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The Resolution of Norwegian Companies in Financial Distress

An empirical study examining the efficiency of Norwegian restructuring alternatives

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

Preface

With this thesis, we conclude our respective Master of Science in Economics & Business Administration degrees at the Norwegian School of Economics (NHH).

As both of us are majoring in Financial Economics, and aim to pursue a career within the field, we particularly wanted the thesis to (1) provide valuable knowledge for the future and (2) be relevant both in time and topic for practitioners as well as academia. Thus, our choice of topic concluded with an analysis of financially distressed companies in Norway in the context of the Norwegian bankruptcy legislation. Our supervisor, Karin S. Thorburn, has greatly contributed to formulate the topic of the thesis, and has provided invaluable consultation. We are deeply grateful for your input, which has been essential for the completion of the thesis.

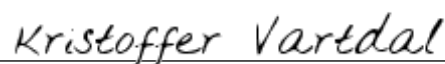
During our education, there has been limited focus on financial restructuring mechanisms both in-and out-of-court. Yet, newspapers are frequently headlined with articles related to companies and industries experiencing severe financial challenges. Especially considering the recent major recession in the price of oil and the imminent consequences on the oil-dependent Norwegian economy. This triggered a desire to study the related mechanisms in further detail, and explore the apparent lack of formal financial restructurings in Norway. After extensive research and analyses, we conclude our degrees with highly relevant knowledge, and hopefully a constructive contribution to the ongoing debate of altering the current bankruptcy legislation.

In addition to Professor Karin S. Thorburn, we would like to extend our gratitude to Kristoffer Hegdahl at the Norwegian law firm, Thommesen. With us possessing limited law experience, he provided an introduction, as well as the necessary knowledge for understanding the main differences between the Norwegian and U.S. bankruptcy legislations. Finally, we would like to thank the Brønnøysund Register Centre and its employees, who have contributed to gather the sample of the analysis and assisted with valuable comments to the dataset.

Bergen, June 08, 2017



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Abstract

This thesis examines the relative success of the Norwegian bankruptcy legislation with reference to similar mechanisms in Sweden and the U.S. Based on the total population of financially distressed Norwegian companies filing a public petition for a debt settlement proceeding since 1999; only 15% have survived the process as a going concern. As comparable research in Sweden and the U.S. documents firm survival rates of three-quarters, this suggests that the Norwegian legislation does not provide an efficient framework for distressed firms. Further disturbing is it that the formal system is effectively unused with only 28 unique companies filing for a debt settlement in the last 18 years.

The alternative to a formal debt settlement is an out-of-court financial restructuring. As the formal system is in general not considered a viable alternative, we analyse a sample of private workouts. Due to the time-consuming process of manually extracting the dataset, restrictions were necessary. Thus, with basis in Norwegian companies listed within the energy sector at Oslo Børs and Oslo Axess, we identified 22 companies that have initiated financial restructurings since 01.01.2015. As of 01.04.2017, 13 of these have completed the restructuring, which constitute the sample for the out-of-court analyses.

We find average recovery rates of senior secured creditors of 95.5%, and junior unsecured equal to 67%. Comparable research of Swedish bankruptcy auctions and Chapter 11 solutions indicates average recovery rates of 77% and 80% for secured creditors, whereas junior creditors recover 2% and 29%, respectively. This indicates that from a creditor perspective, out-of-court financial restructurings are at least as efficient as mechanisms in Sweden and the U.S. However, the Norwegian sample indicates deviations from the Absolute Priority Rule, which an auction procedure eliminates.

The time-horizon, a proxy of the indirect costs related to the bankruptcy procedure, in Norwegian private workouts are relatively swift with a median of 6 months. Similarly, formal debt settlements in Norway require on median 5 months, while Swedish auctions are considerably faster with an average of 2 months. On the contrary, Chapter 11 solutions are heavily time-consuming with a median of 27 months.

Importantly, the results are likely to suffer from a selection bias due to the necessary restrictions. The sample characteristics are strictly defined both in industry and time. Therefore, it is questionable whether the sample properly represent the population of out-of-court financial restructurings. Additionally, the sample characteristics limit the validity of the cross-country comparison as the results may reflect variations in the companies instead of differences in the procedures. Thus, the results must be treated carefully. However, due to the non-existing research on the topic, we argue that the results provide an interesting first examination and discussion of the Norwegian restructuring alternatives in a financial perspective. Overall, the analysis suggests that the Norwegian bankruptcy legislation is inefficient in securing firm survival, and secondly, that the alternative, out-of-court financial restructurings, are surprisingly efficient in securing creditor recovery rates and limiting bankruptcy costs.

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1. Introduction

Norway, a global top 5 exporter of crude oil (Ec.europa.eu, 2017) with an oil and gas sector constituting ~22% of total GDP, has suffered greatly from the recent oil-recession. The drop in the price of oil (see Appendix B) has affected companies, employees, lenders, shareholders, as well as a range of other stakeholders (Hungnes, Kolsrud, Nitter-Hauge & Strøm, 2016). Illustrating the heavy oil dependency, 61 of the 211 companies traded at Oslo Børs and Oslo Axess, the Norwegian stock exchange, are listed within the energy sector. As a consequence of the recession, a majority of these companies struggle financially, which have resulted in a series of recent financial restructurings.

Due to an evidently inefficient Norwegian bankruptcy legislation, the majority of large-cap firms aim to find an agreement with its creditors based on an out-of-court restructuring process (Hegdahl, 2017). Therefore, in January 2015, the Norwegian Department of Justice appointed Judge Villars-Dahl to examine the current legislation and its efficiency in securing value. With inspiration from the struggling economy and apparent inefficient bankruptcy legislation, this thesis provides the first analysis on the outcome of Norwegian restructuring alternatives in a financial perspective. Primarily, with reference to alternative solutions in Sweden and the U.S., which represent two distinct frameworks for resolving companies in financial distress.

Whereas the U.S. bankruptcy code facilitates for companies to restructure under Chapter 11, Sweden operates with an auction bankruptcy system, as there are no effective reorganization provisions (Thorburn, 2000). As the Norwegian bankruptcy legislation has been criticized for not providing the necessary tools for a distressed firm to survive (Hegdahl, 2017), the thesis examines whether the current legislation promotes successful restructurings. This is primarily based on an empirical analysis of Norwegian firms undergoing debt settlement proceedings, the survival rate of the relevant companies, and the time-horizon from initiation to completion. With basis in comparable estimates from research in Sweden and the U.S., as well as the alternative of private workouts, we aim to discuss the efficiency of the current restructuring alternatives for Norwegian companies.

Although similar research exists based on Swedish and U.S. data, e.g. by Thorburn (2000) in Sweden and Franks and Torous (1994) in the U.S., no directly comparable analysis has been documented on Norwegian data to our knowledge. Previous research highlights survival rates of financially distressed companies filing in the respective countries, recovery rates of creditor

classes, bankruptcy costs and adherence to the Absolute Priority Rule (APR). Swedish and U.S. data indicate similar survival rates of three-quarters of the sample found by Thorburn (2000) and Franks and Torous (1994). The recovery rates of senior secured debtholders are also comparable of 80%. However, compared to Chapter 11, the Swedish auction process facilitates for a highly time-efficient process with cash distribution promoting a strict adherence to APR.

Based on data retrieved from the Brønnøysund Register Centre (Brønnøysund), we identify only 28 unique companies that have filed publically for either a compulsory or voluntary debt settlement in Norway in the period of 1999 - 2017. In this limited sample, only 15% of the companies that initially went into a debt settlement proceeding survived the process as a going concern. In comparison with similar survival rates in Sweden and the U.S., this indicates that the Norwegian bankruptcy legislation is inefficient. Further, due to the small number of companies filing under formal procedures, it is seemingly not even considered as a viable alternative from a financially distressed company's perspective.

Moreover, the average and median time from the process is initiated and closed formally are 9.9 and 5.0 months. The time-horizon represent a proxy of the indirect costs associated with distress, as it is reasonable to assume that total costs increase with time spent in bankruptcy. Research reported by Thorburn (2000) finds the average time from filing to sale as a going concern in Sweden to be two months. This illustrates the time-efficient process of a public auction. Similar estimates in the U.S. report an average reorganization under Chapter 11 of ~24 months (Flynn, 1989).

The alternative to a formal restructuring is an out-of-court restructuring where the Board of Directors in the relevant company renegotiates with its creditors. As the out-of-court process is the most commonly applied mechanism to solve financial distress in Norway, this thesis further analyses a sample of private workouts. This process commonly constitutes of amending and extending senior secured debt terms, adjustments to financial covenants, conversion of junior unsecured debt, new equity offerings, and asset sales, depending on the severity of the situation (PWC, Finansiell restrukturering av større selskaper, 2017). The goal is to facilitate for a runway until the industry is expected to recover from the recession.

As a single database providing the necessary information in order to analyse out-of-court restructurings does not exist, we had to manually extract data from company announcements, which is an extremely time-consuming process. Thus, it was necessary to impose certain restrictions to the sample even though it is likely to result in a selection bias of the sample. This is important to consider throughout the thesis when interpreting the results.

In order to isolate the effect of the oil recession commencing in 2014, the out-of-court sample is limited to companies within the energy sector traded at Oslo Børs and Oslo Axess that initiated a financial restructuring in the period of January 2015 - April 2017. By defining a financial restructuring as an extensive reorganizing of the capital structure involving both changes in equity and debt, we identify 22 companies that have announced initiation of a restructuring process (Newsweb.no, 2017). As of 01.04.2017, 13 of these companies have completed the restructuring, which constitute the data sample in the out-of-court analysis.

The average time spent from the company officially announces that the firm have initiated a private workout to completion is 7.1 months, with a median of 6.0. Interestingly, this indicates that the out-of-court procedures imply comparable indirect costs as a debt settlement under Norwegian legislation. On the contrary, the out-of-court restructurings are considerably more time-efficient compared to Chapter 11 reorganizations, although it is noted that discussions with creditors are likely to have been initiated before it is publicly announced. Unsurprisingly, the Swedish auction bankruptcy system facilitates for the most time-efficient process.

Based on an examination of the out-of-court restructurings, the most commonly implemented measure is to amend and extend current debt terms, as well as adjusting covenants, which is observed in 12 out of 13 restructurings. An equally common initiative is to secure liquidity through equity offerings. Additional loans are provided in 8 restructurings, which exposes the lenders for additional risk beyond the existing debt. Interestingly, in 3 of the restructurings, the secured creditors have agreed to a haircut on the outstanding debt amount, which indicates severely distressed companies. However, the average haircut of the sample is considered minor of only 4.5% relative to debt face values, which is equal to a recovery rate of 95.5%.

As expected, conversion of unsecured debt is more commonly observed in 9 out of 13 restructurings, with an average haircut of 33%, which implies a recovery rate of 67%. Although the loss is substantial, it is minor compared to the average loss of the equity value since the

price of oil traded at USD110 per barrel, which is 80%. Finally, asset sales and / or delays in asset deliveries are observed in 7 out of the 13 restructurings.

Even though certain of the companies in our data sample have executed minor restructurings as a precautionary measure, the average debt-to-equity ratio pre-restructuring was 5.5x, while the average current ratio was 0.9x. This illustrates the imminent lack of short-term liquidity within the industry, and need for restructuring as a last measure before filing for bankruptcy. Post-restructuring, the average of the respective ratios is enhanced to 2.2x and 2.0x, improving solvency and securing short-term liquidity. This is primarily a consequence of extended amortization of existing debt, conversion of unsecured debt to equity, and new equity offerings.

Overall, based on a 15% survival rate of companies under formal debt settlement proceedings, this analysis suggests that the Norwegian bankruptcy legislation is inefficient in securing survival of the going concern. From our perspective, the law could benefit through inspiration from the Swedish and U.S. procedures, and thus limit the need for out-of-court restructurings.

The thesis is organized as follows: Chapter two provides a brief introduction to the Norwegian bankruptcy legislation. Moreover, chapter three addresses relevant literature on the topic and evidence based on Swedish and U.S. data. Further, chapter four provides the analysis of the formal debt settlement proceedings, therein the data sources, descriptive characteristics, and firm survival rate. In similar, chapter five introduces the out-of-court sample and analyses.

Primarily, the thesis addresses the following issues; (1) the survival rate of financially distressed companies entering debt settlement proceedings formally in Norway, and its relative success compared to Sweden and the U.S., (2) which implemented measures are most commonly observed in Norwegian out-of-court restructurings, (3) recovery rates of various creditor classes and strictness to APR under out-of-court restructurings, and (4) the bankruptcy-related indirect costs under formal debt settlements and out-of-court restructurings compared to international evidence.

Chapter six discusses the weaknesses and limitations of the thesis, as well as suggestions to future research on the topic. Next, we included a section, chapter seven, which introduces a discussion of how the Norwegian legislation could be altered with inspiration from Sweden and the U.S. Finally, the conclusion of the analysis is presented in chapter eight.

2. Introduction to the Norwegian bankruptcy legislation

As the thesis addresses the efficiency of the Norwegian bankruptcy legislation, the following chapter briefly introduces the most fundamental aspects of the law. The introduction is intended to provide the reader with the necessary background theory for understanding the following analyses. For further details on the Norwegian bankruptcy legislation, as well as an introduction to the Swedish and U.S. bankruptcy legislations, see Appendix C.

Under the Norwegian bankruptcy legislation, a company has three alternatives when in financial distress; a voluntary debt settlement, a compulsory debt settlement or bankruptcy. The first two alternatives refer to a situation where the company is provided the possibility to negotiate a solution to its financial challenges with its creditors. The third alternative refers to the scenario where the company is liquidated and ceases to exist. Private individuals can also file for bankruptcy; however, we will only focus on the filing companies in this thesis. The emphasis of this chapter will be on the debt settlement procedures as we examine the survival rate of companies trying to restructure in-court.

A petition for a debt settlement¹ requires that the company is both unable to repay its creditors' obligations as they expire, and that the Court finds it probable that the company will achieve a successful debt settlement. The objective of the two before mentioned requirements is to conserve the debt settlement procedure to the companies that truly need it. The requirements for a bankruptcy filing are that the company is both illiquid and that its current debt exceeds current assets. Both the debtor² and the creditors can file for a bankruptcy, whereas it is only the debtor that can file for a debt settlement.

In order to avoid bankruptcy, the debtor can file a petition for a voluntary or a compulsory debt settlement. A voluntary debt settlement requires a unanimous vote in favour, while a compulsory debt settlement requires three-quarters of the votes from all the affected creditors. Thus, a voluntary debt settlement is challenging to achieve. Both petitions must explain the cause of the financial challenges and provide a plan for how the debt will be settled.

¹ A debt settlement is normally a renegotiation of unsecured claims, hence the name.

² A debtor is a person or enterprise that owes funds to another party.

A voluntary debt settlement can include the tools³ suggested by the law. In addition, the involved parties may freely negotiate and propose other solutions as they see fit. Hence, conversion of debt to equity is a viable alternative, which is commonly observed in out-of-court restructurings. However, a compulsory debt settlement is limited to only contain tools suggested by the law. In addition, it requires a minimum dividend of 25% to all unsecured creditors. Thus, the alternatives within a compulsory debt settlement are severely restricted and the procedure require an unattractive minimum dividend. Especially considering that distressed companies are usually unable to guarantee unsecured creditors a minimum dividend of 25%. This limits the use of the legislation (Hegdahl, 2017).

The alternative to an in-court debt settlement proceeding is an out-of-court financial restructuring. In the following, restructurings under Norwegian legislation are referred to as debt settlement proceedings, whereas private workouts are termed as out-of-court procedures. These important terms are used extensively throughout the thesis.

³ In particular, the tools suggested by the law are (i) the possibility of 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.

3. Literature review

Prior to conducting the analyses, relevant research literature on financially distressed companies in the U.S., Sweden and Norway has been examined. This chapter addresses the most critical aspects of the literature and how the findings are applied in this thesis.

A number of studies provide extensive research on Chapter 11 reorganizations and out-of-court private settlements in the U.S. However, international studies on financially distressed reorganizations are limited. There is some evidence provided on Swedish auction bankruptcies mainly by Thorburn. However, to our knowledge, there is limited analysis based on Norwegian data, especially in light of the recent financial restructurings in oil-related industries. This may be due to the challenges related to retrieving the necessary data on out-of-court restructurings.

The following chapter highlights the most important research papers on Swedish and U.S. data, and the implications for our analysis. First, general advantages and challenges related to bankruptcy legislations, as well as the importance of having a well-functioning framework are discussed. Second, research on financially distressed companies in the U.S. with respect to survival rates, recovery rates, bankruptcy costs and adherence to APR is presented. Third, comparable research from Sweden is provided, which in combination with the U.S. evidence facilitate for the hypotheses tested in the thesis. Finally, the limited research on Norwegian recovery rates is documented, before the key-takeaways are summarized.

3.1. Bankruptcy and the resolution of financial distress (2008)

The chapter in the Handbook of Empirical Corporate Finance (Hotchkiss et al., 2008) provides a theoretical and empirical background on private and court-supervised mechanisms relevant for companies in financial distress. Based on the theoretical framework provided, we define a company to be in financial distress at the time when the liquid assets⁴ of the firm are not sufficient to cover the current requirements of its hard contracts⁵. In order to restructure and resolve the financial distress, the company must alter the mismatch to provide sufficient liquidity e.g. through renegotiations of the outstanding hard contracts.

⁴ Cash and cash equivalents (marketable securities) that can be converted to cash or liquid assets within 12 months.

⁵ Long-term investments that is expected to produce liquid assets in the future e.g. property, plant and equipment.

The chapter highlights how a financial restructuring can reduce premature asset sales as a consequence of liquidity default, which is a favourable feature of a restructuring alternative. On the other hand, restructuring alternatives limit the creditors' right to seize and liquidate assets in order to cover their investments. Harris and Raviv (1991), and Bolton and Scharfstein (1996) provide further discussion on the topic.

Another challenge related to debt renegotiations is asymmetric information between the debtors and creditors on the true value of the assets, and hence the going concern value and liquidation value. Giammarino (1989) and Mooradian (1994) provide research indicating that less informed creditors prefer a costly bankruptcy in court in case of heavy asymmetric information to access a transparent procedure. Further, Carapeto (2005) demonstrates that informational asymmetries could result in extended bargaining negotiations, and thus increased bankruptcy costs. On the other hand, Brown (1989) argues that an out-of-court restructuring always is advantageous in the case of symmetric information, thus, promoting private workouts in situations of limited asymmetric information problems.

In addition, in cases with several creditor classes, an agreement can be challenging to establish and could consequently result in holdout problems. For example, senior secured lenders may have an incentive to liquidate in order to secure their full value, and thereby vote down a generally more beneficial proposal. An efficient bankruptcy legislation is important in order to curb the consequences of this "common pool" challenge.

Overall, an efficient bankruptcy legislation providing a framework with the accessible tools to solve information asymmetry and potential hold-out problems is important to ensure the survival of the firm and adhering creditor seniority. If companies and creditors are limited to the alternative of resolving financial distress out-of-court, certain creditor classes risk to be cheated for their rightful claims.

3.2. Evidence on U.S. data and mechanisms

3.2.1. *Active Investors, LBOs, and the Privatization of Bankruptcy (1989)*

Jensen (1989) argues that private workouts are more likely to be attractive compared to Chapter 11 in cases of heavily levered firms. An aggressive leverage ratio implies that a high proportion of the marginal costs related to the reorganization is prescribed to the creditors, as the equity value is likely to be zero. Therefore, the senior creditors could be willing to take a loss on their claim in order to avoid the increased costs related to a Chapter 11 solution. The overall effect of the reduction in claims and marginal cost of restructuring argues for an out-of-court solution, due to the high costs related to formal reorganizations.

3.2.2. *Troubled debt restructurings: an empirical study of private reorganization of firms in default (1990)*

As the costs related to a reorganization out-of-court are expected to be less compared to formal bankruptcy mechanisms, many firms initially attempt to reach a private workout solution. Gilson, John and Lang (1990) examine debt-restructuring activity in the early 1980s, which indicates that 53% of firms file for Chapter 11 after unsuccessful workouts. Further, the paper suggests that firms with a larger proportion of intangible assets, more bank debt, and with less lenders are more likely to successfully restructure their debt privately. In addition, legal and institutional constraints, as well as higher costs related to a formal bankruptcy provide incentives for a private settlement. Stein (1992) argues that the extensive procedural demands related to a Chapter 11 reorganization result in increased direct costs compared to a private workout. As the Norwegian bankruptcy legislation concerning debt settlement proceedings is effectively neglected by larger companies, U.S. research suggests that it may be due to it either not providing the necessary tools and / or that a private workout is more cost-efficient.

Further, Gilson, John and Lang (1990) argue that the time-horizon in formal procedures is more extensive compared to private workouts as (1) decision-making takes more time, and (2) lawyer fees are treated as a priority claim under Chapter 11, thus, providing an incentive to prolong the process. As the time-horizon in a restructuring implies higher indirect costs⁶, companies and creditors find a private workout favourable. In 1984, Altman provided one of the first studies examining the indirect costs related to bankruptcy procedures. Based on his research, the average indirect costs are equal to approximately 10% of the firm value pre-bankruptcy (Altman, 1984). However, the methodology is criticised due to a causality problem, which

⁶ Opportunity cost of available managerial time and potential negative reputational effects.

Opler and Titman (1994) challenge. Nevertheless, the conclusion is that it exists significant indirect costs related to financial distress. Overall, the evidence indicates that the indirect costs are higher compared to direct costs in the case of bankruptcy. Hence, they are important to consider when determining the relative efficiency of the bankruptcy procedure.

On average, companies restructuring privately in the U.S. require 15 months, with a median of 11 months. Franks and Torous (1994) find that Chapter 11 reorganizations require on average 27 months in order to be resolved whereas distressed exchanges require 17 months. Flynn (1989) who finds an average bankruptcy time-horizon of 25 months under Chapter 11 substantiates the results. Thus, evidence suggests that private workouts in the U.S. imply less indirect costs compared to a formal process. Based on these findings, we expect to find that Norwegian out-of-court restructurings take on average less time compared to debt settlement proceedings.

Gilson, John and Lang (1990) provide extensive descriptive statistics of the restructuring measures implemented. Out of the sample of 80 corporate restructurings, 53 companies (66%) were in default before restructuring. In 74% of the sample, new equity is distributed to creditors and total debt repayment amount is reduced. In contrast, the least common measure is to extend the maturity of the debt, which is found in 49% of bank debt restructurings. Compared to in-court settlements, private workouts are characterized by more bank debt outstanding. Banks are more sophisticated lenders compared to other claimholders, which imply less holdout problems.

Moreover, in the sample, larger firms measured by the book value of assets are typically the ones that restructure privately. Confirmed by Moulton and Thomas (1993), and Chatterjee, Dhillon and Ramírez (1995) larger companies are also more likely to succeed in a restructuring attempt relative to smaller companies. This is primarily due to larger firms having more assets suitable for distressed sales, in combination with often more diversified business operations, which provide security if one of the divisions struggles.

3.2.3. A comparison of financial restructuring in distressed exchanges and Chapter 11 reorganizations (1994)

Franks and Torous (1994) investigate in their paper the restructuring of U.S. firms in financial distress. Using a sample of 82 companies, primarily consisting of relatively large, petroleum firms completing a distressed exchange of publicly traded debt in the period of 1983 - 1990, the analysis provides results on recovery rates for various creditor classes. Secured creditors recover a median of 87% and 80% in distressed exchanges and Chapter 11 reorganizations, respectively. The median recovery rate of junior debt is 80% and 29%.

In addition, the paper finds that less senior creditors usually receive a larger portion of the recovery value in equity securities. The conclusion is that the total recovery rate under Chapter 11 is less compared to that in distressed exchanges, which may be a consequence of not as solvent or more illiquid firms, or higher related costs. Further, the paper provides evidence of deviations from the APR. Positive deviations for junior claimants are frequently observed. This may be due to avoid a costly in-court procedure, which is considered very time-consuming (Hotchkiss et al., 2008).

Further, the paper provides capital structure and solvency characteristics of the sample. The year prior to default, the average current ratio of 37 companies filing under Chapter 11 is 1.06x. The 45 companies restructuring informally were more liquid with a pre-default average current ratio of 1.38x. In terms of solvency, both the companies under distressed exchanges and Chapter 11 had pre-default market solvency ratios of approximately 80%⁷.

As the sample consists primarily of large, oil-related companies, the pre-restructuring financial characteristics are interesting to compare with our out-of-court sample within the energy sector. Thus, we can discuss whether the Norwegian firms initiate restructuring initiatives too late, and thereby risk firm value, or rather as pre-emptive measures. However, the difference in the time period between the two samples will limit the degree of certainty to the discussion, and are thus considered speculative (see Table 1, page 35 for a comparison).

⁷ Face value of all debt relative to the market value of equity plus the face value of all debt.

3.2.4. Anatomy of Financial Distress: An examination of Junk-Bond issuers (1994)

Asquith, Gertner and Scharfstein (1994) find in their paper that asset sales are critical in order to avoid bankruptcy. While only 14% of the companies that sell above 20% of total assets file for bankruptcy, firms with limited asset sales subsequently file in 49% of the cases. Further, asset-selling companies are more likely to complete a successful debt exchange, most commonly through repayment of senior private debt.

Interestingly, leverage at the industry level is negatively correlated with asset sales (Asquith, Gertner and Scharfstein, 1994). As our out-of-court restructuring sample primarily consists of firms operating in asset-heavy and relatively leveraged industries, this implies that few of the firms are expected to sell off assets. Further, asset prices are likely to be realized at a discount as the companies' operating industry is in recession. This is due to a limited number of potential buyers, in line with research by Shleifer and Vishny (1992).

Also, Asquith et al. (1994) indicate that if the company has public bonds that are junior to the bank debt, the restructuring may be more challenging to complete. Another disturbing result is that 59% of companies where senior banks agree to a restructuring of the debt ultimately enter bankruptcy. This is an indication of insufficient implementation of liquidity- and solvency-improving initiatives.

Further, they document 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. James (1995) substantiates these results, and argues that banks are more willing to take a haircut and / or convert to equity only conditional upon junior debtholders consenting to restructure their claims. This is contrary to evidence found by Gilson, John and Lang (1990).

3.2.5. Evidence on the success⁸ of Chapter 11 outcome

Research provided by Hotchkiss and Mooradian (2004) based on 1,770 public companies that filed for Chapter 11 between 1979 and 2002 finds that 44% of the companies emerge as a public company, 27% continue as a private company, while 21% are liquidated, and 8% merge with another firm. This implies that the company survives more or less in 79% of the cases. This proportion of surviving companies is comparable with research provided by White (1989), Hotchkiss (1995), and Morrison (2007), and is thus used as a benchmark for U.S. firm survival rate under Chapter 11.

In 1993, Hotchkiss presented evidence that firm size, measured by pre-reorganization asset size, is the most important factor for determining whether a distressed company will survive a Chapter 11 reorganization. This is confirmed by Asquith, Gertner and Scharfstein (1994) as discussed in section 3.2.4. The possibility of divesting assets in order to finance operations facilitates for the survival of the firm.

Interestingly, Carapeto (1999), and Dahiya et al. (2003) find that Debtor-In-Possession (DIP) financing with super-priority greatly contribute to a successful reorganization⁹. As the Norwegian bankruptcy legislation does not provide a similar tool, this could be an attractive feature of an updated framework (see comparison of fundamental elements of the Norwegian, Swedish and U.S. bankruptcy legislations in Appendix C.4.). Chatterjee, Dhillon and Ramírez (2004) further document the positive features of DIP financing.

⁸ "Success" implies that the firm has been able to restructure successfully and thus avoids liquidation.

⁹ Provides access to working capital.

3.3. Evidence on Swedish data and mechanisms

3.3.1. *Bankruptcy auctions: costs, debt recovery, and firm survival (2000)*

In 2000, Thorburn published a paper addressing the time-horizon, costliness, recovery rates on creditor claims, as well as deviations from the APR on 263 private bankruptcy filings from 1988 - 1991. The sample consists of the larger firms in Sweden restricted to a minimum of 20 employees. As the Swedish bankruptcy code provides no effective reorganization provisions, these bankruptcy filings are determined based on an auction process. Thorburn (2000) finds evidence on survival rates of 75% of the firms, while the remaining 25% is liquidated piecemeal, which is similar to the Chapter 11 evidence discussed in the last section.

The evidence indicates that the Swedish process facilitate for a swift process with 2 months on average, implying less creditor conflicts and consequently less indirect costs compared to Chapter 11, yet, with comparable recovery rates on creditor claims. Secured debtholders recover on average 69% (median of 83%) of the face value of outstanding claims in bankruptcy auctions, while junior creditors receive only 2% (0%). This sample constitutes of going concern sales and successful reorganizations, which preserve the company, as well as piecemeal liquidations. Going concern sales provide on average a recovery rate of 77% (87%) for secured creditors, and 2% (0%) for junior. Recovery rates under a piecemeal liquidation are less, reflected by a 50% average recovery rate for secured debtholders (45%), and 2% (0%) for junior.

Deviations from APR are close to zero as an auction process involves a cash settlement, which is considered attractive. On the contrary, auction mechanisms are criticised due to the probability of asset fire sales, as the distress is likely to be on industry level reducing potential demand, as argued by Shleifer and Vishny (1992). Overall, the paper provides evidence suggesting that an auction bankruptcy system is a surprisingly efficient approach to resolve financially distressed companies.

3.4. Evidence on Norwegian recovery rates

3.4.1. Recovery rates in the Norwegian High Yield Bond Market (2010)

We find limited relevant literature with basis in the Norwegian market, indicating that the scope of the thesis could provide interesting results on an unexplored area. In the limited literature we identified, another thesis written as part of the Master of Science in Economics and Business Administration at NHH analysed defaults and recovery rates in the Norwegian high yield bond market in the period of 2005 - 2010.

Haugland and Brekke (2010), identified the following determinants of rate of recovery; (i) time of incorporation, (ii) default category, (iii) project delays, (iv) cost overruns, (v) proprietary technology, (vi) remaining funding, (vii) established operations, and (viii) refinancing. As the scope of our thesis is to analyse the various alternatives for financially distressed companies in Norway in light of the recent oil recession, and its efficiency, we do not pursue to identify any significant determinants of recovery rates in our sample. This is partly because Haugland and Brekke (2010) covered this relatively recently, and due to our sample being too small in order to provide any statistically significant results. Hence, we assess this to be outside the scope of this thesis. Rather we focus on comparing the results from Norwegian financially distressed firms with relevant bankruptcy procedures in Sweden and the U.S.

On the other hand, the thesis estimates average recovery rates on a larger sample than ours, which provides an interesting comparable basis. The volume weighted average recovery rates for defaulted bonds are for senior secured and subordinated 57% and 10%, respectively. Further, the analysis provides an estimate of post-restructuring equity ownership of initial shareholders in the cases of debt-to-equity conversions. Most interestingly, theory suggests this to be 0% as the equity is lost in a financially distressed situation; however, the results indicate an average of 5% - 10% post-restructuring ownership, documenting positive deviations from the APR.

3.5. Key takeaways

This section has examined previous research and evidence with basis in primarily the Swedish and U.S. bankruptcy mechanisms for financially distressed companies. The respective bankruptcy legislations and mechanisms provide two very different and distinct resolutions for solving distress. While Sweden does not have any efficient provisions available through formal law, an auction mechanism is utilized in most of the cases. On the other hand, U.S. companies aim to reorganize formally under Chapter 11, and if necessary liquidate under Chapter 7.

Both mechanisms provide comparable company survival rates and creditor recovery rates. The survival rates of 75% and 79% in Sweden and the U.S., respectively, will be used as a benchmark for the firm survival rate under Norwegian debt settlements. Likewise, the senior secured and junior unsecured creditor recovery rates will be utilized to measure the relative efficiency of the out-of-court financial restructurings. Further, an auction bankruptcy system is seemingly efficient in terms of related indirect costs, and limits deviations to the APR. Thus, it will be interesting to analyse how Norwegian debt settlements and out-of-court restructurings compare. Overall, previous research provides both valuable background theory, as well as comparable results for our analysis of Norwegian financially distressed companies.

Nevertheless, there are clear distinctions to the various samples such as sample size, industries analysed, time-period and firm size, which is likely to also explain some of the differences. Although this will be discussed extensively in the following sections, which will introduce our sample and conducted analyses, it is important to recognize the sample characteristics when interpreting the results. For example, the Swedish sample consists primarily of small companies in terms of assets size, whereas the U.S. sample includes a majority of large, petroleum-related firms. In addition, the Swedish evidence is based on an auction bankruptcy procedure whereas the U.S. results are derived from either a voluntary distressed exchange or Chapter 11. Importantly, the two samples, as well as our sample, are not directly comparable, and the results must therefore be treated carefully. However, as previous research is limited, we argue that it provides the best foundation for a discussion of the efficiency in resolution of financially distressed Norwegian companies.

4. Empirical analysis: Norwegian debt settlements

Chapter four introduces the empirical analysis of companies filing for compulsory and voluntary debt settlement proceedings under the Norwegian bankruptcy legislation. The primary objective of this chapter is to examine whether the formal framework in Norway for reorganizing financially distressed companies is efficient in terms of securing firm survival. Further, the results will be compared to previous research providing evidence on Swedish and U.S. mechanisms.

In particular, the chapter is organized as follows. First, the data sources that the sample is based upon, as well as the imposed restrictions are presented. Second, descriptive characteristics of the sample are discussed. Third, the firm survival rate is analysed and compared with international evidence.

4.1. Data sources and restrictions

In order to examine the financially distressed companies that have filed for debt settlement proceedings under the Norwegian bankruptcy legislation, we contacted the Brønnøysund Register Centre (Brønnøysund). They provided the population of data from the Register of Bankruptcies with entities either filing for a compulsory or voluntary debt settlement since the database was established in 1999. As of 01.04.2017, there have only been 40 individual cases filing a public petition for debt settlement proceedings, which is alarming in itself (see Appendix D for the total population and case-specific details). Importantly, these are only public petitions. In addition, it exists petitions filed privately to the respective District Courts; however, they were not accessible for this analysis.

Within the total population, nine private individuals have filed. In order to isolate the analysis to only consider companies filing, we chose to exclude these cases from the sample. In addition, there are two companies¹⁰ that initially filed for a voluntary debt settlement, however, were later reclassified to a compulsory debt settlement. In our final sample, we treat these separate cases as one unique company filing. Moreover, one company¹¹ has filed for a compulsory debt settlement multiple times, and will correspondingly be treated as a single instance. Thus, the total unique observations in our data sample are 28 companies.

¹⁰ Single-Phase Power AS and Varada Marine AS.

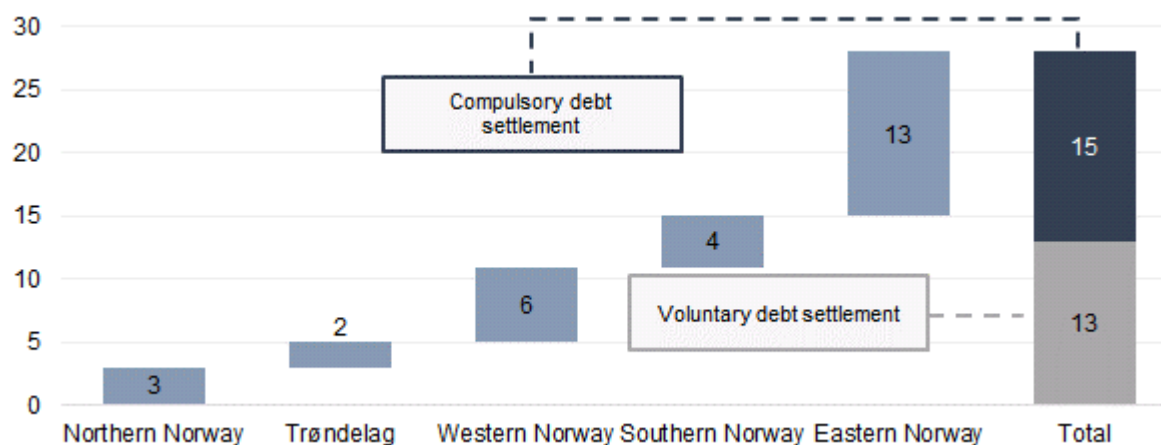
¹¹ Vestkran Kranutleie & Byggmont AS.

Although the dataset captures an extended time-period, all companies have filed later than 2006. Brønnøysund also provides the necessary information to confirm whether the company survived the process as a going concern or not. The time-horizon of the individual processes is established through the official documents from the Register of Bankruptcies, from filing to closing. Additionally, newspapers and industry newsletters have been used to provide information when applicable. As for pre-restructuring accounting figures of the relevant companies, the latest available annual reports from Proff.no have been applied, preferably from the year prior to bankruptcy.

4.2. Sample characteristics

The majority of the 28 companies that officially have filed to Brønnøysund are from Eastern Norway pre-filing, which is unsurprising as most of Norway's economy is clustered in the area (illustrated in Figure 1). Notably, six companies were formerly based in Western Norway, a geographical area providing the majority of offshore-related services in the country. The sample consists of a variety of companies, with an pre-filing asset size ranging from NOK270 thousand to NOK2.05bn. with a mean and median of NOK162m. and NOK34m., respectively. In terms of number of employees, the average is 78 with a median of 8. In particular, it is Reinertsen AS with its 1,300 employees at filing date who skews the average, thus, we consider median values to be a more accurate reflection of the sample companies. The majority of the companies were privately owned pre-filing. Out of the sample, 13 companies have in the period filed for voluntary debt settlement proceedings, whereas 15 companies have initiated compulsory settlements (see chapter two for an introduction to the Norwegian bankruptcy legislation).

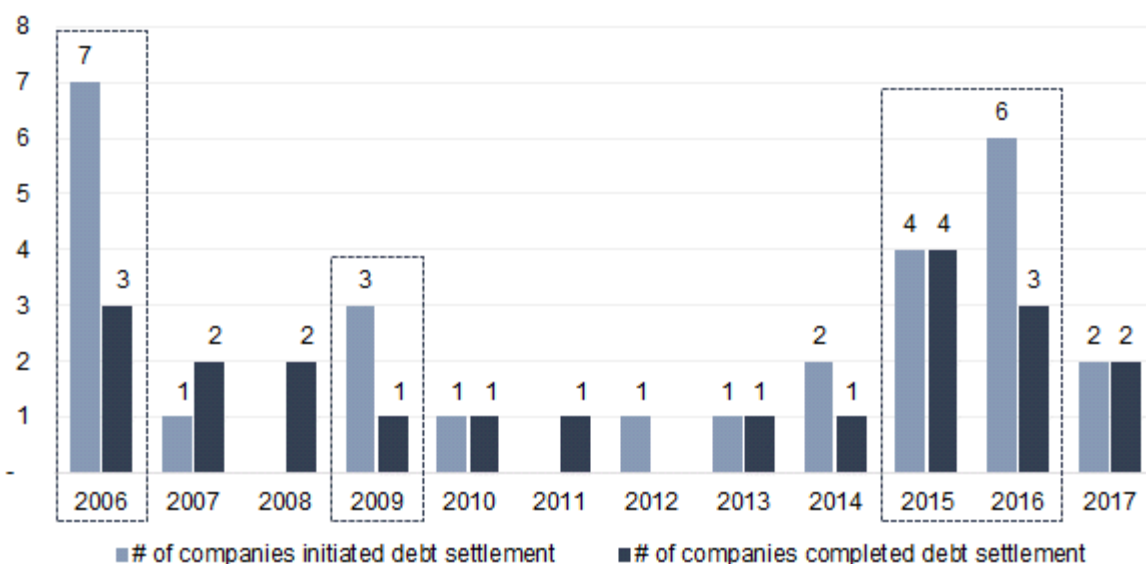
Figure 1: Geographical footprint of distressed firms and distribution of compulsory vs. voluntary debt settlements.



Source: Brønnøysund Register Centre.

As previously mentioned, no companies filed to Brønnøysund before 2006. However, during 2006, seven companies initiated debt settlement proceedings, as illustrated in Figure 2. Three of these companies finalized their procedures during the year. The year after the financial crisis, 2009, also stands out as a year with additional companies filing for debt settlement, although Norway were relatively unaffected by the crisis compared to other countries (Regjeringen.no, 2017). Interestingly, the years of 2015 and 2016 document four and six companies filing, respectively, which is likely to be a consequence of the oil-recession. An example is the relatively large oil-service company, Reinertsen AS. As of 01.04.2017, two additional companies filing for compulsory debt settlements substantiate this. These two companies have yet to finalize their processes, and are thus excluded from the sample when examining the firm survival rate.

Figure 2: Time-series of companies filing for and completing debt settlement proceedings.

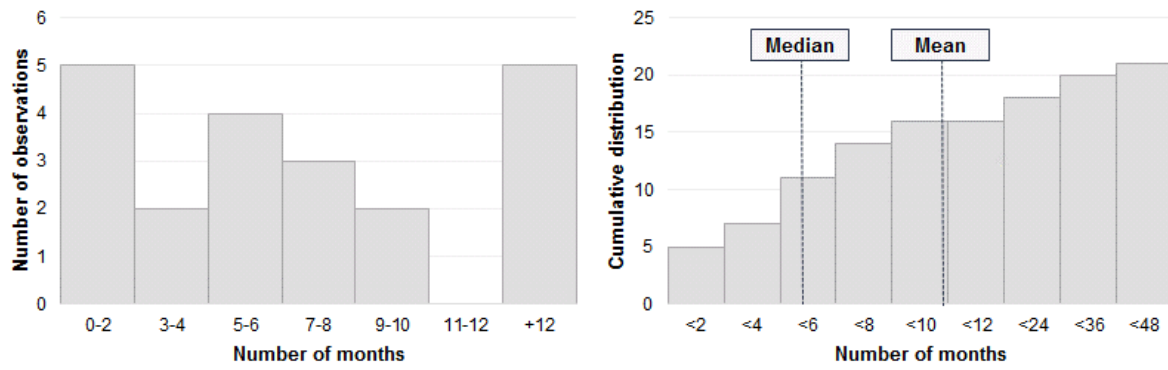


Source: Brønnøysund Register Centre.

Overall, the average time from filing to closing is 9.9 months; however, the sample is heavily skewed reflected by a median of 5.0 months. In particular, there are three outliers¹² with 29.2, 30.3, and 40.6 months, respectively. The distribution of the time-horizon from filing to closing is illustrated in Figure 3, which indicates a large variance in the number of months spent in debt settlement proceedings. Once again, we consider the median value as the most representative.

¹² Ofofbanen AS, North Salmon AS, and Think Nordic AS (see Appendix D, Figure 19 for a complete list of the time-horizon, company-by-company).

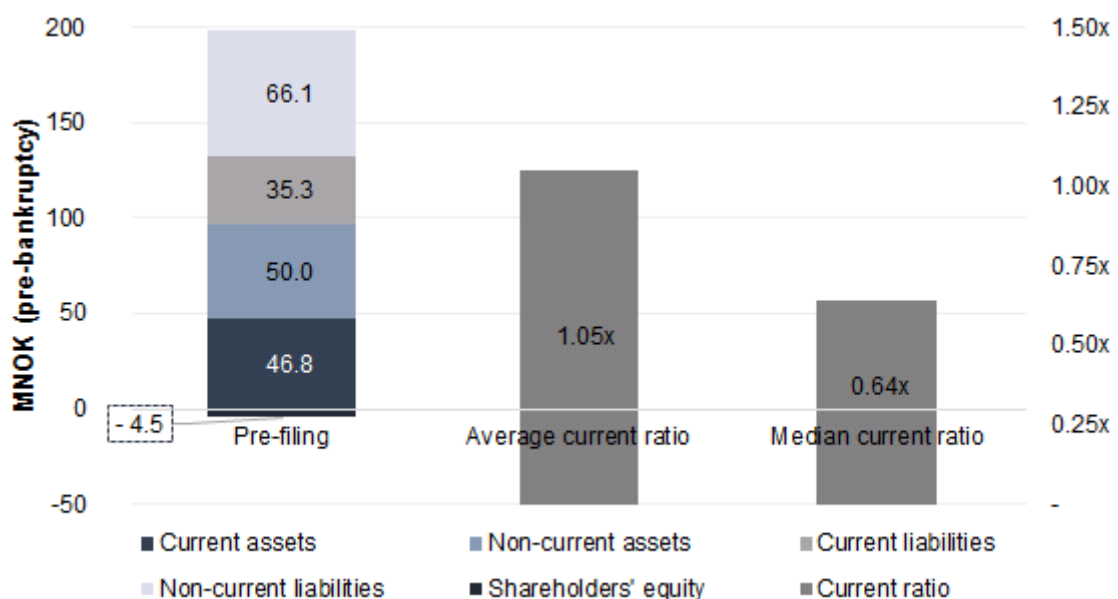
Figure 3: Frequency distribution of time spent in debt settlement proceedings.



Source: Brønnøysund Register Centre.

In terms of pre-filing financial characteristics, the companies' annual reports from the year prior to filing indicate heavy financial distress (Proff.no, 2017). The main balance sheet elements on average of the sample are illustrated in Figure 4 on the left, documenting that on both average and median levels, the book value of shareholders' equity is negative. Thus, the average company is considered insolvent. In order to measure the liquidity of the companies, the sample current ratio has been calculated. An average of 1.05x implies severely distressed companies, barely able to cover their short-term liabilities with current assets. A median value of 0.64x substantiate this. Moreover, 21 of the 28 companies report negative EBIT with an average financial cost of NOK16.1m. This results in a negative Interest Coverage Ratio (ICR) on average, with only two companies reporting an ICR >1.00x, illustrating how the companies are not able to comply with the amount of debt outstanding and the related terms. In other words, the sample companies are considered both insolvent as well as illiquid.

Figure 4: Pre-filing financial characteristics of sample firms.



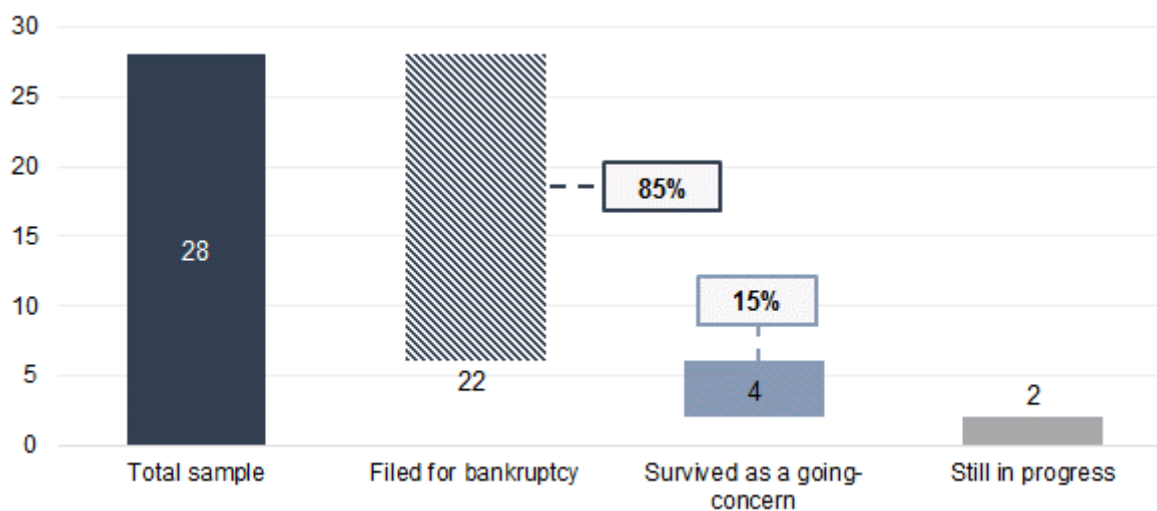
Source: Proff.no (pre-filing annual reports).

4.3. Firm survival rate under Norwegian debt settlement proceedings

As the Norwegian bankruptcy legislation is criticised for not providing the necessary framework and tools to ensure the survival of the firm in a distressed situation (Hegdahl, 2017), we expect that few companies will survive the process as a going concern. In particular, based on Swedish¹³ and U.S. data¹⁴, which research indicates a survival rate of approximately 75%, *our hypothesis is that less than three-quarters of the companies survive as a going concern when filing for a debt settlement proceeding under the Norwegian bankruptcy legislation.*

After analysing the outcome of the total sample of 28 unique companies filing for a debt settlement proceeding, either compulsory or voluntarily, we find that 22 firms have later filed for bankruptcy whereas only four have survived as a going concern. Three of the companies that survived filed initially for a voluntary process while the last company survived a compulsory debt settlement. The two remaining companies are still in the process, and are therefore not considered. This implies that out of the limited number of companies going into the process, only 4 out of 26 survived, which equals a survival rate of 15%.

Figure 5: Survival rate of companies under debt settlement proceedings.



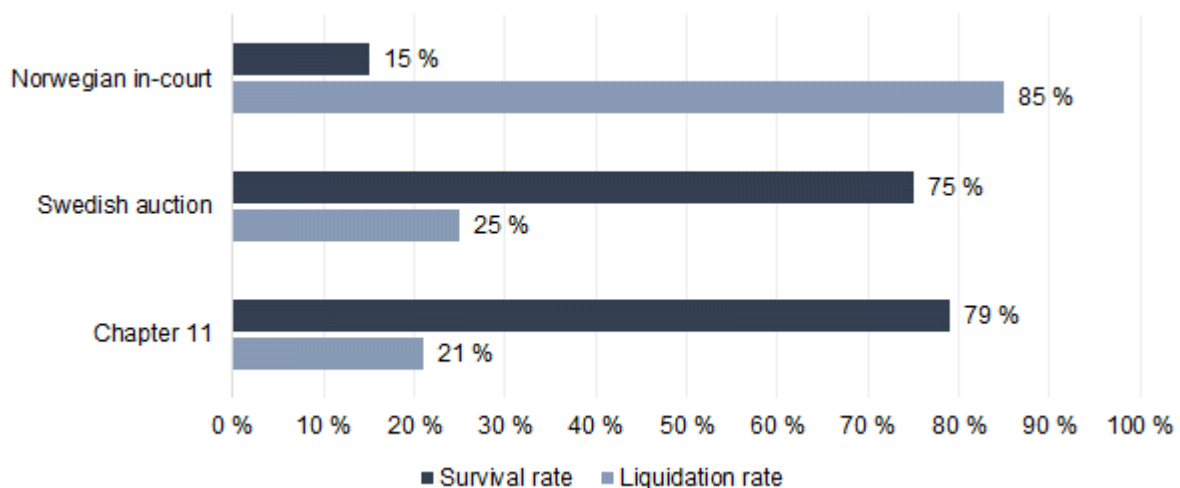
Source: Brønnøysund Register Centre.

¹³ Thorburn (2000).

¹⁴ Weiss (1990), Gilson, John, and Lang (1990), Franks and Torous (1994), and Hotchkiss (1995).

Compared to juridical mechanisms in Sweden and the U.S., this suggests that the Norwegian bankruptcy legislation is inefficient in securing firm survival (see Figure 6). Equally disturbing is the small amount of companies actually utilizing the formal framework. This implies that the legislation is not only inefficient, but also not applied. Companies are rather aiming to establish agreements in out-of-court financial restructurings without all the formal restrictions imposed under the law, or file directly for bankruptcy. Considering the latter, this is further depressing the implication of the survival rate, as it would imply that the sample consists exclusively of companies convinced that they can restructure and survive. In other words, the sample may suffer from a selection bias by including only the companies with a fair chance to survive, and thus overestimate the true expected survival rate for a random company.

Figure 6: Survival rate of Norwegian debt settlement proceedings compared to Swedish and U.S. evidence.



Source: Brønnøysund Register Centre, Thorburn (2000), and Hotchkiss and Mooradian (2004).

It is also interesting to consider the pre-filing financial characteristics of the various samples. As discussed, the Norwegian debt settlement sample is severely distressed with a median current ratio of 0.64x and an average negative equity book value with the majority of companies reporting negative ICRs. In comparison, the Swedish and U.S. samples have median current ratios of 1.23x and 0.99x, respectively. Therefore, the international sample companies are in a less distressed situation, which again can help explain the higher survival rates. Moreover, differences in company sectors, time-period of the samples, firm size and country-specific variables further distort the possibility to directly compare the survival rates under the various legislations. However, even though the validity of the 15% survival rate is questionable in a comparison perspective, the analysis indicates that the current Norwegian legislation does not optimally facilitate for firm survival.

By comparing our findings with the recent investigation conducted by Judge Villars-Dahl, we gain confidence in the result. Villars-Dahl concluded his research with a 19% survival rate for Norwegian companies filing for debt settlement proceedings through the Court (Villars-Dahl, 2016). This is comparable with our estimation of a survival rate equal to 15%. The difference between the survival rates of 15% and 19% is most likely due to Villars-Dahl's access to the total population of *both* public and private debt settlements, whereas we only have access to the public. This is further elaborated upon in chapter six discussing the thesis' weaknesses and limitations.

Previous research on U.S. data documents higher costs related to a formal restructuring, both in terms of direct and indirect costs, due to among others more formal procedures requiring additional lawyers and an extended process (Stein, 1992). Assuming that a Norwegian debt settlement proceeding also requires additional formal procedures, this could partly explain the low usage; however, we believe there are more fundamental challenges related to the bankruptcy legislation that are the primary causes. Based on an analysis of the Norwegian, Swedish, and U.S. bankruptcy legislations, chapter seven presents a discussion and criticism of certain aspects of the current law in light of the two other countries' bankruptcy mechanisms.

Our findings indicate that the Norwegian bankruptcy legislation is effectively unused, and that it does not facilitate for a high firm survival rate. The alternative, which the majority of larger companies adopt, is an out-of-court financial restructuring. Thus, we find it interesting to analyse this process as well, and examine whether it promotes successful outcomes. This is addressed in the following chapter, which introduces an empirical analysis of a sample with recent out-of-court financial restructurings in oil-related industries.

5. Empirical analysis: Norwegian out-of-court restructurings

Chapter five presents an analysis of a sample of recent Norwegian out-of-court financial restructurings (see Appendix C.5. for general background theory on financial restructurings). We primarily conduct an analysis with the purpose of indicating any potential tendency in commonly implemented measures, creditor recovery rates and bankruptcy-related costs. Although a sample selection is likely to imply a degree of bias to our estimates, we argue that the results are interesting to analyse, nonetheless. Especially considering the relevancy for oil-related sectors and its stakeholders, as well as the lack of research on the field. However, we do emphasize that the following results must be treated and interpreted carefully, and that additional research on a broader sample is necessary in order to establish any statistical inferences.

The chapter is organized as follows: First, the data sources applied in order to gather the sample and conduct the analysis are presented. Moreover, it provides information on the restrictions that was necessary to impose to establish an appropriate dataset. Second, the sample descriptive characteristics and the implications of them are discussed. The final sub-section of the chapter, 5.3., includes the analysis. In particular, we examine the most commonly observed implemented measures in out-of-court restructurings, recovery rates of various creditor classes and adherence to APR, and indirect costs related to financial distress.

5.1. Data sources and restrictions

The analysis of out-of-court financial restructurings is based on firms traded on the Oslo Børs and Oslo Axess markets (211 companies) as of 01.04.2017, in order to isolate large-cap companies that are obliged to provide the necessary information to conduct the analysis. Further, in order to analyse the effect of the oil-recession, the sample is limited to companies listed within the energy sector, which comprise of 61 companies in total¹⁵. This includes companies within the sub-industries; (i) Investment, (ii) Shipping, (iii) E&P, (iv) Oil service, (v) Seismic, (vi) Rig, and (vii) Offshore (see definitions in Appendix A). In addition, we imposed a restriction on the time-period to focus on financial restructurings initiated in 2015 - 2017 in order to limit the analysis to the effect of the recent recession. Nonetheless, this was necessary due to the time-consuming process of extracting the data manually.

¹⁵ One of the companies, Solstad Offshore (SOFF), is listed with series A (SOFF) and series B stocks (SOFFB). The company is treated as a single company in the analysis, thus, resulting in 60 unique companies in the sample.

All public announcement since 01.01.2015 (annual reports, quarterly reports, mandatory notifications, etc.) from each of the 60 unique firms have been manually examined in order to establish whether the specific company have initiated a financial restructuring. The majority of the firms have been heavily affected by the oil recession and have implemented organizational restructurings and / or certain amendments to the amortization profile of outstanding debt (Newsweb.no, 2017). Therefore, we defined a financial restructuring as an extensive reorganization of the capital structure involving both changes in equity and debt. The public announcements, in particular restructuring term sheets provided in relation to the announcement and completion of a restructuring, have been analysed to identify which measures have been implemented in the various companies and its implications.

To establish the time-horizon of the restructuring processes, information has been primarily collected from www.newsweb.no (NewsWeb), which is an announcement portal where company announcements and reports are published. Additionally, Norwegian newspapers, such as Dagens Næringsliv, Hegnar Media, E24 and Finansavisen, have been used as a complementary data source. However, not as the primary source as we consider NewsWeb to provide official, and often more accurate information. In addition, on one particular restructuring we were provided with private information regarding the case study from an investment bank.

In particular, restructuring term sheets and investor presentations related to the restructurings have provided the basis for calculating the recovery rates for the various claimants. These include all necessary information regarding the process for all creditor classes. In addition, annual and quarterly company reports, as well as mandatory notifications to Oslo Børs, have provided valuable information on the details of the restructurings. Official information from www.oslobors.no has been used as basis for the stock price development in the time-period.

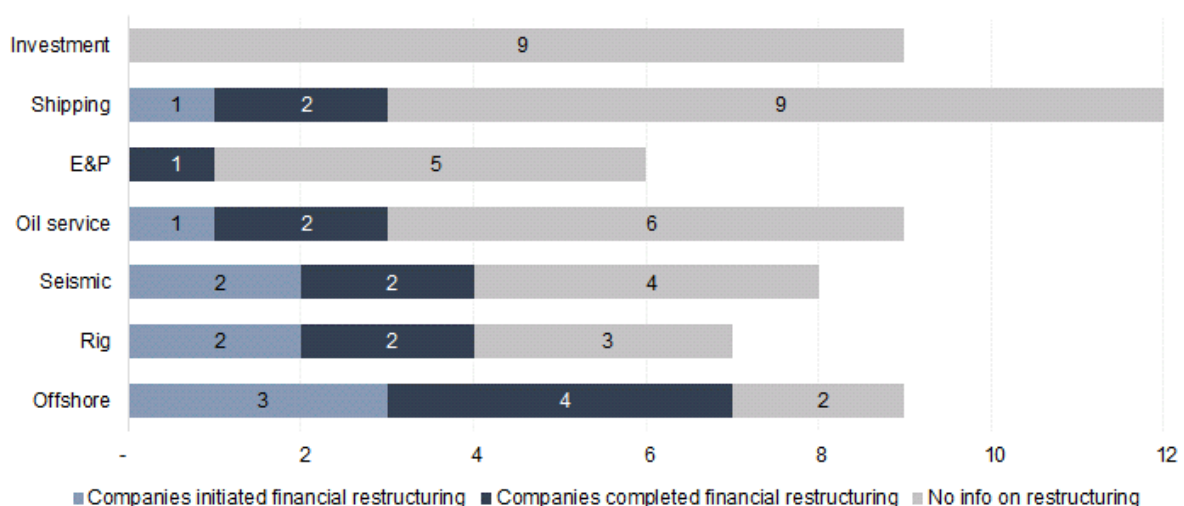
Changes in the capital structure from pre- to post-restructuring are based either on (i) pro-forma financial statements related to the restructuring often disclosed in investor presentations, or (ii) the quarterly report in the period pre- and post-completion and implementation of the restructuring. Favourably, pro-forma statements have been utilized as they isolate the direct effect of the restructuring, whereas during the period between a quarter and the next, several events can have an effect on the balance sheet. However, in the cases were pro-forma statements were not available, quarterly reports have been used.

5.2. Sample characteristics

The 60 companies within the energy sector are further divided into sub-industries, as it is interesting to analyse how the recession has influenced the particular segments. For example, seismic companies are expected to experience early cycle challenges as they are characterized by short contract backlogs (Nordea Markets, 2017). In addition, exploration costs are one of the first cost-reducing measures E&P companies implement as they rather focus on more cost-efficient brownfield¹⁶ investments with short-term cash flow potential. On the contrary, E&P companies are expected to not be as heavily affected as they possess more control of their business in terms of revenues and costs, whereas e.g. offshore- and rig companies' revenues are derived directly from the E&P players' demand of their services.

In the sample, there are (i) 9 companies classified as investment companies, (ii) 12 shipping companies, (iii) 6 E&P companies, (iv) 9 oil service companies, (v) 8 seismic companies, (vi) 7 companies operating rigs, and (vii) 9 OSV companies. As Figure 7 illustrates, there are certain sub-industries that have been more affected than others, as expected. In total, we find that there are 22 companies that have officially announced initiation of financial restructurings. Of these, 13 companies have already completed the restructuring, and will constitute the sample for the analysis. The remaining 9 are still in discussions with its creditors as of 01.04.2017 and are thus excluded (see Appendix F and G for detailed information on all out-of-court cases).

Figure 7: Number of financial restructurings based on sub-industries.



Source: NewsWeb, company reports, Norwegian newspapers and industry newsletters.

¹⁶ Investments in extensions of already constructed facilities.

Unsurprisingly, the companies operating within the offshore, rig and seismic sub-industries have experienced the most dramatic effect of the reduced demand of their services. These sectors are characterised by a high degree of cyclicity as revenues are derived directly from the E&P companies' investments, which fell sharply in line with the decline in the price of oil¹⁷. Also, the sub-industries are asset heavy, thus, often heavily leveraged in order to finance expensive rigs and vessels.

Further, during the period of Brent oil prices in excess of USD100 per barrel in 2011 - 2014, the sub-industries invested extensively in new assets as day-rates were rising. Today, day-rates have declined to levels barely covering operating expenses due to limited demand in combination with a massive over-supply, which have resulted in a fierce competition of newly announced contracts (Nordea Markets, 2017). Therefore, the companies immediately struggle to cover their relatively high financial expenses, as cash flow is sparse with the result of financial distress. Consequently, the solution is likely to be an initiation of a financial restructuring. For example, today there are only two listed companies within the offshore sub-industry that have yet to initiate a financial restructuring. Not because they do not struggle, but rather because of financially strong ownership (Deep Sea Supply and Siem Offshore). On the other hand, oil service¹⁸ and investment companies are less capital intensive, and do not have the same financial exposure. Hence, it is easier to adjust to the cyclical downturn without engaging in extensive financial restructuring efforts.

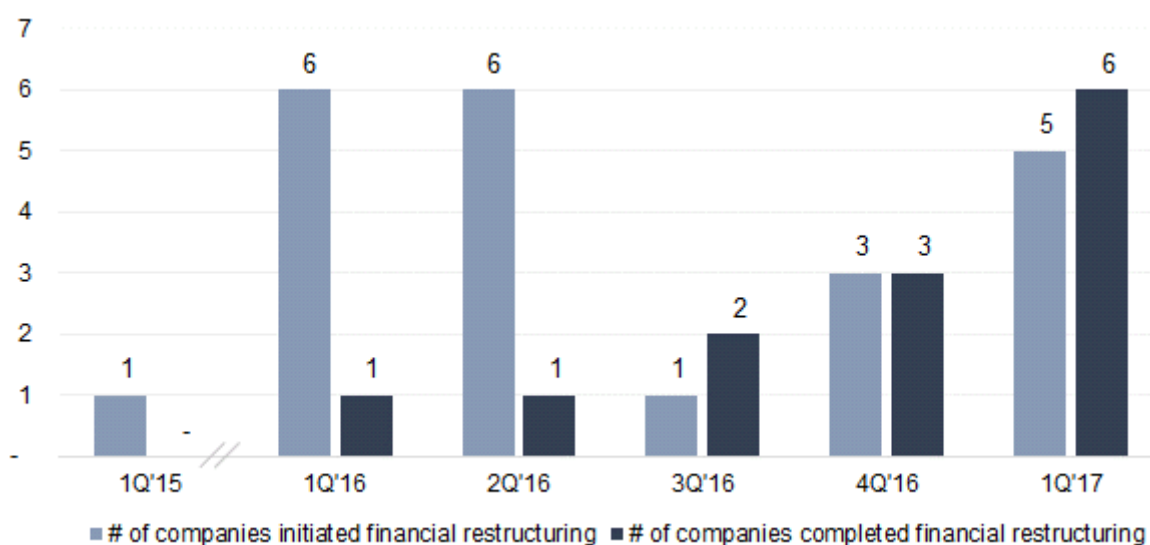
To summarize, the sample consists of companies within sub-industries that share many of the same characteristics, but also distinct differences. In particular, the sample is characterized as asset-heavy, generally extensively leveraged, and highly cyclical with performance derived from the development in the price of oil.

¹⁷ E&P spending declined by 26% y-o-y in 2015, and ~22% in 2016. Industry experts anticipate the investments to stabilize at 2016 levels in 2017 (Nordea Markets, 2017).

¹⁸ Defined as companies focusing on technology and engineering operations.

Although the price of oil declined with almost 60% from USD110 per barrel in June 2014 to USD47 per barrel in January 2015, the majority of the sample did not officially announce financial restructuring initiatives until 2016 when it reached USD28 per barrel (see Appendix B, Figure 17). With the benefit of hindsight, the industry could have profited from addressing their financial challenges at an earlier stage. However, it is not uncommon for companies experiencing distress to delay initiation of the necessary measures until it is inevitable. The time-series distribution is illustrated in Figure 8.

Figure 8: Time-series distribution of companies initiating and completing out-of-court financial restructurings.



Source: NewsWeb, Norwegian newspapers and industry newsletters.

Twelve companies officially announced restructuring plans during the first six months of 2016. Most of the processes were completed in 4Q'16 and 1Q'17, with an average restructuring time-horizon of 7.1 months of the total sample. Notably, it is less than the comparable estimate from formal debt settlement proceedings, which is 9.9 months. This suggests that a restructuring out-of-court is more efficient than under the Norwegian bankruptcy legislation, however, the median values are comparable. This will be discussed in more detail in sub-section 5.3.6. Although the 22 companies constitute 37% of the total firms within the energy sector, it is expected that additional companies will address their financial challenges in the near term, especially within the rig sub-industry (Hegnar.no, 2017).

The pre-restructuring financial characteristics of the 13 companies that have already completed a financial restructuring, as well as accessible data on companies filing for debt settlement proceedings, are summarized in Table 1. The figures presented are based on the last reported quarterly or annual financial statements. Primarily, the figures are based on the book value of shareholder's equity and face value of debt securities. For comparable purposes are characteristics for the sample of Swedish companies reported by Thorburn (2000), and publicly traded U.S. firms filing for Chapter 11 and distressed exchanges documented by Franks and Torous (1994), presented.

Table 1: Key pre-restructuring characteristics of Norwegian samples compared to comparable Swedish and U.S. data.

	Norwegian firms (out-of-court)		Norwegian firms (formally)		Swedish firms (Thorburn, 2000)	
	Mean	Median	Mean	Median	Mean	Median
Sample size	13		28		263	
Book value of assets (NOK million)	15 269	13 167	162	34	21	11
Debt-to-equity ratio	5.51x	2.83x	(195.37x)	-	-	-
Debt-to-assets ratio	79 %	80 %	-	-	92 %	93 %
Current ratio	0.91x	0.77x	1.03x	0.64x	1.39x	1.23x
Long-term debt/BV of assets	34 %	43 %	-	-	34 %	35 %
ICR (based on EBITDA)	1.45x	1.20x	(13.92x)	(2.69x)	-	-
Time in reorganization (months)	7.1	6.0	9.9	5.0	2.4	1.5

	Distressed exchanges (Franks & Torous, 1994)		Chapter 11 reorganizations (Franks & Torous, 1994)	
	Mean	Median	Mean	Median
Sample size	45		37	
Book value of assets (NOK million)	-	-	2 493	398
Debt-to-equity ratio	-	-	-	-
Debt-to-assets ratio	78 %	76 %	81 %	87 %
Current ratio	1.38x	1.39x	1.06x	0.99x
Long-term debt/BV of assets	-	-	-	-
ICR (based on EBITDA)	-	-	-	-
Time in reorganization (months)	17.7	17.0	29.6	27.0

Source: Company annual and quarterly reports, Proff.no, Thorburn (2000), and Franks and Torous (1994).

Notably, Norwegian companies restructuring out-of-court are significantly larger than Norwegian firms filing formally, Swedish firms under the auction bankruptcy system, and the U.S. firms, in terms of book value of assets. Therefore, we speculate that the Norwegian companies out-of-court have more creditors to negotiate with. Although the Swedish sample is limited to only include companies with +20 employees, which accounts for the largest 6% of Swedish corporations, the book value of assets is relatively minor (Thorburn, 2000). The Norwegian firms filing for debt settlement proceedings are also small in terms of asset size as it is primarily smaller firms with less complicated creditor structures that initiate this process. The sample of out-of-court restructurings consists primarily of capital-intensive, asset-heavy industries, which may partly explain the large deviations in firm size.

On the other hand, the companies share many of the same key financial characteristics. Debt-to-assets, reflecting the leverage ratio of the companies, are considered high for all companies. Whereas the average Norwegian out-of-court debt-to-assets ratio is 79%, the comparable figures for Swedish and U.S. firms in distressed exchanges and Chapter 11 reorganizations are 92%, 78% and 81%, respectively. Thus, the Swedish sample is the most leveraged, while the Norwegian out-of-court sample is comparably leveraged as the U.S. firms. Moreover, the long-term debt percentage of the book value of assets is similar in Norway and Sweden, reflecting that the Swedish sample is excessively short-term financed in comparison.

In order to analyse the liquidity of the sample, the current ratio is calculated reflecting the proportion of current assets relative to current liabilities. The current ratio is $<1.00x$ for out-of-court companies both at the mean and median values of $0.91x$ and $0.77x$, respectively. By definition, this implies that the companies are not able to cover their short-term obligations with current assets, and are hence illiquid. This reflects the severity of the current market conditions. The ratio is less than for both Swedish and U.S. firms, however, comparable to the formal debt settlement sample in Norway. This may indicate that the Norwegian firms have been relatively slow at realizing the severity of the challenges the company and industry is experiencing. This is further substantiated by the low ICR, which is on average $1.45x$ and median $1.20x$. The ratio is based on EBITDA in order to isolate the cash flow available to cover interest expenses due to the large impairments within the industry resulting in negative EBIT.

To summarize, the out-of-court sample consists of a defined set of publicly listed companies. All companies are heavily affected by the development in the price of oil and are considered asset heavy. In particular, the relevant assets are tangible and divisible, which potentially could affect the results of the analysis. Moreover, the majority of companies are large in terms of asset size compared to international samples. Further, the sample is generally highly leveraged and in great financial distress with poor liquidity, comparable too Swedish and the U.S. firms.

Due to the necessary restriction of analysing companies only within the energy sector, the results are likely to be biased, and thus not truly represent the greater population. However, due to the oil-dependent Norwegian economy, we argue that, if anything, it is the most relevant sample to consider.

5.3. Analyses on out-of-court financial restructurings

The following section introduces the analyses on the financial restructurings in the described out-of-court sample. We aim to infer from the sample data general evidence on the population of financial restructurings. Or assess whether the differences between the results from our sample and international studies is dependable. First, the individual restructuring cases have been analysed in order to establish the most commonly implemented measures in the processes. Second, the aggregated financial implications as a consequence of the implemented measures are discussed. Third, creditor recovery rates are calculated based on specific classes. Moreover, potential deviations from APR are discussed. Fourth, the recovery rates are compared to international evidence in order to comment on the relative efficiency in securing creditors' claims. Fifth, the post-restructuring effect on the companies' balance sheet is analysed. Finally, in the sixth sub-section, the bankruptcy costs related to both Norwegian in- and out-of-court processes are discussed in light of comparable research on Swedish and U.S. mechanisms.

5.3.1. Most commonly observed implemented measures

A series of measures are commonly observed in a financial restructuring e.g. new equity issues, conversion of bonds, and adjustments to financial covenants. The specific measures implemented are individually negotiated by the various creditors depending on the relative bargaining power and how severely distressed the company is. With basis in theory of how financially distressed companies are commonly restructured, general capital structure hierarchy, and relevant literature from Sweden and the U.S., we establish a hypothesis of what we expect to find. *We expect that every major claimholder will have to amend their rights. In particular, we expect (i) senior secured lenders to amend and extend current debt terms, and not take a haircut on their claim, (ii) junior lenders without security (bondholders) to convert debt to equity, and (iii) new equity offerings to secure additional liquidity.*

In the sample of 13 completed Norwegian out-of-court financial restructurings in oil-related companies in 2015 - 2017, the following number of observations are identified.

Table 2: Frequency distribution of implemented measures as part of the restructurings (# of observations).

Industry	Offshore	Rig	Seismic	Oil service	E&P	Shipping	Investment	TOTAL
# of companies	9	7	8	9	6	12	9	60
Financial restructuring	4	2	2	2	1	2	-	13
Amend & Extend / Covenant changes	4	2	2	2	-	2	-	12
New equity offering	4	2	2	2	-	2	-	12
New loans	3	1	1	2	-	1	-	8
Conversion of secured debt	2	-	-	1	-	-	-	3
Conversion of unsecured debt	3	2	2	1	1	-	-	9
Conversion of other stakeholders	1	-	-	-	-	-	-	1
Asset sales / delay in asset delivery	4	1	1	-	-	1	-	7
Total observations	21	8	8	8	1	6	-	52

Source: NewsWeb, company reports and investor presentations.

In all but one restructuring proposal, have the senior secured lenders, most often commercial banks, amended and extended debt terms, as well as adjusted related financial covenants¹⁹. Equally common is it to offer new equity in order to secure additional liquidity through cash. Only one company, Petrolia, did not implement these measures, which initiated a pre-emptive restructuring. Further, new and / or an extension of current credit facilities have been approved in 8 out of 13 restructurings, which is interesting as it is not expected that senior lenders would be interested in “throwing good money after bad money”.

If the company is severely distressed, the senior and secured debtholders could potentially take a loss on the investment. Naturally, the lenders aim to avoid this scenario and prefer to amend existing terms; however, a haircut on the outstanding secured debt has been observed in three of the restructurings indicating deeply insolvent companies. Unsecured debtholders, most commonly bondholders, are more likely to convert to equity at a haircut. In line with traditional capital structure hierarchy, this is observed in more cases than for more senior lenders (nine vs. three observations).

Finally, we observe one case where other stakeholders²⁰ have converted outstanding claims to equity, and seven cases of asset sales and / or delay in asset deliveries. Ofek (1993) and Kruse (2002) provide evidence on a correlation between asset sales and the firm’s debt level, which also seems present in our highly leveraged sample. This is further documented by Asquith et al. (1994), Brown, James and Mooradian (1994) and Hotchkiss (1993; 1995) in various papers demonstrating a high frequency of asset sales for financially distressed U.S. companies both out-of-court and in Chapter 11 reorganizations. As discussed in section 3.2.4., Asquith et al. (1994), argue that asset sales are critical in order to survive as a going concern, which could be a positive sign for the Norwegian companies that have sold assets and secured liquidity.

On the other hand, Shleifer and Vishny (1992) find evidence on asset fire sales under financial distress. This suggests that the companies may have sold assets below market value at a discount. As the market value of rigs, vessels and ships are more or less unobservable with few transactions under the current industry distress; it is challenging to pursue this hypothesis further. However, the distress is arguably on an industry level, which limits the potential market of interested buyers, thus, implying less profitable sales.

¹⁹ See Appendix G for case studies of the respective financial restructurings.

²⁰ Other stakeholders are non-financial claimholders such as suppliers with outstanding claims at the company e.g. shipyards.

The implemented measures should ensure that the companies are no longer in breach with financial covenants, and secure a stable financial platform to withstand the current market downturn. As it is expected that even more Norwegian firms within the relevant industries will be subject to restructuring negotiations, it is interesting to be aware of what the respective creditor classes should expect going into the discussions.

Based on this sample, senior lenders with security in assets are expected to amend and extend current outstanding terms. Junior bondholders are most likely to convert parts of their claims to equity in order to preserve a healthier capital structure, as well as limiting cash needs for principal payments. In addition, it is commonly issued new equity, which is reasonable as the two other measures do not imply increased cash to cover liquidity needs. Surprisingly, it is also common for senior lenders to extend credit facilities to further secure liquidity for the distressed company.

The results confirm our initial hypothesis, and general financial economics theory, of the most common measures in a restructuring. However, it is emphasized that the finalized amended terms and capital structure depends individually on how efficient the specific firm operates, contract backlog, capital structure, amortization profile, number of creditors and creditor classes, and liquidity. Therefore, we assess the inference on our data to the more general population to be discussable at best. Nevertheless, it provides an interesting observation for any stakeholders entering a financial restructuring process.

5.3.2. Aggregated financial effects as a consequence of the implemented measures

The following section provides information on the aggregated financial effects on the total sample of out-of-court restructurings. Thus, it is possible to establish how much the creditors related to the companies in the sample have lost due to the recession, as well as the amount of new equity that has been invested. In the next section, 5.3.3., the analysis will focus on the average recovery rates for specific creditor classes. However, first the aggregate financial effects on the creditors post-restructuring in nominal terms are discussed. We emphasize that this sub-section primarily includes an observation on the effect on the sample, and does not intend to draw any conclusions for the population of out-of-court financial restructurings.

The recovery rate of a specific creditor class is the proportion of the face value of the investment that is retrieved post-restructuring. For clarification, it represents $(1 - \text{Haircut in } \%)$, as the term haircut has been used extensively in the thesis. The post-restructuring value is dependent on the degree of financial distress, the seniority of the security, the implemented measures in the restructuring, and the underlying collateral (Franks and Torous, 1994). In our thesis, it is calculated with basis in debt face values and the market value of equity at the conversion date. Market values of the received securities are available in all cases as it is either principal repayments in cash or conversion to equity at observable market values.

Considering the apparent default risk of the sample companies, debt face values are likely to overestimate the real market value. Eberhart, Moore and Roenfeldt (1990) provide research on this issue, and report a value-weighted ratio of market-to-face value of 80% for debt claims. Even though this is research based on U.S. firms under Chapter 11, it is reasonable to assume that also the market value of Norwegian debt in financially distressed companies is less than the face value due to associated risk.

Table 3 summarizes the aggregate financial implications of the implemented measures discussed in section 5.3.1., divided in the various sub-industries. E.g. in the offshore industry it has been issued in total ~NOK2.5bn. in new equity, credit facilities have been extended to provide 192 months of additional runway, existing credit facilities have been increased with ~NOK4.1bn., while secured- and unsecured debtholders have taken a loss of ~NOK0.7bn. and ~NOK2.8bn., respectively. The figures on an aggregate level substantiate that it is the investors within the offshore-industry that have been impacted the most from the oil-recession, closely followed by the rig, seismic and oil-service industries.

Table 3: Summary of financial implications following the restructurings in various sub-industries (NOK 000s).

Industry	Offshore	Rig	Seismic	Oil service	E&P	Shipping	Investment	TOTAL
# of companies	9	7	8	9	6	12	9	60
Financial restructuring	4	2	2	2	1	2	-	13
New equity	2 499 000	1 432 865	2 580 872	867 370	-	1 310 981	-	8 691 088
Months of runway	192	78	84	36	-	54	-	444
Increase in credit facility	4 137 400	1 082 150	69 258	512 882	-	865 720	-	6 667 410
Haircut on secured debt	676 800	-	-	182 000	-	-	-	858 800
Haircut on unsecured debt	2 848 000	1 883 877	1 300 995	874 377	-	-	-	6 907 250
Total haircut	3 524 800	1 883 877	1 300 995	1 056 377	-	-	-	7 766 050

Source: NewsWeb, company reports and investor presentations.

Further, the table provides information about the total amount of new equity issued in the sample, total increase in credit facilities, and nominal amount of haircut on secured- and unsecured debt. On an aggregate level, it has been issued ~NOK8.7bn. in new equity in order to secure additional liquidity. The lenders have in total facilitated for a runway of 444 months, or 37 years, for the companies. Moreover, the senior and secured creditors have realized losses of ~NOK0.9bn. through the restructurings in Bergen Group, Farstad Shipping and Havila Shipping (see Appendix G for case-specific information). Unsecured creditors have on an aggregate level lost ~NOK6.9bn. by converting outstanding debt to equity.

In total, this implies an aggregate loss for creditors in oil-related publicly traded companies of NOK7.8bn., which equals ~USD1.0bn. Out of the total pre-restructuring financial liabilities, this equals 7.5%. The already dramatic loss is expected to increase as even more companies finalize their restructurings, and new ones are initiated. In addition, it is an imminent risk that already restructured companies will have to restructure their capital structure once more in the case of a prolonged recession. Further, this sample does not include all the private companies restructuring out-of-court²¹, which would have increased the total loss even more.

²¹ Additional companies that have initiated restructuring alternatives consist among others of Atlantic Offshore, Island Offshore, Olympic Shipping and Viking Supply Ships. There are several OSV companies that would have been interesting to analyze, however, due to the time-constraints of a master thesis, restrictions was necessary to limit the scope.

5.3.3. *Creditor recovery rates and strictness to the Absolute Priority Rule*

The following sub-section introduces the specific creditor classes' recovery rate in our sample, and examines if senior lenders are cheated for their rightful value. With basis in this, we aim to elaborate upon the general tendency in the population of out-of-court restructurings. However, as previously discussed, self-selection of the sample may limit the degree of inference.

In the industries analysed, the majority of secured and senior debt is provided by commercial banks (primarily Scandinavian banks e.g. DNB, Nordea, Swedbank, etc.), and Giek²² (Anon, 2017). These loans are defined as secured and / or senior debt, and the terms are used interchangeably. The industries are characterized as asset heavy and capital intensive, thus, provides an arena for the senior lenders to have security in the companies' tangible assets. Junior debt is primarily provided by bondholders without security in assets, however, in the cases of bondholders with security, they are treated as secured creditors.

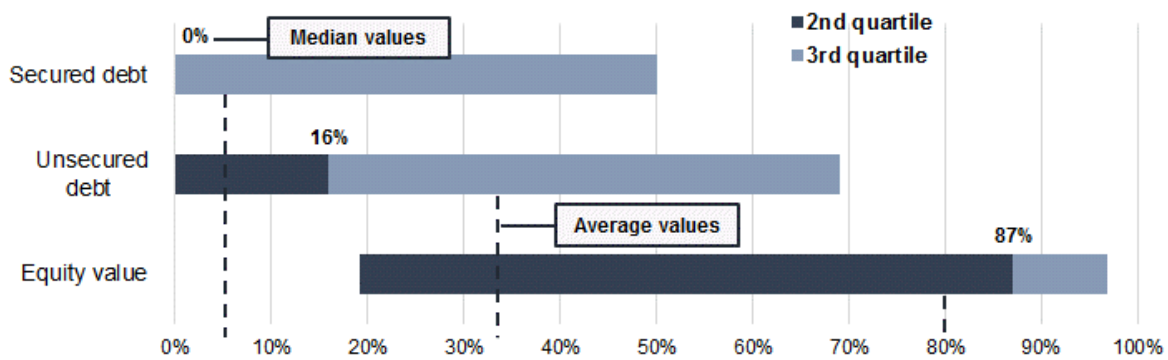
The following analysis is based on a hypothesis that the creditor recovery rates should follow the Absolute Priority Rule. APR requires that more junior creditors, illustrated by unsecured debt and equity in this analysis, receive financial consideration in a distressed restructuring only after creditors with higher seniority have been fully paid (Franks and Torous, 1994). A deviation from APR exists when junior claimants receive any consideration simultaneously as senior lenders are not fully paid, and is defined as a positive deviation.

Figure 9 illustrates the haircut, $(1 - \text{Recovery rate in } \%)$, depending on the specific creditor classes defined as (i) secured debt, (ii) unsecured debt, and (iii) equity holders in the 2nd and 3rd quartile of the sample, as well as the median and average figures. These recovery rates include the total sample. Importantly, as there are only three cases of secured debtholders taking a haircut, while nine of the restructurings involve a haircut on unsecured debt, the average and median recovery rates are heavily affected by the remaining cases with a haircut of zero. Thus, we also provide comparable figures *including only* the cases where the specific measure has been implemented, which does not constitute the total sample. This is referred to as the conditional haircut. It provides an estimate of how large haircut the creditor class could expect to lose *given* that the company is in a position where a haircut is inevitable, and is presented in Figure 10. Further information on recovery rates of the sample is located in Appendix E.

²² Garanti-instituttet for eksport kreditt - The Norwegian Export Credit Guarantee Agency, a government agency who provides guarantees for loans, product deliveries and payments (https://giek.no/?lang=en_GB).

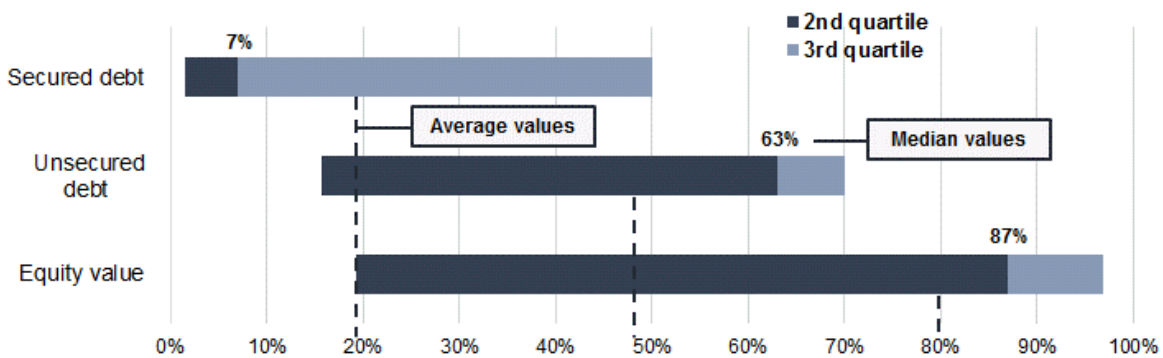
The average haircut of secured creditors in the total sample is 4.5%, with a median of 0%. However, this is based on only three observations of haircuts, and should thus be treated carefully. The average and median values of the conditional haircut are 19% and 7%, respectively. In the Bergen Group restructuring, the senior creditors took a 50% loss of the outstanding debt amount, which consequently results in a skewed sample and a relatively high average. Especially when considering the conditional haircuts. In the Farstad Shipping and Havila Shipping restructurings, the senior creditors converted parts of outstanding debt and accrued interests in equity at conversion prices above the subsequent equity offering, which resulted in losses of 7% and 1%, respectively. This partly illustrates that the distressed firms must offer a large discount in order to attract new equity to the company in subsequent offerings.

Figure 9: Haircut quartiles due to financial restructurings out-of-court, total sample.



Source: NewsWeb, company reports, investor presentations and restructuring term sheets.

Figure 10: Haircut quartiles due to financial restructurings out-of-court, conditional haircut.



Source: NewsWeb, company reports, investor presentations and restructuring term sheets.

Unsecured debtholders have on average taken a haircut of 33%, with a corresponding median of 16%, implying recovery rates of 67% and 84% assuming the total sample. Once again, considering the conditional sample, the average and median haircut increases to 48% and 63%, respectively. For comparison purposes, the average equity value loss of the financially distressed firms is 80% (87% median) since 01.07.2014, when the price of oil still traded at ~USD110 per barrel.

Even though the sample indicates a clear trend in line with the APR, it is observed positive deviations. In certain cases, bondholders have converted their claims and realized losses while shareholders still retrieve value. This is consistent with the study provided by Haugland and Brekke (2010) suggesting that shareholders recover 5% - 10% on average in distressed high yield bonds simultaneously as the creditors do not recover 100%. In addition, unsecured debt recovery rates are above 0% in cases where secured lenders have taken a haircut. For example, in the Farstad Shipping restructuring, the senior creditors took a loss of 7%, simultaneously as the unsecured creditors recovered 28% of the value (see Appendix E, Figure 20). Additionally, the pre-restructuring shareholders still controlled approximately 1% of the shares post-restructuring. According to APR theory, the recovery rate should have been 0% for both junior claimants, unsecured bondholders and shareholders, as long as the secured creditors took a loss. Based on this sample, the analysis suggests that the APR does not hold in Norwegian out-of-court restructurings. The relative bargaining position between the creditor classes seemingly has an effect on the post-restructuring value. Importantly, due to the strict sample selection, it is discussable whether the sample results can draw any conclusions on the population.

As the companies in the sample are limited to some of the largest in Norway it is likely that it involves more creditors and hence increased bargaining complexity. One can argue that Norwegian debtholders, especially unsecured bondholders, have been cheated for value by equity holders, and would prefer an alternative process that ensures the APR principle to be withheld. This is surprising as bond investors are mostly larger, institutional players, which is expected to be sophisticated claimholders able to negotiate the terms in their favour. On the other hand, as there are no formal procedures in an out-of-court restructuring, the equity holders would need to be compensated in some parts in order to vote for the proposal in the general meeting (Hegdahl, 2017; PWC, Finansiell restrukturering av større selskaper, 2017). This could explain some of the positive equity deviations from APR, and could be eliminated with an efficient and strict formal procedure, such as cram-down provisions or an auction process.

5.3.4. Recovery rates compared to evidence from Sweden and the U.S.

Next, the recovery rates discussed in the previous section is compared to international evidence. In order to compare the results of the various samples and procedures critically, it is important to bear in mind the different sample characteristics. The Swedish and U.S. samples have been described in further detail in section 3.3. and 3.2.3., while Table 1 on page 35 provides a summary of financial characteristics. Due to the self-selection of the Norwegian sample, leading to only a few, large companies within a specific sector in a given time-period, the following analysis is only able to provide a platform for discussion. Thus, the value in the inferential statistics is limited in providing any general evidence beyond this. The results may reflect the sample companies and not necessarily the efficiency of the bankruptcy mechanism.

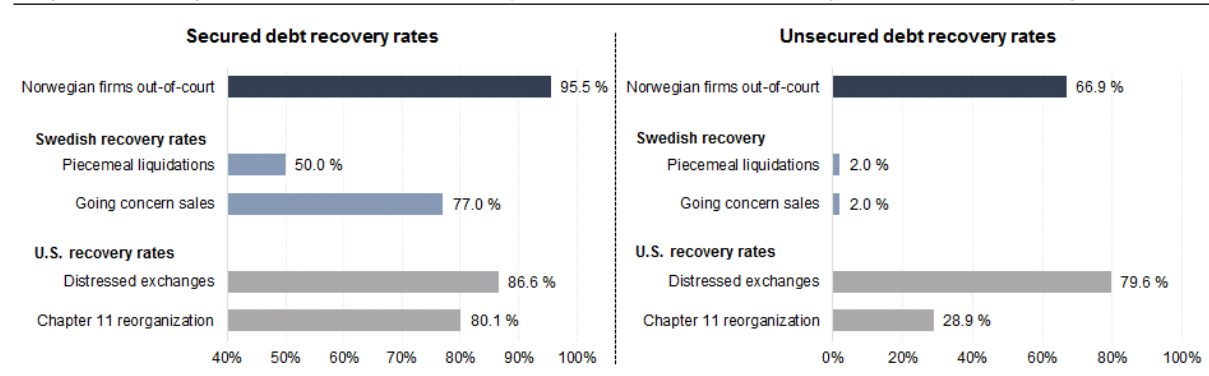
Thorburn (2000) provides research on creditors' recovery rates in Swedish auction bankruptcy cases. Similarly, Franks and Torous (1994) have studied recovery rates for distressed exchanges and Chapter 11 reorganizations in the U.S. These two studies have been examined to provide comparable estimates to the Norwegian out-of-court restructuring results. *Our hypothesis is that Norwegian out-of-court recovery rates are less compared to international formal restructurings due to the provided framework under the law. In addition, we expect the Swedish auction bankruptcy procedure to provide the most efficient mechanism in terms of strictness to the APR as the settlement in cash allows for a seniority distribution.*

The Swedish recovery rates are based exclusively on market values as the auction process provides a cash settlement and distribution to creditors. Franks and Torous base their analysis on market values if available otherwise book values are used. In order to control for any systematic biases by using book values they examine a sub-sample of market values only, and confirms approximately identical results. However, recovery rates are observed to be higher relative to market values compared with book values, which once again suggests that the book values overestimate the true value of outstanding debt. This is important to take into consideration when interpreting the following results. The summarized recovery rates are presented in Table 4 with the main results compared and illustrated graphically in Figure 11.

Table 4: Total sample recovery rates out-of-court compared to Swedish and U.S. evidence.

	Norwegian firms (out-of-court)		Swedish firms				U.S. firms	
			Piecemeal liquidations		Going concern sales and successful reorganization		Distressed exchanges	Chapter 11 reorganizations
	Mean	Median	Mean	Median	Mean	Median	Median	Median
Sample size	13		63		142		45	37
Secured debt	95.5 %	100.0 %	50.0 %	45.0 %	77.0 %	87.0 %	-	80.1 %
Bank debt	-	-	-	-	-	-	86.6 %	86.4 %
Senior debt	-	-	-	-	-	-	78.5 %	47.0 %
Junior debt	66.9 %	84.0 %	2.0 %	0.0 %	2.0 %	0.0 %	79.6 %	28.9 %
Equity	19.8 %	12.7 %	-	-	-	-	-	-

Figure 11: Average (median on U.S. data) recovery rates on secured debt (left) and junior unsecured debt (right).



Source: NewsWeb, company reports, investor presentations, restructuring term sheets, Thorburn (2000), and Franks and Torous (1994).

Interestingly, the average and median secured debt recovery rates for Norwegian firms, 95.5% (median 100%), are superior to Swedish firms in piecemeal liquidations, 50% (45%), Swedish firms under going concern sales, 77% (87%), distressed exchanges in the U.S. (87%), and Chapter 11 reorganizations median of (80%). This is further substantiated as the Swedish recovery rates are based entirely on market values, which probably overestimate the recovery rates compared to the book value. One would expect that the formal processes under Swedish and U.S. legislations would provide a more efficient result compared to Norwegian out-of-court restructurings, however, this is not the case. Once again, as the Norwegian sample is limited to a few and very selective observations, the results should be treated carefully.

Further, unsecured creditors in Norwegian companies recover on average 67% (84%) of the debt face value, whereas the similar creditor class in Sweden recover only 2% (0%). As Thorburn (2000) documents, this reflects the strict adherence to APR following an auction bankruptcy system, compared to a restructuring process with basis in creditor negotiations. This is substantiated by results from distressed exchanges and Chapter 11 reorganizations in the U.S., indicating median recovery rate values of (80%) and (29%), respectively. The U.S. processes share more characteristics with the Norwegian out-of-court procedure, compared to an auction bankruptcy system, and indicates frequently observed deviations from APR. Jensen

(1991) who argues that deviations from APR and related inefficiency will increase firms' cost of capital illustrates this unfavourable feature. On the other hand, similar research suggests that ex-post deviations from APR reduces underinvestment inefficiencies and the overall time-horizon of the bankruptcy reorganization (Franks and Torous, 1989; Weiss, 1990).

The results suggest that senior creditor classes in Norwegian out-of-court restructurings could benefit from an auction system in order to maximize the recovery rate in the cases of deviations from APR. The majority of the senior lenders in the relevant oil-related businesses have security in assets. Thus, they could potentially increase the financial return by forcing a liquidation of the companies and claim their rights. On the contrary, this could have other negative effects such as reputation issues related to generating future business (PWC, *Finansiell restrukturering av større selskaper*, 2017).

However, based on the sample, secured debtholders in Norwegian out-of-court financial restructurings have taken minimal losses, and should probably be satisfied with the outcome. Out of the sub-sample of nine restructurings involving a haircut on unsecured debt, only two of the cases demand a haircut on the secured creditors and deviate from APR. Moreover, in these particular cases the secured creditors realized relatively minor losses considering the severely distressed financial situation of the companies. The Norwegian banks have been criticized for not contributing sufficiently in the restructuring negotiations; however, this suggests that it is actually the unsecured creditors and shareholders that have gained excess value in certain cases.

The deviations from APR between the various bankruptcy procedures indicates the related costs for the creditors. In turn, this could explain the haircut that senior creditors are willing to take to avoid filing formally. As described earlier in the thesis, the firm survival rate in Norwegian debt settlement proceedings is low at 15%. It is likely that only the most senior and secured lenders could retrieve their investments, while unsecured bondholders would have to take substantial losses. Therefore, unsecured bondholders may assess the alternative of "giving" existing shareholders excess value as more attractive compared to filing for debt settlement proceedings under Norwegian legislation. The relationship between secured and unsecured debtholders is basically the same if the secured creditors suspect that they could risk taking a larger haircut in a liquidation compared to keeping the company as a going concern.

Overall, out-of-court financial restructurings in Norway are surprisingly efficient compared too Swedish and U.S. evidence. The recovery rate of senior secured creditors is significantly higher

than in Sweden and the U.S., which breaches with our hypothesis. A potential explanation could be higher costs related to formal procedures as discussed by Gilson, John, and Lang (1990) and Stein (1992), thus leaving less of the firm value for the creditors post-restructuring. However, we assess it to be most likely due to the Norwegian sample only including a limited number of companies. In particular, the sample companies are larger and exclusively publicly listed, which could imply that the firms are in general more successful.

On the other hand, the Norwegian sample, in similarity with the U.S. data, indicates that the APR is violated in certain cases (see Appendix E; restructurings in FAR and HAVI). If seniority was followed strictly, the senior secured lenders would have received a higher recovery rate. Nonetheless, in the majority of the cases, the secured debtholders do not take a haircut, and recover 100% of the value while unsecured creditors take a loss. This indicates that out-of-court financial restructurings in Norway are fairly efficient in adhering APR in the relationship between secured and unsecured creditors. Unsurprisingly, and in line with our hypothesis, Sweden have the most efficient mechanism in terms of minimizing deviations to APR.

As the results from the Norwegian out-of-court analysis suggest considerably higher recovery rates compared to Sweden and the U.S., we suspect that our sample suffer from a selection bias. The out-of-court sample consists of listed, large companies that have historically been highly successful. As the companies in Sweden and the U.S. are smaller measured in asset size, and not restricted to be public, these samples are likely to include less successful companies, thus, limiting the value recovered.

A second possibility is that the initial cause of the financial challenges is the severe decline in the price of oil, which is expected to recover, thus, leading to expectations of the business being value generating in the short- to medium-term. The companies in the Swedish and U.S. samples may suffer from more fundamental and indefinite challenges related to the business, implying even less distressed value of the firm, and hence less value to the creditors.

A third remark is that the sample companies in Norway are restricted to asset-heavy industries. In particular, the assets are tangible, divisible and easily tradeable. In a company valued on basis of intangible assets, which is not easily transferable, the distressed value could be close to zero. However, given the characteristics of the Norwegian sample, this may imply that the minimum recovery rate is higher than zero - at least limited to the material value of the asset. In turn, this could promote an overall higher recovery rate.

5.3.5. Post-restructuring implications on capital structure

This sub-section examines the effect on the capital structure as a consequence of the financial restructurings. Thus, it serves more as an interesting observation than an inferential statistical analysis. Primarily, the section discusses the implications of initiating a restructuring too late, and illustrates the post-restructuring effect of the before-mentioned implemented measures.

As discussed in section 5.2., describing the pre-restructuring financial characteristics, few of the distressed companies do initiate pre-emptive bankruptcy measures. Out of the sample of 13 companies, only three restructure at a stage where the company has a current ratio higher than 1.00x. This indicates that the management teams seem to not realize the brutality of the financial situation, and delay to initiate the necessary measures.

One example is the rig company, Seadrill. The company has historically paid out generous dividends, lastly in September 2014. At the time, the price of oil had already declined with USD20 per barrel. Simultaneously, the company had accumulated USD13bn. in long-term debt²³. Today, it is undergoing major financial distress, and considers to file under Chapter 11 in the U.S. (Hegnar.no, 2017). If the management had been more pre-emptive, they could have suspended the dividend payment, and thus be in a more comfortable financial position today.

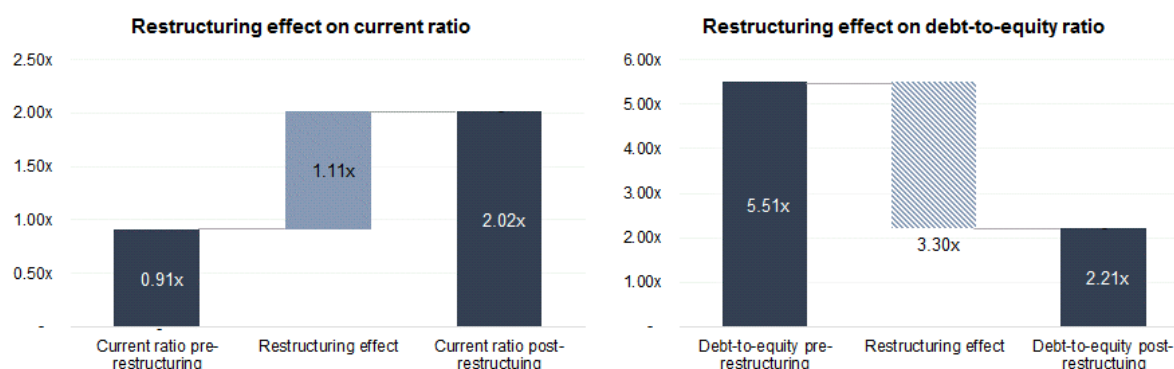
Illustrated by Seadrill, this suggests that Norwegian management teams have delayed the harsh, but necessary measures, and destroyed going concern value leading to a very limited value in the companies at restructuring date. This could potentially have increased the losses for creditors that have converted to equity at very low conversion prices, as well as enhancing the dilution effect of pre-restructuring shareholders. On the other hand, the slow reaction may also be a consequence of the imminent and unexpected shift in the market sentiment.

The effect of the financial restructurings on an aggregate level is illustrated in Figure 12, which presents two key financial metrics, the current and debt-to-equity ratios. By extending the maturity of outstanding credit facilities with less than 12 months to maturity, and issuing new equity improving the cash balance, the current ratio has been improved from 0.91x, to 2.02x. The average months of secured runway for the 13 companies is 40.4 months, with the majority securing until 2020. As long as the industry downturn is not prolonged, this should secure the company the necessary liquidity to survive.

²³ Seadrill annual report 2014.

The debt-to-equity ratio has also been strongly reduced from 5.51x to 2.21x. Conversion of junior creditors to equity and a few cases of haircuts on senior debt, as well as issuance of new equity have resulted in a significantly healthier capital structure on an aggregate level. From the companies' and converted creditors' perspective, this is hopefully enough to secure the company from filing for bankruptcy or to address their financial challenges once more through a second restructuring. In that case the already converted bondholders would experience a massive dilution effect, and be left with close to zero in value.

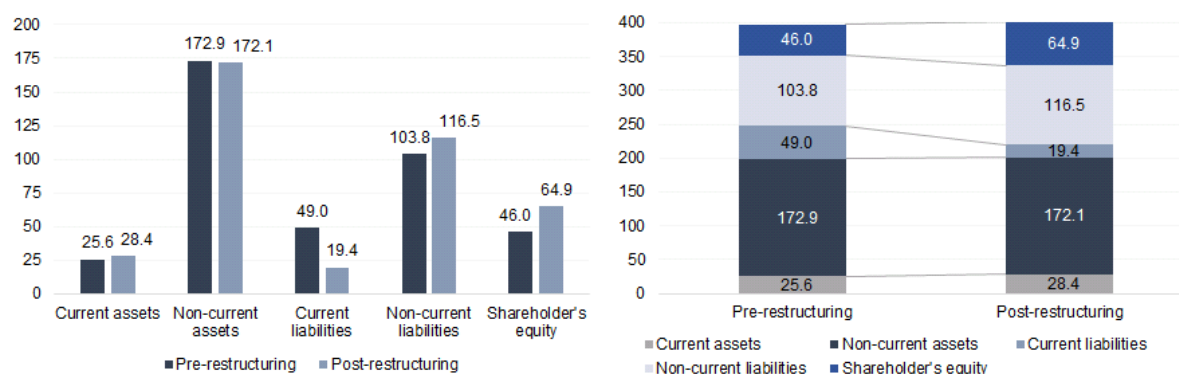
Figure 12: Restructuring effect on key financial ratios (average).



Source: Company reports, restructuring term sheets and investor presentations.

Figure 13 breaks down the average post-restructuring effect on the balance sheet into the main items. The most dramatic effect is observable in current liabilities, which is reduced from NOK49bn. to NOK19bn. While non-current liabilities and shareholders' equity increase with NOK13bn. and NOK19bn., respectively. As expected with a current ratio below 1.00x at restructuring date, it is primarily the current liabilities that are addressed by reclassification of short-term interest bearing debt.

Figure 13: Restructuring effect on average aggregate capital structure (NOK in billions).



Source: Company reports, investor presentations and restructuring term sheets.

5.3.6. Time-horizon and bankruptcy related costs

After having analysed and discussed the implemented measures and its implications on the creditors and companies, the final sub-section examines the related bankruptcy costs. Costs related to the bankruptcy procedure constitute of the direct, as well as the indirect costs imposed by the process. While the direct costs account for fees related to lawyers, financial advisors, and administrative efforts, the indirect costs reflect the opportunity cost of available managerial time, as well as negative reputational effects in product and capital markets (Thorburn, 2000).

Direct costs are in general not required to disclose in private out-of-court restructurings, and are thus not considered in this thesis. Nevertheless, Gilson, John, and Lang (1990) document direct costs equal to 0.6% of the book value of assets on average, which is minimal. On the other hand, Altman (2006) estimates on average 6.5% of direct costs in Chapter 11, suggesting that also the direct costs could be a significant factor to consider.

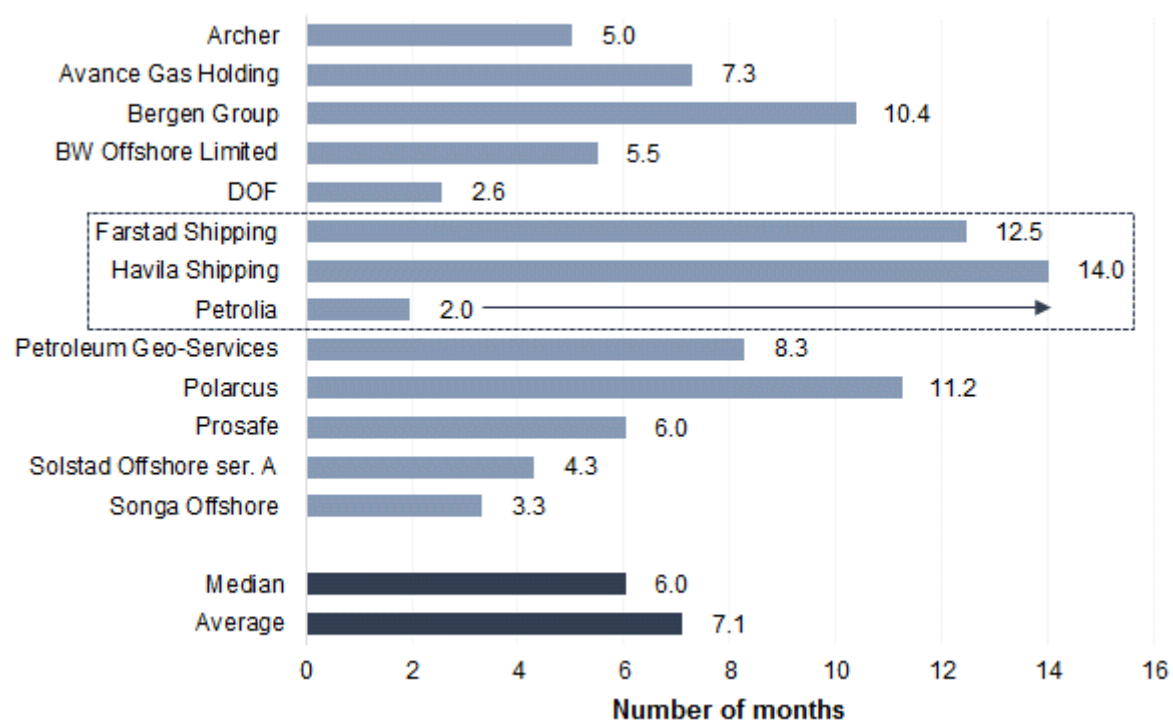
In order to provide an estimate of the indirect costs related to a restructuring process, the time-horizon of the process is established. Thereafter, it is compared to estimates on Norwegian debt settlement proceedings, as well as Swedish and U.S. samples provided by Thorburn (2000), and Franks and Torous (1994). Similarly, as the cross-country comparison of recovery rates, the following analysis is subject to differences in the sample selection. Thus, the results are likely to partly reflect these differences as well, and not exclusively the variations in the bankruptcy mechanisms. Therefore, the results, and its implications, must be treated critically. However, we argue that the observations and the related discussion promote interesting considerations to the bankruptcy costs in Norway.

The time-horizon is measured from the date the company officially announces an initiation of discussions with financial advisors, amended debt terms, or announced a restructuring proposal. This is most often observed in official announcements to NewsWeb and / or quarterly reports. *The hypothesis of the analysis is that the indirect costs are the least under the Swedish auction bankruptcy mechanism due to the swift process of an auction. In addition, the out-of-court solution is expected to provide a more efficient procedure compared to formal mechanisms. This is justified by the extensive requirements under formal restructuring by law.*

In the out-of-court sample, the average time-horizon is 7.1 months with a median of 6.0, ranging from 2.0 to 14.0 months as illustrated in Figure 14. As these estimates represent the official time the company has spent in a financially distressed situation, it is likely that the firms have initiated negotiations with its creditors before the announcement. Private information collected from one of the restructuring cases implies that this period could be as much as 6 months. However, this is conditional upon the restructuring complexity and the number of creditors involved in the negotiations, illustrated by the large variation in time-horizon from case to case.

Interestingly, the three restructurings that involves a haircut on senior secured debt; Bergen Group, Farstad Shipping and Havila Shipping, have all been time-consuming processes. In addition, the extensive and complex restructuring in the seismic company, Polarcus, required a substantial time to establish. On the contrary, the E&P company, Petrolia, which initiated a pre-emptive restructuring, was highly efficient only requiring 2.0 months. Petrolia had at pre-restructuring date a current ratio of 2.2x, a debt-to-equity ratio of 1.1x, and an ICR of 1.9x, indicating an at the time relatively healthy balance sheet. Bearing in mind that these are observations on a very limited sample, it may indicate that by implementing pre-emptive measures at a less complex stage, the indirect costs could be reduced. Thus, it may preserve value, which argues in favour for active monitoring by the lenders.

Figure 14: Time-horizon of financial restructuring completions (number of months).

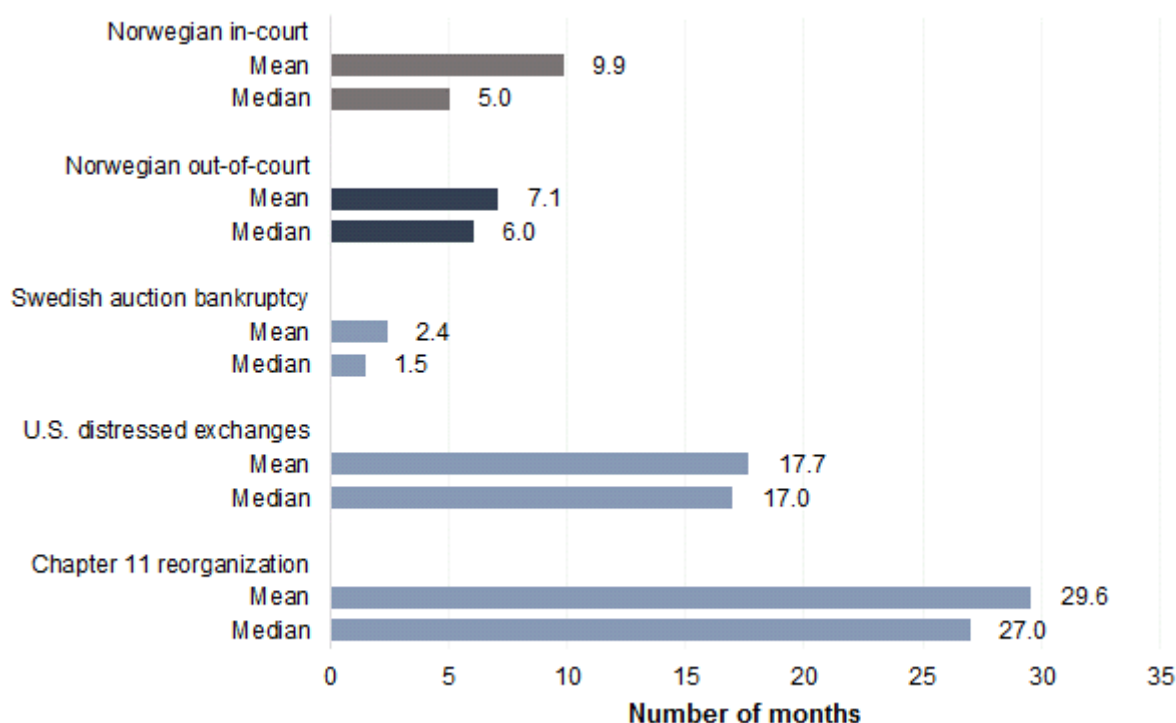


Source: NewsWeb, company reports, Norwegian newspapers and industry newsletters.

Compared to U.S. distressed exchanges and Chapter 11 reorganizations, the time-horizon under Norwegian restructurings, both in- and out-of-court, are significantly less. Research provided by Franks and Torous (1994) measures the period in informal restructurings²⁴ between the default dates to the date of exchange, which is comparable to the basis for our sample. For a debt settlement proceeding, it is measured from the date of default until the Bankruptcy Court confirms the restructuring proposal. Large, petroleum related companies dominate the U.S. data sample, which provides a relatively comparable sample to our out-of-court sample.

While Chapter 11 reorganizations require on average 29.6 months (median 27.0 months), distressed exchanges are substantially more time-efficient with an average of 17.7 months (17.0) as illustrated in Figure 15. The Norwegian out-of-court restructurings are significantly more efficient with an average of 7.1 months. This is interesting, and in line with our initial hypothesis. This may indicate that even though the formal procedures provide the tools facilitating for an efficient process, the extensive formal requirements and use of lawyers delay the process, as Gilson, John, and Lang (1990) document. Ultimately, this implies more indirect costs related to a restructuring by law, and that out-of-court solutions are relatively efficient.

Figure 15: Time-horizon under Norwegian, Swedish and U.S. procedures (number of months).



Source: NewsWeb, company reports, Norwegian newspapers, Thorburn (2000), and Franks and Torous (1994).

²⁴ Defined as a “distressed exchange” in the article.

By comparing the financial characteristics prior to default of the U.S. firms with the Norwegian out-of-court sample, the current ratio is healthier with an average $>1.00x$. As both samples comprise of large complex restructurings within cyclical industries, we speculate that one of the factors behind the rapid process may be the imminent liquidity squeeze in the Norwegian firms. Another possible explanation could be that the U.S. firms have more creditors that must agree on the terms, which further complicates the negotiations. However, as the Norwegian out-of-court sample consists of larger companies than the Chapter 11 sample, this is not likely. Moreover, Franks and Torous (1994) comment that since the sample consists primarily of larger companies, the bank loans are probably syndicated. Thus, disputes between the lending partners could partly explain the extended process. Finally, it may also be due to fundamental differences in the sample selection and firm-specific characteristics.

Thorburn (2000) provides research on time in bankruptcy for 263 private Swedish firms filing for auction bankruptcy in 1988 – 1991, which indicate a highly efficient procedure. The time-horizon is measured from the date the company is filing until sale of core assets as a going concern. The result is an average of 2.4 months (median 1.5 months). This indicates a far more efficient process, which can be naturally explained by the use of an auction process. In addition, the average book value of assets is significantly less compared to both the U.S. and Norwegian sample firms. This may in turn facilitate for less complex procedures and hence a shorter required time-horizon.

In general, the results indicate that the Norwegian out-of-court restructurings and debt settlement proceedings are fairly time-efficient. Surprisingly, the two samples provide a comparable time-horizon. We would expect the formal procedure to be more time-consuming. We speculate that this is due to the smaller firm size in the sample, which promotes a less complicated process.

Moreover, the Swedish auction bankruptcy process provides the least indirect bankruptcy costs, as expected, most likely due to the nature of an auction procedure. This may also be a consequence of the small firm size of the sample. However, the downside is the risk of asset fire sales. As for the U.S. sample, it is the least efficient, which may be due to extensive formal requirements. Considering the comparability of the company characteristics within the Norwegian out-of-court and U.S. samples, it seems that out-of-court financial restructurings are relatively time-efficient. However, there are likely to be other factors not elaborated upon here that also contribute to the difference.

6. Limitations and weaknesses

In order to cover the scope of our thesis in light of the time-constraint, it was necessary to implement certain restrictions to the sample and analyses. The following chapter describes the main limitations, its implication and how an analysis could be improved in further research.

In-court sample: potential for improvement by accessing private debt settlements

The in-court data sample is obtained from the official Norwegian bankruptcy register, the Brønnøysund Register Centre. However, this register only includes the public, and not private petitions for compulsory and voluntary debt settlements. Thus, the sample could be extended to include the private petitions. However, it exists no database to our knowledge including both public and private petitions. The private petitions are registered with each corresponding District Court. Therefore, in order to gather this sample, it is necessary to contact every one of the 64 Districts Courts in Norway and apply for this information. In further research, we recommend expanding the sample by including the private petitions.

In-court sample: risk of selection bias

Due to the limited population of companies filing for a public debt settlement proceeding and the strict legal requirements, we suspect that the in-court sample might be biased. Hegdahl (2017) explains that the in-court debt settlement procedure is unattractive amongst companies due to the harsh requirements and limited options. Thus, the companies filing for this petition could be the “better half of the batch”, and thereby imply a higher probability of surviving compared to the majority of companies *not filing*, as they must truly believe in surviving.

Out-of-court sample: lack of resources and potentially improper representation of the target population

As a data sample of out-of-court financial restructurings in Norway has to be manually extracted due to, at least to our knowledge, no single database covering the information, it is an extremely time-consuming process. Especially as it is necessary to analyse all announcements made to NewsWeb for every single company for X amount of years. Further complicating the process is whether the company classifies as a financial restructuring case, or only a refinancing, which requires judgement as well as a strict definition. In addition, only large, public companies are obliged to announce the necessary information to conduct the analysis.

Thus, we were forced to limit the data sample in terms of time-horizon and economic sectors to isolate a reasonable number of companies to analyse due to the time-constraint. As the most

relevant sector to analyse considering both as a proportion of the Norwegian economy as well as recent financial challenges, we chose to focus on the energy sector. Although the defined sector comprises of almost 29% of all companies traded at Oslo Børs and Oslo Axess, the final sample of 13 companies that have completed a financial restructuring is too narrow to conduct some of the analysis we initially intended to do, such as regression analyses. In addition, it is questionable whether the sample, considering both the industry- and time-specific restrictions, is an accurate representation of the population of companies restructuring privately in Norway. In particular, we consider factors such as the firm size, industry specialization, asset tangibility, leverage and restriction of being publicly listed to limit the inferential validity.

In future research, where time is not an issue, we recommend broadening the sample to include companies from various sectors, as well as over an extended time-period. Although it demands a considerable time to sample, it would more accurately resemble the population of companies restructuring out-of-court. Additionally, one would be able to include regression models in order to measure whether any explanatory variable, in example pre-restructuring asset size, leverage ratio, tangibility of assets, etc., could predict the outcome of a restructuring, both in terms of recovery rates, time-horizon and firm survival rate.

Out-of-court sample: characteristics limit the ability to compare with international evidence

As commented throughout the thesis, the ability to compare and comment on the analysis on the Norwegian data compared to international data is limited due to differences in sample characteristics. While the U.S. sample characteristics are relatively comparable to the Norwegian out-of-court sample, the Swedish and in-court Norwegian companies are significantly smaller. Also, the industry-specific selection is likely to bias the estimates. Thus, the provided results are not directly comparable. The differences in efficiency may hence reflect the differences in the samples, and not the procedure in itself.

Despite the limitations presented in this chapter, in our opinion, the analysis provides constructive and interesting results. While it is questionable whether it is valid to draw any direct conclusions and inferences from the sample, we argue that the analysis provides tendencies and a foundation for discussion. In addition, it is an unexplored field of research in Norway. Thereby, the innovative examination is interesting in itself as a starting point for further research.

7. Discussion of the Norwegian bankruptcy legislation

In this chapter, we present suggestions to how the Norwegian bankruptcy legislation potentially could be improved. We emphasize that these suggestions are our own thoughts and speculations based on the presented data samples and limited evidence. Primarily, the suggestions are inspired by the Swedish and U.S. legislations.

The chapter is organized as follows: First, the objective of the Norwegian bankruptcy legislation is described. Second, thoughts on why the law falls short in practice are explained. Third, the purpose with our suggestions are clarified. Finally, our suggestions are presented.

The purpose of the Norwegian bankruptcy legislation is to provide companies in financial distress the possibility to negotiate a solution to its challenges, while liquidating companies that no longer have value as a going concern. The debt settlement name emphasizes that this is primarily a settling of the companies' debt. Villars-Dahl (2016) argues that companies in financial distress need a comprehensive restructuring and not only a reduction of its debt. As Hegdahl (2017) explains, the law lacks several tools that are commonly observed in out-of-court restructurings and it imposes strict demands. Thus, debt settlement proceedings are an unattractive solution for many companies. Hegdahl (2017) concludes that the law is inefficient, which is substantiated by the analysis conducted in this thesis.

With the suggestions presented in the following, we intend to increase the utilization of the debt settlement procedure. We suspect that several companies do not consider the debt settlement procedure due to its restrictions, as described in chapter two. With the suggestions presented below, we argue that the debt settlement procedure could become more applicable. Thus, additional companies can potentially survive, and thereby reduce the total losses for all stakeholders involved.

Based on an analysis of the Norwegian, Swedish and U.S. bankruptcy legislations, we have identified five areas in the Norwegian legislation where we observe potential for improvement. The first four areas are related to changes in the debt settlement proceeding, while the fifth regards changing the bankruptcy procedure.

I. Creditors' opportunity to file for a debt settlement proceeding

The Norwegian bankruptcy legislation prohibits creditors from filing for a debt settlement proceeding on the debtor's behalf. We believe that one reason for the poor survival rate might be that the petition for debt settlement is often filed too late, substantiated by the pre-filing financial characteristics. The debtor might be unaware of the extent of the financial distress, the management might resist admitting the financial problems, or they might live in the hope that the challenges will be resolved naturally over time. Either way, the longer the debtor waits, the less assets and business are left to restructure.

This argues in favour for an active monitoring approach from the lenders perspective. The creditors view and evaluate the company's financial situation differently from the debtor in often a more unbiased and less optimistic position. Thus, the creditor might discover and address financial challenges at an earlier stage, which would be beneficial for all stakeholders involved. We realize that it would be difficult to initiate a debt settlement without the support of the debtor. However, a filing from the creditors can assist in creating awareness to the financial circumstances.

II. Debt settlement restrictions

A compulsory debt settlement is the most achievable procedure for companies, compared to the voluntary solution that requires a unanimous vote in favour. Under the compulsory debt settlement, the parties involved are restricted from preparing customised solutions and obligated to adhere to unattractive solutions dictated by the law. In addition, this solution is required to provide unsecured creditors a minimum dividend of 25%.

In comparison, the U.S. reorganization plan is identical for both petitions and contains several useful tools. We propose two changes that might make the compulsory debt settlement more attractive for financially distressed companies. Firstly, remove the required minimum dividend, and secondly, add additional tools to the compulsory process.

We suggest altering the minimum dividend requirement of 25%, as we believe that it should not be the decisive factor for whether the process is initiated. The alternative to a debt settlement is often a liquidation; thus, the requirement could rather be whether the creditors receive more in a debt settlement compared to a liquidation. This is a requirement under the United States Bankruptcy code (USBC) - "best interest test" (see Appendix C.2. for additional details). Moreover, we observe that two of the most common initiatives in out-of-court restructurings

are conversion of debt to equity and new equity offerings. Thus, we suggest adding these alternatives as tools in a compulsory debt settlement.

III. Cram Down

Under the USBC, the Court can execute a cram down, accepting restructuring proposals even without the required majority. We argue that the Norwegian legislation should adopt this ability. This would provide the Court with an opportunity to accept proposals that are obvious to provide a favourable solution in an objective perspective, but are prevented by uncooperative creditors.

IV. Distressed financing

The Norwegian bankruptcy legislation does not assist the distressed company with financing during the debt settlement proceeding. With the approval of the debt committee, the company can raise unsecured debt. However, it is difficult for companies to obtain unsecured debt when in financial distress. In comparison, under the USBC the debtor can raise DIP financing with “super priority” to cover operating expenses and other costs that occurs during the restructuring.

Companies filing for a debt settlement are in financial distress and often struggle to survive. Thus, it would be beneficial for these companies to receive financing to cover working capital as well as the costs associated with the debt settlement. We propose to give the debtor the possibility to raise DIP financing with “super priority” as in USBC. As (Carapeto, 1999) and (Dahiya et al., 2003) suggest, this is highly beneficial for companies in distress, and could thus be an interesting aspect of a revised bankruptcy legislation.

V. Change of the bankruptcy liquidation to an auction bankruptcy

As discussed in chapter five, the Swedish auction bankruptcy system provides a surprisingly efficient arena for firm survival, creditor recovery rates and bankruptcy costs. Thus, we argue that converting the Norwegian bankruptcy liquidation to an auction bankruptcy could provide results that are more beneficial for creditors, as well as securing additional companies to survive as a going concern.

We argue that the Norwegian bankruptcy legislation could benefit from changes in the five before mentioned areas. However, as previously mentioned, it is primarily based on a financial perspective and limited evidence, and should thus be treated as suggestions rather than conclusive solutions.

8. Conclusion

This thesis examines the alternative frameworks that financially distressed companies in Norway can utilize, and their relative success with reference to comparable research in Sweden and the U.S. The Norwegian bankruptcy legislation is widely criticised for its lack of contribution to the survival of financially distressed firms. In combination with the largest economic sectors in Norway struggling due to the recent oil-recession, the topic of the thesis is highly relevant in time.

Based on data retrieved from the Brønnøysund Register Centre, only 28 unique companies have filed for debt settlement proceedings under the Norwegian bankruptcy legislation since the inception of the database in 1999. These companies are primarily small- and mid-cap., private companies either filing for compulsory or voluntary proceedings. Out of the sample, only 15% of the companies have survived the process as a going concern.

In Sweden, Thorburn (2000) provides evidence on 263 small firm bankruptcy auctions. Similarly, Franks and Torous (1994) document research under distressed exchanges and Chapter 11 on relatively large U.S., primarily petroleum-related, companies. As both studies indicate three-quarters of the firms surviving bankruptcy as a going concern, the Norwegian survival rate is very depressing.

Further depressing the firm survival rate is our suspicion of a selection bias in the sample. We believe the sample only includes companies that genuinely believe in a successful restructuring. This indicates that the formal provisions in Norway provides insufficient resources for the distressed company to survive, and that few companies even consider it as a viable alternative. Thus, the most commonly applied alternative is a financial restructuring out-of-court, which is examined in the remainder of the thesis.

Due to time constraints and a time consuming data gathering process, we had to select a sample of out-of-court financial restructurings. As the Norwegian economy is highly oil-dependent, the sample is limited to listed companies within the energy sector that initiated a restructuring in the period of 01.01.2015 - 01.04.2017. Additionally, it is only listed companies that are obliged to provide the necessary information in order to conduct the analysis. We argue that these companies best represent large Norwegian companies, however, we acknowledge that the self-selection is likely to imply a bias in our results. With these restrictions, the sample initially consisted of the 61 listed companies within the energy sector at Oslo Børs and Oslo Axess.

With basis in this sample, 22 companies have initiated financial restructuring measures out-of-court. 13 of these companies have officially completed the restructuring, which constitute the sample for further analysis. Interestingly, the most distressed sub-industries are the offshore-, rig- and seismic segments, which all are characterized as highly debt-financed and capital-intensive industries with a short contract backlog. Pre-restructuring, the sample companies are in severe financial distress with average current and debt-to-equity ratios of 0.9x, and 5.5x. This is low compared too Swedish and U.S. data, however, similar to Norwegian in-court ratios.

The most commonly observed implemented measures out-of-court are to (1) amend and extend current debt terms, (2) offer new equity, and (3) convert unsecured debt to equity. Consequently, we find that the creditors of listed companies within oil-related industries in Norway have lost in aggregate NOK7.8bn. due to haircuts on secured- and unsecured debt. This equals 7.5% of the pre-filing outstanding debt obligations. Simultaneously, it has been invested NOK8.7bn. of new equity in order to secure additional liquidity. As a result, the average current and debt-to-equity ratios in the sample have been improved significantly to 2.0x and 2.2x, respectively, which address the acute liquidity need.

Interestingly, senior secured creditors in Norwegian out-of-court restructurings recover on average 95.5% of the debt face value. In Swedish auction bankruptcy procedures and Chapter 11 reorganizations, the comparable figures are 77% and 80%, respectively. For junior unsecured creditors, the average recovery rate is 67% in Norwegian out-of-court, and 2% and 29% in Sweden and Chapter 11. This indicates that the out-of-court restructurings in Norway are surprisingly efficient in terms of value recovery, which may be a consequence of asset fire sales in Sweden, and considerable bankruptcy costs related to a Chapter 11 solution.

However, due to the self-selection of the Norwegian sample, it consists primarily of large, and historically successful companies. The firm size, in combination with other characteristic differences between the samples, are likely to also explain the impressive recovery rates. Thus, we emphasize that the results must be interpreted carefully, and that additional research must be conducted in order to establish conclusive results.

In terms of deviations from the Absolute Priority Rule (APR), the Swedish mechanism is superior due to the nature of the cash settlement related to the auction procedure. Both out-of-court in Norway and in the U.S., there are clear violations of APR, and positive deviations are frequently observed. This indicates that junior creditors and shareholders cheat senior creditors for value. In most Norwegian out-of-court cases, the seniority between secured and unsecured creditors is adhered, however, shareholders are often observed to gain excess value.

Due to the extensive formal requirements related to a Chapter 11 process, the median time-horizon, which reflects a proxy of the indirect costs, is 29 months. In Sweden, the process facilitates for a time-efficient procedure with a median of 2 months. Our research indicates that debt settlements under Norwegian legislation are relatively efficient with a median of 5 months, which is approximately identical to an out-of-court restructuring median of 6 months.

Seemingly, Chapter 11 implies extensive indirect costs related to the bankruptcy procedures, whereas it is minimized under an auction process. Norwegian procedures, both in- and out-of-court, provide surprisingly time-efficient mechanisms. This is further substantiated as especially Norwegian out-of-court restructurings involve larger companies, and most likely processes that are more complex. This may partly be a consequence of the critical illiquidity of the companies, which put pressure on achieving a speedy resolution.

The above findings conclude that the current Norwegian bankruptcy legislation appears to be inefficient, which confirms the widespread criticism. Thus, it is often not even considered as a viable alternative for financially distressed companies in Norway. Therefore, Norwegian firms seek out-of-court solutions in order to address their liquidity and solvency challenges. An empirical analysis of a sample of oil-related, private financial restructurings demonstrates a surprisingly efficient mechanism. Even though the selection bias limits the ability to draw any conclusions on the population of Norwegian out-of-court financial restructurings, both creditor recovery rates and bankruptcy-related costs are seemingly superior to Sweden and U.S. evidence. We argue that these results facilitate for further research on an unexplored, but highly relevant topic. In the future, we suggest to broaden the sample to include companies completing restructurings over a longer time-horizon, as well as including additional industries. Nevertheless, it is clear that Norway is in need for a modernization of the formal legislation, and that the current debt settlement proceeding is effectively unused.

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Appendix A – Definitions

As our thesis addresses a topic in the intersection between financial economics and business law, we provide an extensive description of important terms used throughout the paper. Thus, we aim to facilitate by providing the most essential background knowledge in order for both finance and law practitioners to find the content valuable.

Absolute Priority Rule (APR) – Stipulates the order of payment in the event of liquidation or an exchange of securities in a restructuring from most senior to junior according to creditor classes. Deviations from the APR occurs when junior claimholders receive any consideration simultaneously as classes that are more senior take a loss.

Amend and extend – Refers to amendments of current outstanding debt terms, as well as extensions of the investment's date of maturity.

Amortization profile – The schedule for repayment of outstanding debt financing including the principal as well as interest costs.

Auction bankruptcy – Primarily referred with respect to distressed firms in Sweden filing for bankruptcy where the firm either is liquidated piecemeal in exchange for cash or survives as a going concern.

Brønnøysund Register Centre – Administers many of Norway's most important registers and electronic solutions. Primarily referred with respect to the Register of Bankruptcies, which contains information on estates in bankruptcy, debtors in liquidation and compulsory liquidations.

Buy-back – Refers to a corporate action where the company buys outstanding bonds in the market. Most often to a discount of the face value in the case of financial distress.

Cash sweep – An amendment to the debt terms where the lender only is repaid in the case of positive cash flows from the company. Often an amendment to a fixed repayment schedule.

Chapter 11 – U.S. bankruptcy code 11 that involves a reorganization of a company's debts and assets.

Compulsory debt settlement – A formal restructuring alternative for financially distressed companies in Norway if creditors and the debtor is not able to reach a voluntary debt settlement.

Current ratio – A short-term liquidity ratio (12 months) defining a company's proportion of current assets relative to current liabilities.

Debt-to-assets – Book value of total liabilities relative to the total value of assets indicating the degree of leverage and related financial risk.

Debt-to-equity ratio – The face value of debt outstanding in a company relative to the book value of equity (unless otherwise stated e.g. market values).

Default – The failure to comply with terms related to outstanding debt.

Distressed exchange – An exchange of publicly listed securities out-of-court, conditional on the firm being in financial distress.

Enterprise value (EV) – A measure of the total market value of the company including all equity and debt classes subtracted by cash and cash equivalents.

Exchange offer – An offer where securities are exchanged for cash and / or other securities.

Exploration & Production (E&P) companies – A company or group with focus on identifying, augmenting, producing, and merchandising a variety of oil and gas.

Financial covenant – A formal term related to debt financing either restricting actions or imposing certain requirements on the company.

Financial distress – The liquid assets of the firm are not sufficient to cover the current requirements of its hard contracts.

Financial restructuring – An extensive reorganizing of the capital structure involving both changes in equity and debt.

Going concern – Describing a company with sufficient resources to cover its operations within the near future (defined as 12 months) with no risk of bankruptcy.

Haircut – The proportion of the investment which is lost after a financial restructuring (1 – recovery rate in %).

Illiquidity – A scenario where the company is not able to cover its financial obligations in the next twelve months.

Insolvency – Describing a company not able to meet its financial obligations.

Investment companies – A company or group without direct ownership of operating assets, but with investments in other companies operating within the energy sector.

Liquidation value – The total value of assets at a specific time either when the company is dissolved or in a case where a liquidation may be relevant.

Nordic Trustee – Offer bond trustee services in the Nordics.

Offshore companies – A company or group with operations within offshore services, typically Offshore Supply Vessels (OSVs).

Oil-service companies – A company or group with primary business focus on engineering- and technology-services.

Organizational restructuring – Initiatives related to a reorganization in the operations of the company e.g. lay-offs and asset sales.

Out-of-court restructuring (private workouts) – An informal restructuring outside of the judiciary where the company represented by the Board of Directors renegotiate the terms of outstanding debt and equity with relevant creditor classes and investors.

Piecemeal – Assets are divided and sold as parts leaving realized cash for the creditors on an as-we-go basis.

Prepacks – Describing the event where a restructuring proposal is completed and announced by the management before initiating a Chapter 11 process.

Recovery rate – The proportion of the investment which is retained after a financial restructuring ($1 - \text{haircut in \%}$).

Rig companies – A company or group with operations related to the drilling of wells for exploration and production purposes.

Runway – The time-horizon a company can cover its outstanding liabilities, related covenants and expenses including principal repayments and interests based on current projections.

Secured debt – Debt financing with security in the company’s assets as collateral. In this thesis, the term is used interchangeably with the term “senior debt”.

Seismic companies – A company or group operating in the offshore industry by finding oil and gas reservoirs based on seismic signals.

Shipping companies – A company or group operating ships in order to transport goods by sea.

Stakeholders – A party with an interest in the company who can either influence or be influenced by the company’s affairs e.g. investors, customers and distributors.

Subordinate – Referring to a security class of lower rank / seniority.

Super-priority – The right to receive payment before any other claimant.

Unsecured debt – Debt financing without security in the company’s assets, thus riskier compared to secured debt. In this thesis, the term is used interchangeably with the term “junior debt”.

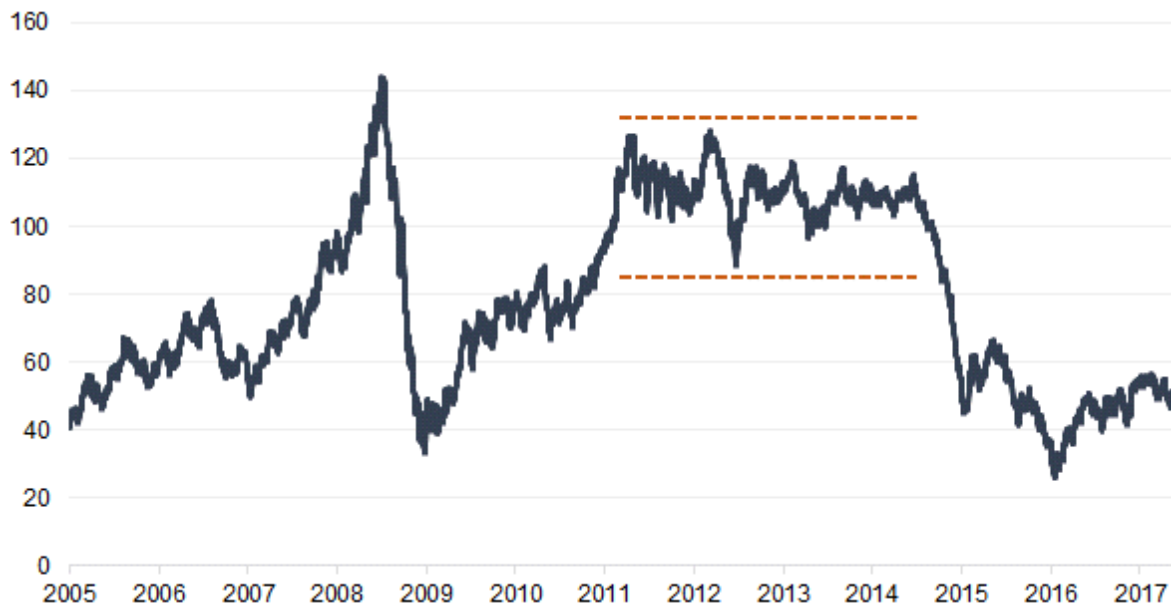
Voluntary debt settlement – A process where the debtor compiles a debt settlement proposal in assistance with the Enforcement Office in order to finalize a mutually acceptable agreement with its creditors.

Waivers – A temporary release from a term related to a debt contract given from the lender to the debtor.

Appendix B – Historical Brent oil spot price development

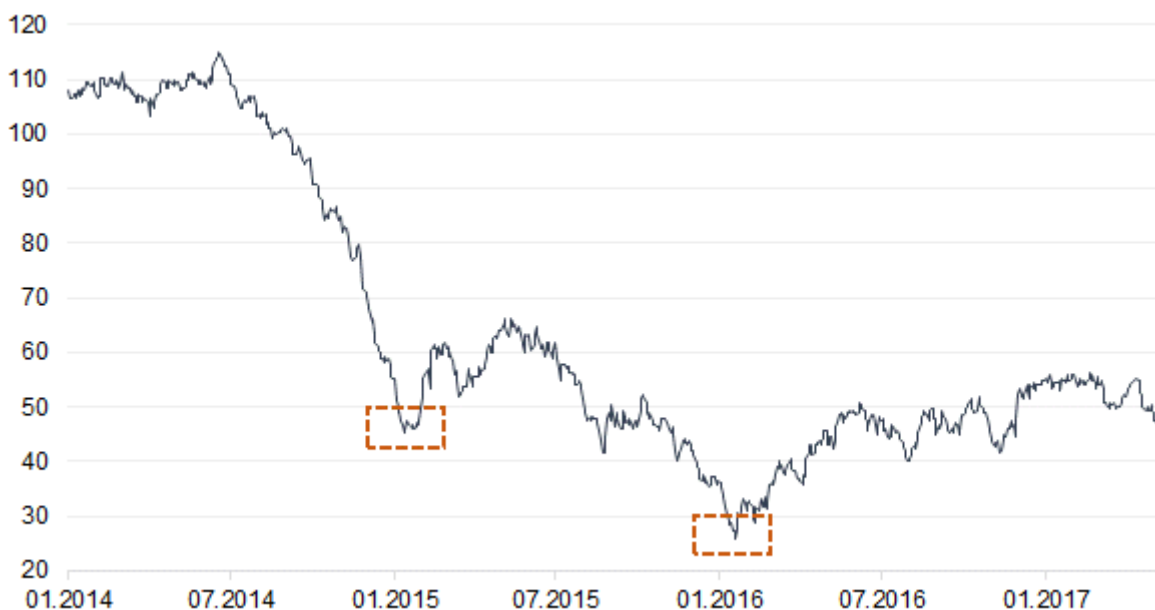
The price of Brent oil was high and stable in the range of USD100 - USD120 per barrel in the period 2011 - 2014, facilitating for a thriving oil industry. In January 2016, the price declined to USD28, which have had severe implications on the Norwegian economy.

Figure 16: Brent Spot Price 2005 – 2017 (Dollars per Barrel).



Source: U.S. Energy Information Administration.

Figure 17: Brent Spot Price 2014 – 2017 (Dollars per Barrel).



Source: U.S. Energy Information Administration.

Appendix C – Detailed background theory

As the topic of the thesis is in the intersection of corporate finance and business law, the most essential background theory and key aspects of the relevant bankruptcy legislations are presented in this appendix.

First, the Norwegian bankruptcy legislation described in Chapter two is complemented with additional details. Second, Chapter 11 within the U.S. Bankruptcy code is examined. Third, the most relevant features of the bankruptcy law of Sweden are presented. Finally, characteristic elements related to out-of-court financial restructurings are discussed, which represents the alternative to a formal process within the law.

C.1. Complementary details to the Norwegian bankruptcy legislation

In the following, the debt settlement procedure introduced in chapter two is complemented with additional details.

C.1.1. The debt settlement requirements

Only the debtor can file a petition for a debt settlement under Norwegian bankruptcy law, cf. KKL. § 1. The primary argument for this restriction is that the Court finds it crucial that the debtor will cooperate actively and loyally to achieve a successful debt settlement. If a petition is filed, it is required to specify whether the debtor prefer to apply for a compulsory or voluntary debt settlement. The debtor is required to explain the cause of the financial challenges and provide a suggestion on how the debt will be settled, further described in KKL. § 2.

The two requirements for filing a debt settlement are referred to as the liquidity requirement²⁵ and the forecast requirement²⁶, cf.²⁷ KKL. §§ 2 and 4. For the first requirement to be met, it is sufficient that only one creditor's obligations are not fully covered or that the Court finds it probable that the debtor will not be able to meet its obligations going forward. The law sets no restrictions to whether the debtor is insolvent²⁸, as with a bankruptcy. Second, the Court must assess the probability of a successful debt settlement based on the statement from the debtor, which documents how the outstanding debt is proposed settled. This requirement is breached if

²⁵ Likviditetsvilkåret.

²⁶ Prognosevilkåret.

²⁷ An abbreviation for the Latin word, confer, which refers to further elaboration on the topic.

²⁸ Illiquid and insufficient.

the Court finds it unlikely that the debtor will be able to achieve a successful debt settlement with its creditors.

We identify one of the main drawbacks with the current legislation to be that the petitions for debt settlement proceedings are often filed too late. At this point, the company has not the liquidity required to implement the process, especially as the company cannot raise debt with “super priority”, as in Chapter 11. Thus, the liquidity requirement might work against its intention.

C.1.2. Overview of compulsory and voluntary debt settlement

The debtor and its creditors can freely choose whether they will initiate a formal debt settlement proceeding or an out-of-court restructuring. If an out-of-court arrangement is chosen, the company can freely convert to a formal debt settlement at their own discretion later. Within the Norwegian bankruptcy law, the company can choose between two types of proceedings, compulsory or voluntary debt settlement. All creditors affected by the proposed settlement have voting rights. However, normally the proposed plan affects only the unsecured creditors, while secured creditors are safeguarded by their collateral.

The possibilities within a voluntary debt settlement and its required majority to be initiated are described in KKL. §§ 23 and 25. If the Court rejects the voluntary debt settlement, the debtor can file for a compulsory debt settlement instead. The alternatives within a compulsory debt settlement and its required majority to be initiated are described in KKL. §§ 25 and 30. As the majority can overturn the minority, the Court requires a minimum dividend of 25% to all unsecured creditors in a compulsory debt settlement.

C.1.3. The debt settlement proceeding

The Norwegian bankruptcy law grants the District Court a discretionary power to determine whether the debtor is to provide security for the costs that will arise during the debt settlement, cf. KKL. § 3. This security will normally amount to NOK300 thousand in an advance payment. The Court needs to assess the burden it is for the creditor to freeze large amounts as collateral against the need to secure coverage for the administrative costs incurred during the proceeding. The aim of the collateral is to avoid costs imposed on the government, cf. KKL. § 3.

The debtor’s protection from bankruptcy filings and creditor collection attempts during the negotiations are described in KKL. §§ 17 and 16. The company is normally protected from bankruptcy the first three months during a voluntary proceeding. In contrast, in a compulsory

settlement, the company is not protected against bankruptcy if the majority of the debtholders file in favour, cf. KKL. § 16. In such a case, it is not likely that the debt settlement will be successful.

The debtor cannot raise new debt without the approval of the debt committee, cf. KKL. § 14. Importantly, in the case of new debt financing, it will not be granted security. The new debt is normally used to cover ongoing operating expenses and costs associated with a debt settlement.

If the creditors accept the debt settlement plan and the District Court approves, the debt settlement proceeding can begin. The District Court will appoint a debt committee with an accountant and an appeal committee, which acts as the top authority during the proceedings, and shall assist the debtor and preserve the common interests of the creditors. The debtor maintains control over the business during the debt settlement, cf. KKL. § 14. However, the debtor is obliged to provide the debt committee access to the business operations, financial conditions and comply with orders from the committee. The debt committees' objective is to ensure that the business fulfils its objectives and is managed properly during the debt settlement, cf. KKL. §7. The committee has the authority to cancel the proceeding if the company does not fulfil the requirements.

C.2. The United States Bankruptcy code

Under the United States Bankruptcy code, it is most common to resolve corporate financial distress with two mechanisms; a Chapter 7 liquidation or a Chapter 11 reorganization. We will introduce Chapter 7. However, the primary focus is on Chapter 11 of the USBC. Companies filing for Chapter 7 is liquidated and cease to exist. Chapter 11 provides companies with the opportunity to review their assets and liabilities, and negotiate a reorganization plan with its creditors. The objective of the reorganization is to let the company continue its operations and turn profitable, cf. US Supreme Court 1934²⁹.

C.2.1. Voluntary and involuntary reorganisations

Both the debtor and its creditors can request a reorganization, cf. USBC. §§ 301 and 303. The petition may be voluntary, when it is filed by the debtor, or it may be involuntary, when filed by the creditors. Thus, the debtor can be forced into a reorganization within the USBC. The law does not set any requirements for illiquidity or insolvency for the business. Hence, financially secured firms can request a reorganization. However, this is not commonly observed³⁰.

A voluntary petition must adhere to the official bankruptcy form prescribed by the Judicial Conference of the United States. The form must elaborate on the purpose with the petition and that it is in “good faith”. If the Bankruptcy Court suspects that the system is being abused, it has the authority to reject the petition. The debtor must provide the Court with an updated status on its assets and liabilities, financial statements, financial obligations and other relevant information, cf. Bankruptcy Rule 1107 (b).

The main requirement for an involuntary petition is that it can only be opened if at least three of the creditors are in favour of the petition, and that their unsecured claims amount to at least USD10 thousand, cf. USBC. § 303 (b) (1). If the debtor has less than 12 creditors, it is sufficient that one creditor supports the petition on the condition that the creditor has unsecured claims in excess of USD10 thousand, cf. USBC. § 303 (b) (2). The creditors are obliged to document to the Court that the debtor is unable to fulfil its debt obligations. If the Court approves the involuntary petition, the debtor has the option to protest the decision within the next 20 days.

²⁹ Local Loan v. Hunt, 292 U.S. 234, 244 (1934). ”...gives the honest but unfortunate debtor...a new opportunity in life and clear field for future effort, unhampered by the pressure and discouragement of pre-existing debt”.

³⁰ Alan B. Morrison, Fundamentals of American law, Page 465.

For the reorganization plan to be approved, it must be accepted by a sufficient majority in each creditor committee, cf. USBC. § 1129. Only the creditors affected by the reorganization plan can vote. A creditor committee approves the plan if two-thirds of the creditors measured in USD, simultaneously as more than half of the creditors vote in favour. This dual system is meant to avoid a settlement controlled by a large number of creditors with small claims or few creditors with large claims. If a reorganization plan is approved by the majority of the creditor committees, the minority are protected by the “best interest test”, cf. USBC. § 1129. The “best interest test” states that unless the individual creditor has approved the restructuring plan, it is entitled to the equivalent of the potential receivable under a Chapter 7 liquidation.

C.2.2. Overview of the reorganization

Compared to the Norwegian bankruptcy law, the USBC does not make any suggestions to the extent of the reorganization plan. However, the code has minimum requirements to the arrangement of the procedure. The reorganization plan is required to contain a systematic overview of how the creditors are divided into classes and must specify how the reorganization will affect each class. It is up to the parties themselves to establish an appropriate reorganization plan, and they can freely customize it according to specific needs. The possibilities within the company and what the creditors are willing to accept are decisive for the solution.

When Chapter 11 is announced, all creditors are required to cease collection attempts, referred to as an automatic stay, cf. USBC. § 362. The purpose of this provision is to prevent creditors from collecting claims and dividing the company leaving no business left to run and to reorganize. If the Bankruptcy Court approves, the filing company can raise DIP financing to cover operating expenses while in bankruptcy, cf. USBC. § 364. If the company does not have the possibility to raise unsecured debt, the Bankruptcy Court can approve that new debt has seniority over other claims or that it will be secured by collateral, cf. USBC. § 363 (c) defined as “super priority”. This provision is intended to provide an incentive for creditors to lend capital to the debtor.

After filing for Chapter 11, the debtor will remain in control over the business until the outcome of the petition is decided. The Court shall always appoint one, or more creditor committees, cf. USBC. § 1102. Creditors are assigned to committees based on their debt priorities, where each committee is responsible for preserving its creditors’ interests. A debt committee must always represent unsecured creditors. If the company suffers from e.g. a lack of, incompetent and / or

a dishonest management, the debt committee can request the Court to appoint a trustee, cf. USBC. § 1104. Then, it is the trustee that operates the debtor's business, cf. USBC. § 1108.

The Bankruptcy Court will assess the proposed reorganization plan and the probability of a successful reorganization, cf. USBC. § 1129. Should each creditor class approve the plan with an adequate majority, and the Bankruptcy Court finds the plan to be satisfactory, the plan can be executed, cf. USBC. § 1126. The USBC. § 1141 states that upon confirmation of the reorganization plan, the debtor will as a rule always be exempted from payment obligations other than those resulting from the plan.

The Bankruptcy Court can approve a reorganization plan despite some creditor committees objecting to the proposal, if the Court finds the plan fair and equitable, cf. USBC. § 1129 (b). This process is referred to as a cram down. For the cram down to be approved, the Bankruptcy Court needs to be convinced that the reorganization plan complies with all the terms of the USBC. § 1129. Generally, the plan must be feasible, have honest intentions and be applicable by law. The Court must be convinced that a subsequent reorganization or a liquidation will not follow. The best interest test still applies with a cram down.

C.3. The Swedish bankruptcy code

The Swedish bankruptcy system is designed as a mandatory English-style auction³¹. The bankrupt company is auctioned off for sale immediately after filing for bankruptcy. After the filing, the incumbent management are immediately replaced by a court-appointed trustee. The management of the operations are then transferred to a trustee that has a fiduciary responsibility towards the creditors. The trustee is responsible for overseeing and completing the liquidation of the assets in an open bid auction. All labor contracts are automatically terminated after the company files for bankruptcy, including top management. However, key personnel are retained on temporary consulting contracts. The companies' assets are protected during the bankruptcy and creditors cannot seize their claims.

C.3.1. Auction payment in piecemeal vs. going concern

Buyers can freely place bids on individual assets or the entire firm as a going concern. In the case of no interest in the company as a going concern, the company's assets is sold piecemeal. Thus, it is the demand in the market that determines whether the company will be liquidated piecemeal or reorganized.

If the company is liquidated piecemeal, the winner of the auction must pay cash for the company. Subsequently, the creditors are paid in accordance with the absolute priority of their claims. Should the company be acquired as a going concern, the buyer has the option to structure the acquisition as a merger or a leveraged buy-out (LBO). A LBO let the acquiring company buy the target without committing a lot of equity. Thus, the auction procedure provides incentives for buying the company as a going concern.

³¹ An open auction where the bidders are informed of outstanding bids, and are allowed to increase bids with the highest bidder receiving the property.

C.3.2. Composition – The formal alternative to an auction bankruptcy

As an alternative to the bankruptcy, the company can file for a composition³². This is a procedure where the company can renegotiate its unsecured debt claims under the supervision of the Court. This procedure requires that secured debt and priority claims are offered full repayment, and that junior creditors at least receive 25% of their claims. The composition does not contain any provisions protecting the company from debt collection from secured claims³³ further promoting limited use of the procedure³⁴. Interestingly, this procedure shares many of the similar characteristics as the Norwegian debt settlement procedure. Nonetheless, the Swedish bankruptcy auction system has proven to be so efficient that compositions are rarely observed.

³² “Ackord”.

³³ Local Loan v. Hunt, 292 U.S. 234, 244 (1934). “...gives the honest but unfortunate debtor....a new opportunity in life and clear field for future effort, unhampered by the pressure and discouragement of pre-existing debt”.

³⁴ Eckbo, E., Thorburn, K., 2000b. The resolution of financial distress in a cash auction bankruptcy environment. Unpublished memo, Dartmouth College, Hanover, NH.

C.4. Key characteristics of legal rules under Norwegian, Swedish and U.S. law

Table 5: Characteristics of a restructuring under Norwegian bankruptcy legislation, U.S. Chapter 11 and the Swedish auction bankruptcy.

Characteristic	Rules for debt settlement proceedings under Norwegian bankruptcy law	Rules under U.S. Chapter 11	Rules under Swedish bankruptcy ³⁵
Right to file	Only the debtor can file for a debt settlement.	Both debtor and creditor can file for Chapter 11. If the filing is involuntary, 3 or more creditors must support the petition.	Both debtor and creditor can file for an bankruptcy.
Control rights in bankruptcy	The debtor remains in control of the business under the supervision of a court-appointed debt committee.	The debtor will remain in possession of the business (DIP), unless a trustee is appointed by the court.	All labour contracts are automatically terminated, and the business is transferred to a court appointed trustee.
Resolution mechanism	The debtor can file for a compulsory or voluntary debt settlement. The opportunities with the compulsory case are limited.	Debtor and creditor can file for a voluntary or involuntary reorganization. Both scenarios provide the same opportunities.	None. The company is auctioned off. The highest bidder wins the auction.
Voting rules	The voluntary case requires a unanimous vote in favour, and the involuntary case require majority of ¾ of the votes.	The petition requires ½ of the votes and 2/3 of value in claims in each debt committee.	None. The company is auctioned off.
Settlement	Cash, new debt and new equity, if the procedure is voluntary. If compulsory, only cash.	Cash, new debt and new equity.	Only cash if the company is liquidated piecemeal. If bought as a going concern, M&A and LBO is allowed.
Firm protection	The company is protected against creditors' collection attempts.	"Automatic stay" - the company is protected against creditors' collection attempts.	The company is protected against creditors collection attempts.
Possibility of "cram down"	No.	Yes.	No. The company is auctioned off.
Absolute Priority Rule	No deviations allowed.	Deviations are frequently observed ³⁶ .	No deviations allowed.
DIP financing	The debtor can raise new unsecured debt with the approval of the debt committee.	DIP-financing, if the company is not able to raise unsecured debt; new debt can be given "super priority".	Debtor can raise new unsecured debt. Uncommon due to the auctions short time span.

³⁵ As mentioned earlier, the company can alternatively file for a composition; however, this alternative is not included in the overview due to its rarity.

³⁶ Franks, J. and Torous, W. (1994). A comparison of financial restructuring in distressed exchanges and chapter 11 reorganizations. *Journal of Financial Economics*, 35(3), pp.349-370.

C.5. Out-of-court restructurings in a Norwegian perspective

The alternative to a formal bankruptcy procedure is an out-of-court financial restructuring. If the value of the going concern is higher than the liquidation value, the management and Board of Directors prefer the company to continue its operations. This is the ultimate goal of a restructuring. In order to achieve this, amendments must be implemented to the balance sheet and related financial covenants, to provide sufficient liquidity and solvency. Depending on the severity of the financial distress and the bargaining power of the respective creditors, various actions will be initiated. This section will examine the most common aspects in an out-of-court restructuring relevant for larger Norwegian companies³⁷.

C.5.1. General background theory

In order to facilitate for continued operations, the company must concurrently implement operational restructuring initiatives such as lay-offs, asset sales and sale-leasebacks. While a financial restructuring typically reduces amortization profiles and interest payments, an operational restructuring ensures that the company can generate sufficient cash flow to cover the renegotiated obligations. Although operational restructurings are critical to facilitate for survival of the firm, the remainder of the section will focus on financial restructurings, as it is the topic for the thesis. Further use of words such as “restructuring”, “reorganization” and “workouts” refer to a financial restructuring unless otherwise stated.

One of the reasons for the widespread recession in oil-related industries is the combination of high leverage and cyclical industries. While financial gearing is positive under thriving markets, as it will boost both the top- and bottom line. However, the companies with the most aggressive gearing will be the most exposed and financially vulnerable during industry distress. In today’s market, this is evident as the companies that historically have funded expansions and investments through debt financing is the ones that struggle the most (in example Seadrill).

Some of the most commonly observed “red flags”³⁸ for a company, which is more exposed in an industry recession, are (1) breach of financing terms, (2) complicated capital structure, (3) declining operational cash flow, (4) declining EBITDA/debt ratio, (5) high proportion of short-term debt, (6) short contract coverage, (7) higher break-even compared to competitors, and (8) large upcoming principal repayments (PWC, Finansiell restrukturering av større selskaper,

³⁷ In January 2017, PwC published a comprehensive paper on financial restructurings in Norway. The following section is in a large degree based on this paper and will provide as a background for further analysis in the thesis.

³⁸ Non-exhaustive.

2017). As long as the company demonstrates that its operations can support all of these “red flags”, it is considered to be in full compliance and thus, can function as a going concern.

C.5.2. Covenant breach; minor restructuring

If certain of the financial covenants related to outstanding debt are breached, such as minimum liquidity- and solvency ratios, the company has per definition defaulted on the debt. However, this does not necessarily force the company to file for bankruptcy, as all relevant parties will prefer to renegotiate current terms. The most commonly observed measures in a minor restructuring are that the lender provides waivers for a given period in combination with an extended amortization profile. This is defined as “amend and extend”, and is a frequently used term throughout the thesis. Even though senior lenders, often banks, with security in assets in theory could seize the relevant assets at this point, this is infrequently observed, as it is often unfavourable for all parties involved. The banks do not have the necessary expertise to operate the assets, and a massive distressed sale of assets could potentially lead to fire asset sales (Thorburn, 2000). Furthermore, this could have negative reputational effects for the bank.

If the company in addition has outstanding bond loans, it complicates the situation. In Norway, Nordic Trustee (NT) has power of attorney to ensure that the bondholders’ rights are fulfilled (Nordictrustee.com, 2017). In minor breaches, NT has the mandate to renegotiate terms, however, in events that are more complicated, the new amendments must be approved by two-thirds of the bondholders³⁹.

Certain loan terms can create additional challenges in financially complicated situations. In particular, cross-default covenants imply that if one of the loans defaults, the loan with the covenant is also considered in default. Consequently, the company must then renegotiate with several parties, which complicates the situation.

³⁹ As bonds are traded in the market and the company does not have access to the bond owner register, the firm will not possess information on current bondholders. This can for example facilitate for hostile takeovers as investors with interests can invest in bonds and vote down restructuring proposals, and consequently “force” the company into default (exemplified by REM Offshore and Solstad Offshore deal, 2016).

C.5.3. Permanent financial challenges: debt restructuring

More severe financial challenges can occur as a consequence of fundamental changes related to the companies' operations e.g. a drop in the price of oil from USD110 per barrel to USD28. Although the company still has an enterprise value exceeding the amount of debt obligations, more significant amendments must be implemented. This situation implies a need for both an operational, as well as a financial restructuring to conserve cash. The first step is to implement a standstill-agreement, which involves a temporary suspension of payments. Due to cross-default clauses, this could lead to a default on all outstanding loans.

At this stage, commonly observed financial restructuring measures⁴⁰ are (1) interests paid as Payment-In-Kind (PIK)⁴¹, (2) implementation of cash sweep⁴² mechanisms, (3) conversion of (unsecured) debt, (4) conversion of current bonds in more favourable bonds e.g. convertible bonds, and (5) repayment of outstanding bonds in the market at a discount to the face value. In such cases, it is necessary that the banks, as well as a minimum of two-thirds of the bondholders approve the adjustments. If the proposed measures do not affect the shareholders in the company, a general meeting is not required for approval.

In general, no lenders will want to take a haircut on their investment without receiving any consideration. Often the solution is that unsecured debt is converted to equity. In combination, banks provide new credit facilities to cover ongoing operating expenses. As the default risk is substantial, this loan has a super-priority over current outstanding debt, and must therefore be agreed upon by all debtholders, which can result in prolonged negotiations. All implemented measures at this point are based on the assumption that the going concern value is higher than the value derived from a liquidation. Thus, a restructuring is favourable.

Simultaneously as debtholders take losses, shareholders also need to contribute to the survival of the company. Often banks will demand that the equity investors provide new cash flow through equity offerings. This could be both risky and attractive from the investors' perspective depending on the likelihood of a company survival. In return, the banks must provide a runway until the industry is expected to recover. Unsurprisingly, a resolution of the distressed situation will be more time-consuming and complicated the more parties involved. Depending on the

⁴⁰ Non-exhaustive.

⁴¹ Interests are paid as additional claims to the company, thus, reducing the cash flow effect of the loan.

⁴² Interest is only paid in case of positive cash flow.

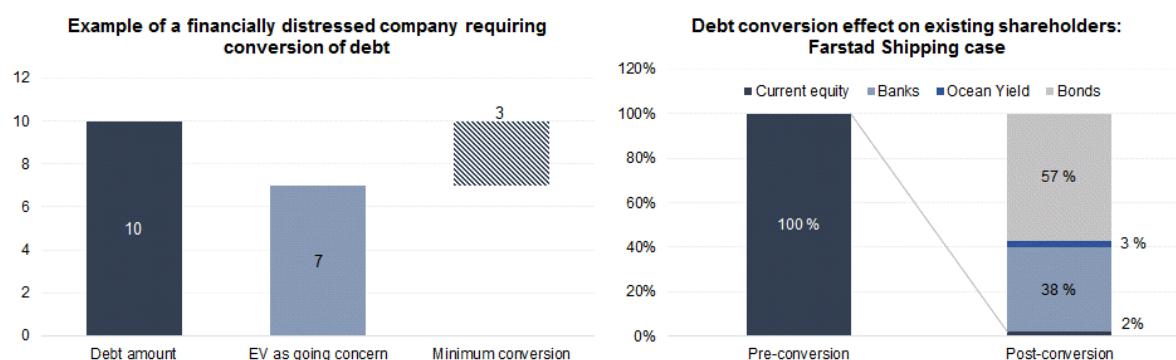
bargaining power of the respective parties, effectively decided by seniority and security claims, it is negotiated how much they need to contribute with in the restructuring.

Other potential restructuring alternatives are to reduce debt ratios through a buy-back of outstanding bonds with cash, or propose an exchange offer, which involves an exchange of bonds for other securities, often equity. This will improve financial ratios and provide a healthier capital structure, and could thus be effective initiatives. However, it requires that the company possess a significant cash balance, and that the bondholders is interested in receiving equity for their claims, which often is not the case.

C.5.4. Enterprise Value below debt value: debt conversion

In the case of insolvency⁴³, where the equity value is lost and enterprise value is below the debt amount, it is unavoidable to convert debt to equity (Figure 18 provides an example). In theory, the equity should be traded at zero value, in other words bankruptcy. However, the stock is often traded at a small value resembling a call option in risk and potential pay-off.

Figure 18: Textbook example of a situation that requires a debt to equity conversion, and the post-conversion effect.



Source: Company reports and restructuring term sheets.

Another consequence of reduced cash flows, and ultimately financial distress, is impairments of assets as the pre-distress book value probably is no longer relevant. This is very evident in the offshore industry today as the companies have impaired more than USD1,000m. in assets.

The positive effects of a debt conversion are immediately visible on the balance sheet and solvency ratio. Additionally, the company will face reduced financial expenses, which improves liquidity. The downside for existing shareholders is a heavy dilution as the equity

⁴³ The borrower is not able to cover its debt obligations and total assets and revenues does not suffice to cover debt amount.

value is practically lost, which is illustrated on the right in Figure 18. In example, under the Farstad Shipping restructuring, the pre-conversion shareholders were left with 2% of the equity value post-conversion. Finally, after additional equity offerings they were further diluted to 1% of the total post-restructuring equity (Nordea Markets, 2017).

In conjunction with the debt conversion, additional measures must be implemented. Commonly observed initiatives⁴⁴ at this point are: amend and extend, additional short-term financing from banks to cover operating expenses, and new equity offerings to existing as well as new shareholders.

One important factor in a debt conversion is that it is firstly the junior, unsecured bondholders that is forced to convert their stake. From the senior secured lenders' perspective, this is unfavourable, as they have invested based on existing ownership. Converted bondholders may have other incentives than the previous owners. In addition, valuable knowledge and skills may be lost due to the heavy dilution, which eradicates incentives. Other unfavourable features of a debt conversion include (1) a more complicated restructuring process as existing shareholders must vote in favour of the resolution, (2) converted debtholders have a risky position in a potential subsequent restructuring, (3) differences in incentives between various investors results in intense negotiations, and (4) a conversion does not secure new, necessary cash flow.

The alternative to a debt-to-equity conversion is a reduction in face value of the outstanding debt. Another scenario could be a reduction in face value in combination with granting securities that are more attractive e.g. convertible bonds. Warrants could also be relevant to distribute to provide more favourable terms. Either way, the bondholders must vote in favour for the restructuring proposal with two-thirds of the majority, whereas senior secured banks must vote unanimously in favour. In addition, for the company to remain as a juridical entity, the existing shareholders must vote in favour for the restructuring proposal. In compensation, the shareholders often receive some of the equity value post-restructuring even though all equity value is theoretically lost (see Farstad Shipping case). This provides for a deviation in the APR of value distribution in a bankruptcy scenario. Note also that a conversion of debt often is executed below the face value of the investment, thus implying a haircut for the debtholders. For example, consider a company with NOK100m. in outstanding subordinate debt. The debtholders are offered to convert to 50m. shares with a value of NOK1.00 per share. In other

⁴⁴ Non-exhaustive.

words, the debtholders have taken a haircut of 50% as they receive NOK50m. in compensation for an investment of NOK100m. A haircut of 50%, which represents the loss, is equal to a recovery rate of 50%, the value that is recovered out of the initial investment. Another typical example, based on the previous information, is that the entire face value is converted, e.g. to 100m. shares at NOK1.00 per share. However, a subsequent equity offering is executed at NOK0.20 per share, resulting in a sharp decline in the share price. Then the previous debtholders own 100m. shares worth NOK0.20 each, which equals NOK20m., implying a haircut of 80%, and a recovery rate of 20%. Note that the market value of the debt is probably lower than the face value, as the company is in distress. Thus, the haircut is not as severe measured as a fraction of the current market value.

C.5.5. Going concern value below liquidation value: liquidation

The last scenario is when the going concern value is below the liquidation value. In that case, the secured creditors' incentive is to liquidate the company's assets in order to be paid. In Norway, the Board of Directors has two alternatives; (1) a controlled liquidation⁴⁵, or (2) a commenced bankruptcy proceeding⁴⁶.

In the case of a controlled liquidation, the shareholders decide whether the company should be liquidated through a general meeting, and consequently a liquidation committee is elected if approved. The committee will finalize the liquidation, and the creditors will be compensated according to seniority.

If a controlled liquidation is not approved, the Board must file for bankruptcy to the District Court. Then, if the Court finds the company to be insolvent, they appoint a trustee who has the responsibility for the bankruptcy under the Norwegian law (Altinn.no, 2017). The trustee will cover the creditors' interests, and not the shareholders', due to seniority. After the assets have been sold, claims are prioritized for repayment as follows: (1) Court-related costs, (2) employees' salary, and (3) taxes and fees. Subsequently, non-financial claims such as debt to suppliers are repaid. Lastly, financial creditors are compensated according to seniority. Unsecured creditors do not usually receive any dividends in these processes, as most of the value is already lost.

⁴⁵ Styrt avvikling.

⁴⁶ Melde oppbud.

C.5.6. Key takeaways

A financial restructuring of larger companies is a complicated process with many stakeholders and various interests involved. The primary goal is to secure the survival of the company going forward, and thereby minimize losses for all parties involved. This section has provided the basics for understanding the processes involved in an out-of-court restructuring depending on the severity of the situation.

Appendix D – Total population of public Norwegian debt settlement proceedings

Table 6 presents the total population of public petitions for debt settlement proceedings in the Brønnøysund Register Centre. In order to establish our preferred data sample, we excluded all petitions listed as “Person”. In addition, companies filing multiple times are treated as a single company filing where the last announcement decides the category.

Table 6: Total population filing a public petition for debt settlement to the Brønnøysund Register Centre.

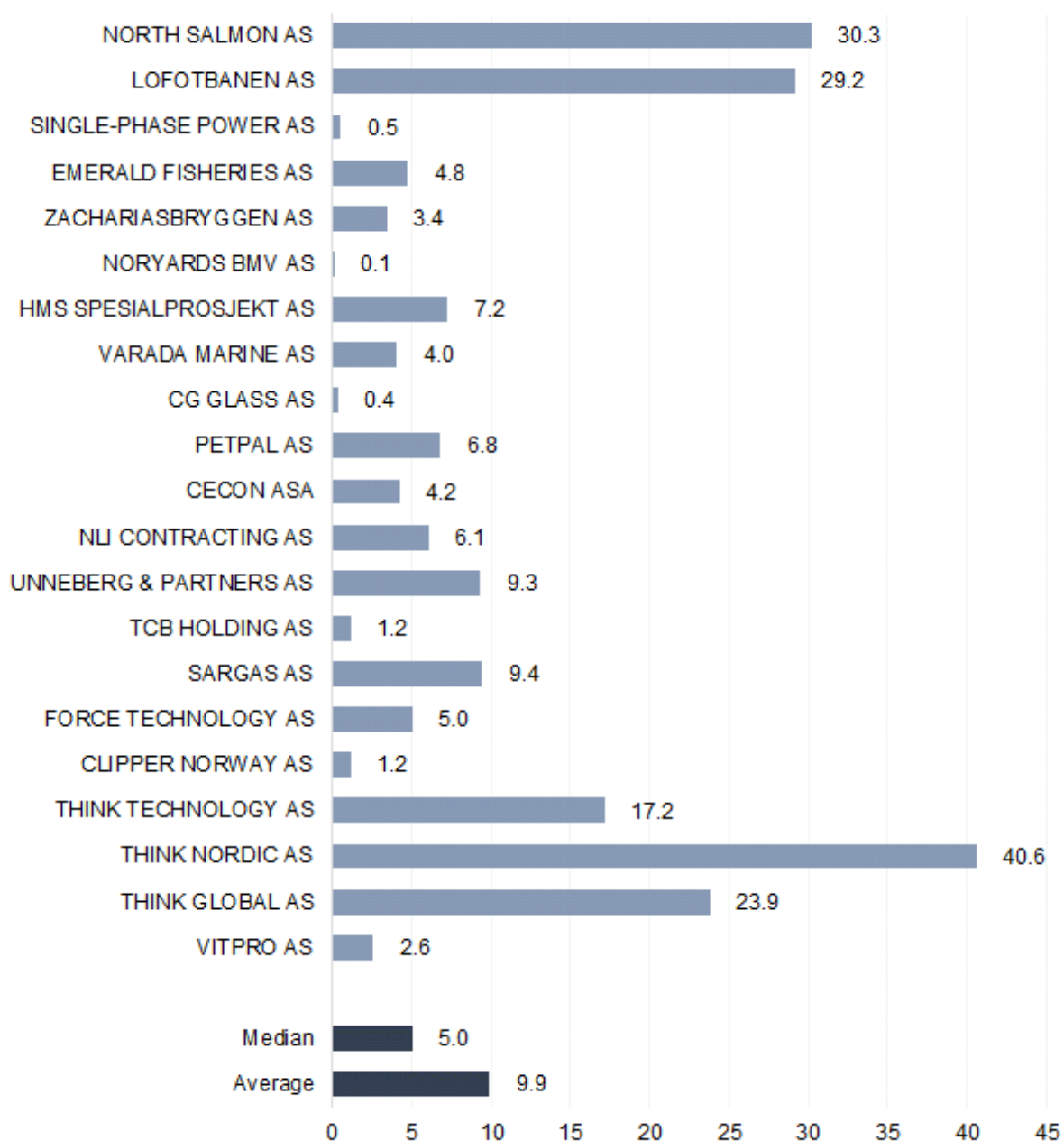
Company name	County	Date	Announcement	Company / Person
Cecon ASA	Aust-Agder	16.12.2014	Compulsory settlement	Company
CG Glass AS	Vest-Agder	05.02.2015	Compulsory settlement	Company
Clipper Norway AS	Oslo	16.03.2006	Voluntary debt settlement	Company
Emerald Fisheries AS	M & R ⁴⁷	21.09.2016	Voluntary debt settlement	Company
Endure AS	M & R	09.03.2017	Compulsory settlement	Company
Engebretsen Clark Martin	Østfold	22.12.2006	Compulsory settlement	Person
Force Technology AS	Oslo	15.06.2006	Compulsory settlement	Company
Helgeland Rør AS	Nordland	26.01.2017	Compulsory settlement	Company
Hestø Wenke Iren	Nord-Trøndelag	17.01.2014	Voluntary debt settlement	Person
HMS Spesialprosjekt AS	Hordaland	09.05.2014	Voluntary debt settlement	Company
Holmefjord Ivar	Hordaland	23.11.2011	Voluntary debt settlement	Person
Johannessen Harald	Oslo	19.01.2010	Compulsory settlement	Person
NLI Contracting AS	Vestfold	26.02.2016	Voluntary debt settlement	Company
North Salmon AS	Finnmark	04.05.2006	Voluntary debt settlement	Company
Noryards BMV AS	Hordaland	30.03.2016	Compulsory settlement	Company
Odd Stadion Vest AS	Telemark	17.10.2012	Voluntary debt settlement	Company
Ofofbanen AS	Nordland	10.05.2006	Voluntary debt settlement	Company
Oksvold Ruth May	Nord-Trøndelag	01.06.2011	Voluntary debt settlement	Person
Oksvold Stein Olav	Nord-Trøndelag	01.06.2011	Voluntary debt settlement	Person
Ole Syvert Dalan	Oslo	14.03.2006	Compulsory settlement	Person
Petpal AS	Aust-Agder	06.03.2007	Voluntary debt settlement	Company
Reinertsen AS	Sør-Trøndelag	21.12.2016	Voluntary debt settlement	Company
Roger Amundsen	Oslo	26.06.2006	Compulsory settlement	Person
Sargas AS	Oslo	20.01.2015	Compulsory settlement	Company
Single-Phase Power AS	Nord-Trøndelag	13.09.2016	Compulsory settlement	Company
Single-Phase Power AS	Nord-Trøndelag	11.07.2016	Voluntary debt settlement	Company
TCB Holding AS	Oslo	16.03.2006	Voluntary debt settlement	Company
Think Global AS	Akershus	16.06.2009	Compulsory settlement	Company
Think Nordic AS	Akershus	24.02.2006	Compulsory settlement	Company
Think Technology AS	Akershus	16.06.2009	Compulsory settlement	Company
Unneberg & Partners AS	Oslo	11.07.2006	Compulsory settlement	Company
Varada Marine AS	Vest-Agder	31.08.2016	Voluntary debt settlement	Company
Varada Marine AS	Vest-Agder	05.10.2016	Compulsory settlement	Company
Vestkran Kranutleie & Byggmont AS	Hordaland	31.01.2012	Compulsory settlement	Company
Vestkran Kranutleie & Byggmont AS	Hordaland	10.02.2015	Compulsory settlement	Company
Vitpro AS	Østfold	10.02.2015	Compulsory settlement	Company
WABA AS	Hedmark	21.12.2009	Voluntary debt settlement	Company
Westberg Jonny	Nord-Trøndelag	17.01.2014	Voluntary debt settlement	Company
Wollbekkgruppen AS	Oslo	23.07.2010	Voluntary debt settlement	Company
Zachariasbryggen AS	Hordaland	27.05.2013	Voluntary debt settlement	Person

Source: Brønnøysund Register Centre.

⁴⁷ Møre og Romsdal.

The following illustration presents the time spent in bankruptcy for the entire sample of companies filing for compulsory and voluntary debt settlement proceedings. The sample documents a large variation in time spent in bankruptcy from a minimum of 0.1 to the longest procedure of 40.6 months. The median and average values are 5.0 and 9.9 months, respectively.

Figure 19: Time-horizon in formal debt settlement proceedings, case-by-case.

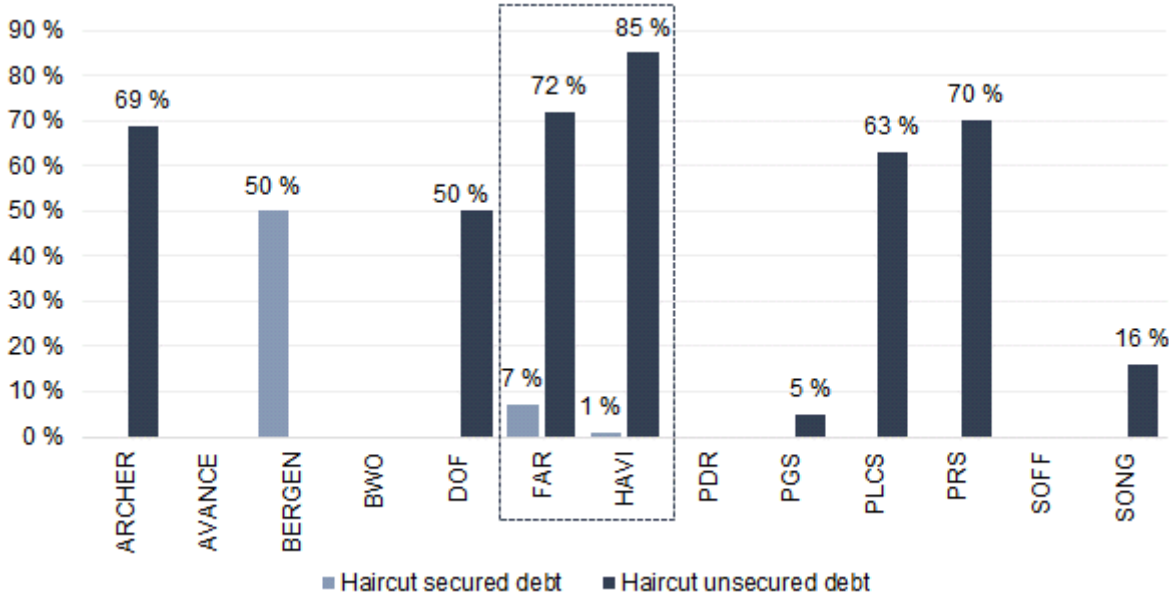


Source: Brønnøysund Register Centre.

Appendix E – Recovery rate specifics

Out of the sub-sample of nine restructurings where the unsecured creditors have converted to equity, there are two cases (FAR and HAVI) of subsequent losses to secured debtholders. As illustrated in Figure 20, even though the unsecured creditors took massive losses they still recovered some value post-restructuring (28% and 15%, respectively). Additionally, pre-restructuring shareholders recovered some, yet minimal, value, which breaches with the APR. In the remaining seven cases (ARCHER, DOF, PDR, PGS, PLCS, PRS and SONG), the secured creditors only amended and extended their terms, and thus, adhered to the seniority profile. Note that unsecured creditors converted in the PDR financial restructuring, however, at a recovery rate of 100%. Thus, it is not highlighted in the Figure.

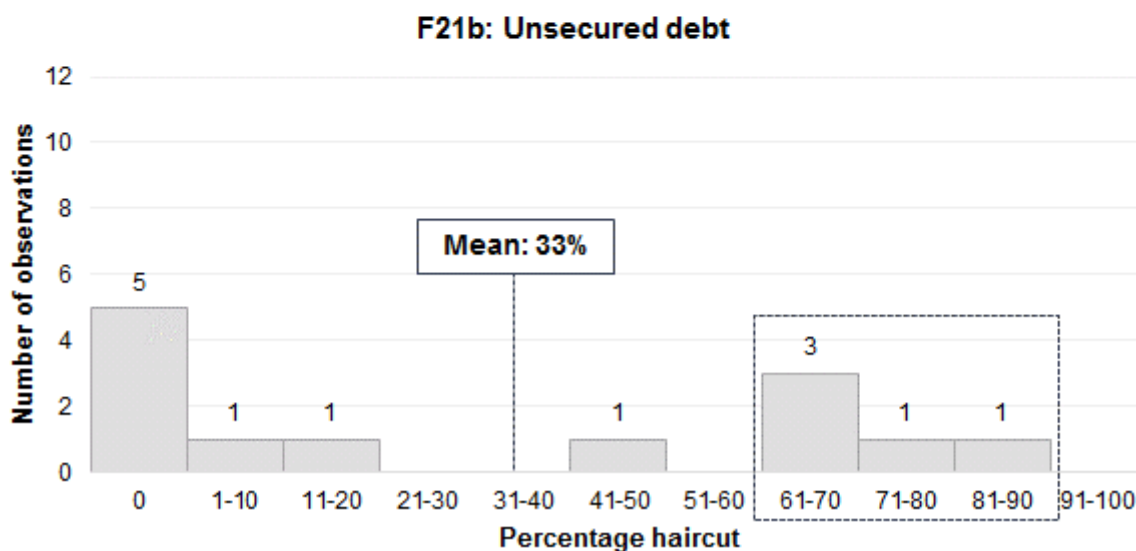
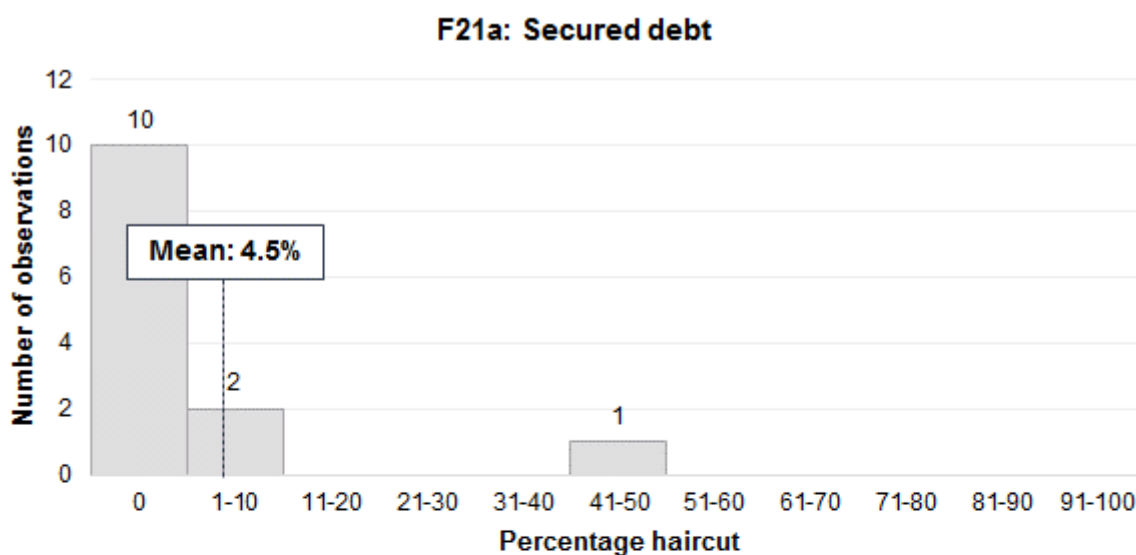
Figure 20: Haircuts in financial restructurings out-of-court, case-by-case.



Source: NewsWeb, company reports, investor presentations and restructuring term sheets.

Figure 21a and 21b provide the distribution of the restructuring cases with respect to the haircuts the respective creditor classes agreed upon. It is evident that the majority of the secured creditors have a recovery rate of 100%, whereas it is the unsecured creditors that have taken haircuts. Most commonly in the range between 60% - 90% of the investment's face value.

Figure 21a and 21b: Frequency distribution of haircuts in financial restructurings out-of-court.



Source: NewsWeb, company reports, investor presentations and restructuring term sheets.

Appendix F – Companies that have initiated out-of-court financial restructurings

Table 7 presents the companies that per 01.04.2017 have officially initiated discussions regarding a financial restructuring, however, have yet to finalize the terms. The sample restrictions are the same as earlier; publicly listed companies at Oslo Børs and Oslo Axess within the energy sector in the time-period 01.01.2015 – 01.04.2017.

Table 7: Companies yet to finalize financial restructurings as of 01.04.2017.

Company name	Ticker	Sector	Res. initiated	Notes
Badger Explorer	BXPL	Oil Service	02.02.2017	
Eidesvik Offshore	EIOF	Offshore	15.03.2017	
EMAS Offshore	EMAS	Offshore	13.12.2016	
Electromagnetic Geoservices	EMGS	Seismic	22.03.2017	
I.M. Skaugen	IMSK	Shipping	05.01.2017	Engaged financial advisors (has already agreed upon amend and extend of covenants).
Oceanteam	OTS	Offshore	20.10.2016	
Seabird Exploration	SBX	Seismic	24.02.2017	Restructured 03.03.2015, and has once again engaged financial advisors (has already agreed upon amend and extend of covenants).
Seadrill	SDRL	Rig	18.05.2016	
Sevan Drilling	SEVDR	Rig	18.05.2016	Subject to restructuring effects as the company is a subsidiary of Seadrill (has already agreed upon amend and extend of covenants).

Source: NewsWeb, company reports, www.hegnar.no, www.dn.no, www.e24.no and www.finansavisen.no.

Table 8: Other notable considerations to companies that have not announced a financial restructuring as of 01.04.2017.

Company name	Ticker	Sector	Res. initiated	Notes
Atlantic Petroleum	ATLA NOK	E&P	NA	Refinanced debt 03.03.2017, however, not considered a financial restructuring.
Deep Sea Supply	DESSC	Offshore	NA	Refinanced in relation with the merger between Solstad Offshore and Farstad Shipping (approved by The Competition Authority 25.04.2017).
Fred Olsen Energy	FOE	Rig	NA	Has changed covenants and repurchased bonds, however, not considered a financial restructuring. FOE is likely to be one of the next companies to restructure with limited contract backlog, old assets, and heavy debt financing.
InterOil Exploration and Production	IOX	E&P	NA	Completed financial restructuring 20.01.2015
MultiClient Geophysical	MCG	Seismic	NA	The company was acquired 30.03.2017 by Geox.
Norwegian Energy Company	NOR	E&P	NA	Initiated a financial restructuring 01.10.2014, which were completed 24.03.2015.
Odfjell Drilling	ODL	Rig	NA	GOLDEN restructured where ODL is a minority shareholder, and therefore not considered in our sample. ODL have also refinanced its debt.
Reach Subsea	REACH	Oil Service	NA	Charter restructuring, however, no financial restructuring.
Sevan Marine	SEVAN	Oil Service	NA	Restructured 28.08.2013
Siem Offshore	SIOFF	Offshore	NA	Has amended covenants, extended runway and secured additional equity, however, not considered a complete financial restructuring.

Source: NewsWeb, company reports, www.hegnar.no, www.dn.no, www.e24.no and www.finansavisen.no.

Appendix G – Case-specific information on completed out-of-court restructurings

The following section contains a single page with details on a specific completed out-of-court financial restructuring. In line with our definition of a financial restructuring, and based on data from primarily www.newsweb.no, we found 13 publicly listed companies that have restructured within the energy sector since 01.01.2015. These companies are:

Table 9: Companies completing a financial restructuring out-of-court in the period of January 2015 – April 2017.

ARCHER	96
AVANCE GAS HOLDING	97
BERGEN GROUP	98
BW OFFSHORE LIMITED	99
DOF	100
FARSTAD SHIPPING	101
HAVILA SHIPPING	102
PETROLIA	103
PETROLEUM GEO_SERVICES	104
POLARCUS	105
PROSAFE	106
SOLSTAD OFFSHORE	107
SONGA OFFSHORE	108

Source: NewsWeb, company reports, investor presentations and restructuring term sheets.



Ticker: ARCHER
Industry: Oil service
Market value: NOK1,730m.
Number of shares: 147,281,887
Restructuring initiated: 20.09.2016
Restructuring completed: 28.02.2017

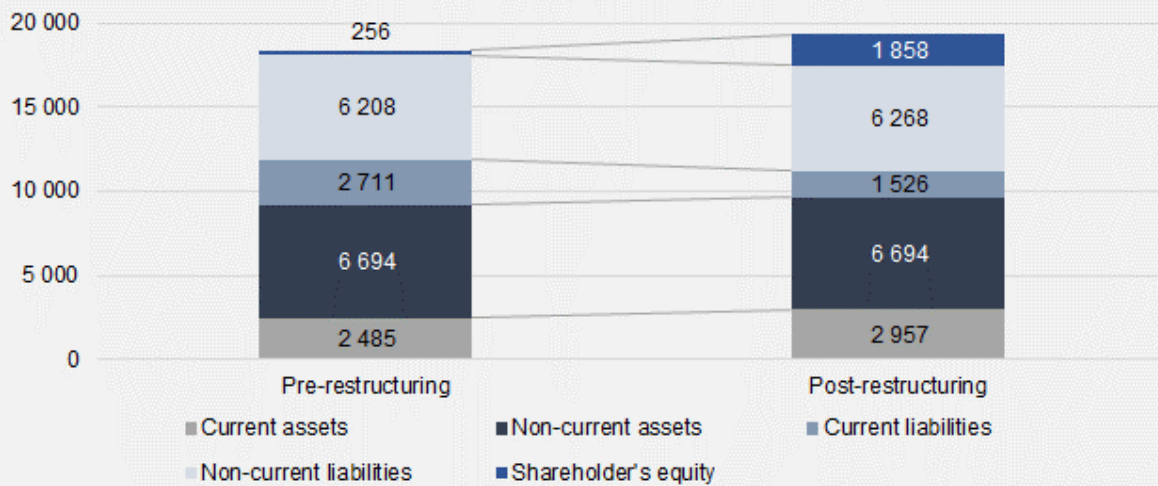
Implemented measures:

- Amend and extend (36 months)
- New equity offering (NOK840m.)
- New loans (NOK476m.)
- Conversion of unsecured debt (31%)

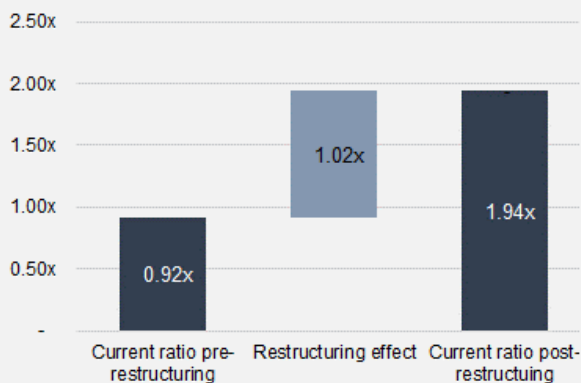
Indexed share price



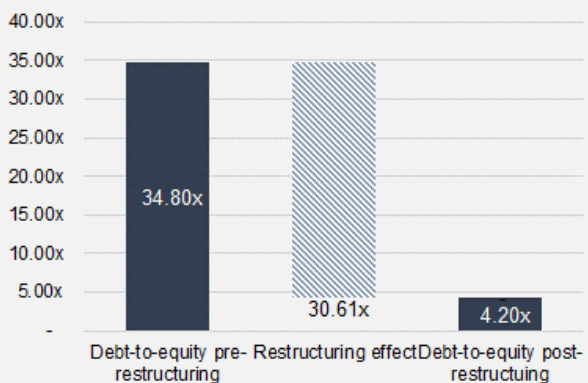
Restructuring effect on capital structure



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



Avance Gas Holding



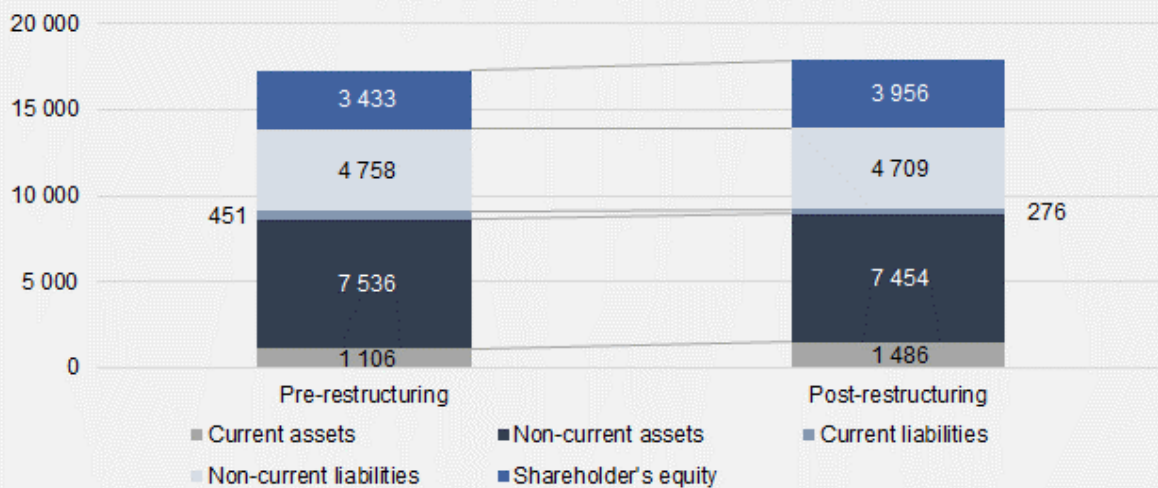
Ticker: AVANCE
 Industry: Shipping
 Market value: NOK1,508m.
 Number of shares: 64,527,972
 Restructuring initiated: 15.03.2016
 Restructuring completed: 20.10.2016

Implemented measures:

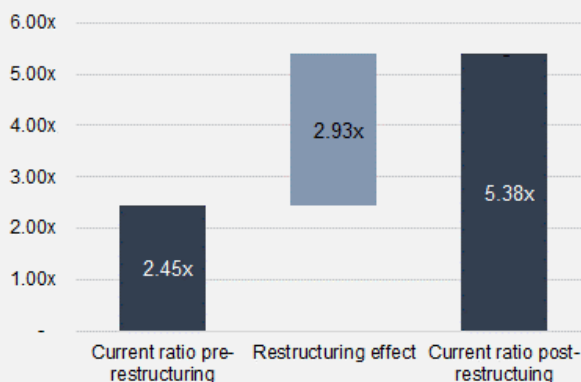
- Amend and extend (30 months)
- New equity offering (NOK455m.)
- New loans (NOK866m.)
- Asset sales / delay in asset delivery



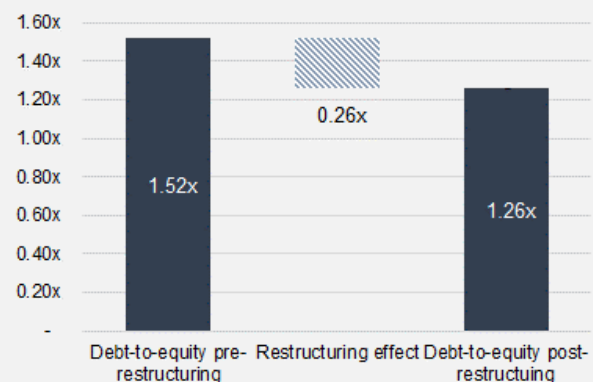
Restructuring effect on capital structure



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



Bergen Group



Ticker: BERGEN
 Industry: Oil service
 Market value: NOK221m.
 Number of shares: 83,416,078
 Restructuring initiated: 26.02.2016
 Restructuring completed: 02.01.2017

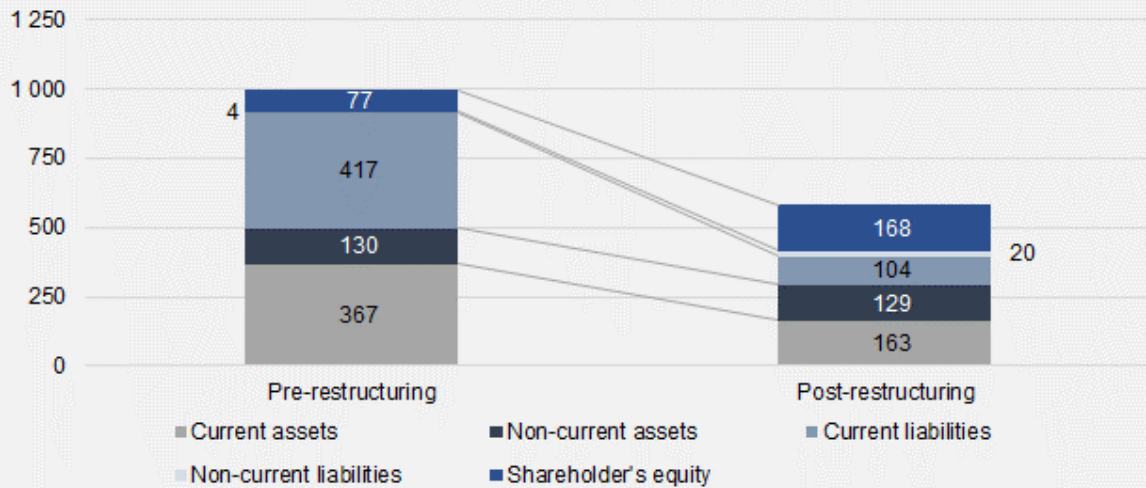
Implemented measures:

- Amend and extend (n.a.)
- New equity offering (NOK27m.)
- New loans (NOK37m.)
- Conversion of secured debt (50%)

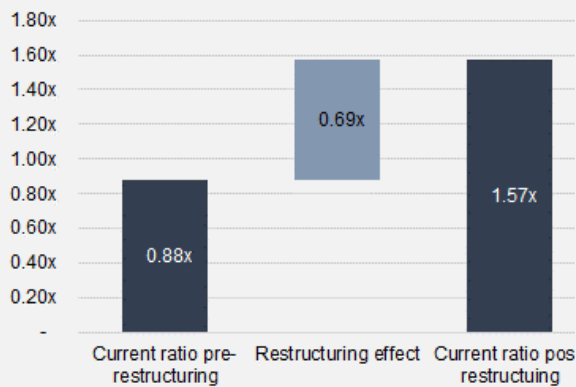
Indexed share price



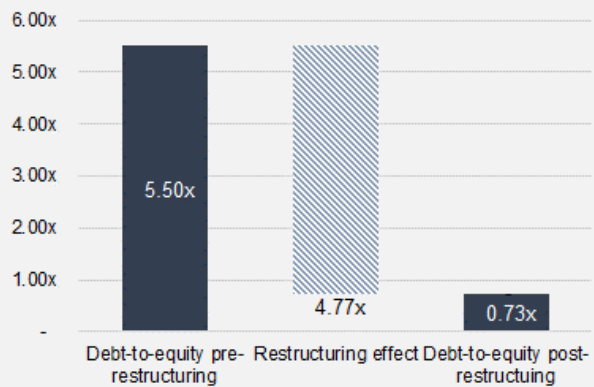
Restructuring effect on capital structure



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



BW Offshore Limited



Ticker: BWO
 Industry: Shipping
 Market value: NOK4,068m.
 Number of shares: 184,956,719
 Restructuring initiated: 08.02.2016
 Restructuring completed: 27.07.2016

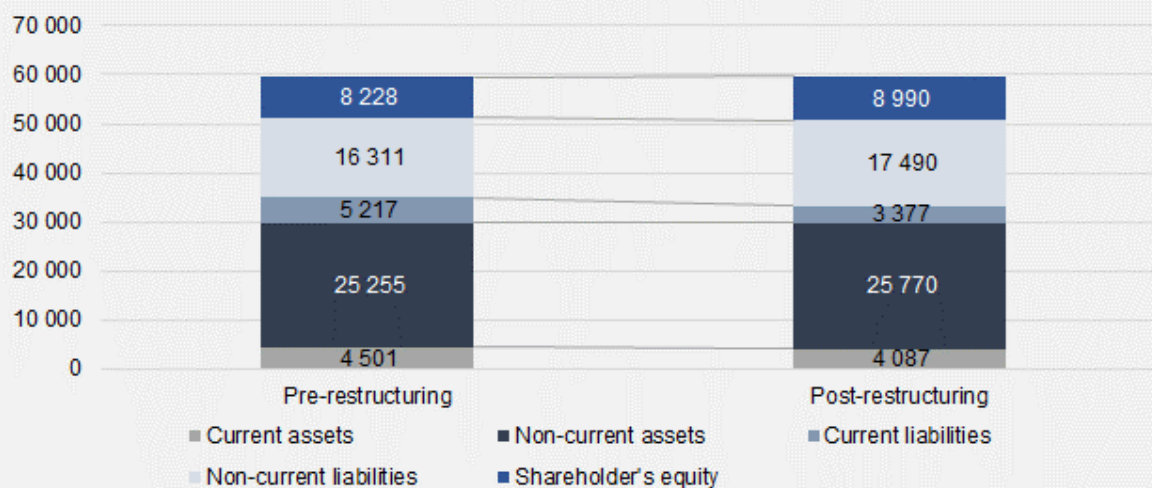
Implemented measures:

- Amend and extend (24 months)
- New equity offering (NOK856m.)

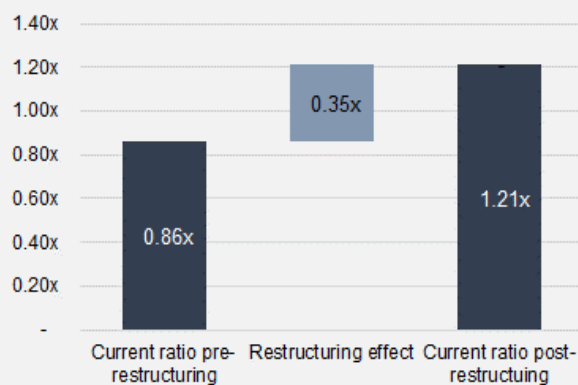
Indexed share price



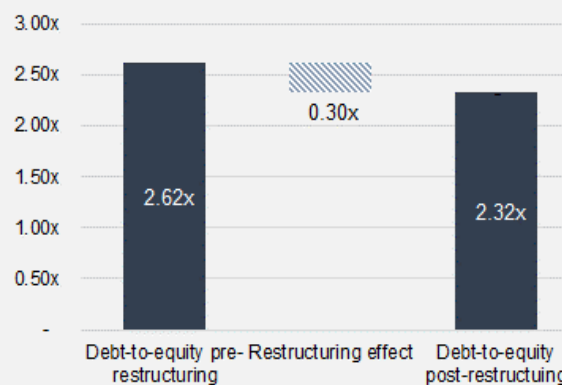
Restructuring effect on capital structure



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio





Ticker: DOF
 Industry: Offshore
 Market value: NOK1,433m.
 Number of shares: 1,629,377,797
 Restructuring initiated: 29.04.2016
 Restructuring completed: 15.07.2016

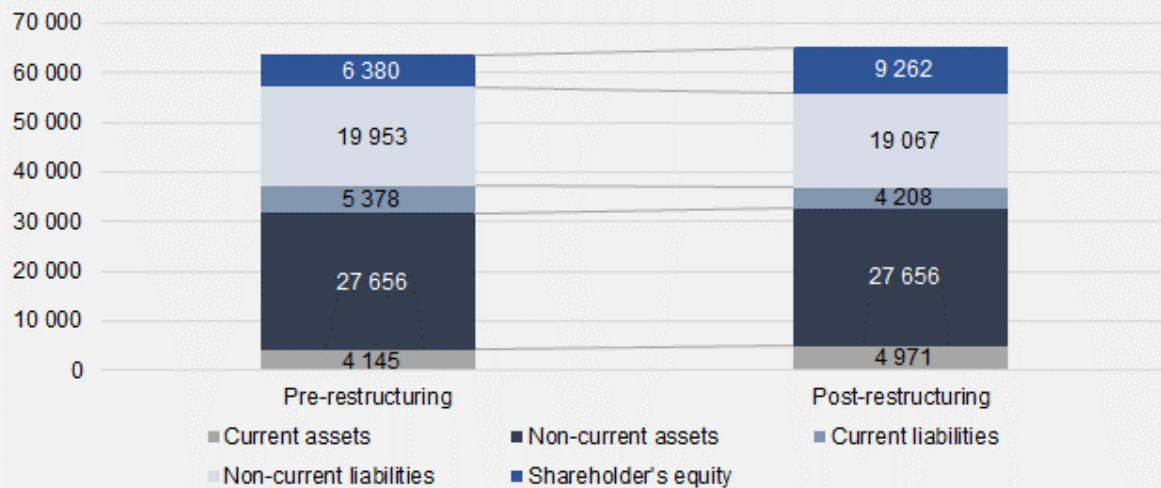
Implemented measures:

- Amend and extend (36 months)
- New equity offering (NOK1,060m.)
- New loans (NOK3,800m.)
- Conversion of unsecured debt (50%)

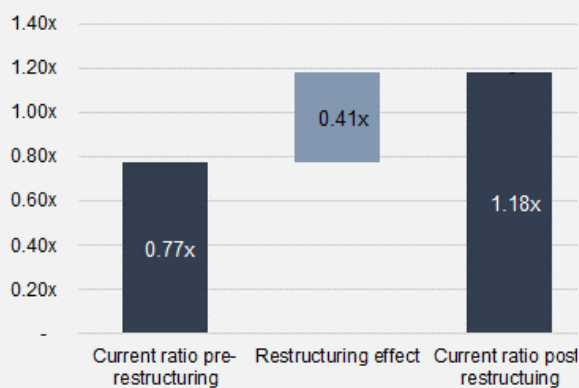
Indexed share price



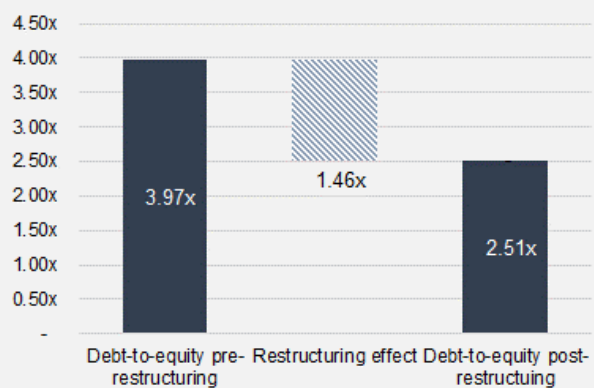
Restructuring effect on capital structure



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



Farstad Shipping



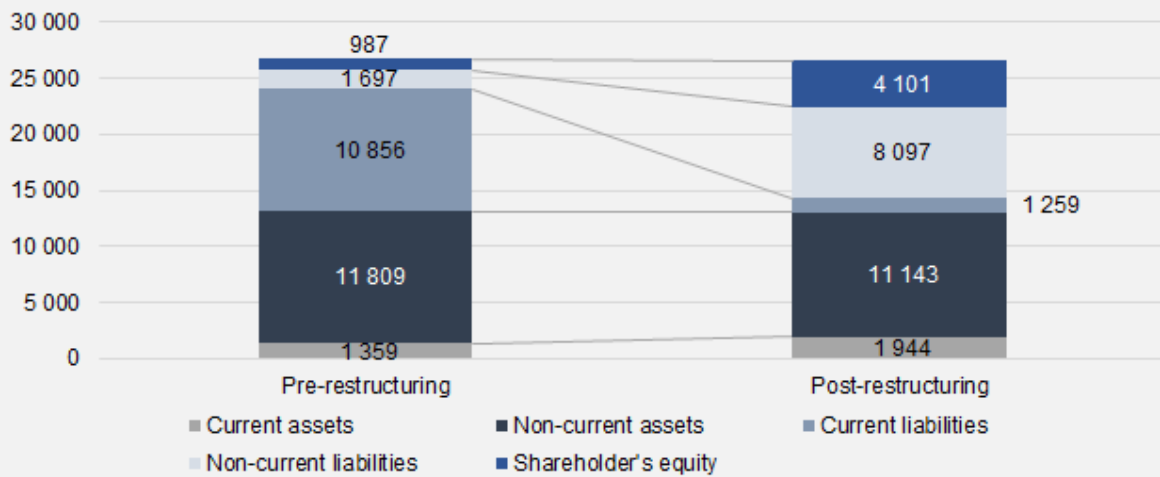
Ticker: FAR
 Industry: Offshore
 Market value: NOK1,605m.
 Number of shares: 4,863,540,679
 Restructuring initiated: 29.02.2016
 Restructuring completed: 09.03.2017

Implemented measures:

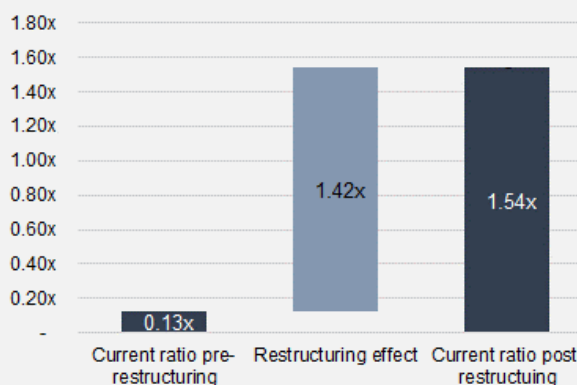
- Amend and extend (48 months)
- New equity offering (NOK650m.)
- Conversion of secured debt (93%)
- Conversion of unsecured debt (28%)
- Asset sales / delay in asset sales



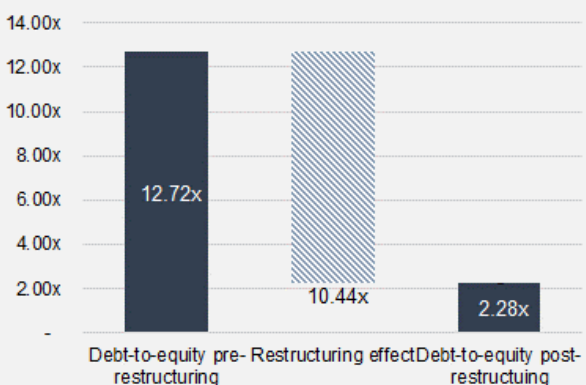
Restructuring effect on capital structure



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



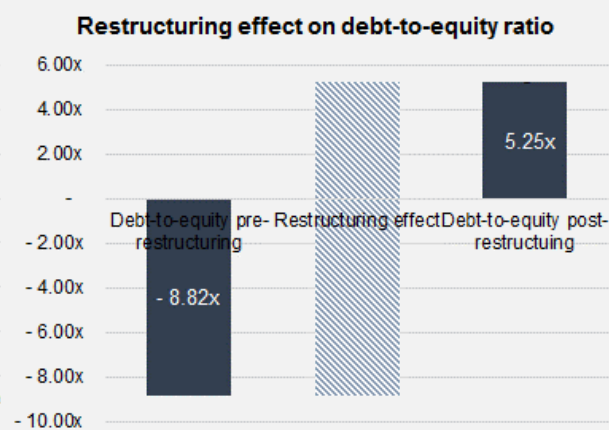
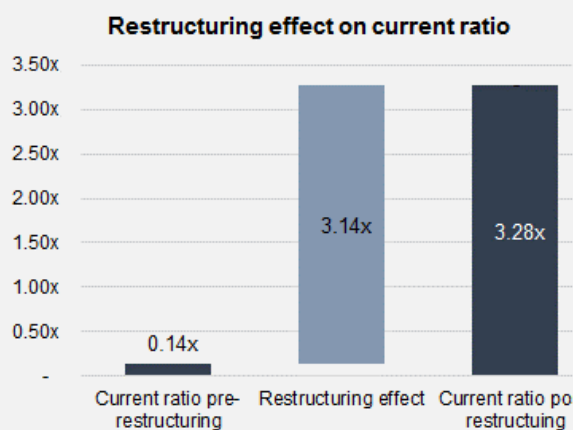
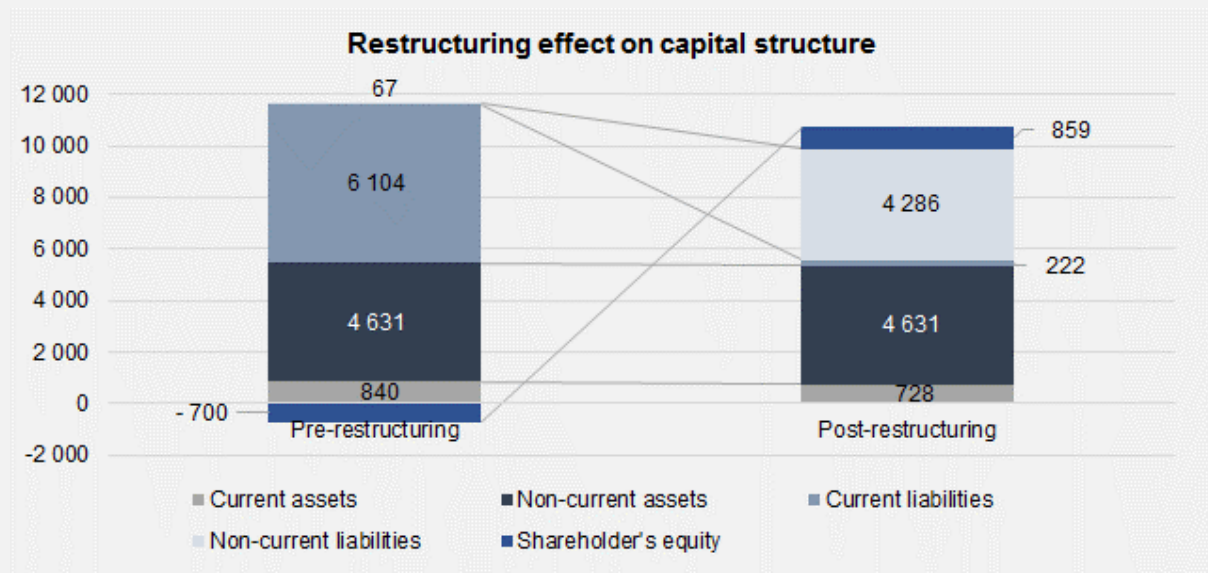
Havila Shipping



Ticker: HAVI
 Industry: Offshore
 Market value: NOK300m.
 Number of shares: 1,766,555,850
 Restructuring initiated: 05.01.2016
 Restructuring completed: 28.02.2017

Implemented measures:

- Amend and extend (48 months)
- New equity offering (NOK164m.)
- New loans (NOK84m.)
- Conversion of secured debt (99%)
- Conversion of unsecured debt (15%)
- Asset sales / delay in asset delivery



Petrolia



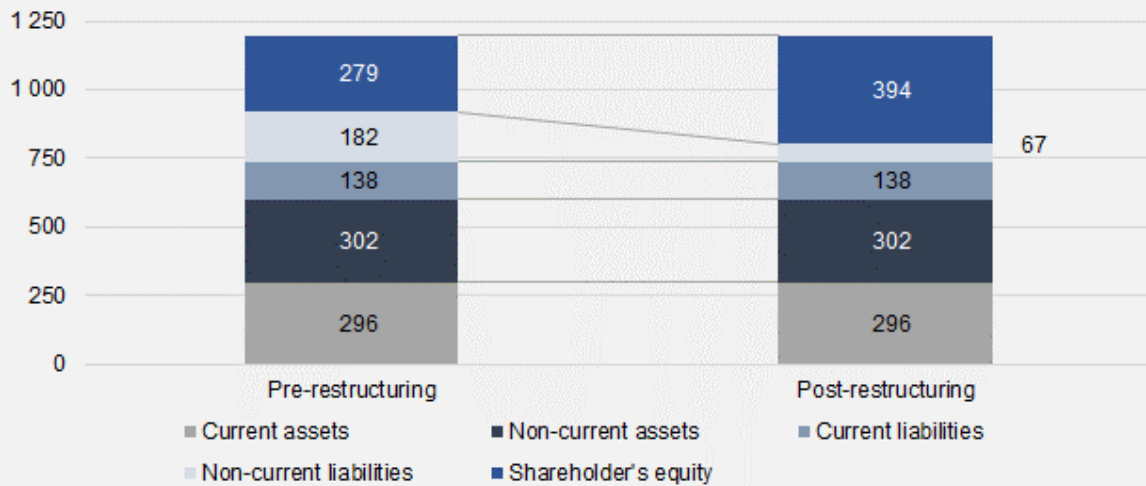
Ticker: PDR
 Industry: E&P
 Market value: NOK209m.
 Number of shares: 53,757,988
 Restructuring initiated: 22.11.2016
 Restructuring completed: 20.01.2017

Implemented measures:

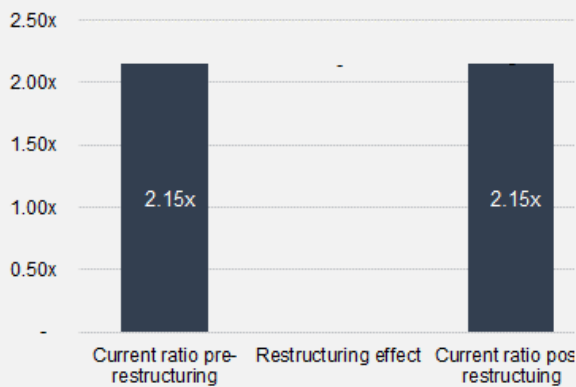
- Conversion of unsecured debt (100%)



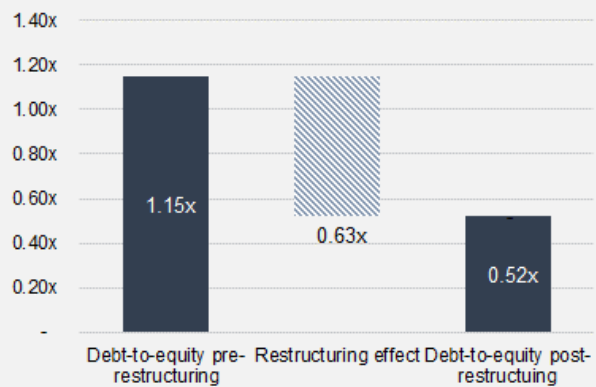
Restructuring effect on capital structure



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



Petroleum Geo-Services



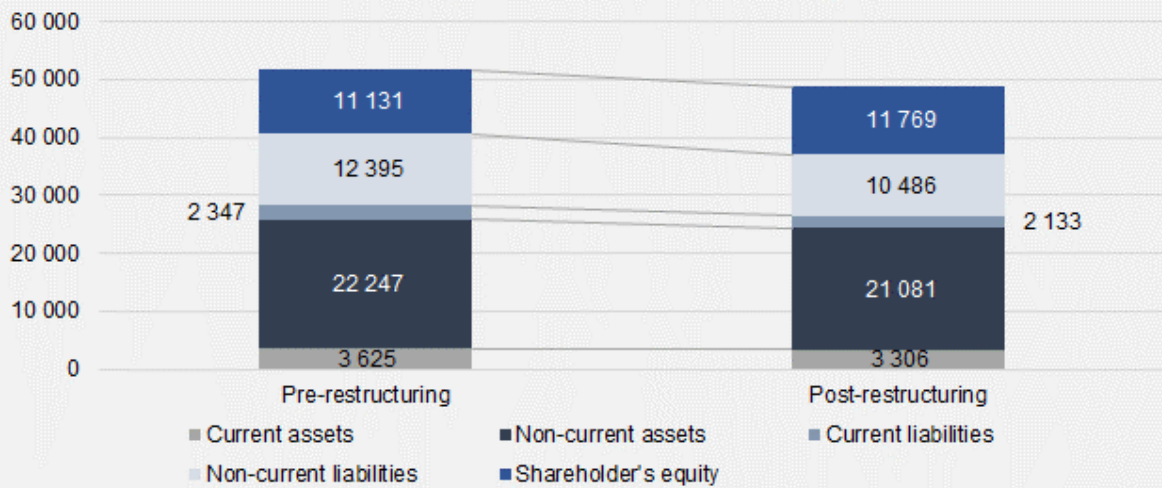
Ticker: PGS
 Industry: Seismic
 Market value: NOK6,258m.
 Number of shares: 338,579,996
 Restructuring initiated: 03.05.2016
 Restructuring completed: 06.01.2017

Implemented measures:

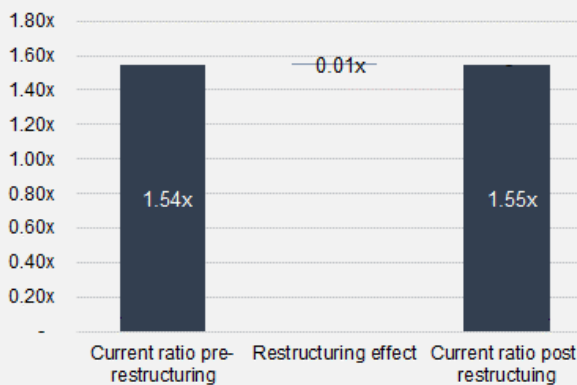
- Amend and extend (24 months)
- New equity offering (NOK2,251m.)
- Conversion of unsecured debt (95%)
- Asset sales / delay in asset delivery



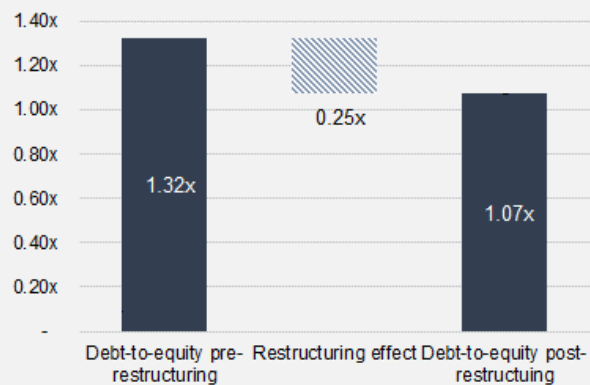
Restructuring effect on capital structure



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio

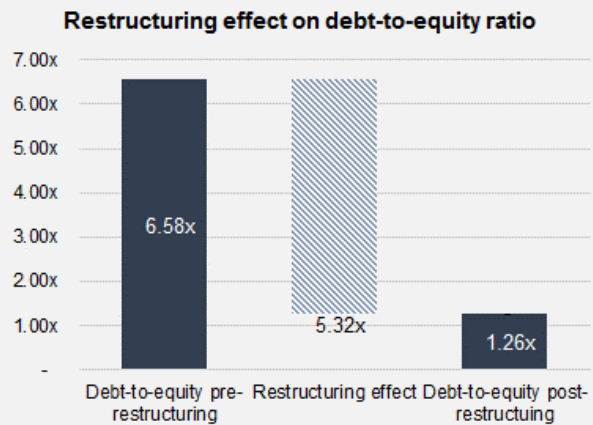
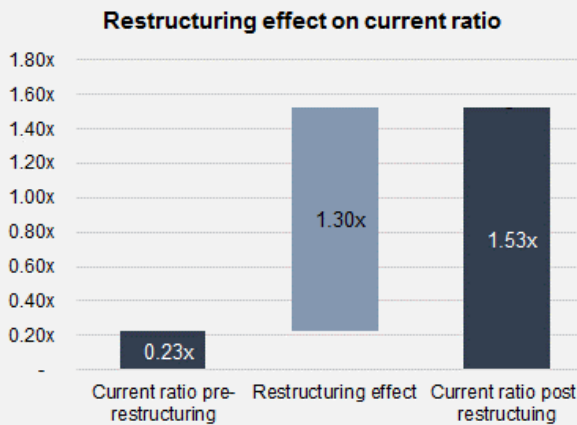
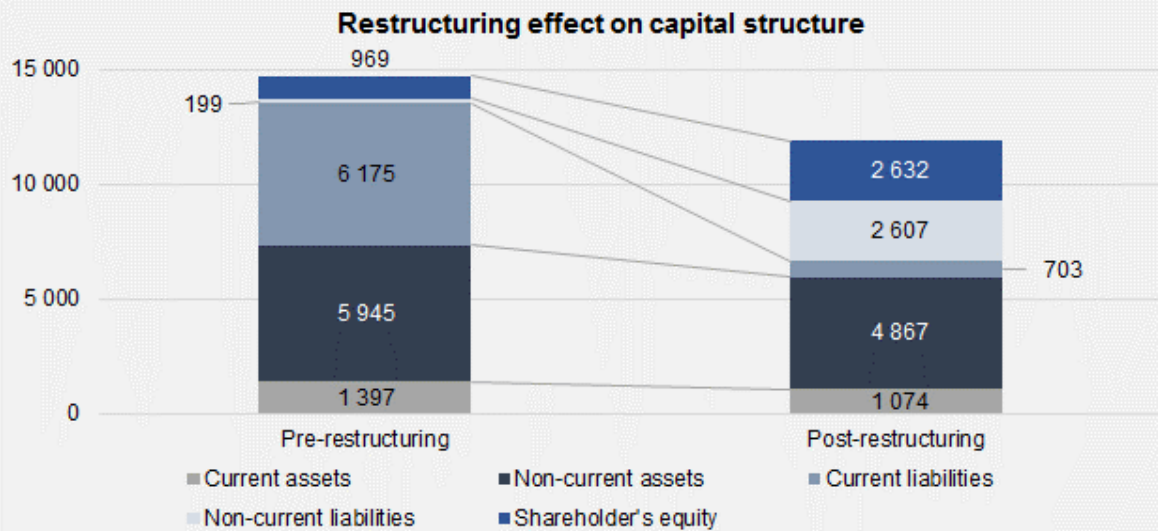
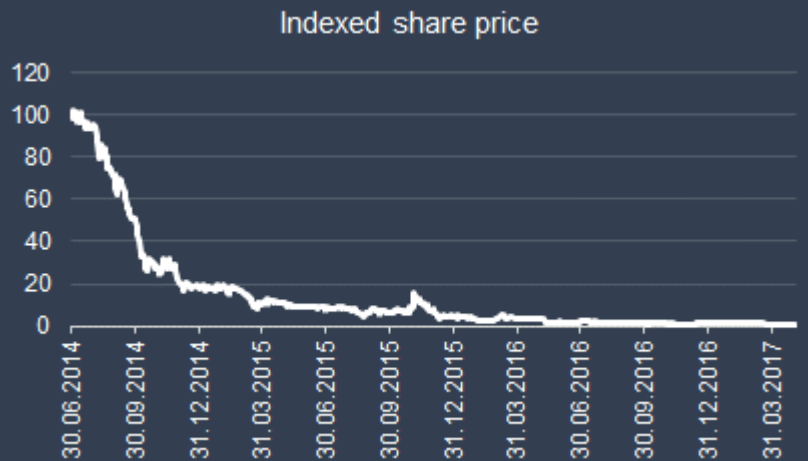




Ticker: PLCS
 Industry: Seismic
 Market value: NOK307m.
 Number of shares: 1,534,385,386
 Restructuring initiated: 25.03.2016
 Restructuring completed: 25.02.2016

Implemented measures:

- Amend and extend (60 months)
- New equity offering (NOK330m.)
- New loans (NOK69m.)
- Conversion of unsecured debt (37%)





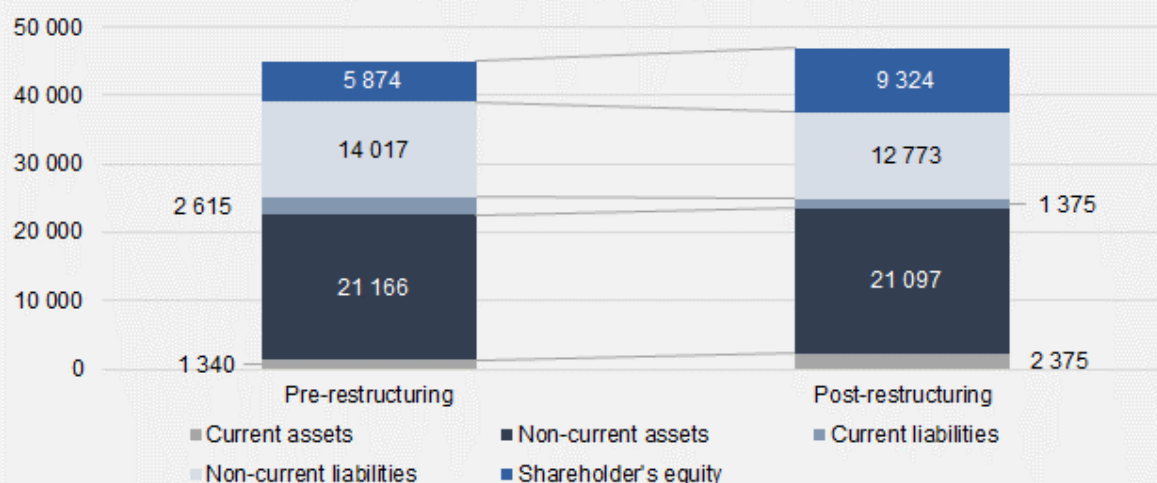
Ticker: PRS
 Industry: Rig
 Market value: NOK2,385m.
 Number of shares: 71,407,009
 Restructuring initiated: 12.05.2016
 Restructuring completed: 09.11.2016

Implemented measures:

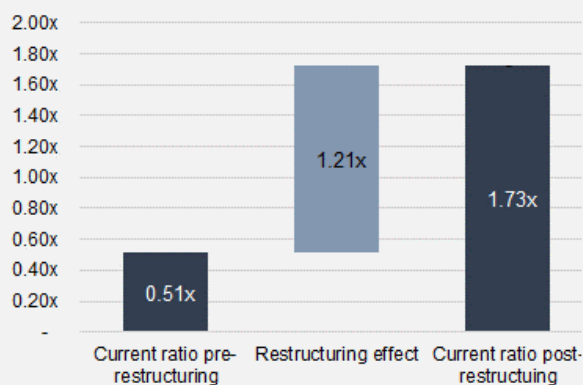
- Amend and extend (48 months)
- New equity offering (NOK1,220m.)
- Conversion of unsecured debt (30%)
- Asset sales / delay in asset delivery



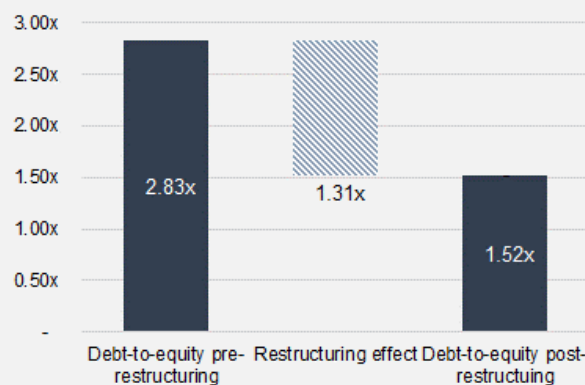
Restructuring effect on capital structure



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



Solstad Offshore



Ticker: SOFF
 Industry: Offshore
 Market value: NOK850m.
 Number of shares: 70,687,377
 Restructuring initiated: 07.06.2016
 Restructuring completed: 14.10.2016

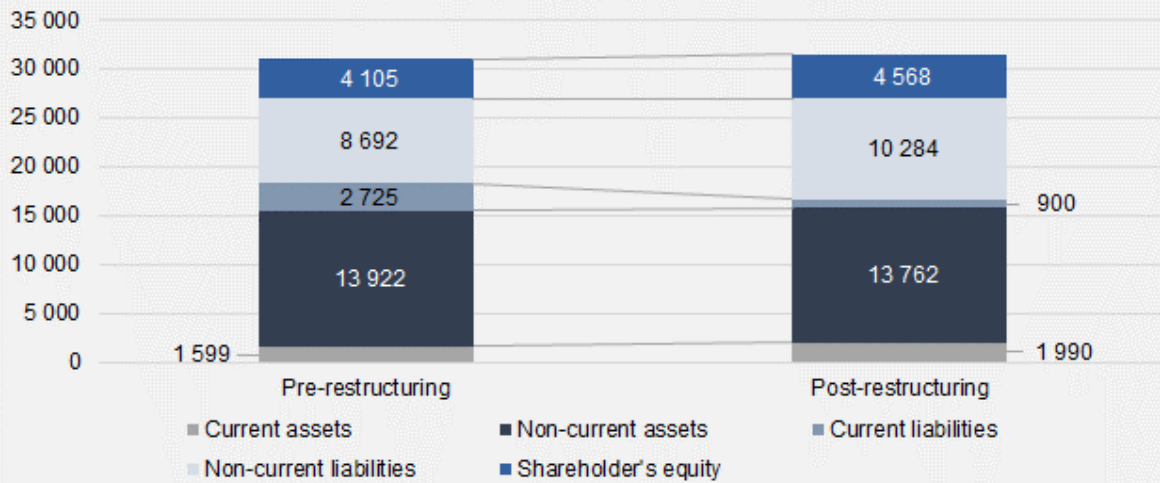
Implemented measures:

- Amend and extend (60 months)
- New equity offering (NOK625m.)
- New loans (NOK250m.)
- Asset sales / delay in asset delivery

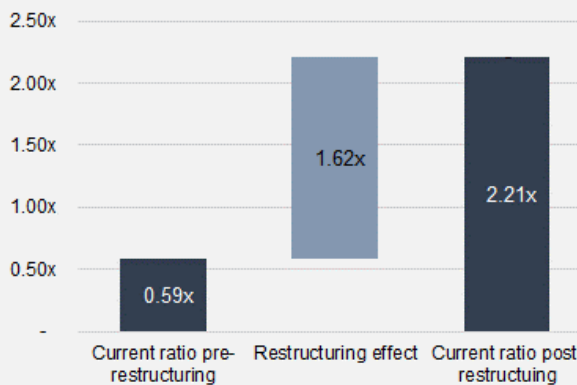
Indexed share price



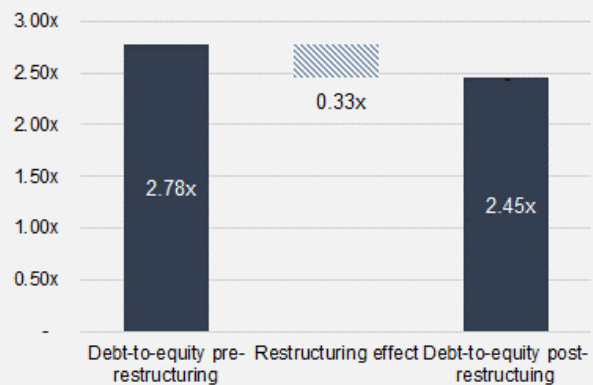
Restructuring effect on capital structure



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio



Songa Offshore



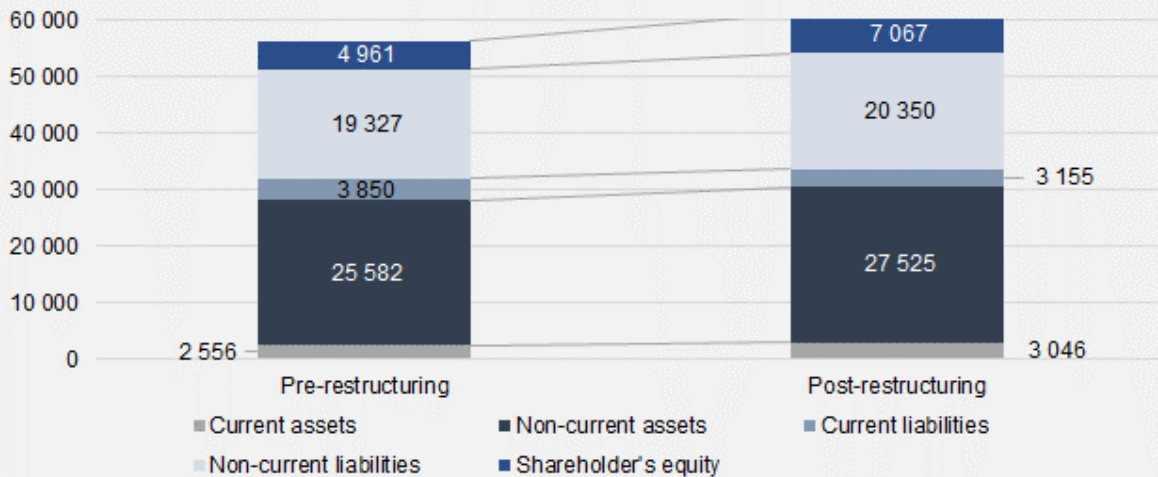
Ticker: SONG
 Industry: Rig
 Market value: NOK3,388m.
 Number of shares: 113,305,512
 Restructuring initiated: 15.03.2016
 Restructuring completed: 23.06.2016

Implemented measures:

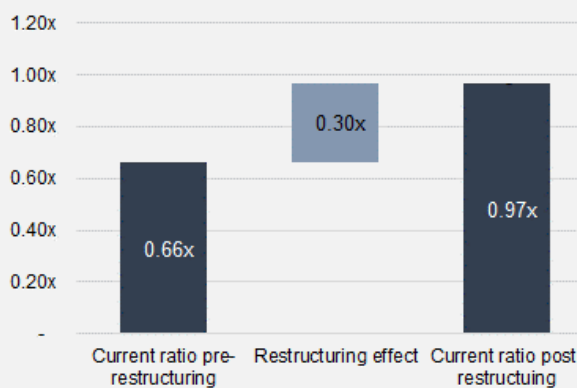
- Amend and extend (30 months)
- New equity offering (NOK213m.)
- New loans (NOK1,082m.)
- Conversion of unsecured debt (84%)



Restructuring effect on capital structure



Restructuring effect on current ratio



Restructuring effect on debt-to-equity ratio

