required. When cold-stacked, a vessel is practically shut down, and is expected to be idle for at least 12 months.

bankruptcy proceedings, as was the case with IM Skaugen in 2018 (Lund & Ekeseth, 2018). Further, as a syndicate grows large, there often tends to be considerable differences between the banks in terms of size and resources. Our understanding from interviews with other stakeholders is that the larger banks are usually fairly constructive when initiating the negotiations, while smaller banks attempts to delay the processes, essentially hoping to be bailed out by the largest banks.

In terms of domicile, we have also learned that local banks with personal commitments to the debtor often find larger banks to be more cynically inclined. This could lead to more distant banks putting pressure on the local banks to bail them out. Additionally, expanding the geographical perspective, if the syndicate includes banks from various nationalities, differences in terms of investment strategies and mandates, as well as culture, often change the dynamics in the negotiations. Typically, if there are banks with clear political agendas, this could complicate the process and prove challenging when trying to find reasonable solutions. Troubles due to so-called “Chinese calculators” are seemingly well known amongst banks involved in restructuring processes, and refer to situations where foreign banks are restrained by political interests and connections. Moreover, differences in nationalities can also indicate the extent to which the banks are likely to accept losses. Gjønnnes (2017) explains how Singaporean or US banks are more willing than their Norwegian counterparts to cut their losses and move on to new engagements.

Being universal creditors, banks should be uniquely positioned to facilitate restructuring solutions of which the outcomes increase the likelihood of the banks getting their outstanding offshore debt repaid. However, most of this debt is tied to vessels as collateral. As such, the recent downturn has not only put the values on these vessels under immense pressure, it has also illustrated how the current market is considerably oversupplied. The only way to ensure a more balanced market is to take vessels out of the market. Importantly, for banks to initiate an industry-wide scrapping effort, we argue that there must be a system in place to compensate the creditors with collateral in the ships that are eventually scrapped. This depends on banks’ ability to coordinate and work together.

GIEK

Another important creditor in the restructuring negotiations is the export credit guarantee agencies. In our sample, agencies involved in the restructurings have also been foreign, as, for

instance, the Brazilian agency. In this thesis, we will mostly refer to the Norwegian agency, GIEK. GIEK provides long-term guarantees on behalf of the Norwegian state, largely on the same terms as the banks. Typically, when a Norwegian ship owner finances the acquisition of a newbuild, 30% of the debt is guaranteed by banks and the remaining 70% is guaranteed by GIEK (Torstensen & Rasmussen, 2017). This provides GIEK with significant risk in restructurings, and as such, it has quite similar motives and priorities as banks going into the process.

Despite some differences in incentives and restrictions, 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

It is important to separate between secured and unsecured bond debt, as secured bond debt has many of the same characteristics as bank debt, while unsecured bond debt differs significantly. Thus, secured bondholders are typically treated similarly to secured banks. In contrast, unsecured bondholders have no collateral and would receive little to nothing in a liquidation scenario.

Most bonds are listed, which implies that bondholders have their holdings continuously valued in financial markets. Thus, going into a restructuring, they are perfectly aware of the deteriorated nature of their investment. As a result, the investments are likely to already have been booked as impairments on investments in their financial statements. Hence, with the loss being behind them, bondholders are essentially left with an option on the market to recover, the value of which is known as the holdout value. This option could cause some bondholders to sit back and postpone the process. Further, during the last wave of Norwegian restructurings, there were a lot of murmuring amongst bond investors claiming unfair treatment from the secured banks. Bondholders were particularly criticising what they perceived as disproportionate loss relative to banks and shareholders, which substantiates the notion of upset bondholders potentially behaving irrationally, delaying the restructuring. Due to the need for two-thirds approval from bondholders in a private workout, in theory, unsecured bondholders tend to be in a position to push banks in a favourable direction.

Bondholders are a fragmented group of investors, with whom the banks have different relationships. A bondholder group who could prove helpful for banks, but on the other hand complicate the restructuring process for other investors, are vulture funds. These funds invest in bonds issued by distressed companies with the sole intention of speculating in recovery of the bonds. For instance, if these funds acquire the bonds at 20% of face value, they might be satisfied with a restructuring solution buying back the bonds at 40% of par, yielding a return of 100% for the vulture funds. Hence, in terms of having bondholders agreeing to a solution involving substantial haircuts on outstanding unsecured debt, these funds could prove beneficial to banks. Another group of bondholders the banks need to take into consideration are the industrial players. These players might have strategic motives when buying debt in the distressed companies, as Aker had when they bought more than a third of Rem's outstanding bond debt during Rem's restructuring, effectively blocking any solution not involving Rem to become a part of the Aker-controlled Solstad (Aadland, 2016). Bonds issued by these distressed companies are typically traded at a significant discount to par. Thus, for industrial players with bigger financial muscles, this need not be a particularly expensive way of seizing significant control over another company's future.

Shareholders

Similar to bondholders, the ability to delay a restructuring can be considered a call option on the market to recover. As restructuring processes may take years to complete, market recovery in that period is possible. Notably, most shareholder value is lost prior to when the restructuring commences. In addition, given the likely outcome of new equity substantially diluting existing shareholders, the upside potential associated with avoiding restructuring, equalling the holdout value, can be massive. According to Franks and Torous (1989), any compensation to shareholders in violation of the APR can be considered a payment for this option.

In some cases – as is the case in some of our sample firms – existing shareholders also have leverage over banks, given their invaluable industry experience. Norwegian ship owners are often owned by families who have been involved in the industry for decades. As discussed, banks are reluctant to take control of a company and will strive to keep these families as majority owners, favouring them when distributing ownership shares. Moreover, interviewees have emphasised the importance of having such owners as a part of the negotiation processes. Arguably, as these owners have their skin in the game to a larger extent than other

stakeholders, they are pivotal in driving the negotiations forward. Interestingly, although outside of our sample, in the failed restructuring of the drilling company Dolphin Drilling last year, claimholders involved in the process have argued that the absence of the controlling owner, Fred Olsen, as a driving force in the restructuring, negatively impacted the outcome.

In restructurings, one can never underestimate the influence of new capital and unimportance of the old. The contributors of equity in a restructuring will find themselves in control of the firm post-restructuring, and naturally, the banks are eager to find suitable owners, increasing the likelihood of leading the company towards a more creditworthy future. Conversely, if banks were to have bondholders convert all their debt to equity, bondholders would essentially seize control of the company. Due to the fragmented nature of bond investors, banks pursue solutions avoiding this. Hence, an alternative to issuing equity to existing shareholders is to find new owners. Due to the high risk involved, financial investors are likely to stay cautious about investing heavily in restructuring cases. Consequently, reaching out to new industrial owners is probably a more viable alternative. For an industrial owner, a company undergoing financial restructuring can be considered as a cheap M&A target, both for competitors and companies elsewhere in the value chain (Torstensen & Rasmussen, 2017). However, for an industrial player, it must make more sense economically to consider M&A than to buy the target company's assets at very low prices in a potential liquidation scenario.

Advisors and other contributing parties

Exhibit 4.4 provides an illustration of which resources banks bring to the table, and at what time, during a restructuring process. Given the complexity and time-consuming nature of all the restructurings in our sample, it is our understanding that all of these resources have been involved in the processes.

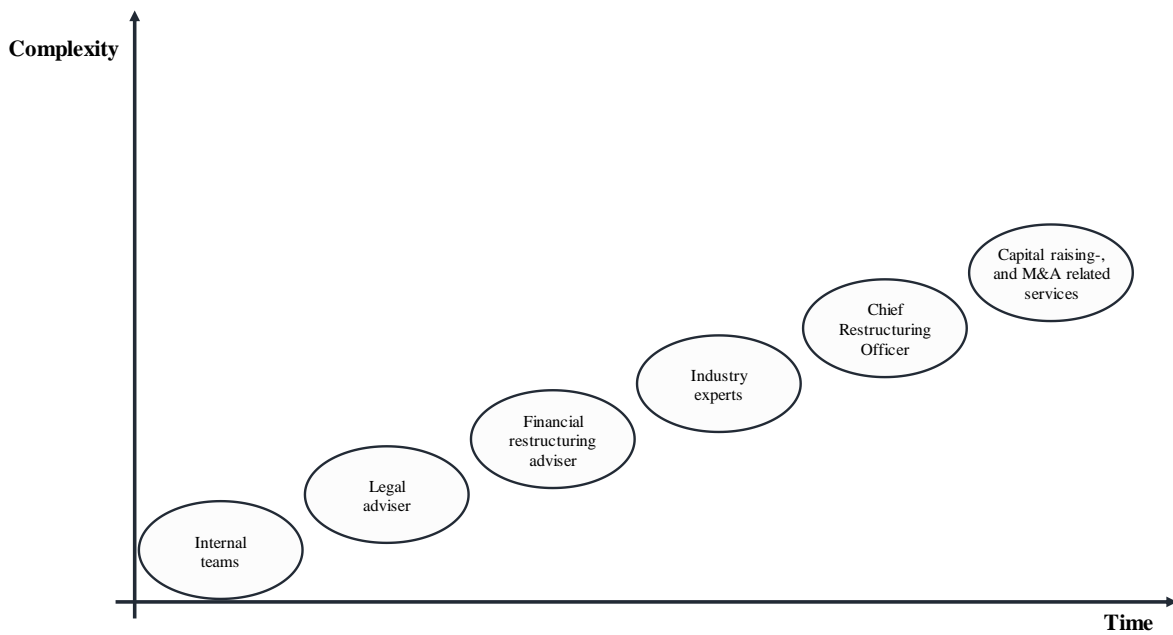


Exhibit 4.4 – When and where resources are needed in restructuring processes

Notably, legal and financial advisors are highly involved in restructuring processes. Arguably, in negotiations including up to 20-30 credit institutions¹⁷, fragmented groups of bond investors, shareholders, company management, customers and other third parties, there is a desperate need for coordinating stakeholder interests, supervise legal concerns and administer practical matters. Moreover, advisors have an important role in reality orientating their clients. In order to succeed, there has to be unequivocal unanimity amongst the stakeholders in who has priority first, second and so on. Having competent advisors with experience from previous restructurings enables this, making the negotiations more productive, increasing the probability of a successful outcome.

Although a Chief Restructuring Officer (CRO) is more commonly used in private workouts in the US, we acknowledge that for all practical matters, Norwegian restructurings also involve a corresponding role with more or less the same assignments. A CRO is basically a professional whistleblower employed by the banks or other stakeholders to work closely with the distressed company, monitoring the actions of the management and board of directors. The aim of including a CRO in the process is to be certain that the company is constantly in

¹⁷ The most extreme example is the restructuring of Seadrill last year, with a total of 42 banks involved, with an estimated total of up to \$250m in restructuring costs.

compliance with the terms of the standstill agreement, or any other agreements pending the outcome of the restructuring process.

The time scope of the whole restructuring process varies significantly, from within a few months to more than a year. As discussed, there are considerable differences in agendas and priorities, as well as experience and knowledge, between the involved parties. Moreover, the negotiation processes are often immensely expensive, and although financial advisors tend to take a success fee, the lawyers often bill by the hour. The costliness of a restructuring process varies greatly from case to case; however, it is our understanding from interviewees that costs up to NOK 80-100 million are not unusual. Restructuring costs are generally covered by the companies, and will consequently impact on the size of the cake the negotiating parties are essentially discussing how to distribute.

5. Post-restructuring analysis of bank contributions

In this chapter, we will investigate the outcomes of our sample cases. Specifically, our emphasis is on the contributions of banks being the key creditor. Firstly, we will examine the outcomes of bank debt, in terms of the measures included in the implemented solution and the extent to which bank debt was affected in the restructuring outcome. Secondly, we will review the role of banks and the relationships with other stakeholders involved in the process, followed by a brief discussion on the assumption of APR in our sample. Lastly, we will conclude the post-restructuring analysis by evaluating what was essentially done – and what was not.

Torstensen and Rasmussen (2017) labelled the restructuring negotiations “a room where everyone has a loaded gun”. As such, we argue that the outcome of bank debt suggests that banks came out of the processes practically unharmed, naming the first section “Dodging the bullet”. Furthermore, the position of banks as secured creditors made them in charge of most of the negotiations, enabling them to dictate the terms and outcomes for other stakeholders. Consequently, the second section is called “The alpha dogs”. The third section, “The go-to guys”, discusses the extent to which banks favoured shareholders at the expense of unsecured bondholders, violating the APR assumption. Finally, in the section “What is done and what is next”, we evaluate the solutions that were ultimately implemented.

Dodging the bullet

Bank debt is by far the most important source of financing in our restructuring cases. Out of the 11 firms, 10 have had bank debt. In total, 82% of all outstanding debt in our sample relates to bank debt. This demonstrates the position of banks and their ability to set the terms of the negotiations with company management and other stakeholders. As emphasised, banks are generally exceptionally reluctant to waive outstanding debt. Assuming the APR holds, junior claimholders receive financial consideration only after creditors with higher seniority have been fully paid. Thus, one should expect banks not to forego any debt before stakeholders with lower seniority have taken a substantial hit on their outstanding claim.

Table 5.1 provides an overview of the outcome for outstanding bank debt in our sample restructurings. Notably, there were only two cases where banks took a haircut. This demonstrates the banks’ reluctance to forego any debt. Further, three cases included banks

converting debt to equity. Significantly more often, the banks agreed to amendments to the payment structure and maturity profile. In total, eight cases involved reductions in amortisation¹⁸, while the maturity on the loans was extended in nine of the cases involving bank debt. Interestingly, the most common measure included by the banks in the restructuring solutions was covenant changes. This demonstrates how banks go to great lengths in order to avoid cancelling on loan engagements. In addition, it illustrates how banks, being on the top of the capital structure, have the ability to dictate the restructuring solutions to favour them.

<i>Cases with bank debt: 14</i>	<i>Number of cases</i>	<i>Share of cases</i>	<i>Average</i>	<i>Max</i>	<i>Min</i>
<i>Cash redemption</i>	0	0%	0%	0%	0%
<i>Haircut</i>	2	14%	7%	7%	7%
<i>Conversion to equity</i>	3	21%	33%	83%	5%
<i>Reduced amortisation (% of outstanding)</i>	8	57%	22%	34%	7%
<i>Maturity extension (years)</i>	9	64%	3.5	5.0	2.2
<i>Covenant changes</i>	11	79%			

Table 5.1 – Overview of outcome for bank debt in our sample restructurings

Debt reductions

Obviously, when your whole business model evolves around profiting from lending out, to waive outstanding debt is a bitter pill to swallow for banks. Moreover, almost all bank debt in our sample is secured. Hence, as banks are disinclined to reduce the nominal outstanding level of debt and most often have priority over other creditors, the amount of debt being cancelled in restructuring processes should be limited. In our sample, the level of bank debt is essentially unchanged post-restructuring. Reductions in the banks' debt claims corresponded to only 2% of the nominal outstanding prior to the restructurings.

In three cases, being the Farstad, Havila and one of the Seabird restructurings, banks ended up converting debt to equity. In the former, banks took a 31% ownership share post-restructuring. In the Havila case, banks ended up controlling around 20% of the company. DNB and Swedbank each took a minority stake of 10% and 5%, respectively. The last case involving

¹⁸ Reduced amortisation means deferral of amortisation payments, often for an agreed period of time post-restructuring. The deferred instalments are usually paid at maturity and should not be confused with cancellation of outstanding debt.

debt conversion is the second restructuring round in Seabird, in which 87% of the bank debt was converted to equity. Notably, such conversion rates of secured bank debt are rare, illustrated by conversion rates of 3% and 11% in the Farstad and Havila cases. It should be noted that the Seabird case involved significantly less bank debt than the former two. Moreover, the credit institution partially waiving its claim was American, which tallies well with our understanding from interviews that American banks more often than their Norwegian counterparts in restructuring processes are willing to take losses and get on with other engagements.

As discussed, there is an obvious reluctance amongst banks to take haircuts on outstanding debt. In our sample, only the banks engaged in the Farstad and Havila restructurings reduced the nominal outstanding level of debt. The former restructuring solution involved banks taking a haircut of 7%. In the latter, the company had to sell non-core vessels and the remaining debt connected to the sold vessels were treated as haircuts. Further, we find no cases involving cash redemption of bank debts. Intuitively, the low frequency of debt being redeemed in cash relates to the liquidity-constrained nature of our sample firms.

Significantly more often than reducing debt, banks agreed to reduce and defer amortisations. The reductions ranged from 7% to 22% of the total outstanding debt. With an average amortisation reduction of 10%, the reduction usually entailed a 50-100% deferral of payment for three years on average. For the distressed companies, as the deferred instalments are usually paid at maturity, reduced amortisation does not mean reduced debt in absolute terms; however, it does provide a much-needed liquidity relief.

Extensions and runway length

The previous chapter on banks' considerations going into a restructuring gave insight into how banks impose softer measures, such as amending and extending current debt agreements, to offer the firm sufficient runway to weather the storm until the market recovers. Maturity extensions were included in nine cases, and averaged around three and a half years, ranging from around two years to five years. In 11 of the cases, covenants were changed or annulled.

Exhibit 5.1 shows the development in the debt maturity profiles of our sample firms, including both balloon payments at maturity and amortisation. The dark columns represent the amount of debt payable at different maturities prior to the restructurings, while the grey columns, on the other hand, illustrate the amount payable with extended maturities. The payment profile post-restructuring is visibly skewed towards the end of the time horizon, which is reasonable given that most of our pre-restructured debt was due around 2016 and 2017 and that the average extension was three and a half years. Further, the chart substantiates our findings of only a limited decrease in bank debt obligations for our sample firms.

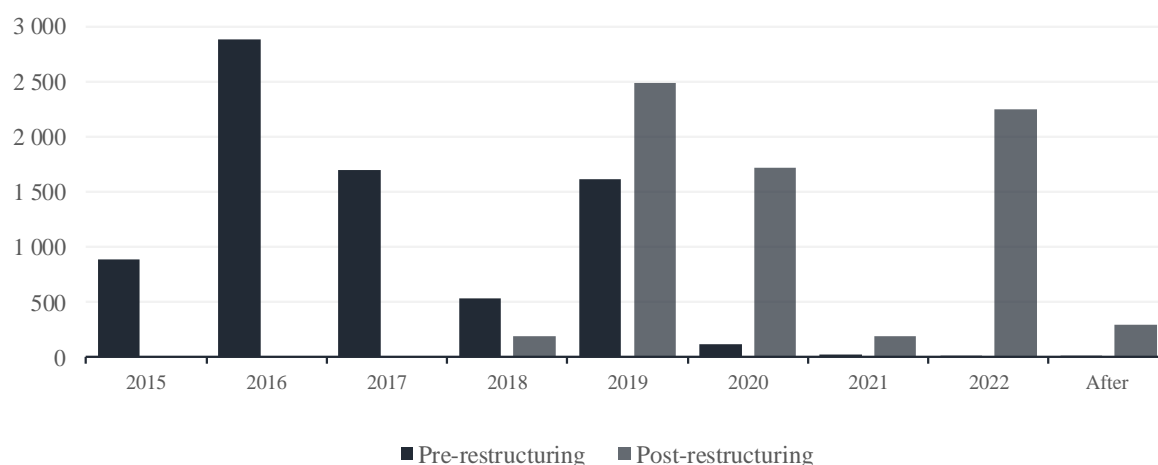


Exhibit 5.1 – Maturity profiles of pre- and post-restructured bank debt in our sample

Summing up in terms of measures imposed by banks, the banks have chosen to kick the can a few years down the road, and extended the maturity of the debt rather than reducing the nominal outstanding. In addition, banks have changed covenants and contributed through deferred and reduced amortisation easing the imminent liquidity strain. Moreover, we find only a few examples of banks converting debt to equity and thus taking ownership positions in the restructured companies. This is consistent with earlier research on restructurings, for example by Asquith et al. (1994), and our discussions on bank incentives and considerations in chapter four.

The alpha dogs

For banks to agree to a restructuring solution entailing them amending and extending debt agreements, they usually demand that other creditors and shareholders contribute equally. In our cases, bondholders generally accepted similar amendments and maturity extensions as those agreed to by the banks. However, as their claims hold less seniority, bondholders are

significantly more exposed to losses on outstanding debt. Similarly, shareholders, being on the bottom of the capital structure, are equally likely to have their ownership position reduced through issuance of new equity.

Exhibit 5.2 illustrates the different contributions from the main claimholders. Overall, shareholders contributed in all but two of the cases. Bondholders and banks contributed in 13 and 10 cases, respectively.

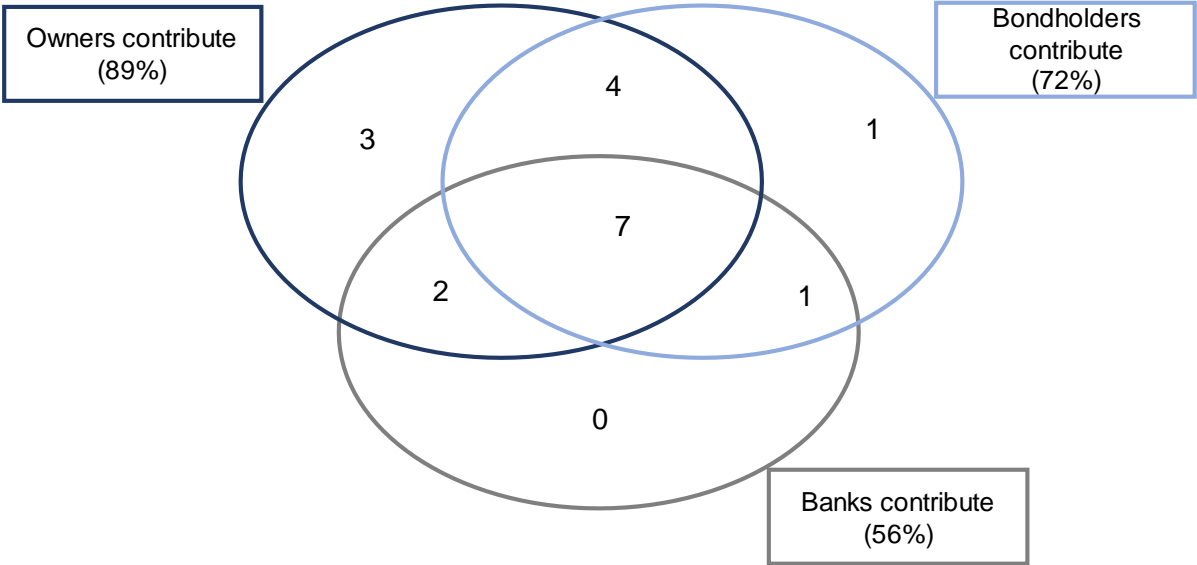


Exhibit 5.2 – Contributions from the different claimholders, number of cases
Contributions not included: Covenant changes and interest changes

As we can see, banks have not agreed to contribute alone in any of our cases. Similarly, only one case involved creditors solving the distressed situation without demanding new equity from shareholders. Considering the seniority of their claims, this comes as no surprise. Further, in two cases, banks and shareholders resolved the situation without the contribution of bondholders. In both Polarcus’ second restructuring and in the first Siem case, the bondholders played no part in the solution implemented despite banks contributing with reduced amortisation and maturity extensions. However, in these cases the initiated measures were related to imminent bank repayments with maturities within months, whereas the maturities on the outstanding bonds were already years ahead. Hence, the notion of banks not incurring losses without less senior claimholders taking substantial hits is presumably intact, in line with James (1995), as discussed in our literature review.

Banks and bondholders

There is a clear difference between secured and unsecured bondholders in terms of priority. As unsecured bondholders receive nothing in a liquidation scenario, one would expect these creditors to end up significantly worse off than their secured counterparts. All of our sample firms had bond debt as a part of their capital structure, and while all restructuring cases involved bond debt, there were only six cases with secured bond debt.

	<i>Bank debt</i> (Observations: 13)	<i>Secured bonds</i> (Observations: 5)	<i>Unsecured bonds</i> (Observations: 15)
<i>Remaining debt</i>	98%	67%	38%
<i>Converted to equity</i>	1%	16%	19%
<i>Cash repayment</i>	0%	0%	5%
<i>Haircut</i>	1%	16%	38%

Table 5.2 – Outcome of bond debt relative to bank debt

Table 5.2 shows the post-restructured outcome of bond debt, both secured and unsecured, relative to bank debt. The table illustrates the extent to which the debt remained, was converted to equity, redeemed in cash or ultimately reduced as haircut on the nominal outstanding. Interestingly, secured bondholders were left with substantially less in nominal terms than secured banks. Whereas 98% of secured bank debt remained post-restructuring, out of the original secured bond debt, only 67% persisted. Moreover, 16% of the secured bond debt was converted to equity and an equal share was reduced as haircut on the nominal outstanding.

As only a handful of cases involved secured bond debt, a few restructurings stand out. Specifically, the first Seabird case involved a 53% haircut on the secured bond debt, while the remaining 47% were either converted to equity or into a new secured bond (SBX04). Notably, 85% of the SBX04 bond were converted to equity in the second round of restructuring two years later. Similarly, Polarcus' first restructuring included 15% haircut on the secured debt. The other three cases involving secured debt prompted no reductions in outstanding debt. Nevertheless, the maturities were extended in two of the cases.

As secured bond debt has many of the same characteristics as bank debt, the considerable difference in recovered debt is somewhat surprising. One explanation for this could be the quality of the collateral. A clear distinction between banks and bondholders that we have come

across in our interviews, relates to the creditors' flexibility in taking collateral. If a bank decides not to increase exposure to a distressed firm due to its risk profile, the door for providing additional financing is closed, basically regardless of the loan terms. Bondholders, on the other hand, will adjust for the increased risk in the pricing of the bond, typically demanding higher coupon rates. Thus, the tendency of issuing secured bonds because of the inability to raise bank debt implies that the quality of the collateral would probably be lower. Consequently, when restructuring, the recovery rates¹⁹ are likely somewhat reduced. However, our understanding from interviews is that the main explanation for the difference in recovery stems from banks' relative reluctance to take losses on outstanding debt. This probably also relates to bondholders, being a fragmented group of investors, more often having issues with aligning interests.

Table 5.2 provides an illustration of how unsecured bondholders typically end up with substantially lower recovery rates than their secured counterparts. Of 15 restructurings where the distressed firm had unsecured bond debt, 10 cases involved a reduction in the nominal outstanding, with an average of 38%. Moreover, in six of the cases, unsecured debt was partially converted to equity. Notably, in contrast to secured claimholders, unsecured bondholders are to some extent redeemed in cash. From an unsecured bond investor's point of view, cash redemption represents a safe way of recovering at least some value. Therefore, unsecured bondholders might accept a larger haircut on their claim in exchange for increased cash redemption. This is consistent with what we see in our sample restructurings, as 5% of the pre-restructured unsecured bond debt is redeemed in cash payment to the bondholders through buybacks of the outstanding bond.

As mentioned, there were three cases where secured banks had to convert debt to equity and/or take a haircut. However, as the amount of secured debt in the Seabird case was insignificant, we will address the other two cases, the Farstad and Havila restructurings. Table 5.3 shows the outcome of bond debt given that bank debt is reduced. In both cases, the unsecured lenders suffered significant haircuts and no unsecured debt remained. In the Havila case, unsecured debt was partially redeemed in cash, while the Farstad case converted debt to equity. This lends support to the notion of banks only taking a hit if unsecured debt is lost. Nonetheless, as

¹⁹ The recovery rate is the amount of pre-restructured debt recovered after a restructuring. Recovery rate can be computed as (1-haircut).

the unsecured lenders are compensated, albeit marginally, through cash and equity, they are given more than they probably would have received in a liquidation scenario. Moreover, these cases inarguably violates the notion of APR.

		<i>Bank debt</i>	<i>Unsecured bonds</i>
Farstad Shipping	<i>Remaining debt</i>	87%	0%
	<i>Converted to equity</i>	6%	28%
	<i>Cash repayment</i>	0%	0%
	<i>Haircut</i>	7%	72%
Havila Shipping	<i>Remaining debt</i>	89%	0%
	<i>Converted to equity</i>	11%	85%
	<i>Cash repayment</i>	0%	15%
	<i>Haircut</i>	0%	0%

Table 5.3 – Outcome of bank and bond debts given banks taking a haircut or converting debt to equity

Some bondholders were rather outspoken in the media during the restructurings of our sample firms. Arguably, this can be interpreted as tactics in the run-up to new rounds of negotiations. However, it does confirm the notion that some of the unsecured creditors have seen the restructuring outcomes as unfair in terms of treatment relative to, for example, banks. The abovementioned Havila restructuring stands out in this respect, as it triggered vocal frustration amongst a significant share of the secured and unsecured bondholders, who remained intransigent throughout the rest of the restructuring process. Thus, the different dynamics between banks and bondholders are especially interesting to investigate in this context.²⁰

Specifically, some of the secured bondholders in Havila were eager to liquidate their collateral, whereas the unsecured bond investors were unhappy with the proposed amendments and extensions, as well as with Havila and the bank syndicate not involving them earlier in the process. The secured bondholders had collateral in Havila's subsea fleet. Due to a more favourable market outlook in the subsea segment and thus increased prospects of cross-subsidisation²¹ of the lower performing OSV segments, in which the banks had collateral, the secured banks were particularly reluctant to sell off these vessels. Further, in terms of the

²⁰ Our intention is not to describe the Havila case in detail, but to illustrate the changing aspects in the relationship that can occur between banks and different stakeholders during a restructuring process. As such, the Havila case functions as a backdrop in this regard. A detailed overview of each sample restructuring can be found in Appendix C.

²¹ Cross-subsidisation refers to a situation in which profits from one segment are used to pay for another segment that is losing money. In particular, cross-subsidisation is relatable to many of the larger ship owners in Norway operating within different offshore segments as for instance seismic, subsea, PSV and AHTS.

unsecured debt, the initial solution proposals required the unsecured bondholders to defer amortisation and cut the interest rate from 10% to 1%. Moreover, the suggested maturity extension was five years, after the maturity of the secured debt in the company, and a 70% haircut on the nominal outstanding. The first solution proposals were both withdrawn as there was insufficient support amongst bondholders. Notably, almost a year after the first proposal announcements, the restructuring was implemented as the banks managed to force through a solution. After a series of unsuccessful attempts, a group of secured banks threatened to liquidate the firm if the final proposal was not accepted. As a liquidation scenario would have yielded lower recovery than the final proposal, bondholders unwillingly accepted. The terms were quite similar to the first proposals, although the haircut on the unsecured debt increased from 70% to 85%. Despite acknowledging their lessened seniority, considering the proposals only induced secured debt to be extended by two years, as well as accepting some temporary amortisation reductions, some unsecured bondholders questioned what, for them, seemed like an unproportioned loss.

There is no obvious answer as to whether the unsecured bondholders have reason to feel poorly treated. According to the APR, no unsecured creditor shall have their claim redeemed unless more secured creditors have been fully compensated. Given that the secured lenders have accepted reduced amortisation and maturity extensions, a 15% recovery rate seems more than fair. On the other hand, bondholders, both secured and unsecured, have higher priority than equity owners. Thus, a discussion around unfair treatment of bondholders must be seen in light of the outcome for equity investors. In the following section, we will highlight the contribution of equity investors in our sample restructurings.

Banks and shareholders

The relative importance of fresh new equity as opposed to old capital in a restructuring is indisputable. Although temporary debt reductions and extended maturities help the distressed firms to stay afloat, it is the equity infusion which enables them to move forward. This indicates that equity investors who contribute with new capital are more appreciated than creditors who are willing to cut the principal by the same amount (Torstensen & Rasmussen, 2017).

<i>Cases with equity issues: 16</i>	<i>Average</i>	<i>Max</i>	<i>Min</i>
<i>New equity / Market cap</i>	86%	731%	10%
<i>New equity / NIBD</i>	9%	70%	2%
<i>Dilution of existing shareholder value</i>	84%	100%	11%

Table 5.4 – Magnitude of new equity issued

Table 5.4 illustrates the magnitude and impact of the new capital coming in through equity issues in the restructurings.²² In sum, equity was raised in 16 out of 18 cases. This substantiates the notion of creditors only being willing to participate in restructurings if the equity investors contribute equally. The equity infusions, when value-weighted, amounted to about 0.86 times the market capitalisation prior to the restructuring solution. In terms of dilution effect, on average 84% of existing shareholder ownership was diluted by the equity issues included in the restructurings, underscoring the depressed nature of the shareholder value prior to the restructuring process. Notably, Table 5.4 shows how, on average, the new equity that came in only covered 9% of net interest-bearing debt before the restructuring. All else unchanged, the equity issues included in the restructurings were clearly insufficient to solve the long-term problem of indebtedness. As was the case with the creditors, shareholders have also only been willing to commit to short-term solutions and kicked the can while hoping for a speedy market recovery.

Following the discussions of Torstensen and Rasmussen (2017), we can point to three main reasons why insufficient equity has ended up being raised in our sample restructurings. Firstly, existing owners are not willing to put their money in the creditors' pockets as long as the creditors themselves are unwilling to forego debt. Secondly, if the underlying market conditions in the sector still look distressed, the company might experience difficulties raising equity from other groups rather than existing owners. As will also be discussed in the next chapter, the OSV market experiences a structural mismatch, making new investors reluctant to invest in the companies as long as there are no signs of ship owners permanently taking vessels out of the market. Finally, the largest existing shareholders will probably be unwilling to invite external owners to equity issues for fear of diluting ownership control. Particularly

²² Market capitalisation and NIBD is computed earlier, prior and as close as possible to solution announcement. The dilution effect is computed as $(1 - (\text{pre-restructured number of shares} / \text{post-restructured number of shares}))$.

in the Norwegian offshore industry, the founding families wholly, or at least partially, control the ship owners, for instance in Dof (Møgster family), Havila (Sævik), Solstad (Solstad), Siem (Siem) and Eidesvik (Eidesvik). These families not only have a unique relationship with employees and local communities, but the companies often represent the family legacy. Thus, their incentives are clearly skewed towards keeping control over the firm. However, the families might not necessarily have unlimited capital to contribute and as such, the equity issues end up being insufficient. Nevertheless, it is often in the interest of banks to keep these families' experience and relationships in the company. As such, the banks typically manage to obtain a restructuring solution in which these families remain in control of the company, often at the expense of creditors and other shareholders.

	<i>All cases (Observations: 18)</i>			<i>When new equity (Observations: 16)</i>			<i>When debt conversion and new equity (Observations: 9)</i>		
	<i>Average</i>	<i>Max</i>	<i>Min</i>	<i>Average</i>	<i>Max</i>	<i>Min</i>	<i>Average</i>	<i>Max</i>	<i>Min</i>
<i>Existing shares</i>	16%	89%	0%	16%	89%	0%	4%	89%	0%
<i>New equity</i>	51%	95%	0%	55%	95%	1%	42%	95%	0%
<i>Creditors</i>	33%	95%	0%	29%	95%	0%	54%	95%	3%

Table 5.5 - Ownership shares for existing shares, new equity and creditors (% of total # of shares)

Table 5.5 shows the distribution of existing shares, new equity and shares to creditors post-restructuring. All of our cases involved issuance of new shares, either through equity issues or conversion of debt to equity, or a combination of the two. As previously stated, existing shareholders were significantly diluted, and they controlled on average 16% of the shares post-restructuring. It is noteworthy that in most of the cases, stakeholders of higher seniority incurred losses, implying clear violations of the APR.

The go-to guys

As the reductions of bank debt are close to negligible, the shareholder value remaining post-restructuring arguably comes at the expense of the bondholders, not the banks, and the unsecured bondholders in particular. Given the seniority and role of banks as key facilitators in these processes, we argue that the violations of the APR found in our sample cases represent a compensation for the influence shareholders hold over banks pre-restructuring. We find two main reasons why the outcomes show a tendency for banks favouring shareholders. Firstly,

the banks do not want to hold company assets or equity. Secondly, the banks see existing shareholders as more suitable owners than bondholders.

Due to both economic and legal reasons, banks shy away from seizing assets. We have previously discussed how the deteriorated nature of the markets these assets operate in make it difficult to derive value from them. Ironically, in some cases, it seems as if the day a secured lender takes possession of its collateral is the day it no longer holds any significant value. Accordingly, we find no cases in our sample involving banks taking possession of vessels. In the Havila case, the company had to separate the vessels into groups of core and non-core vessels, with the company having to sell off vessels from the latter to repay some of the secured bank debt. In the restructuring of the formerly listed offshore company Olympic Ships, Nordea seized three OSV vessels. Interestingly, Nordea was not able to sell any of the vessels, but entered into an agreement with Dof for the management and operation of the vessels, including a purchase agreement on 40% of the new build price.

On the subject of converting debt to equity, banks are generally also reluctant to hold equity. In terms of the legal aspects, regulations requires banks to retain significantly more funds as equity coverage when holding equity relative to debt. Moreover, considering market mechanisms, as the stock market generally does not see banks as long-term investors, the expectations of a vast sell-off of shares following the restructuring will cap the share price. Although there are several reasons for a limited investor interest for OSV companies, the negative share price reaction post-restructuring in both Havila and Farstad supports this notion.²³ Furthermore, the banks acknowledge that they lack sufficient competencies to operate companies. As Thor Haugland, Executive Vice President in the Norwegian savings bank SR-Bank, stated after selling their converted shares in Solstad and Havila: “We have no interest in retaining ownership in those companies” (Strandli, 2018).

While banks do not see themselves as fit to be the owners of the post-restructured companies, the restructuring outcomes clearly indicate who they believe to be the right ones. In our cases, a common denominator is how the banks have actively constructed solutions in which the existing largest shareholders have been able to preserve a controlling share of the company.

²³ The regional bank SR Bank, which became a major shareholder in both Solstad and Havila post-restructuring, sold its converted shares approximately a year after the restructurings with a loss of 35% and 30%, respectively.

Examples are the private placements in Rem and Havila, where Åge Remøy and Per Sævik, respectively, both kept their 51% ownership, while the remaining existing shareholders were significantly diluted. In the former case, the private placement of NOK 150m, which was set at a 98% discount to the last traded share price, was exclusively directed towards Remøy. The equity issue was later fined by the Oslo Stock Exchange on the grounds of clearly deviating from the equal treatment of shareholders principle (Oslo Børs, 2017). Similarly, in the Havila case, Per Sævik kept his 51% ownership share, whereas the remaining 49% ownership share was diluted to the extent to which it amounted to 2.5% of the post-restructured number of shares. Notably, a number of our sample cases²⁴ have involved a private placement in which the largest shareholder has pre-subscribed to a number of shares which entitles them to remain in control of the company.

As discussed, the largest shareholders are often families with invaluable experience as ship owners, with a great relationship with employees, suppliers and local communities. Conversely, bondholders are a fragmented group of investors, often with conflicting interests and operating strategies. With regards to value preservation, banks are thus more inclined to back the existing shareholders in the restructuring negotiations. In the years preceding the oil price collapse, the ship owners had issued significant amounts of bond debt, making bond debt a part of the pre-restructured capital structure of all the firms in our sample. In some of our cases, due to the extent of bond debt, a full conversion of bond debt to equity would practically make the bondholders in control of the firm. As this outcome is considered unattractive to banks, it is our understanding that banks, especially in cases where there is limited capital available from the existing largest shareholders, choose to construct solutions in which the bonds remain unaffected, slightly amended or converted to bonds with new terms. However, in terms of the banks' behaviour towards bondholders, some delicacy is required as consistently disproportionate and unfair treatment could frustrate bond investors, effectively closing the high-yield bond market for the companies. This could result in hampering the firms' future possibilities of refinancing bank debt.

In conclusion, banks are unwilling to seize collateral and they also consider themselves unfit to control companies. At the same time, they deem the existing shareholders more attractive than bondholders in terms of who are more suitable owners post-restructuring. As such, banks

²⁴ For a more detailed overview of our restructurings, we refer to Appendix C.

opt to favour outcomes in which the largest shareholders contribute with a significant share of the equity. Due to the equal treatment principle of shareholders in equity issues, this has, to some extent, also benefitted other shareholders. Bondholders, on the other hand, find themselves squeezed between the banks as main creditors and existing shareholders as contributors of new equity. Consequently, we find 10 cases where existing shareholders hold more than 10% of the post-restructured shares, despite creditors with higher seniority incurring losses, thus violating absolute priority. As such, we do have some sympathy for the bondholders claiming unfair treatment by banks. However, our compassion only goes so far, as bondholders have been left with more than they would have if liquidating the companies. As Torstensen and Rasmussen (2018) point out, if you are an unsecured claimholder, it is just a question of how much recovery prevents you from pushing the liquidation button.

What is done and what is next?

Reading through the solution announcement of every restructuring in our sample, there is a consistency in the conveyed intention of each restructuring, namely to enable the companies to endure the severe market downturn. Thus, the underlying premises of the restructurings were seemingly to provide short-term reliefs rather than to solve the fundamental problems of the sector. We will come back to the repercussions of this kick-the-can approach shortly; however, let us for a moment take a step back to briefly examine what has been achieved.

The banks have come out of this round of restructurings practically without a scratch in their nominal loan value. Although they have had to defer amortisation and extend maturities, of the total outstanding debt pre-restructuring, only 2% was reduced. As far as we understand, the banks have managed to preserve the relationship with the companies, as well as with the other stakeholders involved in the restructuring process. In terms of the latter, the existing owners have been able to maintain a controlling stake in the companies. However, the equity issues have cost them greatly and come with significant risk. Further, bondholders have suffered severe reductions in debt. In particular, unsecured bondholders have converted debt to equity and to some extent been redeemed in cash, often with significant haircuts.

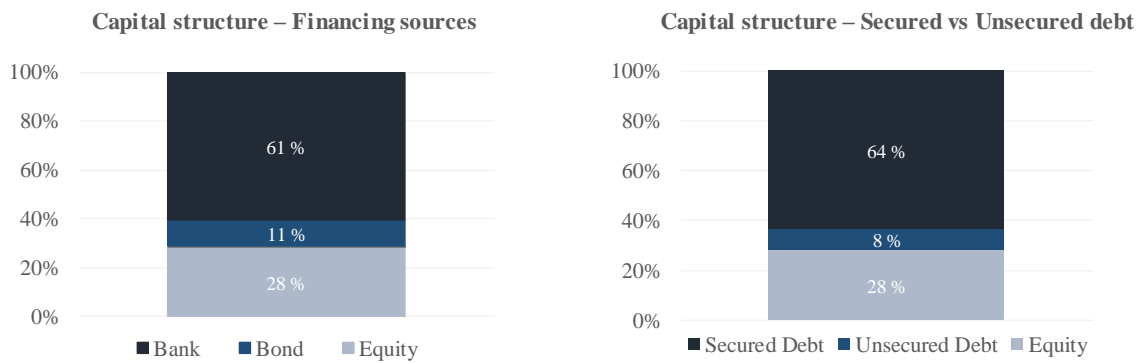


Exhibit 5.3 - The average capital structure of our sample firms as of today

Exhibit 5.3 demonstrates how the restructuring outcomes have entailed severe reductions in unsecured debt. Today, the average sample firm's capital structure consists of 8% unsecured debt, from 21% going into the restructurings. Notably, the unsecured bond debt is measured at face value. However, as these bonds are listed, we are able to observe that the fair value of this debt is effectively much lower. For example, Solstad's unsecured bond SOFF04, with an outstanding nominal of NOK 1 billion, trades at above 90% discount to face value per November 2019. This indicates that the recovery in any potential new restructuring would be limited. Moreover, it implies that banks are considerably more exposed to losses if debt reductions are necessary in a potential second wave of restructurings.

In terms of the distressed companies, they all avoided liquidation. Importantly, the restructurings have so far enabled them to continue serving their customers and preserve the backlogs. Moreover, firms have generally been able to avoid cancellations of newbuilds, typically through postponements of the delivery date. Nonetheless, the employees have experienced significant downsizing due to the deteriorated nature of the industry and the distressed position of the companies. Although structural restructurings go beyond the scope of this thesis, we note that some of our sample firms have implemented actions to alter their operational course, as well as changing their financial structure.

Exhibit 5.4 illustrates the development in the average (book) debt-to-equity (D/E) ratio of the sample firms prior to the restructurings up until today²⁵, including a particular emphasis on the effect from the restructurings we have investigated. The reductions in bond debt combined

²⁵ Today refers in both Exhibit 5.3 and Exhibit 5.4 to 19.11.2019.

with significant equity infusion had an immediate effect, cutting the D/E ratio by a third to 2.18.

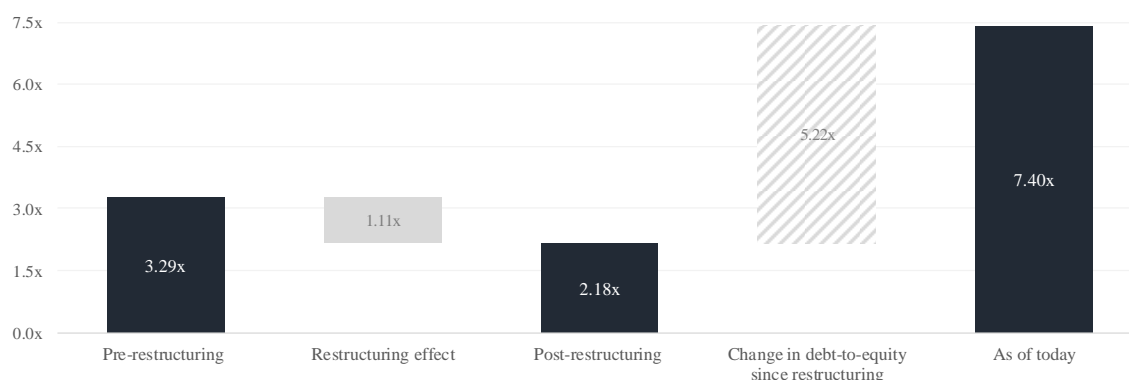


Exhibit 5.4 - Restructuring effect on D/E-ratio and change in D/E-ratio post-restructuring

Exhibit 5.4 also provides insight to the current situation of our sample firms. Although cases like Solstad and Havila somewhat confuse the overall picture, there is inarguably an issue of the offshore companies still struggling under heavy indebtedness as the current D/E ratio equals 7.40. Moreover, the average cash flow-to-debt ratio in our sample is 4%. As the equity infusions from previous restructurings are long gone, the debt remains record high, and the operational landscape remains depressed and barely at cash break-even levels, more than a handful of our sample firms have communicated to the market that negotiations with creditors once again are ongoing.

Regretfully, one of the most important things to take from our restructurings, is that they do not address the issue of overcapacity in the OSV industry. As the oversupply of vessels was one of the key contributing factors for the downturn, this substantiates our notion that stakeholders preferred kicking the can a few years down the road rather than taking the bull by the horns and addressing the elephant in the room. Being the main creditor across companies in the same sector, banks are in pole position to dictate an industry-wide collective effort to reduce the capacity in the market, improving the market balance and paving the way for a financially sustainable future. However, as this potentially would incur significant losses, banks have been exceptionally reluctant to let go of their collateral. Nevertheless, it is our clear understanding that in the issue of overcapacity lies the key to a market improvement. We have difficulties seeing any market movement that would be able to absorb the extensive number of vessels laid up along the west coast of Norway.

In the section explaining financial restructurings, we emphasised that if the company's financial distress is due to cyclical downturns that are expected to pass, creditors are probably not incentivised to forego significant portions of their claim. However, if the downturn turns out to be lasting, an inadequate initial restructuring would probably be succeeded by new rounds of restructurings. The similarities to our sample restructurings are striking. Arguably, the downturn in the OSV industry is just as much a structural crisis as it is a cyclical downturn. The hopes of a swift market recovery are futile as long as the supply-demand balance remains fundamentally skewed. Given this, the banks would have needed to initiate measures in excess of solely easing the short-term liquidity squeeze. Knowingly or unknowingly, the banks misdiagnosed the industry, and as a result prescribed the wrong medicine. Clearly, the restructurings provided some short-term relief; however, substantiated by Exhibit 5.4, they certainly did not cure our firms.

6. Outlook for bank behaviour in coming restructurings

Having considered the restructurings that are behind us, we now turn our attention to the current status of our sample firms. Despite increasing E&P spending encouraging offshore activity, the OSV industry still battles depressed day rates due to an overwhelming oversupply of vessels. The issue of capacity surplus has been labelled a key contributing factor for the depressed state of the market. However, none of our sample cases addressed this in the last restructuring round. Our opinion is that future restructurings must confront the excess of vessels in the market. In the next sections, we will discuss this issue in more detail.

Initially, we will give a brief overview of the current OSV market, with a particular emphasis on the market balance and how our sample firms fit into this picture. The first section “A drastic remedy is needed” refers to the market being conceived as oversupplied. Then, we turn to the role of banks in terms initiating an industry-wide scrapping effort. The section “Desperate sellers, broke buyers” deals with the depressed level of vessel values, to which most bank debt is tied. Further, the section “Stronger together?” addresses the potential role of consolidations in future restructurings in order to improve the market balance. Lastly, the section “Temporary solutions to permanent problems” describes how we believe in the companies and their claimholders’ ability to find new restructuring solutions. However, we are cautious about concluding the extent to which these solutions will be permanent.

A drastic remedy is needed

The immensely profitable prospects in the early years of the 2010s persuaded ship owners to plough all profits back into newbuilds. Inevitably, the reinvestments led to overinvestments. Per Sævik, majority owner of Havila, has termed the rapid growth in the OSV fleet in the mid-2010s as a collective suicide amongst ship owners (Sævik, 2017). He argues that regardless of the oil price collapse, due to the unsustainable number of operating vessels, the OSV companies at some point were doomed to collapse.²⁶

²⁶ The OSV industry is indeed global. However, the entry between the regions is low. Moreover, our sample firms and their banks are particularly exposed to the situation in the North Sea. Thus, we will focus on this particular fleet in the following.

The current North Sea fleet of OSVs totals around 375 vessels. Our clear impression after interviews with stakeholders across the industry is that significant reductions to this number are needed. In an attempt to quantify a sustainable OSV market equilibrium, we argue that an OSV/Rig-ratio could provide some clarity,²⁷ as the number of operating offshore rigs still remains the primary OSV market driver. The OSV/Rig-ratio indicates the number of available OSVs in the market relative to operative rigs. For instance, if there are 350 OSVs in the market, available to serve 35 rigs operating in the North Sea, the OSV/Rig-ratio equals 10 times.

We acknowledge that there is no clear-cut answer to what is a sustainable number of vessels. Tidewater, the largest OSV operator globally, has previously argued that an OSV market equilibrium corresponds to an OSV/Rig-ratio around 5 times, regardless of operating region (Rynd, 2018). Given a medium-term outlook of around 50²⁸ working rigs in the North Sea, a reasonable number of vessels serving these rigs should be around 250. Notably, with 375 OSVs currently available in the market, an equilibrium is considerably distant from this scenario. This substantiates our claim that a significant reduction, possibly as much as one third of the current fleet, is pivotal for the market to recover.

As such, a healthier market balance is dependent on capacity reductions. However, determining which ships to scrap is not straightforward. Generally, there are two main factors indicating whether a laid-up ship is likely to ever come back into operation (Gjønnnes & Ringholm, 2017). Firstly, the age of the vessel is critical, as recommissioning of old and idle ships is considerably expensive. Consensus amongst industry experts and analysts in today's market, is that a vessel which is older than 15 years, and also has been stacked for more than two years, will most likely never come back into operation. Secondly, the ownership status of the vessel gives an indication of the willingness and capability of getting the vessel into the market. In terms of willingness, the vessels of our sample firms are largely financed with bank debt. Consequently, any impairment or scrapping would directly impact on the banks having collateral in these ships. Moreover, reactivation of laid-up ships requires cash up front, whereas the contracts paid to the operators is settled later. Thus, the firm will need to build up

²⁷ We acknowledge that such ratios disregard important distinctions in terms of size, specifications and services provided by the different vessels. However, for simplicity, we argue that using OSV/working rigs sufficiently justifies the mean.

²⁸ A consensus outlook of global E&P activity has suggested 500-550 working rigs over the next five years. Our estimation of North Sea-activity corresponding to 10% of this number of rigs is based on conversations with our interviewees.

working capital which requires funding not necessarily available. Further, we assume that there are banks involved who would suggest such money to be spent for repayment purposes rather than to revive old ships. Regarding the ability to get the vessels back in the market, there is inarguably a significant difference between a ship owned by, for instance, an Asian bank which has reclaimed its collateral and a Norwegian ship owner in terms of who has the experience and industrial knowledge to take a vessel back into operation.

Table 6.1 provides a brief overview of the OSV fleet in our sample. Overall, our firms have 218 vessels in their respective fleets, 57 of which are laid up. Solstad represents the overwhelming majority of the idle capacity, having 48 vessels stacked in total, where 18 were built prior to 2004. Similarly, two of the three vessels Dof has laid up are more than 15 years old. In addition, Havila and Siem have four and three OSVs stacked, respectively. All of these are less than 15 years old. Eidesvik and Oceanteam currently have all of their vessels on contract.

	<i>DOF</i>	<i>EIOF</i>	<i>HAVI</i>	<i>OTS</i>	<i>SIOFF</i>	<i>SOFF</i>
<i>Number of OSVs in the fleet</i>	36	7	15	2	21	137
<i>... of which is laid up</i>	3	0	4	0	3	48
<i>Vessels build prior to 2004</i>	8	2	0	0	0	24
<i>... of which is laid up</i>	2	0	0	0	0	18
<i>... and has been for + 2 years</i>	2	0	0	0	0	14
<i>All vessels laid up for + 2 years</i>	2	0	3	1	1	38

Table 6.1 – The number of OSVs (excl. seismic and subsea) in our sample, incl. lay-up status

Isolating the proposed age-indicator of which vessels will probably never re-enter the global OSV market; a back-of-the-envelope calculation based on Table 6.1 implies that 16 vessels in our sample are good candidates for scrapping, namely the two and 14 vessels owned by Dof and Solstad, respectively. Further, we note that there are 28 additional vessels which have been in lay-up for more than two years, 22 of which are older than 10 years. Thus, given the costliness of recommissioning and the low day-rates on any potential contract, these are possible candidates for scrapping as well.

We believe that the abovementioned companies, given that it is a part of a collective effort throughout the industry, would prefer to scrap vessels. As long as there is an excess of vessels bidding for contracts, the achievable day-rates for the distressed companies will remain depressed. However, there are banks having collateral in these ships, and as far as we

understand, no bank would ever allow a company to scrap a vessel to which it has considerable outstanding debt tied, particularly not unilaterally. In the following sections, we make two assumptions for the behaviour of banks in terms of scrapping vessels in future restructurings. Firstly, the banks are obviously reluctant to let go of their collateral, and even more so if their collateral values are significantly higher than the scrapping value. Secondly, an industry-wide scrapping effort would only be achievable through consolidation of companies and/or a system of compensation amongst creditors. The former assumption will be dealt with first, while the latter will be addressed subsequently.

Desperate sellers, broke buyers

We assume that lower collateral values increase the likelihood that banks will be willing to scrap a vessel. Relative to this assumption, we have observed two common rules in the industry. The first relates to the firms' financing of the ships. The second deals with the issue of valuing assets in a depressed market. Both rules paint a rather grim picture of the situation for banks holding collateral in distressed assets.

Prior to the industry downturn, a general rule for ship owners acquiring vessels was to finance with 80% debt. For Norwegian firms, the main source of debt was banks, resulting in some of the larger Norwegian banks being severely exposed to the offshore industry. In Q1 2016, the banks' total exposure to the OSV industry amounted to around NOK 65 billion (Finanstilsynet, 2017). However, the value of vessels rapidly diminishes when the market turns sour. The other common industry rule is that the value of marine steel, being both rigs and ships, plunges by as much as 80% in a depressed market. Obviously, there are no rules without exceptions, and some vessels have distinct attributes and characteristics differentiating them in the event of an upswing. Nonetheless, this rule has historically been confirmed on several occasions, for example during the shipping crisis in the late-1970s and in 2011. Moreover, second-hand prices of OSVs observed in the last few years further lend support to the rule. For instance, the Norwegian offshore company Standard Drilling, which has spent the downturn acquiring ships at depressed prices, has recently acquired a five-year-old Norwegian-built PSV from a liquidated firm for a price of \$8.1 million, representing a discount of 82% on a \$44 million estimated newbuild price (S.D. Standard Drilling Plc, 2019). Given that this vessel was operative in the North Sea prior to the liquidation of its owner, this would imply that the cold-stacked OSVs are worth even less. Consequently, these two 80% rules imply that banks, by

being pro-cyclical during the boom, have accumulated extensive amounts of debt tied to ships which are worth dramatically less now that the market is bust.

When confronted with these rules, the banks are consistently dismissing their relevance and validity. We, however, still find them very interesting, as we assess that the probability of banks agreeing to scrap vessels in future restructurings is directly linked to the extent to which banks have outstanding debt tied to these ships. Understandably, any bank would be reluctant to waive its collateral in an operative \$50 million supply vessel. However, such a vessel would never be scrapped. On the other hand, the numerous cold-stacked vessels, especially the ones identified in the section above, have significantly depreciated values. Reactivating these vessels would induce significant costs, and would only happen if a profitable long-term contract presented itself. We note that such contracts are rare events in the current market. Thus, in terms of these cold-stacked vessels, given that the physical steel value is negligible, banks are only left with an option on a recovering market. Our understanding is that no market recovery will be able to absorb the current number of vessels in the market. Hence, we would argue that banks this time are probably better off with solutions which include scrapping of such vessels. Firstly, a slimmer supply side would provide the companies with bargaining power to achieve day-rates covering financial costs, as well as operating costs, the former of which, is not the case today, and would clearly benefit banks if this were to change. Moreover, we find it almost inevitable that the current companies' debt overhang may cause problems in the future with respect to fleet renewal. This will put our sample firms at a disadvantage compared to financially healthy operators, as, for example, the aforementioned Standard Drilling, which has 100% equity financing of its ships (Dixon, 2017).

Our notion that banks are more likely to accept losses on vessels with deteriorated values builds upon the assumption that banks have reduced their collateral values as the vessels' market values have diminished, making it easier to forego the relatively little remaining debt in the next round of restructurings. However, this assumption is likely not to hold. In late 2017, the Norwegian Financial Supervisory Authority examined the extent to which the five largest Norwegian banks have booked impairments on outstanding offshore debt, given the market development and the restructurings already undertaken. The banks had made impairments of NOK 6 billion in total, through provisions and realized losses (Finanstilsynet, 2017). Investigating the banks' 2018 annual reports, we find no considerable write-downs, with some banks even reversing impairments. Thus, we believe an estimate of NOK 6-7 billion provides a sufficient overall image for the period of 2015-2019. Table 6.2 shows the impairments made

by our sample firms in the supply and anchor-handling segments alone. Interestingly, accumulated impairments add up to NOK 24 billion, almost four times the total amount booked by banks.

	<i>DOF</i>	<i>Eidesvik Offshore</i>	<i>Havila Shipping</i>	<i>Oceanteam</i>	<i>Siem Offshore</i>	<i>Solstad Offshore*</i>
<i>2015</i>	500	290	1 388	145	1 466	3 292
<i>2016</i>	1 762	509	901	189	553	3 878
<i>2017</i>	1 146	203	0	247	1 026	395
<i>2018</i>	691	0	709	0	551	896
<i>2019</i>	917	0	0	0	0	2 250
<i>In total</i>	5 016	1 002	2 289	581	3 596	10 711

Table 6.2 – Impairments on OSV values, 2015-Q3 2019

**Solstad includes impairments from Rem, Deep Sea and Farstad prior to the merger*

As we mentioned in the section on banking regulations, banks are allowed to use their own internal ratings-based models when computing risk-weighted assets. These models are not publicly disclosed, which makes it significantly more difficult to trace losses on individual companies, or to examine the rationale behind the reported provisions and realised losses. However, given the anticipated impact of IFRS 9 on banks' assessment of expected credit losses, we find the lack of reported losses and impairments baffling. Prior to the implementation of IFRS 9, the general opinion in the market was that impairments would increase significantly with the new accounting standards, as losses would be assessed through scenario-weighted expectations of debt recovery rather than losses being realised only when incurred by specific trigger events (Trumpy, 2017). Two years into IFRS 9 reporting, our impression is that banks are not even close to booking sufficient impairments, by placing too much emphasis on scenarios reflecting market recovery rather than scenarios assuming the market to remain depressed. Moreover, calculations of expected credit loss are supposed to include reasonable assumptions of the current market situation and outlook, usually by shipbrokers giving their estimates and projections. As far as we understand from banks' financial reports, there is still substantial dissonance between the booked values related to outstanding collateral and the actual value of the vessels observed in the market. Due to few transactions in distressed markets, banks are allowed to rely on the shipbroker's assumption of "willing seller, willing buyer" when valuing vessels. It is worth noting that even though the

same brokers have publicly described the current market as “desperate sellers, broke buyers” (Flaaten, 2018), these seemingly inflated values are allowed to stay in the banks’ financial statements.

Thus, as long as the auditors and the Norwegian FSA approve the stated values, in terms of preserving value for their shareholders, we find no incentives for banks to write down the values of old and idle vessels. Nevertheless, considering our notion that banks should be able to forego debt more easily in future restructurings, as the losses are already behind them, regrettably we find no basis for this. This conflicts with our theory that the deteriorated values of the vessels could open up for banks to include an industry-wide condemnation as a part of upcoming restructuring solutions.

Stronger together?

When asked to describe its behaviour in the last round of restructurings, one of the banks we interviewed emphasised how they had acted with discipline. In order to construct sustainable restructuring solutions in the future, we hope that discipline is not confused with pride. Although we understand the banks’ reluctance to forego collateral, it seems inevitable that banks must accept to scrap vessels in order to facilitate an OSV industry recovery. Our second assumption in terms of bank behaviour towards scrapping vessels, is that such an effort is dependent on banks being able to facilitate this across all companies in the industry. One way of steering the restructuring solutions in this direction is by pushing for more consolidation. Added to the possibilities of monetising on synergy effects from improved market entry, cost efficiency and better capital market access, we argue that larger units through consolidation will find it easier to scrap vessels as the effect on the balance sheet and their operations will be more limited.

In our sample, the Solstad merger stands out as the only example of restructuring through consolidation. The merger was described by the banks as a necessary structural measure enabling the merged company to achieve synergies through more efficient operations and a lower cost base. Through the Aker system and John Fredriksen’s Hemen Holding,²⁹ the banks found a solution which included both industrial expertise and financial muscles for the

²⁹ John Fredriksen's investment holding Hemen Holding was the controlling owner of Deep Sea Supply prior to the merger.

company to withstand the demanding market. Nonetheless, the merger did not address the issue of overcapacity. Particularly Deep Sea Supply brought vessels into the merged company, mainly built by Indian and Chinese yards, which clearly did not complement the rest of the fleet as they were inadequate for most North Sea operations. As an illustration, eight Deep Sea Supply PSVs, all of which were Indian from 2007 or 2008, have been cold-stacked since the merger. Although we understand the attractiveness of teaming up with financial heavyweights such as Fredriksen in a consolidation, we find the inclusion of indebted vessels with no expected cash-flow outlook as not constructive. As long as these redundant vessels are present in the market, albeit cold-stacked, they will function as anchors for contract rates and ship values.

Consolidation is an efficient method for banks to collectively reduce debt throughout an industry at the same time as concentrating and preserving valuable expertise and to enable cost synergies in the firms. However, it is also an opportunity to facilitate scrapping of vessels. Learning from the Solstad merger, we argue that the banks did not arrange for a successful merger. Notably, the merger triggered close to NOK 1 billion in cost savings on both operational and administrative levels. Nevertheless, although involving a slight 7% haircut on bank debt in the Farstad case, the vast majority of pre-merger bank debt was simply amended and extended. As an illustration, the net interest-bearing debt-to-market capitalisation ratio in the post-restructured company was 15, by far the highest amongst our sample firms. Moreover, the combined fleet of around 140 vessels is clearly too large, and it stands as proof of the unwillingness amongst creditors to deal with the pressing issue of overcapacity. It should be noted that 38 vessels have been in lay-up since the merger. To our knowledge, none have been scrapped. In contrast, Tidewater has scrapped 85 ships in the last few years (Snyder, 2019). Interestingly, contrary to our sample cases, Tidewater's restructuring in 2017 ended up with all creditors converting their outstanding debt to equity. Hence, the company came out of the process practically debt-free and has been able to scrap redundant vessels without the creditors' blessing.

We argue that in order to derive value from coming restructurings, future solution proposals have to include scrapping of vessels in combination with equity infusions and substantial debt reductions. Merging companies would be a rational way of addressing all of these issues. As emphasised, any debt reduction must be collectively distributed across the companies to have the anticipated impact. If not, the company with reduced indebtedness will be able to undercut every firm with an unchanged burden of debt. Consolidation would address this issue as it

creates fewer and financially stronger market players, potentially enabling the banks to reduce the level of debt with less than they would if the firms remained as separate units. Regarding the scrapping, banks, by being universal creditors, are the only claimholders effectively having the power to enforce restrictions on fleet size throughout the whole industry. An industry-wide scrapping must be founded upon an evaluation based on age and efficiency of the vessels, across companies. Moreover, as the banks are basically all exposed to the same companies and fleets, they have to work together towards a compensation system for the vessels that end up being scrapped. Arguably, finding reasonable solutions to these challenges would be less demanding if the firms were consolidated into larger companies. Further, raising equity would probably also be easier if there are larger units.

In conclusion, we believe that a bank-initiated scrapping effort is more likely to be achieved through industry consolidation and a compensation system for the vessels that are scrapped. This requires extensive efforts throughout the banking syndicate. Given the insight from our interviewees, that aligning interest between banks is one of the most time-consuming aspects of a restructuring, we acknowledge that this might prove difficult in the short term.

Temporary solutions to permanent problems

Predicting the outcomes of future restructuring rounds is a matter of balancing the confidence in banks having intentions of improving the offshore industry with the awareness that old customs die hard. From interviews, our impression is that as long as equity investors are willing to contribute with cash, banks will continue using temporary solutions such as amortisation deferrals and maturity extensions, essentially turning back to old and well-known tricks. We have already highlighted how the last round of restructuring solutions, by not addressing the problems of either indebtedness or overcapacity, effectively just kicked the can down the road. As the market will not recover unless the issues of debt and oversupply are solved, that road inevitably seems more and more like a dead end.

Arguably, both banks and shareholders must increase their contributions in order to construct sustainable capital structures following the next round. As the presence of unsecured bond debt is limited, banks should see more of their debt being converted, and even to some extent reduced. We have argued in favour of measures dealing directly with the issues of overcapacity and the need for a more consolidated industry. However, as it stands, the incentives for banks to address these issues still seem too small.

In the first round of restructurings, the main contributors of new equity were the largest existing owners. The vast majority of the cases involved equity infusions that turned out to be extremely costly for the owners, and came in addition to the severe value loss related to the market downturn. Certainly, this raises the question of whether they can afford additional contributions. If not, this would bring new dynamics to the restructuring processes and could open up opportunities for more consolidation in the industry. In order to find new equity outside the OSV industry, banks have to give considerably beneficial terms to attract sufficient interest. This could entail debt reductions. As banks communicate a continuous intention to reduce their offshore exposure, we believe options like issuing new loans and taking over ownership are less plausible.

In their conclusion, Torstensen and Rasmussen (2017) questioned the long-term impact of the restructuring solutions, as the debt levels remained high and the restructurings included few consolidations and new owners. Unless the market did not rapidly recover, a new wave of restructurings could potentially wash over the Norwegian ship owners. A second round might include increased consolidation, losses for banks, and forced liquidation, they argued.

In the two years that have passed, the market has not remotely recovered as expected. As a result, the industry has seen seven new restructurings. Further, the maturity extensions in several other cases are soon caught up with, including the Dof, Havila and Solstad cases which all have entered into new restructuring negotiations with the creditors, the latter two with considerably negative book value of equity. However, we are sceptical of the probability of forced liquidation. Unless the vessels are sold to firms operating outside the industry, the market imbalance will continue. Obviously, not all PSVs can be transformed into well boats in the aquaculture industry or rescue ships in the Mediterranean. As such, we mostly consider forced liquidation of vessels to be another short-term solution.

In terms of the prospects for increased consolidation and bank losses, our findings are rather similar to those of Torstensen and Rasmussen (2017). As the net effects on the banks' debt claims were negligible in most of our cases in the first round of restructurings, there are now clear indications that banks have to contribute more going into round two, either through conversion of debt to equity or haircuts on the nominal. The anticipated market upswing depends on a fundamentally healthier market balance, and it is, in our view, critical that banks opt for solutions that include both enhanced industry consolidation and scrapping of vessels. Following new accounting standards, we assumed that significantly reduced market values on

the collateral would trigger the relative attractiveness of scrapping vessels. However, the implementation of IFRS 9 has not led to banks taking what we consider to be proportionate impairments. Thus, as long as the FSA and auditors do not put pressure on banks to report more losses on the outstanding engagements, our understanding is that the banks' incentives to amend and extend existing loan terms outweigh those pushing for scrapping of vessels and industry consolidation.

The indications we have seen from the restructuring cases after Torstensen and Rasmussen (2017) lend support to our impression that banks will continue kicking the can as long as there are equity investors willing to contribute. We have not observed any willingness amongst creditors to address the need for enhanced industry consolidation or a compensation scheme for those forgiving collateral. As such, we find it reasonable to assume that it will take time before any such arrangements could be deemed realistic. Consequently, for the upcoming round of restructurings, we fear the probability of yet another series of temporary solutions to permanent problems.

7. Limitations and areas of further research

Although it is tempting to say that our discussions about the role of banks in our sample cases will set a precedence for future Norwegian financial restructurings, we acknowledge that there are some limitations to our thesis. In this chapter, we highlight some main underlying assumptions, their implications and how similar analyses could be developed in further research.

First of all, our sample includes only 18 observations. The lack of observations has reduced the possibility of using more advanced statistical analyses. As such, we acknowledge that adding companies from other offshore-related industries to our sample, such as E&P, oil-service and drilling, would have increased the number of observations. However, we believe this would have weakened the precision and relevance of our discussions in terms of the interactions between stakeholders within one industry. Further, extending the time horizon back in time would also have added more financial restructurings to our sample. This would consequently have triggered a different context to our thesis. In addition, going back in time to crises with similar underlying characteristics, for instance the shipping crisis in the 1970s, would suggest significant difficulties collecting information. Moreover, as the high-yield market has not been prominent in Norway before this century, observations prior to the 2000s would not include the same dynamics between private and disbursed debt.

Our sample firms operate in cyclical and asset-heavy industries, two factors which both have implications for the outcomes of the restructuring. In terms of cyclicality, we argue that the claimholders probably would have been more reluctant to extend and amend if they did not assume that the company's financial distress was primarily due to cyclical downturns, and that the market would recover in a few years. As discussed, the notion of asset liquidity plays a critical role in the outcomes of restructurings. Thus, regarding the asset-heavy nature of our sample firms' industry, one should be cautious of generalising the outcomes of our restructurings to other industries where the distressed firms' assets are more liquid.

Further, as our sample includes only Norwegian restructurings, we stress that judicial differences and legislative proceedings concerning bankruptcy differ between countries. Therefore, the results of the restructurings might not generalise to other countries. However, we argue that such differences and conflicting outcomes of workouts between countries could be a topic for further research. Moreover, the capital structures tend to differ between

countries. The financing scheme of Norwegian firms relative to for example US companies, differs significantly on the share of private versus disbursed debt. Consequently, we have few or no examples where secured bond debt is outweighing bank debt. As Norwegian banks are significantly reducing their exposure in the offshore segments, bond financing will inevitably be a relatively more important part of the ship owners' capital structure. Thus, an area of further research could be the question of future capital structures and project financing in the industry. Moreover, the ownership structure in Norwegian offshore firms is distinctly different from other countries. Our sample firms are largely companies where the founding families are still majority owners. As discussed, this impacts on the incentives and contributions of such equity investors. In addition, they possess knowledge and expertise which have made them subject to favourable treatment by banks in the negotiations.

We have restricted our sample to only include listed companies, and have also excluded companies that were listed prior to the restructuring but later delisted. This is due to the lack of information, as well as to be able to compare the current situation of our firms. However, this may impact upon the findings in our thesis, and potentially their relevance. Firstly, private firms will typically have problems in relation to information asymmetries. This would have an impact on the negotiation dynamics as claimholders outside the company are likely to have limited access to important information about the firms' financial and operational status. Secondly, the fact that shares are more illiquid in private companies, implies that conversion of debt to equity is relatively unattractive compared to restructurings in listed companies. Moreover, by excluding delisted companies, we only include companies which we know survived the restructuring processes. This creates a survivorship bias which could give the impression that all private workouts will end successfully. It is worth noting that the seismic company Dolphin Geophysical and the ship owner Atlantic Offshore declared bankruptcy after unsuccessful out-of-court negotiations. Finally, although the shares were not listed on the Oslo Stock Exchange, several companies have their bonds listed on the Nordic ABM, thus raises Norwegian capital in the same way as other listed Norwegian firms. By not including such companies, for instance Viking Supply Ships, Island Offshore and Boa Offshore, we have excluded observations potentially altering or impacting on our findings.

8. Conclusion

This thesis has provided insight into the role of banks in the financial restructurings in the Norwegian offshore industry after the oil price collapse in 2014 given the persistent depressed situation in the OSV market. Through analysing the restructuring outcomes, as well as the negotiation dynamics between banks and other stakeholders, we have showed how unsecured bondholders and equity owners have succeeded in preserving values to which they would not have been entitled in a liquidation scenario. Our results thus confirm the notion of frequent violations of APR in out-of-court restructurings, consistent with the findings of Gilson et al. (1990) and Frank and Torous (1994). Having discussed the position of banks as universal creditors, and its relevance in addressing the issue of market oversupply in future restructurings, we find that solutions involving scrapping of vessels and industry consolidation are crucial in order to help companies break out of the restructuring spiral.

Following a theoretical backdrop explaining the concept of financial restructurings, the thesis started by assessing qualitative aspects of the determinants of bank behaviour in a restructuring process. Our model point to four main aspects forming bank behaviour, being the current financial status of the distressed firm, the targeted capital structure post-restructuring, the banks' judicial and regulatory constraints and the relationship with the other stakeholders.

Analysing the banks' contributions in the restructuring outcomes, we observe that bank debt post-restructuring is practically unchanged from the level prior to the restructurings. Instead of nominal reductions, the banks have opted to amend and extend current loan terms. In terms of interaction with other claimholders, equity has mainly been issued through private placements from the largest existing owners. As such, banks have violated the APR by favouring shareholders at the expense of more senior creditors.

We believe that the downturn in the OSV industry is just as much a structural crisis as it is a cyclical downturn. As such, it is essential that the outcomes of upcoming restructurings include banks initiating and supporting an industry-wide scrapping of vessels and enhanced consolidation in order to improve the market balance. However, in the years since Torstensen and Rasmussen's thesis (2017), our opinion is that banks have proved themselves neither prepared nor willing to address these fundamental issues burdening the industry. Thus, in terms of bank behaviour in coming restructurings, we think future solutions will continue to provide short-term relief while the more permanent issues will remain unsolved.

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Appendix

The appendices offer complements to the results presented in the thesis. Initially, we explain the calculations of the Altman's Z -score. Thereafter, as the majority of our results are presented on an aggregated level, we provide 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.

Appendix A – Altman's Z-score

Altman Z score is a statistical tool used to assess the likelihood for a company to go bankrupt based on its financial position. The score is a predication of five financial ratios; profitability, leverage, liquidity, solvency and activity. The coefficients are set according to the prediction power with respect to bankruptcy.

$$\mathbf{Z\ score} = (1.2 \times A) + (1.4 \times B) + (3.3 \times C) + (0.6 \times D) + (0.99 \times E)$$

where,

$$A = \frac{\textit{Working capital}}{\textit{Total assets}}$$

$$B = \frac{\textit{Retained earnings}}{\textit{Total assets}}$$

$$C = \frac{\textit{EBIT}}{\textit{Total assets}}$$

$$D = \frac{\textit{Market value of equity}}{\textit{Total assets}}$$

$$E = \frac{\textit{Total sales}}{\textit{Total assets}}$$

Companies with Z-score above 3.0 have low likelihood of bankruptcy. On the other hand, a Z-score below 1.8 means that the company has a very high probability of declaring bankruptcy.

Appendix B – Tables on firm level

Table A.1 – Company names and tickers

Company	Ticker
DOF ASA	DOF
Eidesvik Offshore	EIOF
Electromagnetic Geoservices	EMGS
Farstad Shipping	FAR
Havila Shipping	HAVI
Oceanteam	OTS
Polarcus	PLCS
Rem Offshore	REM
Seabird Exploration	SBX
Siem Offshore	SIOFF
Solstad Offshore	SOFF

Table A.2 – Outcome for secured bond debt

	<i>HAVI</i>	<i>PLCS</i>	<i>PLCS3</i>	<i>SBX</i>	<i>SBX2</i>
<i>Cash redemption</i>	0%	0%	0%	0%	0%
<i>Haircut</i>	0%	14%	0%	53%	0%
<i>Conversion to equity</i>	0%	6%	0%	27%	82%
<i>Total debt reduction</i>	0%	20%	0%	80%	82%
<i>Maturity extension (years)</i>	3.6	4.0	0.3	2.0	3.0

Table A.3 – Outcome for bank debt

	<i>DOF</i>	<i>EIOF</i>	<i>EMGS</i>	<i>EMGS2</i>	<i>EMGS3</i>	<i>FAR</i>
<i>Cash redemption</i>	0%	0%	0%	0%	0%	0%
<i>Haircut</i>	0%	0%	0%	0%	0%	7%
<i>Conversion to equity</i>	0%	0%	0%	0%	0%	5%
<i>Reduced amortization (% of outstanding)</i>	7%	9%	0%	0%	0%	0%
<i>Total debt reduction</i>	0%	0%	0%	0%	0%	13%
<i>Maturity extension (years)</i>	0.0	3.0	0.0	0.0	0.0	5.0
	<i>HAVI</i>	<i>OTS</i>	<i>PLCS</i>	<i>PLCS2</i>	<i>PLCS3</i>	<i>REM</i>
<i>Cash redemption</i>	0%	0%	0%	0%	0%	0%
<i>Haircut</i>	0%	0%	0%	0%	0%	0%
<i>Conversion to equity</i>	11%	0%	0%	0%	0%	0%
<i>Reduced amortization (% of outstanding)</i>	25%	0%	24%	12%	32%	34%
<i>Total debt reduction</i>	11%	0%	0%	0%	0%	0%
<i>Maturity extension (years)</i>	4.0	0.0	5.0	0.0	0.0	3.5
	<i>SBX</i>	<i>SBX2</i>	<i>SBX3</i>	<i>SIOFF</i>	<i>SIOFF2</i>	<i>SOFF</i>
<i>Cash redemption</i>	0%	0%	0%	0%	0%	0%
<i>Haircut</i>	0%	0%	0%	0%	0%	0%
<i>Conversion to equity</i>	0%	83%	0%	0%	0%	0%
<i>Reduced amortization (% of outstanding)</i>	0%	0%	0%	0%	30%	0%
<i>Total debt reduction</i>	0%	83%	0%	0%	0%	0%
<i>Maturity extension (years)</i>	0.0	0.0	0.0	3.0	3.0	2.2

Table A.4 – Outcome for unsecured bond debt

	<i>DOF</i>	<i>EIOF</i>	<i>EMGS</i>	<i>EMGS2</i>	<i>EMGS3</i>	<i>FAR</i>
<i>Cash redemption</i>	10%	60%	18%	6%	0%	0%
<i>Haircut</i>	50%	40%	5%	3%	0%	72%
<i>Conversion to equity</i>	40%	0%	0%	0%	0%	28%
<i>Total debt reduction</i>	100%	100%	23%	9%	0%	100%
<i>Maturity extension (years)</i>	0.0	0.0	3.0	0.0	0.0	0.0

	<i>HAVI</i>	<i>OTS</i>	<i>PLCS</i>	<i>PLCS2</i>	<i>PLCS3</i>	<i>REM</i>
<i>Cash redemption</i>	15%	0%	0%	0%	0%	8%
<i>Haircut</i>	85%	0%	45%	0%	70%	50%
<i>Conversion to equity</i>	0%	100%	32%	0%	16%	15%
<i>Total debt reduction</i>	100%	100%	78%	0%	86%	73%
<i>Maturity extension (years)</i>	3.6	0.0	4.2	0.0	2.6	5.3

	<i>SBX</i>	<i>SBX2</i>	<i>SBX3</i>	<i>SIOFF</i>	<i>SIOFF2</i>	<i>SOFF</i>
<i>Cash redemption</i>	0%	0%	0%	0%	0%	0%
<i>Haircut</i>	0%	0%	0%	0%	20%	0%
<i>Conversion to equity</i>	0%	0%	0%	0%	0%	0%
<i>Total debt reduction</i>	0%	0%	0%	0%	20%	0%
<i>Maturity extension (years)</i>	0.0	0.0	0.0	0.0	5.5	2.3

Table A.5 – Equity contribution in numbers

	<i>DOF</i>	<i>EIOF</i>	<i>EMGS</i>	<i>EMGS2</i>	<i>EMGS3</i>	<i>FAR</i>
<i>New equity / Market cap</i>	381%	23%	241%	98%	39%	395%
<i>New equity / NIBD</i>	9%	7%	-	-	70%	6%
<i>New equity / Total liabilities</i>	7%	6%	36%	27%	16%	5%
<i>New equity / Equity asked for</i>	100%	100%	100%	100%	100%	100%
<i>Private placement / New equity</i>	41%	80%	50%	19%	0%	95%

	<i>HAVI</i>	<i>OTS</i>	<i>PLCS</i>	<i>PLCS2</i>	<i>PLCS3</i>	<i>REM</i>
<i>New equity / Market cap</i>	405%	-	-	173%	245%	181%
<i>New equity / NIBD</i>	4%	-	-	15%	23%	4%
<i>New equity / Total liabilities</i>	3%	-	-	10%	17%	3%
<i>New equity / Equity asked for</i>	100%	-	-	90%	100%	89%
<i>Private placement / New equity</i>	85%	-	-	100%	64%	100%

	<i>SBX</i>	<i>SBX2</i>	<i>SBX3</i>	<i>SIOFF</i>	<i>SIOFF2</i>	<i>SOFF</i>
<i>New equity / Market cap</i>	275%	731%	89%	109%	10%	60%
<i>New equity / NIBD</i>	13%	58%	-	9%	2%	3%
<i>New equity / Total liabilities</i>	7%	25%	-	7%	1%	3%
<i>New equity / Equity asked for</i>	97%	100%	100%	100%	100%	100%
<i>Private placement / New equity</i>	100%	95%	90%	52%	83%	88%

Table A.6 – Financial and operational status

	<i>Total liabilities / Total assets</i>		<i>Z-score</i>		<i>Secured debt / Unsecured debt</i>		<i>Current assets / Current liabilities</i>	
	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>
<i>DOF</i>	79.6%	67%	0.66	0.52	3.17	10.86	0.78	1.20
<i>EIOF</i>	71.3%	61%	0.36	0.61	6.93	23.81	1.80	3.97
<i>EMGS</i>	39.8%	53%	1.28	-4.54	0.00	0.00	0.79	1.91
<i>EMGS2</i>	49.4%	82%	-4.07	-3.84	0.00	0.00	1.83	1.41
<i>EMGS3</i>	69.7%	80%	-3.69	-7.21	0.00	0.00	0.43	1.61
<i>FAR</i>	92.2%		-1.48		4.21		0.16	
<i>HAVI</i>	91%	88%	-1.26	-0.04	3.49	4.64	0.10	0.15
<i>OTS</i>	91%	30%	-0.59	0.74	0.46	5.62	0.37	0.35
<i>PLCS</i>	81.6%	56%	-2.32	-1.85	0.90	2.88	0.23	1.59
<i>PLCS2</i>	61.4%	73%	-1.85	-1.42	2.28	2.28	1.39	1.37
<i>PLCS3</i>	86.6%	80%	-1.42	-1.38	3.28	4.01	0.20	1.28
<i>REM</i>	80.3%		0.79		3.26		0.18	
<i>SBX</i>	172.6%	68%	-4.27	-1.91	1.15	0.71	0.26	0.68
<i>SBX2</i>	69.5%	62%	-3.05	-10.52	1.45	0.21	0.36	0.62
<i>SBX3</i>	26.8%	33%	-10.52	-4.96	0.33	0.33	0.67	2.61
<i>SIOFF</i>	61.7%	65%	0.61	0.09	2.39	3.75	1.00	1.54
<i>SIOFF2</i>	69.6%	73%	0.17	-0.03	3.05	2.99	0.81	0.97
<i>SOFF</i>	72.9%	71%	0.20	0.27	4.22	3.75	1.01	2.21

Appendix C – Summary of each sample restructuring

In this appendix, we provide a one-page summary of each of the 18 individual restructurings in our sample. The summary includes an overview of the implemented measures, as well as an illustration of the restructuring effect on the capital structure, current ratio and debt-to-equity ratio.



DOF ASA

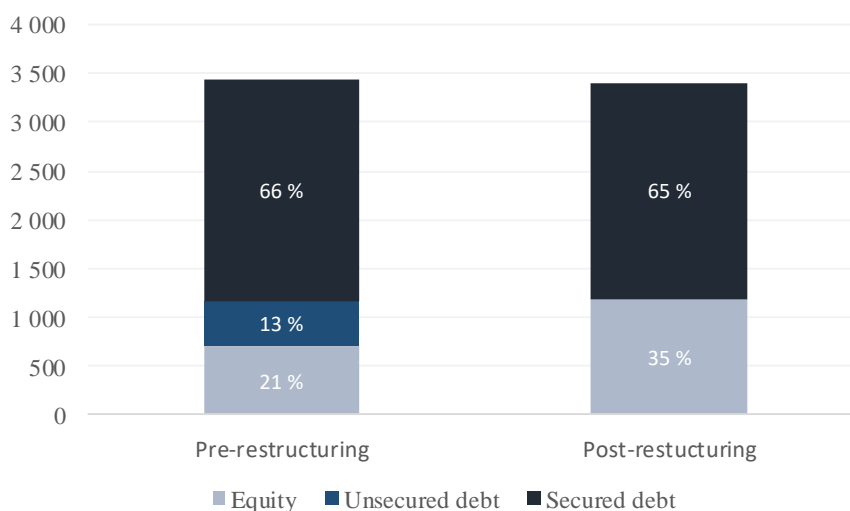
Industry: Supply
 Restructuring initiated: 09.02.2016
 Restructuring completed: 04.08.2016

Implemented measures:

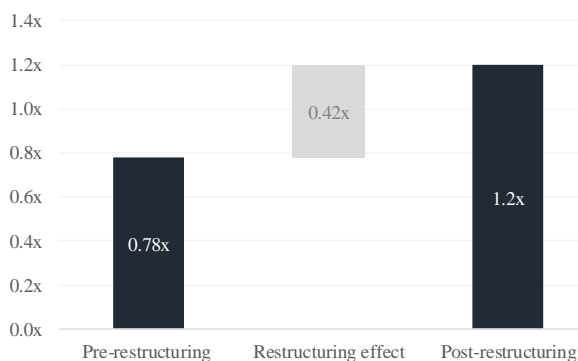
- Haircut unsecured debt (50%)
- Conversion unsecured debt (40%)
- New equity offering (126 mUSD)



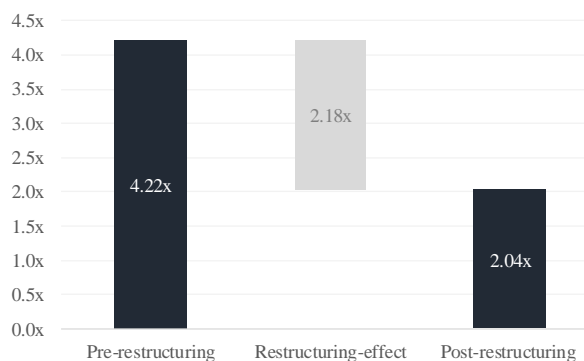
Restructuring effect on capital structure (mNOK)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio





Eidesvik Offshore

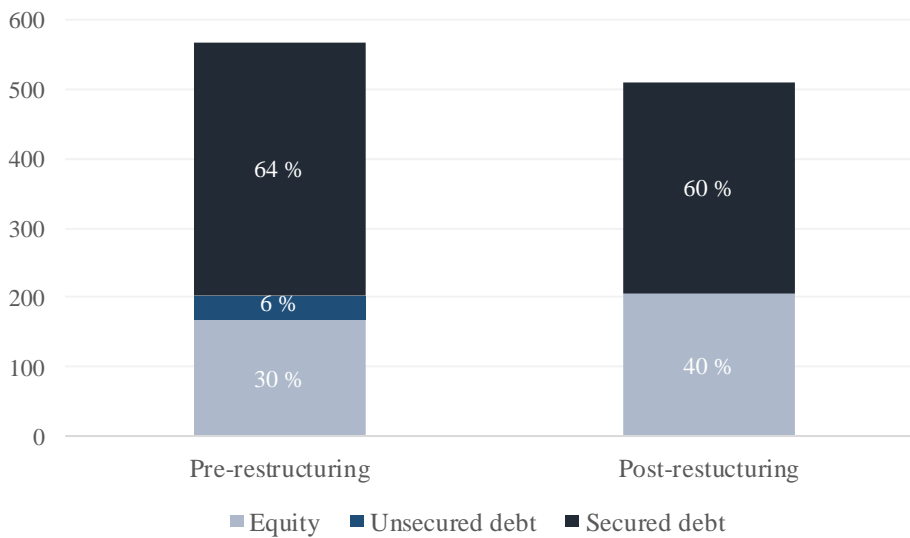
Industry: Supply
 Restructuring initiated: 28.02.2017
 Restructuring completed: 31.01.2018

Implemented measures:

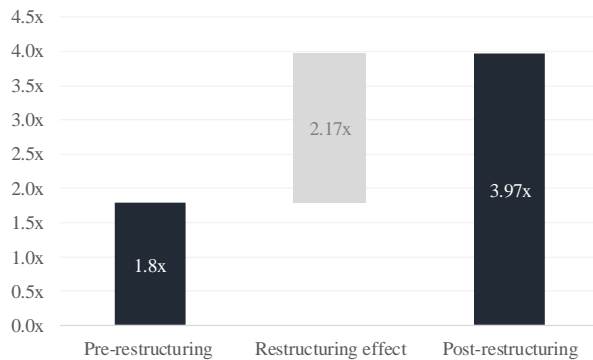
- Amend and extend secured debt (36 months)
- Haircut unsecured debt (40%)
- Cash redemption (60%)
- New equity offering (19 mUSD)



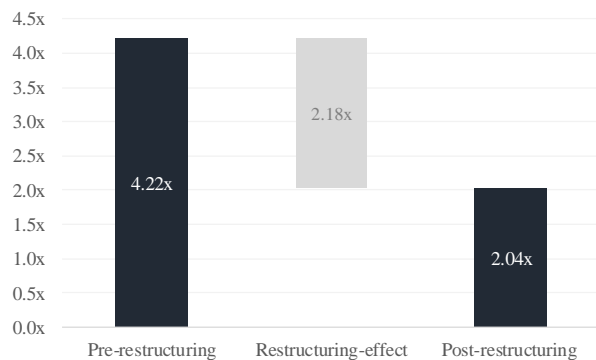
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



Electromagnetic Geoservices (1)

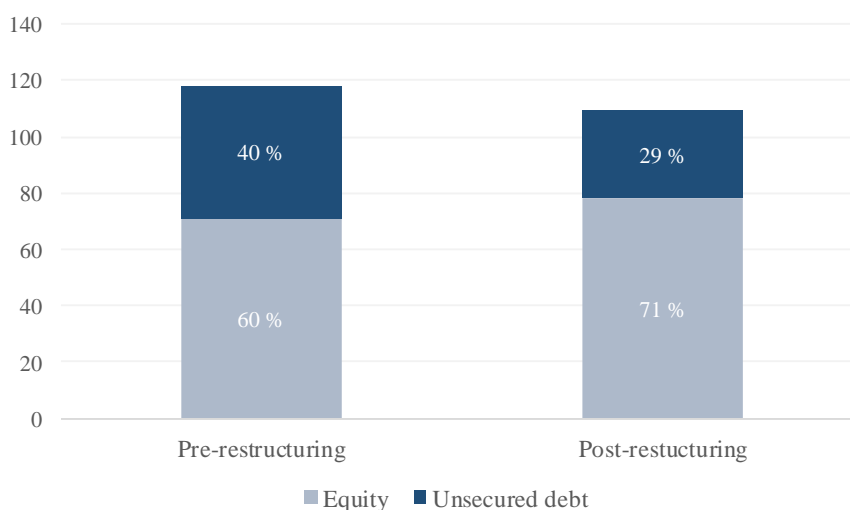
Industry: Seismic
 Restructuring initiated: 15.07.2015
 Restructuring completed: 22.12.2015

Implemented measures:

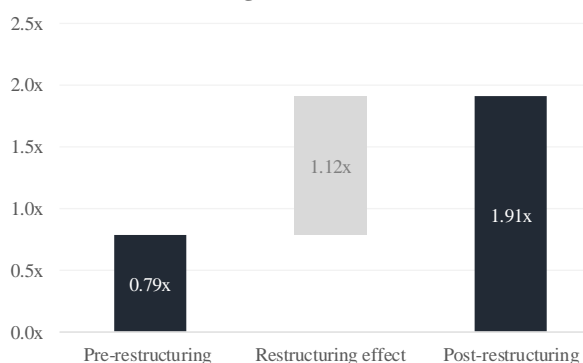
- Amend and extend unsecured debt (36 months)
- Haircut unsecured debt (5%)
- Cash redemption (18%)
- New equity offering (33 mUSD)



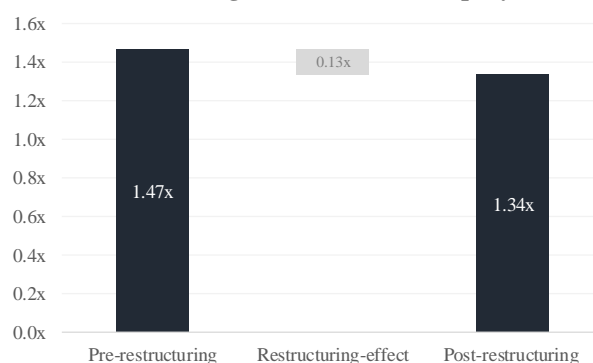
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio

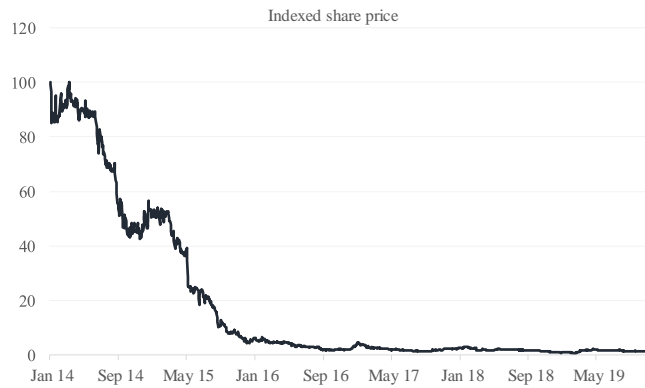


Electromagnetic Geoservices (2)

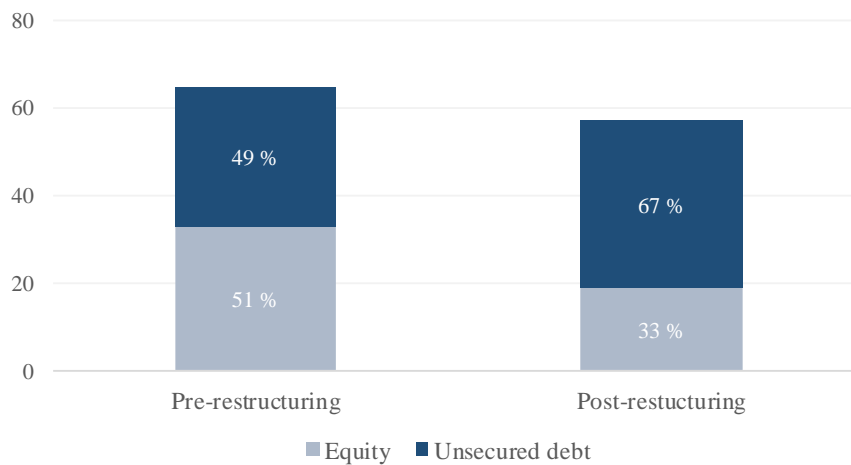
Industry: Seismic
 Restructuring initiated: 09.02.2017
 Restructuring completed: 07.07.2017

Implemented measures:

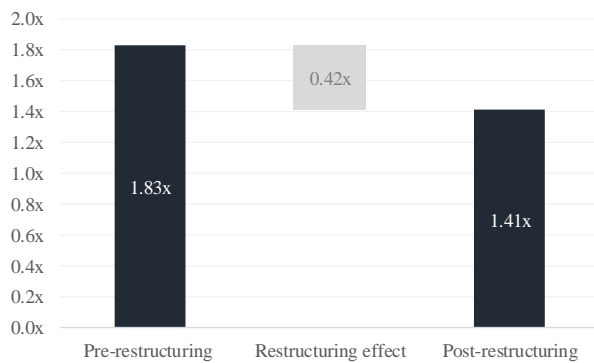
- Haircut unsecured debt (3%)
- Cash redemption (6%)
- New equity offering (23 mUSD)



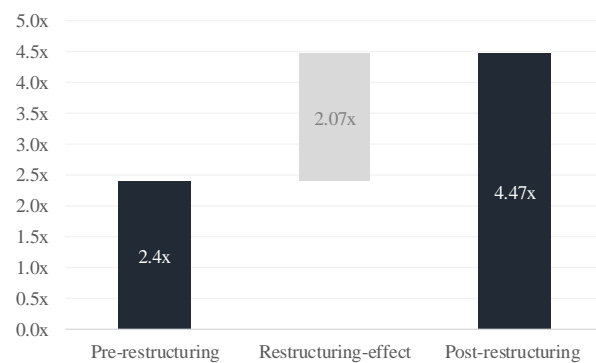
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



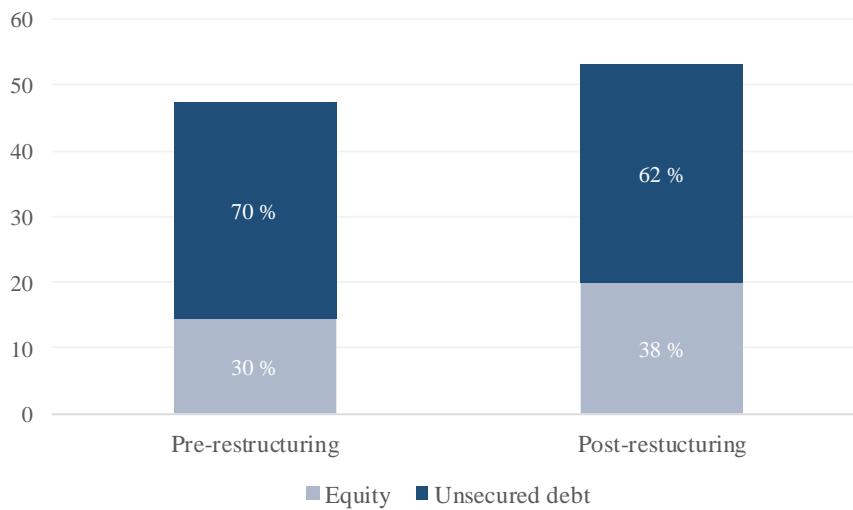


Electromagnetic Geoservices (3)

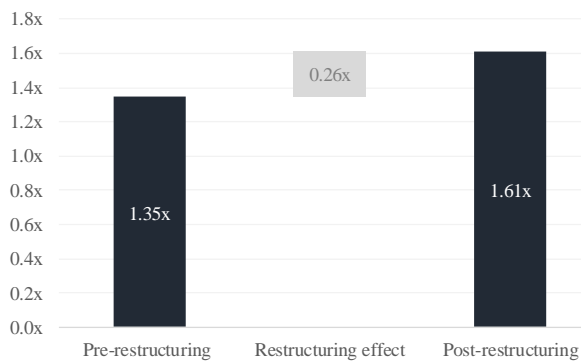
Industry: Seismic
 Restructuring initiated: 08.02.2018
 Restructuring completed: 16.05.2018
 Implemented measures:
 • New equity offering (11 mUSD)



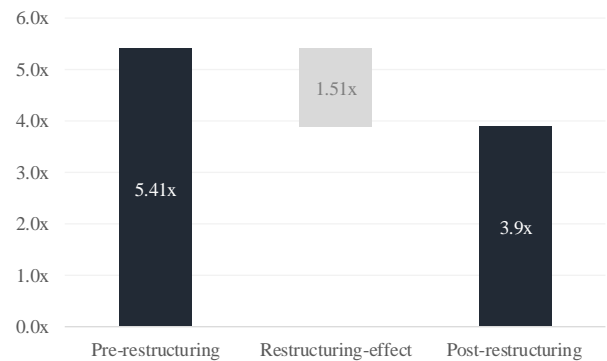
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio





Farstad Shipping

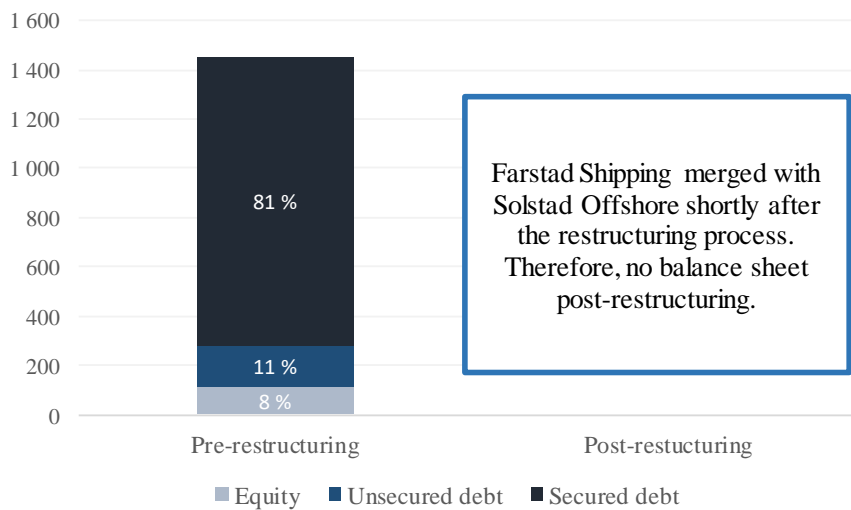
Industry: Offshore
 Restructuring initiated: 01.03.2016
 Restructuring completed: 10.03.2017

Implemented measures:

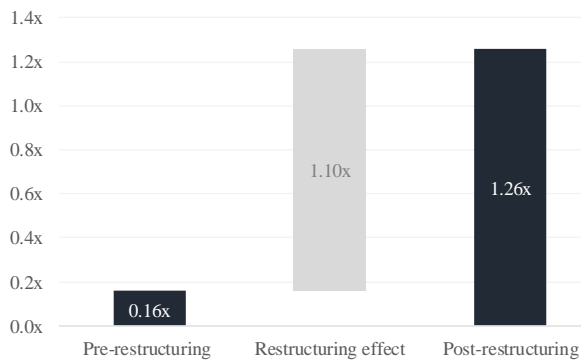
- Amend and extend secured debt (60 months)
- Haircut secured debt (7%)
- Haircut unsecured debt (72%)
- Conversion secured debt (5%)
- Conversion unsecured debt (28%)
- New equity offering (63.2 mUSD)



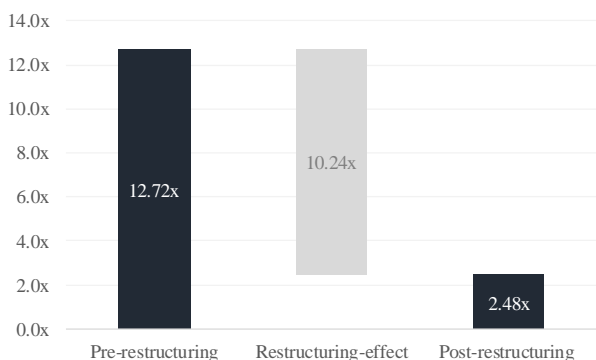
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio





Havila Shipping

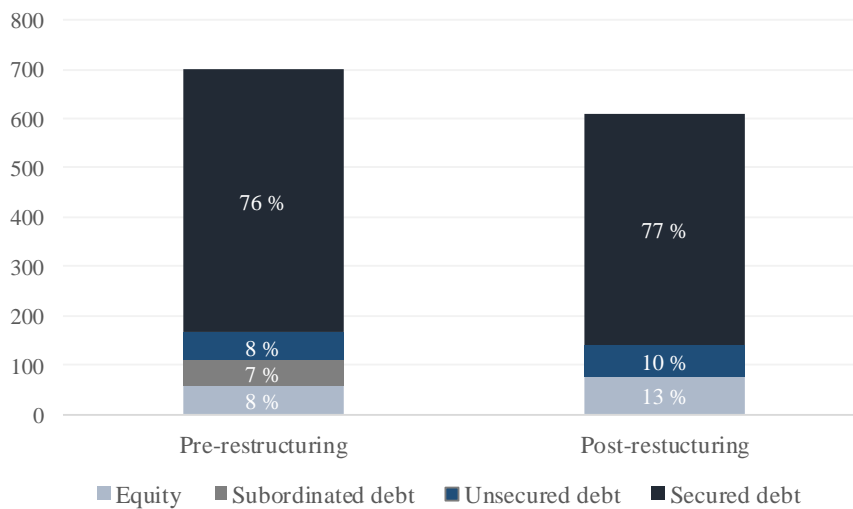
Industry: Offshore
 Restructuring initiated: 05.01.2016
 Restructuring completed: 01.03.2017

Implemented measures:

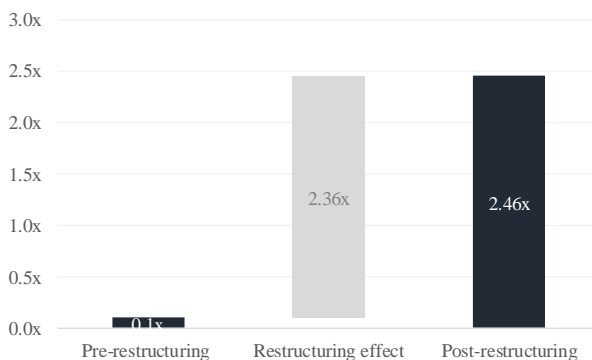
- Amend and extend secured debt (48 months)
- Haircut unsecured debt (85%)
- Conversion secured debt (11%)
- Cash redemption unsecured debt (15%)
- New equity offering (24.4 mUSD)



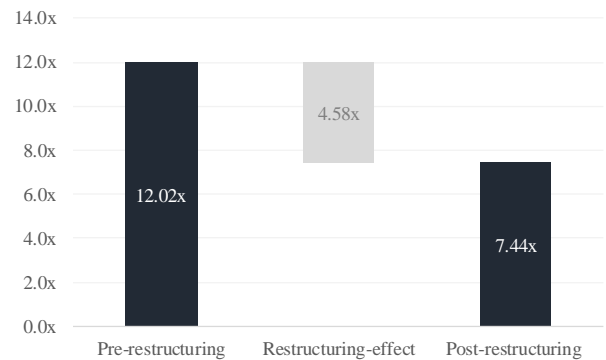
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



Oceanteam

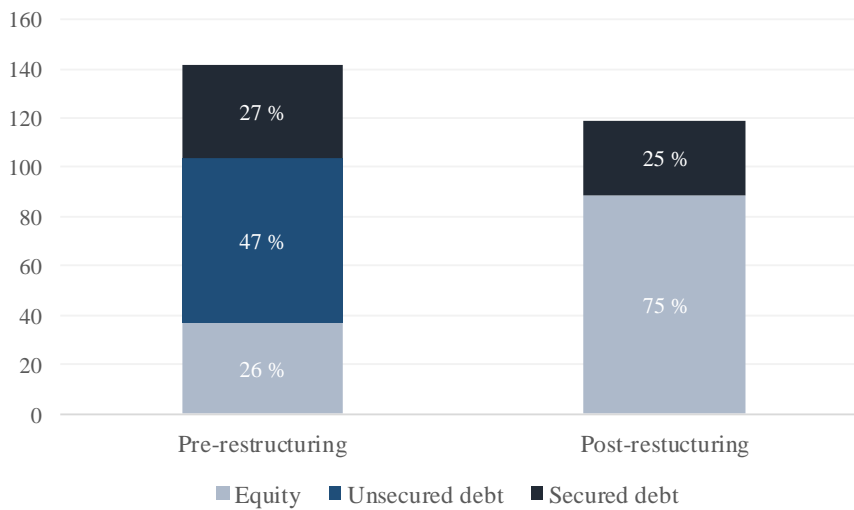
Industry: Offshore
 Restructuring initiated: 20.03.2018
 Restructuring completed: 07.12.2018

Implemented measures:

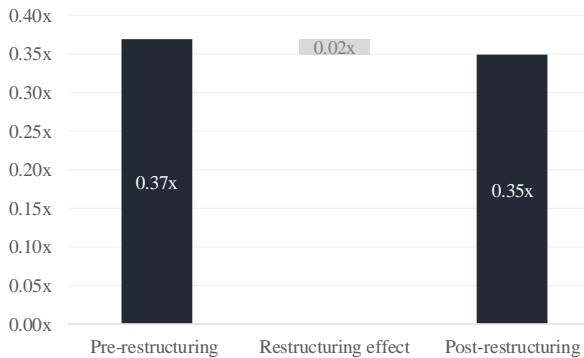
- Conversion unsecured debt (100%)
- Conversion shareholder loan (100%)



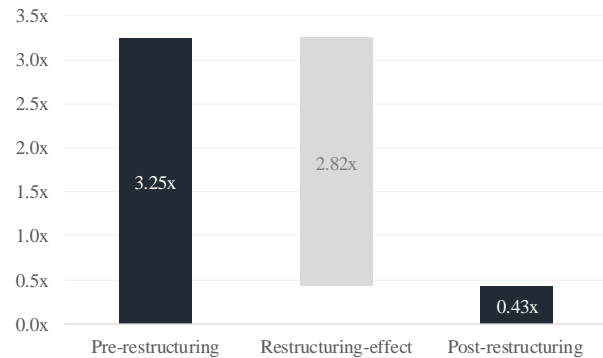
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



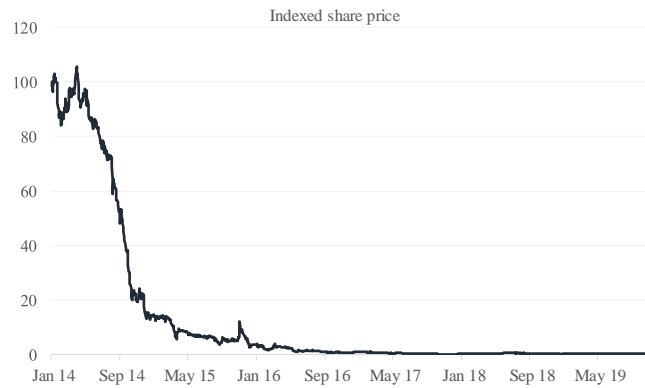


Polarcus (1)

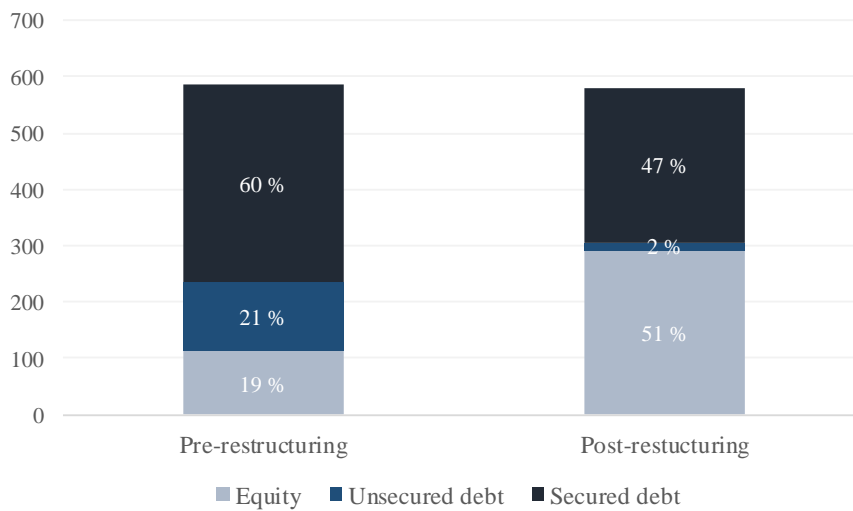
Industry: Seismic
 Restructuring initiated: 07.12.2015
 Restructuring completed: 10.05.2016

Implemented measures:

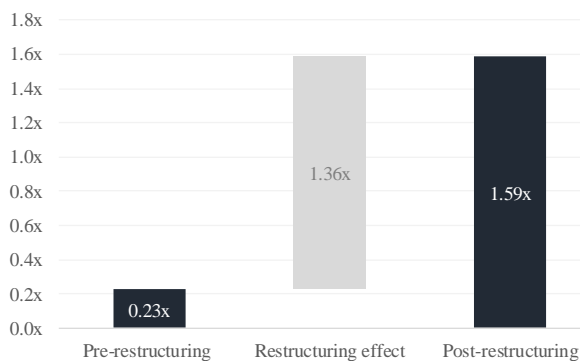
- Amend and extend secured debt (60 months)
- Haircut secured debt (14%)
- Haircut unsecured debt (45%)
- Conversion secured debt (6%)
- Conversion unsecured debt (32%)



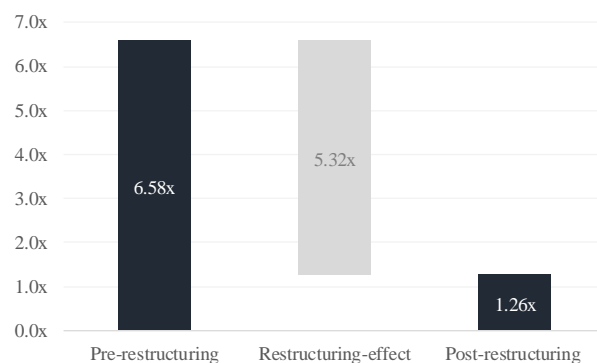
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio





Polarcus (2)

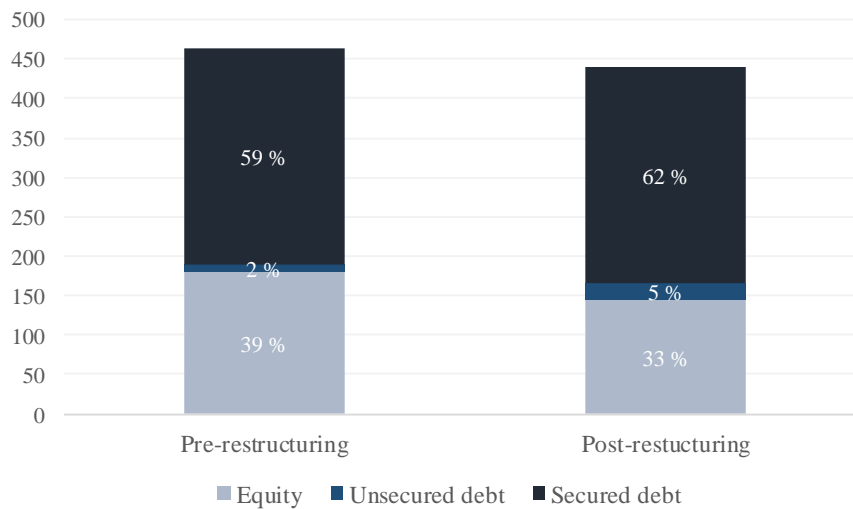
Industry: Seismic
 Restructuring initiated: 09.02.2017
 Restructuring completed: 10.04.2017

Implemented measures:

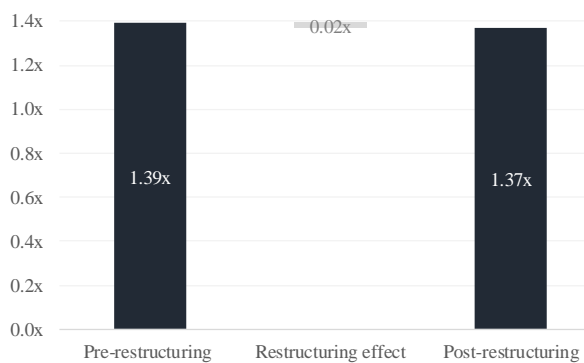
- Amend and extend secured debt (12 months)
- New equity offering (40 mUSD)



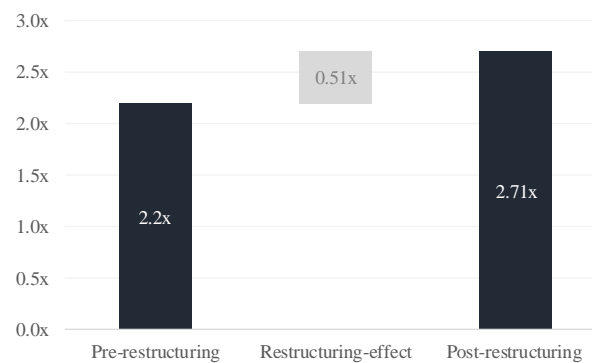
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio





Polarcus (3)

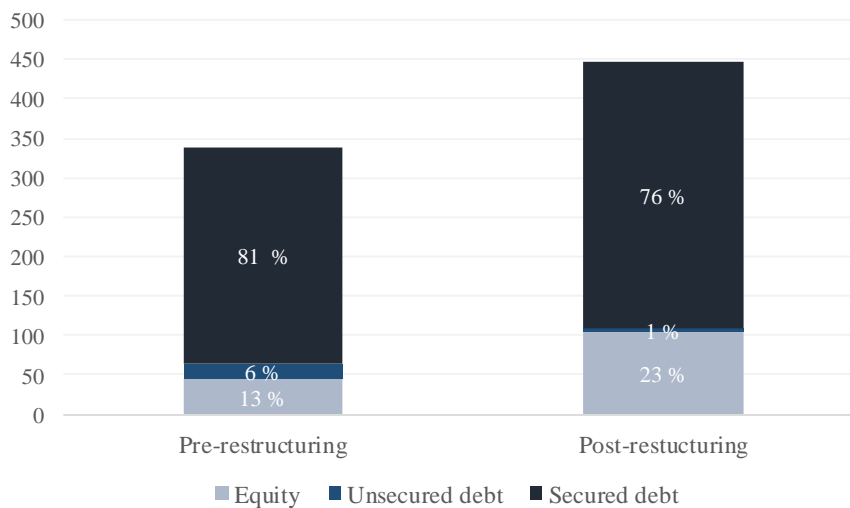
Industry: Seismic
 Restructuring initiated: 27.10.2017
 Restructuring completed: 28.02.2018

Implemented measures:

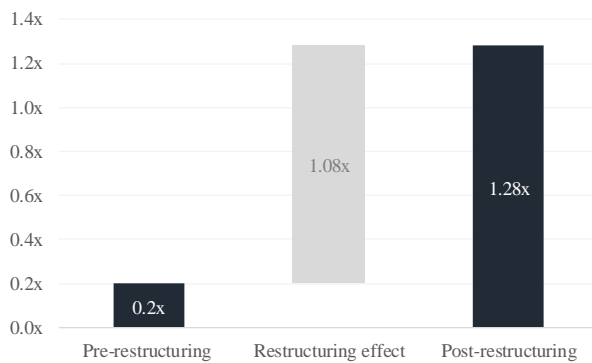
- Amend and extend unsecured debt (36 months)
- Haircut unsecured debt (73%)
- Conversion unsecured debt (15%)
- New equity offering (58 mUSD)



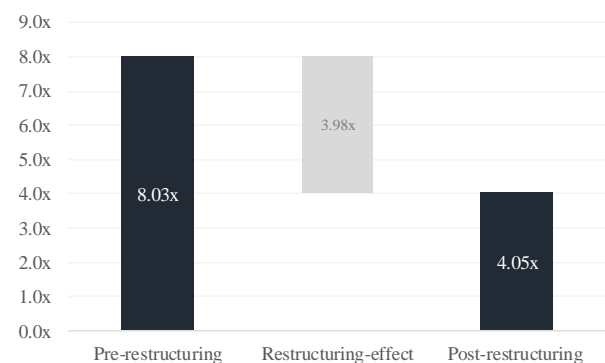
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



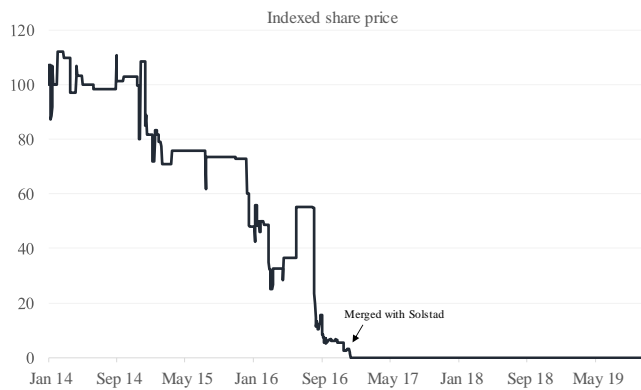
Restructuring effect on debt-to-equity ratio





Rem Offshore

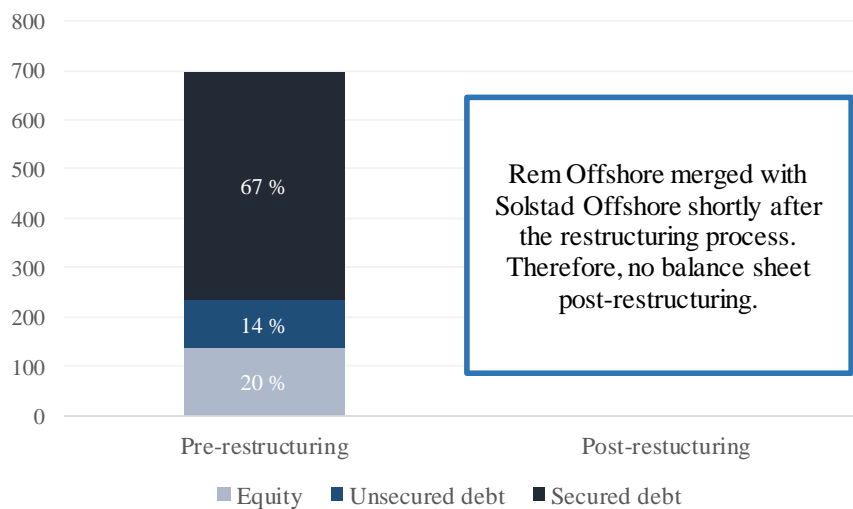
Industry: Offshore
 Restructuring initiated: 18.05.2016
 Restructuring completed: 12.12.2016



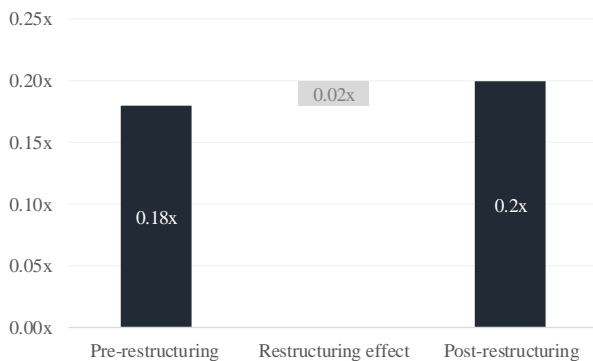
Implemented measures:

- Amend and extend unsecured debt (42 months)
- Haircut unsecured debt (50%)
- Conversion unsecured debt (15%)
- Cash redemption unsecured debt (8%)
- New equity offering (18 mUSD)

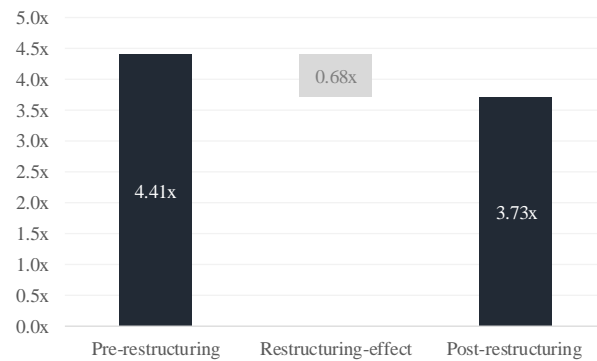
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



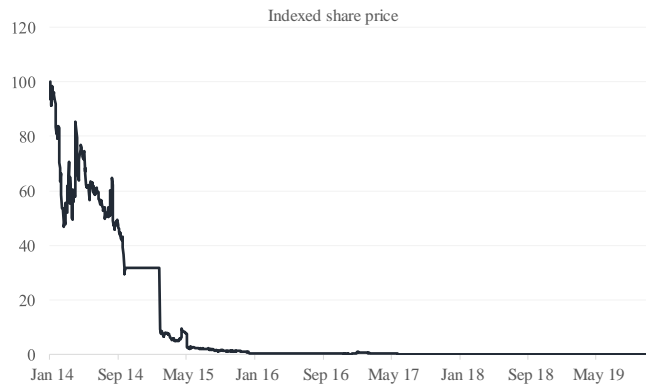


Seabird Exploration (1)

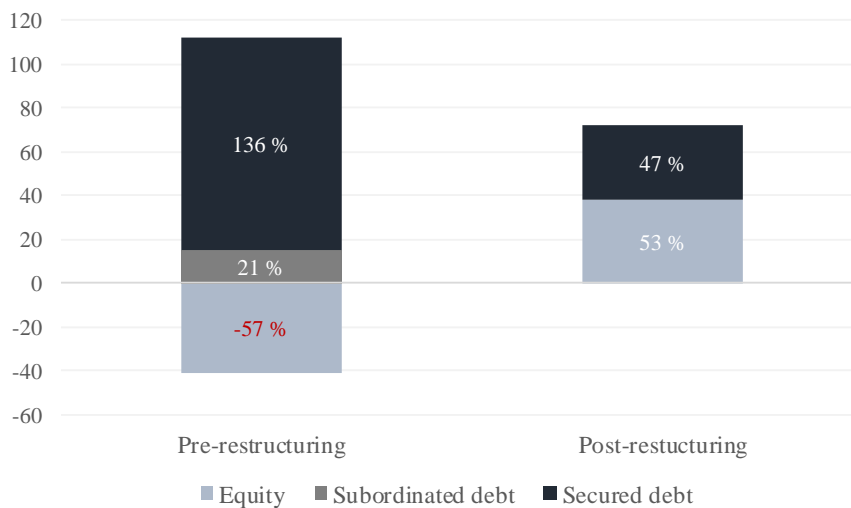
Industry: Seismic
 Restructuring initiated: 15.08.2014
 Restructuring completed: 06.05.2015

Implemented measures:

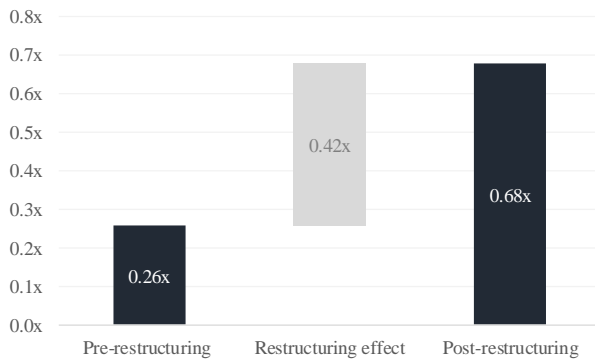
- Amend and extend secured debt (24 months)
- Haircut secured debt (53%)
- Conversion secured debt (27%)
- New equity offering (12 mUSD)



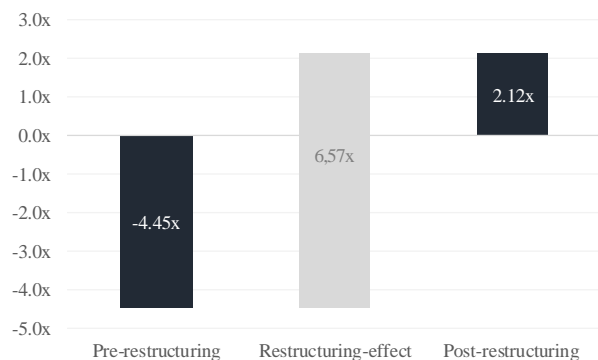
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



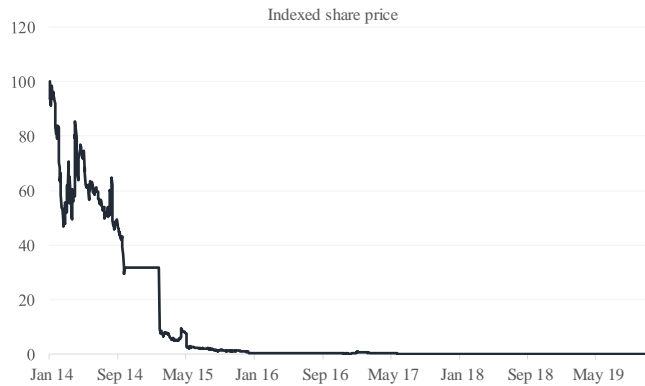


Seabird Exploration (2)

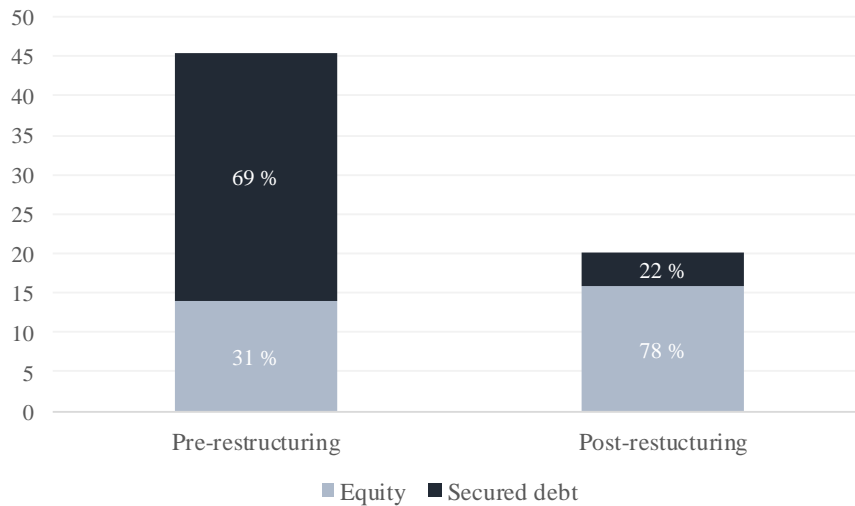
Industry: Seismic
 Restructuring initiated: 05.05.2017
 Restructuring completed: 27.12.2017

Implemented measures:

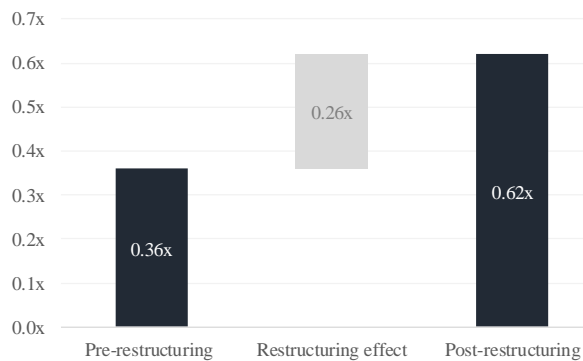
- Amend and extend unsecured debt (36 months)
- Conversion secured debt (82%)
- New equity offering (13.2 mUSD)



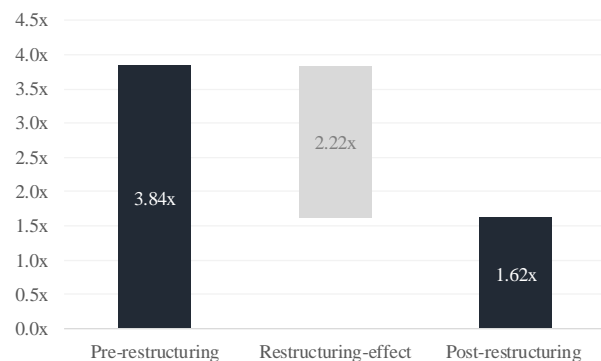
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



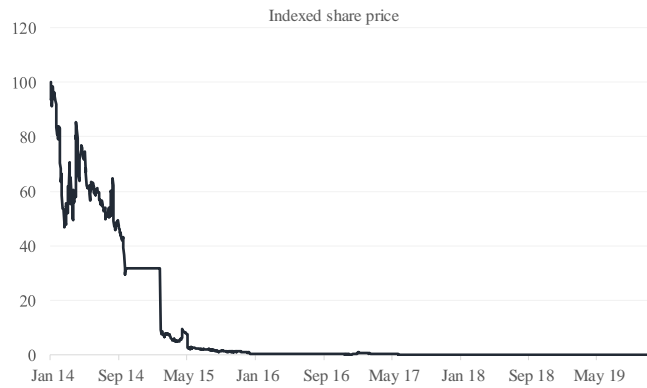
Restructuring effect on debt-to-equity ratio



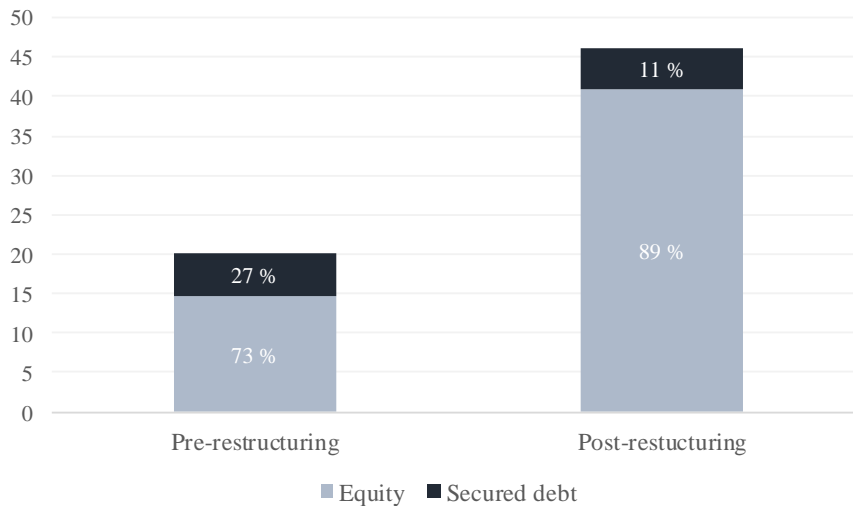


Seabird Exploration (3)

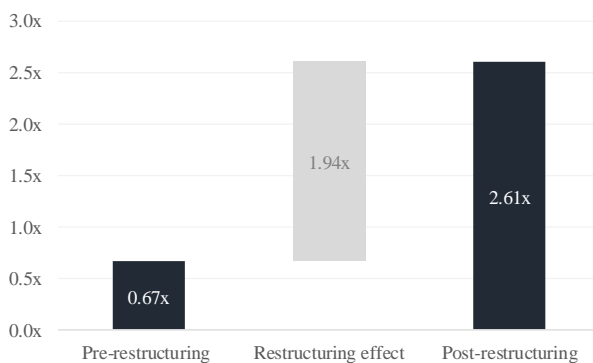
Industry: Seismic
 Restructuring initiated: 24.05.2018
 Restructuring completed: 10.08.2018
 Implemented measures:
 • New equity offering (39 mUSD)



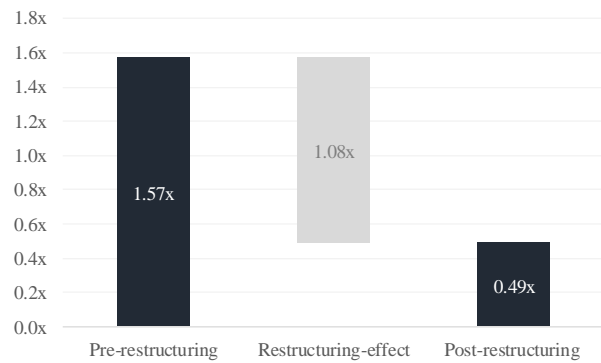
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio





Siem Offshore (1)

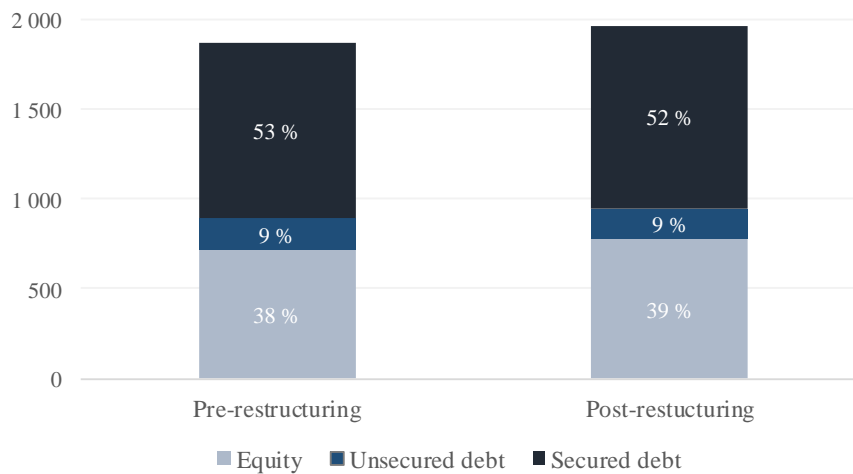
Industry: Offshore
 Restructuring initiated: 20.05.2015
 Restructuring completed: 18.09.2015

Implemented measures:

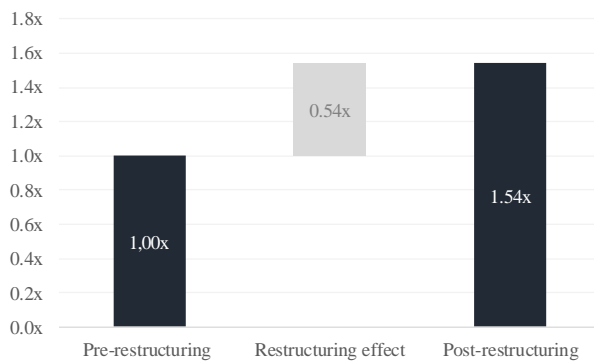
- Amend and extend secured debt (36 months)
- New equity offering (100 mUSD)



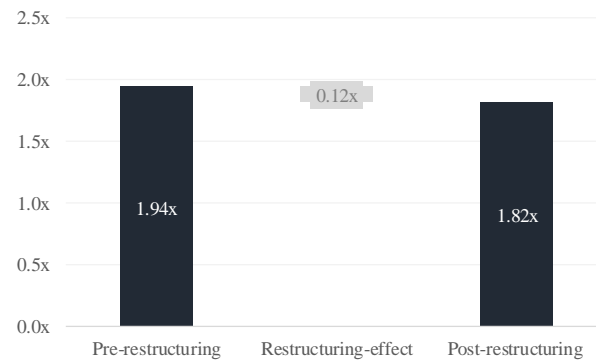
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio





Siem Offshore (2)

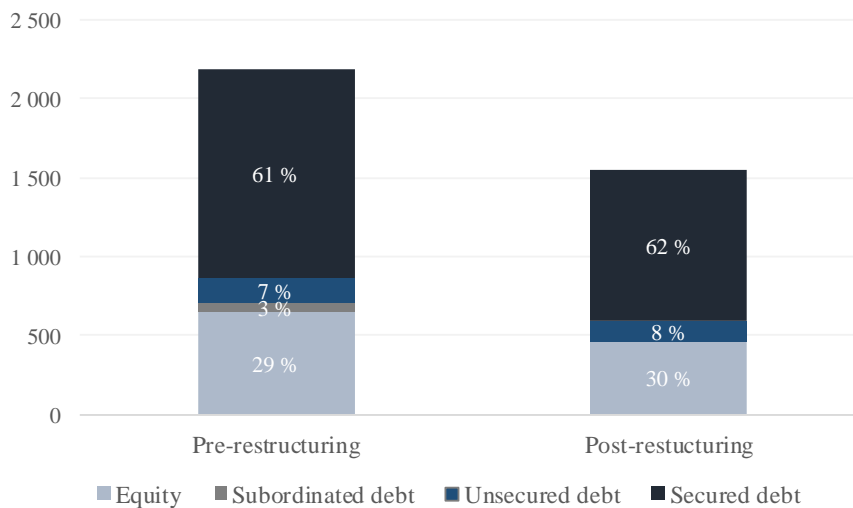
Industry: Offshore
 Restructuring initiated: 28.03.2017
 Restructuring completed: 23.06.2017

Implemented measures:

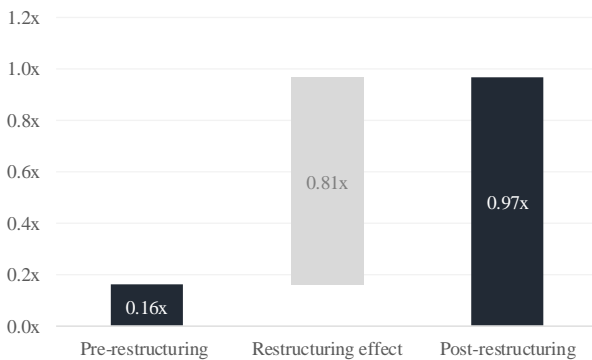
- Amend and extend secured debt (36 months)
- Amend and extend unsecured debt (66 months)
- Haircut unsecured debt (20%)
- New equity offering (22 mUSD)



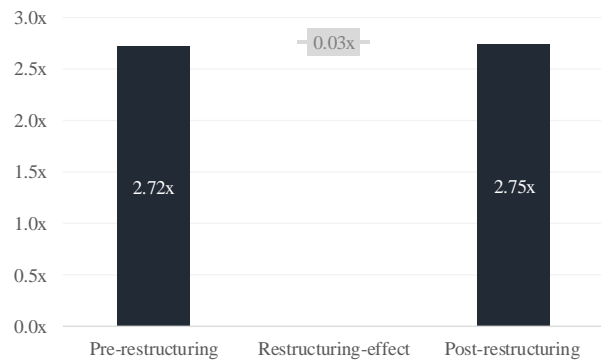
Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



Solstad Offshore

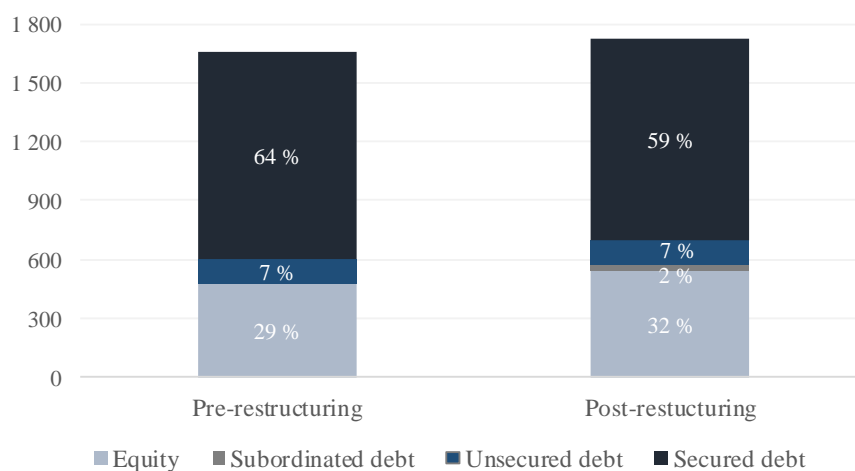
Industry: Offshore
 Restructuring initiated: 24.05.2018
 Restructuring completed: 10.08.2018

Implemented measures:

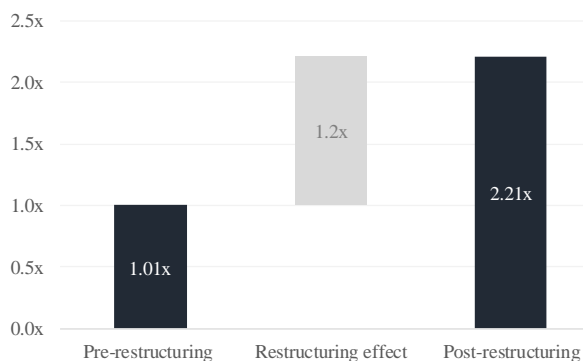
- Amend and extend secured debt (24 months)
- New equity offering (39 mUSD)



Restructuring effect on capital structure (mUSD)



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio

