



Credit Ratings in the Norwegian Investment Grade Corporate Bond Market

A qualitative exploration

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This thesis is written as a part of our Master of Science in Economics and Business Administration at the Norwegian School of Economics (NHH), with specialization in Financial Economics.

Our main goal was to explore the impact of credit ratings in the Norwegian investment grade corporate bond market. It has been of great interest to investigate the topic at this specific point in time. This is because the Norwegian Fund and Asset Management Association (Verdipapirfondenes forening, VFF) has recently announced a specification of their industry standard for fixed income funds stating that VFF Money Market Funds and Fixed Income Funds can only hold a given share of unrated industrial and utility bonds.

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Abstract

The Norwegian bond market is relatively well-functioning despite a low prevalence of credit ratings. In order to define the creditworthiness of issuers, other sources of information have developed. The Norwegian Fund and Asset Management Association (Verdipapirfondenes forening, VFF) has developed an industry standard for fixed income funds to which all members must adhere. The industry standard has previously accepted shadow ratings and information from Nordic Bond Pricing to define the investment universe for fixed income funds. However, a specification of the industry standard was announced in June 2020. The specification states that VFF Money Market Funds and Fixed Income Funds can only hold a maximum share of 10 percent of unrated industrial and utility bonds from July 2022. Hence, there is an increased focus on credit ratings in the Norwegian bond market.

Using qualitative data, we analyze the impact of credit ratings on relevant bond market players. We explore the prevailing perception of credit ratings and the potential outcome of the VFF industry standard specification. The study is restricted to the investment grade corporate segment of the Norwegian bond market, as the specification primarily applies to this market segment. Our findings suggest that issuers benefit from a credit rating in terms of potential lower credit spreads, improved corporate governance, and better access to funding. However, issuers are subject to direct and indirect costs when obtaining a rating. For investors, credit ratings have an informational value and may also impact their investment universes. Credit rating agencies benefit from a growing business when issuers obtain ratings. Moreover, credit rating agencies' analyses of issuers' creditworthiness reduce asymmetric information between issuers and investors. This increases market transparency and may lead to more efficient investment decisions. Additionally, ratings can attract more investors, which eventually can increase market liquidity.

Keywords – Credit ratings, Norwegian bond market, VFF

Contents

1	Introduction	1
2	Theory	3
2.1	Bonds	3
2.1.1	Introduction to bonds	3
2.1.2	The pricing of bonds	3
2.1.3	The risks of bonds	4
2.2	Credit ratings	5
2.2.1	Introduction to credit ratings	5
2.2.2	The rationale for credit ratings	6
2.2.3	The assigning of credit ratings	7
2.2.3.1	Rating process	8
2.2.3.2	Rating methodology	8
2.2.3.3	Rating scale	10
2.2.4	The credit rating industry and regulations	10
3	Context	12
3.1	The Norwegian bond market	12
3.1.1	Introduction to the market	12
3.1.2	The market players	14
3.1.2.1	Issuers	15
3.1.2.2	Investors	15
3.1.2.3	Credit rating agencies	16
3.1.2.4	Brokerage houses	16
3.1.2.5	Trustee	16
3.1.2.6	VFF - Verdipapirfondenes forening	16
3.2	Practices for defining the investment universe	17
3.2.1	Shadow ratings	18
3.2.2	Information from Nordic Bond Pricing	19
3.2.3	Credit ratings	20
4	Methodology	22
4.1	Research design	22
4.1.1	Research method	23
4.1.2	Research approach	23
4.1.3	Research strategy	24
4.2	Data collection	24
4.2.1	Interviews	24
4.2.2	Interview guides	25
4.2.3	Sample	26
4.2.4	The interview process	27
4.2.5	Secondary data collection	28
4.3	Data analysis	29
4.4	Research quality	29
4.4.1	Reliability and validity	29
4.4.1.1	Credibility	30

4.4.1.2	Transferability	30
4.4.1.3	Dependability	30
4.4.1.4	Confirmability	30
4.4.2	Ethical concerns	31
4.4.3	Limitations	31
5	Analysis	33
5.1	Issuer perspective	33
5.1.1	Financial impact	33
5.1.2	Operational impact	35
5.2	Investor perspective	37
5.2.1	Financial impact	37
5.2.2	Operational impact	38
5.3	Credit rating agency perspective	40
5.3.1	Financial impact	40
5.3.2	Operational impact	43
6	Conclusion	46
6.1	Findings and answer to the research question	46
6.2	Limitations of the thesis	51
6.3	Further research	52
	References	53
	Appendix	57
A1	Interview guides	57
A1.1	Rated issuers	57
A1.2	Unrated issuers	58
A1.3	Investors	59
A1.4	Credit rating agencies	60

List of Tables

1.1	VFF: Gradual reduction of maximum share invested in unrated bonds . .	2
2.1	S&P's rating scale	10
3.1	VFF: Gradual reduction of maximum share invested in unrated bonds . .	20
4.1	Data sample	27
6.1	The impact of credit ratings	47

1 Introduction

The Norwegian bond market has grown to become one of Europe's largest and most active bond markets (Nordic Trustee, 2018). There are several explanations to the market growth (M. Wangen, Danske Bank Markets, personal communication, 11th of December 2020). After the financial crisis, regulations for banks became stricter. Consequently, terms and conditions for bank loans have become less attractive to many companies, and hence, more companies have entered the bond market. This involves small and mid-size companies that have previously not sought financing through the bond market (Oslo Børs, nd). The Norwegian bond market facilitates large as well as small transactions and has less comprehensive documentation requirements compared to other international markets (M. Wangen, personal communication, 11th of December 2020). Hence, the Norwegian bond market is available and attractive to a variety of companies.

Credit ratings are assigned by credit rating agencies and indicate the creditworthiness of bond issuers (Sundaresan, 2009). By 2019, only 14 percent of Norwegian bond issuers had received a credit rating (Nordic Credit Rating, 2019). Despite the low prevalence of credit ratings in the Norwegian bond market, the market is well-functioning and relatively efficient (NOU 2018:5, 2018). This can be explained by the previous practice of shadow ratings, which involved that banks and brokerage houses published assessments of issuers' creditworthiness. Shadow ratings served as an important source of information to the market (C. Henriksen, VFF, personal communication, 8th of October 2020). However, shadow ratings were banned by the European Securities and Markets Authority (ESMA) in 2016. Another important source of information is daily prices and indices from Nordic Bond Pricing. In addition, investors conduct their own analyses and are fairly comfortable with issuers (H. Riise-Hanssen, KLP Kapitalforvaltning, personal communication, 15th of October 2020).

The Norwegian Fund and Asset Management Association (Verdipapirfondenes forening, VFF) develops industry standards and recommendations for funds (VFF, 2020a). The industry standard for fixed income funds has always required that VFF funds must invest in rated bonds (C. Henriksen, VFF, personal communication, 8th of October 2020). These bonds must have an investment grade rating. The rating requirement applies to

VFF Money Market Funds and Fixed Income Funds, and not to Other Fixed Income Funds. Due to a low prevalence of credit ratings in the Norwegian bond market, the rating requirement has been operationalized by the use of shadow ratings and information from Nordic Bond Pricing. However, this changed in June 2020 when VFF announced a specification of the industry standard stating that VFF Money Market Funds and Fixed Income Funds can only hold a given share of unrated industrial and utility bonds (VFF, 2020b). The maximum share will gradually decrease, as presented in table 1.1.

Table 1.1: VFF: Gradual reduction of maximum share invested in unrated bonds

Step	From date	Maximum share
1	1.7.2021	30 %
2	1.1.2022	20 %
3	1.7.2022	10 %

As there is a low prevalence of ratings in the Norwegian bond market, the market players may face adjustments in the years to come. Therefore, it is relevant to investigate the impact of credit ratings in the market. This leads to the research question of the thesis:

What is the impact of credit ratings in the Norwegian investment grade corporate bond market?

The research question addresses the impact of credit ratings today and in the future, i.e. after the VFF industry standard specification has taken effect. We apply a qualitative methodology in order to answer the research question and conduct in-depth interviews with bond market players. The thesis focuses on the investment grade corporate bond market, as the VFF industry standard specification primarily applies to this market segment. To investigate the impact of credit ratings, we explore three market perspectives; the issuer perspective, the investor perspective, and the credit rating agency perspective.

The structure of the thesis is as follows: Chapters 2 and 3 present relevant theory and context. Chapter 4 explains the applied methodology and how the data was collected and analyzed. Chapter 5 analyzes the collected data and is structured in financial and operational impact within the three perspectives. The conclusion of the thesis is presented in Chapter 6 and includes a presentation of main findings and answer to the research question. Furthermore, limitations and further research are discussed.

2 Theory

The chapter will provide relevant theory for a broader understanding of bonds and credit ratings. The chapter consists of two main components. Firstly, fundamental elements of bonds are explained. Secondly, an overview of credit ratings is given, and the rationale for ratings and rating practices are explained.

2.1 Bonds

The section presents fundamental elements of bonds, which includes bond characteristics and the pricing and risks of bonds. The purpose is to provide a theoretical understanding of bonds.

2.1.1 Introduction to bonds

A bond is a debt security that represents a loan agreement between an investor (lender) and an issuer (borrower) for a set period of time (Bodie et al., 2018). The investor lends money to the issuer in exchange for regular interest payments. Investors can be funds, insurance companies, and individual investors. Issuers can be corporations, banks, municipalities, and governments. Issuers sell bonds for funding purposes, while investors buy bonds for capital placement and diversification benefits (Markowitz, 1952). When the bond matures, the issuer returns the value of the loan to the investor.

There are different types of bonds. The bond type depends on characteristics given by clauses in the loan agreement (Bodie et al., 2018). These characteristics can be payback structure, seniority in the event of default, issue conditions, options in the loan agreement, floating or fixed payments, and if the bond is secured, i.e. by assets.

2.1.2 The pricing of bonds

According to Merton (1974), the price of a bond will mainly depend on three factors: (1) the required rate of return on risk-free debt, (2) clauses in the loan agreement, and (3) the probability that the issuer will fail to meet its financial obligations. Hence, the bond price compensates the investor for the risk-free investment, the bond characteristics, and

the credit risk associated with the issuer.

There are typically two types of bond payments (Bodie et al., 2018). The interest payments of the loan are called *coupons* and are often paid semiannually. The notional payment of the loan is called *face value*. This amount is usually paid at the maturity of the bond. A bond with no coupon payments, and only a face value, is called a zero-coupon bond. The price P_0 of a coupon bond can be given by the following formula:

$$P_0 = \sum_{t=1}^n \frac{C_t}{(1 + y_t)^t} + \frac{F}{(1 + y_n)^n} \quad (2.1)$$

The formula calculates the price of a bond with a coupon payment of C_t , a face value of F , and a maturity of n years. In the formula, coupons are considered paid annually. The notation y_t is the yield to maturity (YTM) for a zero-coupon bond with a maturity of t years.

The yield to maturity is the bond's internal rate of return (Sundaresan, 2009). The internal rate of return can be perceived as the discount rate when the market price of the bond equals the present value of all future promised payments.

2.1.3 The risks of bonds

The investor holding the bond is exposed to *credit risk* if there is a chance that the issuer will not be able to meet the promised payments, i.e. if the bond defaults (Sundaresan, 2009). If the coupon payment is fixed, the investor is also exposed to *interest rate risk*. The risk is due to that interest rates in the market can increase, which will result in a decreased bond price. In addition, the investor is subject to other risks such as *inflation risk*, *liquidity risk*, *timing risk*, and *event risk*. Given the scope of the thesis, these risks are not further explained.

The credit spread is the spread between the yield to maturity of two bonds that are identical in all other matters, except credit quality (Sundaresan, 2009). The credit spread of a corporate bond can be calculated by subtracting the yield to maturity of a government bond from the yield to maturity of a corporate bond. The yield of the government bond is used as a proxy for the risk-free rate, but NIBOR and swap rates can also be used. The

credit spread can be given by the following formula:

$$\textit{Credit spread} = YTM^{\text{Corporate bond}} - YTM^{\text{Government bond}} \quad (2.2)$$

According to Markowitz' portfolio theory, investors can hold diversified portfolios to reduce risk without reducing the rate of return (Markowitz, 1952). Low rates of return in one of the markets can be compensated by higher rates of return in the other, and hence, there is a diversification effect. This can explain why investors choose to invest in both stocks and bonds, even though bonds historically have had lower rates of return than stocks. Moreover, the diversification effect can also explain why investors choose to invest in bonds with different characteristics or within different sectors.

2.2 Credit ratings

The section presents an introduction to credit ratings. Furthermore, the rationale for credit ratings and the assigning of ratings are explained. The latter is divided into three elements; rating process, rating methodology, and rating scale. Lastly, the credit rating industry and regulations are described. Economic theory is used to provide a deeper understanding of the concepts presented in the section.

2.2.1 Introduction to credit ratings

A credit rating is a measure of a borrower's financial health and indicates the borrower's probability of default (Sundaresan, 2009). Credit ratings are assigned to bond issuers or to individual bonds by credit rating agencies. Normally, credit rating agencies charge issuers for assigning credit ratings. This is referred to as the issuer-pay model. Issuers with low probability of default will typically receive higher credit ratings compared to issuers with high probability of default. As there is higher risk to bonds with high probability of default, low rated bonds will imply higher yield, and vice versa.

When credit rating agencies assign ratings to issuers, the expected loss in the event of default is estimated. The expected loss of default EL can be given by the following formula:

$$EL = PD * (1 - RR) * EAD \quad (2.3)$$

The formula calculates the expected loss of default for a bond with a probability of default PD , a recovery rate RR , and an exposure at default EAD .

Credit ratings can be used to classify bond issuers according to their probability of default (Sundaresan, 2009). Credit ratings are often used to divide bonds into the classes *investment grade* and *non-investment grade*.

2.2.2 The rationale for credit ratings

Asymmetric information is entailed in financial contracts when lenders do not possess the adequate information and control over borrowers' willingness and financial capability to repay debt (Bebczuk, 2003). In other words, a bond issuer may have more information about the default risk than an investor. The concept of asymmetric information was introduced by Georg Akerlof in 1970. By using an example with good cars and bad cars ("lemons"), he illustrated how a knowledge gap between buyers and sellers would eventually result in a decreasing volume of high-quality cars in the market (Akerlof, 1970). The intuition behind this example is transferable to the market for bonds as the creditworthiness of issuers is not directly observable (Standard & Poor's, 2012). An investor will not know if there is high or low risk associated with a bond, and hence, the investor will charge all issuers with the same interest rate. Consequently, the interest rate will be set to a level corresponding to the average risk issuer.

Credit rating agencies assign objective measures of issuers' creditworthiness, and thus, they can help to reduce asymmetric information between issuers and investors (Deb et al., 2011). As ratings provide more and equal information to investors, the market efficiency will improve (Standard & Poor's, 2012). Moreover, credit ratings' reduction of information asymmetries may attract more market players, and hence, the market liquidity may increase. Given the fact that credit rating agencies contribute to reduce asymmetric information in bond transactions, they function as a solution to the classic "market for lemons" problem (Coffe, 2006). In line with the theory of asymmetric information, credit ratings have implications for credit spreads at which the corresponding bonds trade. A study by Güntay and Hackbarth (2010) suggests that there is a significant negative association between ratings and credit spreads. More specifically, a negative change in the credit rating will result in a gradual increase in the credit spread.

However, other studies conclude that bond prices adjust before, and not after, the announcement of credit rating changes (Weinstein, 1977). This is in accordance with research suggesting that credit rating agencies follow investors' opinion rather than leading it (Boot et al., 2006). These findings may sow doubt about the effect of credit ratings. Although there are opposing findings regarding the effect of ratings on credit spreads, ratings provide an informational service to the market (Ederington et al., 1987). A credit rating assessment gathers public information about the issuer, such that it is easily available to investors. The process of gathering relevant information may be less costly for a credit rating agency than for investors individually. Furthermore, credit rating agencies can gain access to non-public information about issuers. In other words, the rating assessment is based on both public and non-public information (Jorion et al., 2005). This suggests that credit ratings can reflect all relevant information.

The fact that issuers are willing to have their debt rated suggests that ratings will provide new information to the market (Ederington et al., 1987). This implies that issuers can signal positive future prospects by obtaining a credit rating. This is in line with signaling theory, which describes behavior in a situation where two parties have different information (Connelly et al., 2011). The theory is applicable to describe a situation where the obtaining of a credit rating may signal that the issuer perceives its creditworthiness to be better than the prevailing market perception, and vice versa. This can provide valuable information to the investor, and hence, the signaling effect can reduce asymmetric information in the market. Moreover, the effect of a credit rating may be larger when investor perceptions are divergent and uncoordinated (Boot et al., 2006). This suggests that the effect of receiving a credit rating will be considerably larger for an issuer that investors perceive differently, or for an issuer that operates between different rating classes.

2.2.3 The assigning of credit ratings

The section presents the rating process, methodology, and scale. The descriptions are based on an interview with Magnus Nystedt, Director, Business Development, Nordic and Baltic Region at S&P (personal communication, 6th of November 2020). As S&P is considered to be the worldwide largest credit rating agency, it is of great interest to present their rating activities.

2.2.3.1 Rating process

Credit rating agencies differ in terms of the process of assigning credit ratings. However, there are clear similarities across different agencies. The rating process starts after contact between the issuer and the credit rating agency has been established. Firstly, the issuer participates in meetings with the credit rating agency in order to understand what the process entails. If the issuer wants to proceed with the process, a contractual agreement is signed between the two parties. Secondly, analysts from the credit rating agency conduct analyses to assess the creditworthiness of the issuer. An important part of this process is the meeting between the analysts and senior management of the company, to discuss the operations and performance of the company and market development. The information for the analyses is provided by the issuer or retrieved from publicly available sources. The rating methodology for the analyses is presented below. Thirdly, the credit rating agency gathers a rating committee, and the committee discusses the analysis and recommendation and ultimately decides on the final credit rating. Fourthly, the credit rating is presented to the issuer, and the issuer can decide on whether to publish the rating or keep it confidential. After this point, the credit rating agency's surveillance of the issuer will begin. This means that the credit rating agency can upgrade or downgrade the rating when there are changes to the issuer or to the market. In other words, the credit rating agency has a monitoring role (Boot et al., 2006). This may have implications for the issuer's actions. Once the credit rating is published, it will likely affect the issuer's funding costs (Sundaresan, 2009). The contract between the issuer and the credit rating agency can be terminated whenever the issuer no longer wants to continue with the agreement.

2.2.3.2 Rating methodology

The credit rating agency S&P has different methodologies for bonds within different sectors. In accordance with the scope of the thesis, the rating methodology for industrial and utility bond issuers is presented. The methodology is divided into two main components; business risk profile and financial risk profile. In addition, the rating will be affected by certain modifiers.

Business risk profile

The business risk profile involves risk related aspects of the issuer, such as country risk, industry risk and competitive position. Country risk depends on the riskiness of operating in a certain country. For companies operating in Norway or any other Nordic country, the country risk is set to the lowest level. The industry risk reflects the credit rating agency's assessment of the specific sector in which the company operates. This assessment will be based on several criteria for each specific sector. The competitive position is the most important component in the credit rating assessment. This component is based on company characteristics such as diversification, size, and competitive landscape. The credit rating is forward-looking and based on discussions with management regarding today's position and future changes.

Financial risk profile

The financial risk profile of a company is based on an analysis of quantitative measures. S&P uses six different financial ratios. There are two core ratios; funds from operations (FFO) to debt, and debt to EBITDA. Additionally, there are four supplemental ratios. The financial ratios are used in order to analyze a period over five years, whereas year 1 and 2 are historical years, year 3 is current year, and year 4 and 5 are forward-looking years. For the forward-looking years, a forecast is created based on the rating agency's assumptions for the future. Given the fact that the credit rating assessment should be forward-looking, the last three years are the most important.

Modifiers

By combining an issuer's business risk and financial risk profile, S&P creates an anchor rating. The anchor rating can be further modified by what is called modifiers. These are factors that are not yet taken into account in the analyses. There are six such modifiers, which include liquidity, financial policy, and management/governance. When the modifiers are taken into account, a stand-alone credit rating can be developed. The last step of the process is to evaluate if there is some sort of support from the owners. After this is considered, the credit rating is finalized.

2.2.3.3 Rating scale

Most credit rating agencies use similar rating scales (Sundaresan, 2009). The agencies assign letters to issuers as measures of their creditworthiness. The scale typically goes from AAA to D. There is an inverse relationship between the credit rating assigned and the likelihood of default. S&P's rating scale is presented in table 2.1.

Table 2.1: S&P's rating scale

AAA	AA	A	BBB	BB	B	CCC	CC	C	D
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The rating AAA indicates minimum credit risk and is the highest rating (S&P, 2014). Bond issuers with ratings from AAA to BBB are classified as investment grade, and these have adequate or strong capacity to meet financial obligations. Issuers and bonds with ratings between BB and CC are classified as non-investment grade, and these are less capable of meeting their financial obligations. Non-investment grade bonds are often referred to as high yield, speculative grade, or junk bonds. The rating C typically indicates default and a low recovery rate. The rating D indicates general default, and hence, the issuer will not manage to meet any financial obligations. The ratings can be further refined by assigning additional signs or numbers. S&P uses plus (+) and minus (-) for ratings AA to CCC when it is necessary to show relative standing within the ratings.

2.2.4 The credit rating industry and regulations

Credit rating agencies assign first-time credit ratings to issuers and update the ratings when there are changes affecting the financial health of the issuers (Sundaresan, 2009). There is a wide range of agencies offering such services. The three major credit rating agencies are S&P, Moody's and Fitch. In addition to the three dominating agencies, new credit rating agencies have entered the Norwegian bond market (C. Henriksen, VFF, personal communication, 8th of October 2020). These are Scope Ratings and Nordic Credit Rating, which were established in Norway after the ban of shadow ratings.

Until the 1970s, credit rating agencies facilitated an investor-pay model (Deb and Murphy, 2009). This involved that investors paid for subscriptions to rating releases from credit

rating agencies. However, photocopiers eventually made rating releases available to non-subscribers, and hence, a free-rider problem evolved. Due to this problem, credit rating agencies changed to the issuer-pay model. This is the model used by most credit rating agencies today. The issuer-pay model involves that credit rating agencies receive payments from issuers for providing their opinion of issuers' creditworthiness (S&P, nd).

The free-rider problem disappeared when credit rating agencies switched from the investor-pay model to the issuer-pay model. However, the issuer-pay model introduced a new problem; conflicts of interest (Deb and Murphy, 2009). A conflict of interest occurs when an individual or organization involved in a transaction can gain by taking actions that adversely work against the counter party (Mehrana and Stultz, 2007). The issuer-pay model implies such a conflict, as the income source for the agencies is rating fees coming from issuers that the agencies should impartially rate (Deb and Murphy, 2009). This may lead agencies to assign better ratings than what is fundamentally correct, i.e. inflated ratings. Inflated ratings were a problem prior to the subprime crisis, as rating agencies assigned too optimistic ratings to tranches of mortgage backed securities (Rom, 2009). This was one of the factors leading up to the collapse of the financial markets in 2008.

Another aspect of the issuer-pay model is that it contributes to establishment of long-term relationships between credit rating agencies and issuers (Deb and Murphy, 2009). On the one hand, a long-term relationship can cause further incentives to assign inflated ratings. This has negative implications for the rating industry and other market players. On the other hand, a long-term relationship between the rating agency and the issuer may have positive implications. The issuer-pay model facilitates a connection between the agency and the issuer, which can increase the flow of non-public information (Bonsall IV, 2014).

Credit rating agencies need certification to perform rating activities and must follow strict regulations. In Norway, credit rating agencies are regulated by the European Securities and Markets Authority (ESMA) (The European Parliament and the Council of the European Union, 2011). ESMA was established in 2011 as a reaction to the subprime crisis and is an independent EU authority. The purpose of ESMA's work is to enhance stability and order in financial markets, as well as protect investors. ESMA has developed credit rating agency regulations, which point out how credit rating activities should be conducted with focus on transparency, integrity, responsibility, independence and good governance.

3 Context

The chapter will present relevant information about the Norwegian bond market. Firstly, an overview of the Norwegian bond market is given. This includes a description of important market characteristics and an introduction to market players. Secondly, VFF-approved practices for defining the investment universe for fixed income funds are explained. While previous practices have accepted shadow ratings and information from Nordic Bond Pricing for this matter, a recent VFF industry standard specification points to credit ratings as the appropriate tool to define the investment universe.

3.1 The Norwegian bond market

The section gives an introduction to the Norwegian bond market and important players in the market. The players include issuers, investors, credit rating agencies, brokerage houses, trustee, and the Norwegian Fund and Asset Management Association (Verdipapirfondenes forening, VFF).

3.1.1 Introduction to the market

In 2018, the Norwegian bond market had outstanding bonds worth of NOK 2,060bn (Nordic Trustee, 2018). This included NOK 1,031bn issued by financial institutions, NOK 529bn issued by the public sector, and NOK 500bn issued by corporations. This equals 50 percent issued by financial institutions, 26 percent issued by the public sector, and 24 percent issued by corporations. In total, there were 2,800 bonds outstanding in the Norwegian bond market in 2018. In accordance with the numbers, the Norwegian bond market is dominated by financial institutions as issuers. The market for Norwegian government bonds is smaller than in other countries of the same size, as the Norwegian state has limited need for funding (NOU 2018:5, 2018). The issued volume of corporate bonds is equally divided between investment grade and high yield bonds, i.e. 12 percent in each class (Nordic Trustee, 2019). In other words, the investment grade corporate bond segment constitutes 12 percent of the Norwegian bond market.

The Norwegian bond market is one of Europe's largest and most active markets (Nordic Trustee, 2018). The Norwegian bond market facilitates small as well as large transactions

(M. Wangen, Danske Bank Markets, personal communication, 11th of December 2020). Moreover, the market has less comprehensive documentation requirements than most international markets. Additionally, the Norwegian bond market has experienced growth as an alternative to traditional bank loans, as capital requirements for banks have increased after the financial crisis. Consequently, more corporations have sought financing through the bond market. A report by Oslo Børs suggests that the Norwegian bond market is a mature market with great experience and knowledge of capital raising, especially within the high yield segment (Oslo Børs, nd). This is because the Norwegian business environment is characterized by capital intensive sectors such as energy and maritime activities. In addition, Norwegian brokerage houses' broad competence and placement ability within these sectors have attracted a significant share of foreign investors.

Bond issuers in the Norwegian bond market can choose between two marketplaces; Oslo Børs and the Nordic Alternative Bond Market (ABM) (Oslo Børs, nd). Oslo Børs started with bond trading in 1881 and is the traditional marketplace for listing and trading of securities. Nordic ABM was established in 2005 as an alternative for listing and trading of fixed income securities, and the marketplace is owned by Oslo Børs. The listing process for bonds differs between the two marketplaces. The listing of bonds at Oslo Børs involves preparing a prospectus, and the bonds must be approved by the Financial Supervisory Authority of Norway. Nordic ABM is a self-regulated marketplace that offers a less comprehensive listing process for issuers because of simplified prospectus obligations and less strict documentation requirements (NOU 2018:5, 2018). This may have improved smaller issuers' access to the bond market.

Bond trades in the Norwegian market occurs in the public market; Oslo Børs or Nordic ABM, or outside the exchange system; in over-the-counter (OTC) markets (Ødegaard, 2017). Public trades occur in the primary or the secondary market. Bonds are initially issued in the primary market, and then traded to other investors in the secondary market. However, most trades are conducted over-the-counter, which implies that investors engage in deals with each other through informal networks.

A survey conducted by Norges Bank in 2016 suggests that the players in the Norwegian market consider the market liquidity to be average or above average (NOU 2018:5, 2018). According to the NOU report, increased securitization will increase the outstanding bond

volume. A growing bond market will consequently lead to more trades in the secondary market, and thus, a more liquid market. This will further make bond issuance more attractive as a funding source, which can improve the market efficiency.

The prevalence of credit ratings in the Norwegian bond market is low compared to other international bond markets. According to a report published by Nordic Credit Rating in 2019, 67 out of a total of 479 issuers in the Norwegian bond market were rated (Nordic Credit Rating, 2019). This equals approximately 14 percent. In comparison, approximately 34 percent of issuers in the Swedish bond market were rated. In the Danish bond market, approximately 33 percent of issuers were rated. Despite a low share of rated bonds in the Norwegian bond market, approximately 50 percent of the outstanding bond volume is rated. This implies that rated issuers in the Norwegian bond market have significantly larger outstanding bond volumes compared to unrated issuers. In fact, the average outstanding bond volume of rated issuers is approximately 10 times larger than of unrated issuers.

There are several explanations to the low prevalence of credit ratings in the Norwegian bond market. Firstly, bond issuers are small on an international scale (NOU 2018:5, 2018). According to the NOU report, the small size of Norwegian issuers may have a negative effect on credit rating agencies' assessments of their creditworthiness. Secondly, there has been other information sources available for investors in the Norwegian bond market. Until 2016, banks and brokerage houses developed unofficial ratings, i.e. shadow ratings. Shadow ratings contributed to a well-functioning market (Finans Norge, 2016). Additionally, Nordic Bond Pricing delivers independent pricing services for bonds in the Norwegian bond market (Nordic Bond Pricing, nd). Nordic Bond Pricing has been established as many market players are in need of objective price estimates for regularly valuating bonds.

3.1.2 The market players

The players in the Norwegian bond market include issuers, investors, credit rating agencies, brokerage houses, trustee, and the Norwegian Fund and Asset Management Association (Verdipapirfondenes forening, VFF). They have all important roles in the market. However, the focus of the thesis is primarily on issuers, investors and credit rating agencies in the

investment grade corporate bond market.

3.1.2.1 Issuers

Corporations issue bonds in order to finance projects and investments (Sundaresan, 2009). Corporate bonds have higher credit risk, and thus, higher coupon payments than bonds with lower credit risk (Elton et al., 2001). According to Nordic Trustee's report on the Nordic corporate bond market, the outstanding volume in the Norwegian corporate investment grade bond market was NOK 238bn in 2019 (Nordic Trustee, 2019). During 2019, there were 71 new bond issues with a total volume of NOK 31bn. The four largest sectors in the Norwegian investment grade bond market were real estate, utilities, industry and transportation.

Credit ratings are important in relation to corporate bonds because there is a negative correlation between ratings and funding costs (Sundaresan, 2009). Hence, a low credit rating implies higher funding costs (Elton et al., 2001). In Norway, it is common that credit ratings are assigned to bond issuers and not to individual bonds. According to Stamdata, 19 issuers in the Norwegian investment grade corporate bond market were rated by December 2020.

3.1.2.2 Investors

The investor base in the Norwegian bond market is dominated by large and professional players (Oslo Børs, 2007). These are primarily banks and insurance companies. Many investors in the Norwegian bond market are members of the Norwegian Fund and Asset Management Association (Verdipapirfondenes forening, VFF). The largest VFF funds are DNB Asset Management, Storebrand Asset Management, KLP Kapitalforvaltning, Alfred Berg Kapitalforvaltning, and Nordea Funds (VFF, 2019). Folketrygdfondet is also an important investment fund in the Norwegian bond market (J. Krog Sæbø, Folketrygdfondet, personal communication 15th of October 2020). In addition, smaller investors, as well as foreign investors, participate in the bond market. In 2019, foreign investors owned 37.5 percent of bonds at Oslo Børs (Oslo Børs, 2020). The share of foreign investors has more than doubled since the year of 2000.

3.1.2.3 Credit rating agencies

Historically, rated Norwegian issuers have received ratings from the large and international credit rating agencies S&P, Moody's and Fitch (C. Henriksen, VFF, personal communication, 8th of October 2020). During the recent years, new credit rating agencies have entered the Norwegian market. The German-based credit rating agency Scope Ratings opened an Oslo office in 2017 (T. Faeh, Scope Ratings, personal communication, 28th of October 2020). In 2018, Nordic Credit Rating was established (G. Liedgren, Nordic Credit Rating, personal communication, 16th of October 2020).

3.1.2.4 Brokerage houses

The brokerage houses operate in both the primary and the secondary bond market. Thea Stensaker, Credit Research Analyst at Nordea Markets (personal communication, 3rd of November 2020), states that one of the main targets of brokerage houses is to match issuers with investors, and vice versa. In the primary market, brokerage houses assist companies with issuing bonds targeted at various investors, and afterwards, they assist and facilitate bond trades in the secondary market. Brokerage houses can also assist with necessary loan documents and typically conduct research analysis of the various bond issuers.

3.1.2.5 Trustee

The trustee connects the issuer and the investor (Oslo Børs, 2007). The main responsibility of the trustee is to protect investor interests by assuring that issuers comply with obligations according to loan agreements. In addition, the trustee can assist issuers in negotiations and conflict resolutions. Bonds listed at Oslo Børs or at Nordic ABM are required to have a trustee. Nordic Trustee is the leading provider of such services in the Norwegian market (Nordic Trustee, 2019). Nordic Trustee is owned by insurance companies, mutual funds, and Nordic banks.

3.1.2.6 VFF - Verdipapirfondenes forening

The Norwegian Fund and Asset Management Association (Verdipapirfondenes forening, VFF) provides services to licensed companies performing fund management or active

management in Norway (VFF, 2020a). Many funds in the Norwegian market are members of VFF. The Association performs a wide set of activities in order to promote knowledge and best practice within the asset management industry.

One of the key activities of the Association is to develop industry standards for market practice to which all members must adhere (VFF, 2020). VFF develops industry standards for equity and balance funds and for fixed income funds. The standards define how investment funds should calculate relevant information, and what information to publish, i.e. return, risk and costs. Furthermore, the standards provide requirements regarding how investment funds should be classified. The purpose of the standards is to enlighten differences in risk and return across different investment funds, and thus, provide players with a more solid foundation for investment decisions and comparison between funds. Additionally, VFF develops industry recommendations. The recommendations include advice and principles that all members are advised to follow.

As the thesis studies the Norwegian investment grade corporate bond market, the focus is on VFF's industry standard for fixed income funds operating in this market segment. The Director at VFF, Christian Henriksen (personal communication, 8th 2020 of October), explains that the purpose of the industry standard for fixed income funds is to define the investment universe for investors. The industry standard distinguishes between Money Market Funds, Fixed Income Funds and Other Fixed Income Funds (VFF, 2017). Money Market Funds can only invest in fixed income securities with a maturity of less than a year. These funds have the lowest risk, and consequently; the lowest expected return. Fixed Income Funds can invest in fixed income securities with a maturity of over a year. These funds have higher risk and higher expected return compared to Money Market Funds. Common to Money Market Funds and Fixed Income Funds is that their mandates only allow investments in fixed income securities classified as investment grade (VFF, 2017). Other Fixed Income Funds have less comprehensive requirements than Money Market Funds and Fixed Income Funds.

3.2 Practices for defining the investment universe

Throughout the years, VFF has approved of different practices for defining the investment universe for fixed income funds. Although the industry standard has always required

credit ratings, the requirement has been operationalized through other practices due to low prevalence of credit ratings in the Norwegian bond market. Shadow ratings and information from Nordic Bond Pricing have previously been accepted by VFF as alternatives to credit ratings. However, VFF announced a specification of the industry standard in June 2020 stating that Money Market Funds and Fixed Income Funds can only hold a given share of unrated industrial and utility bonds.

3.2.1 Shadow ratings

According to the VFF industry standard for fixed income funds from 1998, two shadow ratings could displace one credit rating (VFF, 2017). Shadow ratings were unofficial ratings developed by banks and brokerage houses (Finans Norge, 2017). The practice of shadow ratings involved that banks and brokerage houses published their perception of bond issuers' creditworthiness. The banks and brokerage houses used methods similar to those used by credit rating agencies, but the assessment was simplified and only based on public information.

Although shadow ratings were not credit ratings, they served as an important source of information for banks and brokerage houses' customers (C. Henriksen, VFF, personal communication, 8th of October 2020). Because most players had confidence in the banks and brokerage houses that published shadow ratings, the solution worked well in reducing information asymmetries in the market. In addition, one issuer could have several shadow ratings, which made it easy for investors to compare different assessments (Finans Norge, 2016). The practice of shadow ratings was also beneficial to issuers because they made it possible for smaller, unrated issuers to be included in investors' investment universes (NOU 2018:5, 2018). An additional advantage of shadow ratings was that they were not controlled by issuers, which enhanced protection of investors (Finans Norge, nd).

The banks and brokerage houses used the same letter scale as credit rating agencies, and there were clear similarities between shadow ratings and credit ratings (Finans Norge, 2016). However, the banks and brokerage houses' shadow rating practices were not certified by the European Securities and Markets Authority (ESMA). In 2016, ESMA decided to ban the practice of shadow ratings and justified the decision by stating that banks and brokerage houses did not fulfil the requirements for credit rating agencies (ESMA,

2019). The ban of shadow ratings had implications for the Norwegian bond market. On the one hand, the ban was unfavorable to smaller issuers in terms of their access to the bond market (NOU 2018:5, 2018). Furthermore, an important source of information to investors disappeared (Finans Norge, nd). On the other hand, the ban of shadow ratings resulted in more similar conditions for rating activities in Norway and other European countries (NOU 2018:5, 2018).

3.2.2 Information from Nordic Bond Pricing

At the time shadow ratings were banned, only a minority of Norwegian issuers had obtained credit ratings (C. Henriksen, VFF, personal communication, 8th of October 2020). The industry standard for fixed income funds was revised in 2017, as there was a need for a new solution in order to define the investment universe for VFF funds. The revised standard states that at least one credit rating from an ESMA certified rating agency has to be available (VFF, 2017). If such rating is not available, information from Nordic Bond Pricing should be used in order to verify that the issuer is within what Nordic Bond Pricing defines as the Regular Market universe.

Nordic Bond Pricing was established by Nordic Trustee and VFF in 2013, and the company offers daily, independent pricing services for bonds (Nordic Bond Pricing, nd). By looking at bond pricing levels in the form of credit spreads, Nordic Bond Pricing divides the market into two groups; Regular Market and High Yield (V. Annweiler, Nordic Bond Pricing, personal communication, 22nd of October 2020). Bonds trading at low credit spreads are included in the Regular Market universe, and bonds trading at higher credit spreads are included in the High Yield universe. The rationale for dividing the market into two is purely in order to establish and maintain relevant bond indices for market participants to benchmark their performance.

Vegard Annweiler, the CEO at Nordic Bond Pricing, points out that Nordic Bond Pricing's services are independent of credit ratings. Information from Nordic Bond Pricing is used for daily valuation and benchmarking for investors and is valuable as it is developed by an independent third party.

3.2.3 Credit ratings

In June 2020, VFF announced a specification of the industry standard for fixed income funds (VFF, 2020b). The specification states that Money Market Funds and Fixed Income Funds can only hold a given share of unrated industrial and utility bonds, and that the share gradually will tighten until July 2022. The table below illustrates the gradual reduction of the maximum share allowed to invest in unrated industrial and utility bonds.

Table 3.1: VFF: Gradual reduction of maximum share invested in unrated bonds

Step	From date	Maximum share
1	1.7.2021	30 %
2	1.1.2022	20 %
3	1.7.2022	10 %

Christian Henriksen, the Director at VFF (personal communication, 8th of October 2020), explains that the purpose of the industry standard specification is to provide a clearer definition of the investment universe for investors. Previous practices have been useful in defining frames for investment grade funds, but the new specification suggests a stricter framework for Money Market Funds and Fixed Income Funds. Credit ratings are perceived as a more solid tool than previous practices for assessing issuers' creditworthiness and should therefore play a greater role in defining the investment universe for VFF funds.

Henriksen states that the use of information from Nordic Bond Pricing to define the investment universe was only a preliminary solution. The disappearance of shadow ratings happened quickly, and hence, VFF decided to use this source of information as it was already available in the market. The timing of the specification may be seen in conjunction with new credit rating agencies entering the Norwegian bond market. Scope Ratings and Nordic Credit Rating established businesses in Norway in 2017 and 2018, respectively. According to Henriksen, these agencies may be better suited for Norwegian issuers that are small on an international scale. The reason is probably that the agencies offer simplified rating processes and tolerable prices.

An important aspect of a credit rating is that it correctly and consistently reflects the creditworthiness of an issuer. Henriksen argues that information from Nordic Bond Pricing was not ideal in this matter. The credit quality of an issuer should not be defined by the

price, but rather, the price should be defined by the credit quality. This is not necessarily a problem in a stable market but could pose challenges in the event of rapid market changes. Hence, it was only a matter of time before new and stricter practices for defining the investment universe would be established.

Henriksen states that a preferable outcome of the specification of the industry standard is an increased prevalence of credit ratings in the Norwegian bond market. The perception is that this should be achievable within the given time frame. An increased prevalence of credit ratings will provide improved information, which can be beneficial to all players in the market. However, there is uncertainty associated with whether issuers will obtain credit ratings or not. A potential fear is that issuers are reluctant to obtain credit ratings and that funds, which are subject to the industry standard, will experience a narrower investment universe. Henriksen adds that it is positive if the specification leads to a more liquid and efficient market, but that this is not its primary purpose.

4 Methodology

The chapter will explain the qualitative methodology used to explore the research question, including the research design, the data collection process, and how the data is structured and analyzed. Additionally, we will assess the quality of the research with respect to reliability and validity. The aim is to provide insights into the research approach, and to justify the choices made during the process. This allows the reader to understand how the data is analyzed and to assess the quality of the research.

4.1 Research design

Research design is a description of how to collect and analyze data in order to answer the research question (Saunders et al., 2009). It is common to distinguish between three different types of research designs; descriptive, exploratory, and explanatory. The nature of the research question determines which type is best suited.

The research question of the thesis is exploratory. The research question is open-ended, which enables a deep and broad understanding of the impact of credit ratings in the Norwegian investment grade corporate bond market. Moreover, the research on the specific topic is scarce. This suggests that an exploratory research design is most suitable.

An advantage of an exploratory research design is that it enables thorough analysis of the problem (Saunders et al., 2009). Furthermore, it allows for flexibility to make adjustments throughout the research process as new information emerges. New insights are provided when the respondents share their reflections and in-depth knowledge of the subject. A disadvantage of an exploratory research design is that the researcher can lose control over the research process, as the flexibility can result in an unstructured research (Saunders et al., 2009). Moreover, an exploratory research design can be challenging in terms of defining the level of analysis, and the researcher must therefore be able to clearly define the scope of the thesis. Hence, an exploratory research design sets high standards to the researcher's analytical and observatory skills.

4.1.1 Research method

The research literature distinguishes between qualitative and quantitative research methods (Saunders et al., 2009). The study uses a qualitative method, and the data is based on the reflections of players in the bond market. For a quantitative method, numerical data would have been used.

A qualitative method is well-suited for exploratory research, especially in early-stage markets (Ghauri et al., 2020). One can argue that the Norwegian investment grade corporate bond market is an early-stage market in terms of the prevalence of credit ratings. Moreover, characteristics of the Norwegian bond market are not directly transferable to other markets. Hence, it would not be appropriate to use data from other international bond markets to make assumptions about the impact of credit ratings in the Norwegian investment grade corporate bond market. Furthermore, it does not yet exist empirical data on the effect of increased requirements for credit ratings for VFF funds. An exploratory qualitative research is recommended in such cases (Saunders et al., 2009).

Thagaard (2018) argues that the qualitative research method is flexible and focuses on understanding the topic in question. The flexibility of the qualitative research method enables an interactive process that allows the researcher to go back and forth between the data collection and the research question. However, a qualitative research method can be challenging. The method is time consuming and the data can be unsystematic and hard to organize. The researcher must be aware of not neglecting important elements.

4.1.2 Research approach

Qualitative research can have a deductive or an inductive approach (Saunders et al., 2009). A deductive approach implies testing existing theory on collected data, while an inductive approach uses collected data to develop patterns and to create new theories. The study has elements of both approaches. The study uses existing theory to explain the market players' behavior in relation to credit ratings, which is in line with a deductive approach. Additionally, the study aims to develop patterns based on the knowledge and experiences of interviewed market players. This is compatible with an inductive approach.

4.1.3 Research strategy

A research strategy can be defined as a plan to understand how the researcher will approach the research question (Saunders et al., 2009). The case study method is a research strategy well suited for a qualitative and exploratory research. Ridder (2017) argues that case studies are well suited when an important part of the study is to explore a complex situation. The case study method is often considered to be the best strategy for understanding the interaction between the context and the topic of interest (Saunders et al., 2009).

The case study method involves conducting one or multiple cases (Saunders et al., 2009). Analyzing only one single market perspective may not be sufficient to say something about the overall Norwegian investment grade corporate bond market. Therefore, the study uses the case study method with multiple cases. We conducted interviews with several players from different market perspectives. This increased our understanding of the topic and allowed for comparison between the perspectives.

A disadvantage of the case study method is limited generalizability (Saunders et al., 2009). The time limitations and scope of the thesis allow for analyzing relatively few market players within each perspective. Thus, it is challenging to find results that hold true for the entire Norwegian bond market. Furthermore, there are significant differences between the market players in terms of operations, size and purpose. Ridder (2017) argues that a multiple case study is well suited to find cross-case similarities and differences.

4.2 Data collection

The study uses semi-structured interviews as the primary source of data. The primary data sample consists of 14 interviews with representatives from companies operating in the Norwegian bond market.

4.2.1 Interviews

The primary data in the thesis is based on semi-structured in-depth interviews. The semi-structured interview method is a combination of structured and unstructured questions (Saunders et al., 2009). The structured part of the method has predetermined questions

and follows a specific structure to address topics of interest. The unstructured part is an open conversation that allows the respondents to answer freely and make reflections depending on what they consider to be relevant. Hence, the semi-structured interview method enables flexibility throughout the research process.

An advantage of the semi-structured interview method is that it enables the respondents to address topics or aspects that the researcher has not considered prior to the interview (Saunders et al., 2009). The method also allows the researcher to ask follow-up questions. By conducting semi-structured interviews, we gained knowledge of how the Norwegian bond market players emphasize credit ratings, and how they envision the outcome of the VFF industry standard specification.

4.2.2 Interview guides

The semi-structured interviews were based on interview guides. The analysis addresses three different perspectives; the issuer perspective, the investor perspective, and the credit rating agency perspective. As these perspectives differ in terms of market role, perspective specific interview guides were designed. The interview guides were developed prior to the interviews and are available in Appendix 1. In addition, bond market players were interviewed in order to gather relevant background information for the thesis. The background interviews did not follow a specific interview guide, but consisted of questions focusing on the players' specific area of expertise.

The interview guides follow a logical structure. The guides begin with a presentation of ourselves and the purpose of the study. The respondents were asked for consent to record the interview, and if their name and company name could be used in the study. The interview guides are further divided into three sections. The first section consists of questions regarding the operational context of the market player. In this section, the respondents were asked to describe the company and their role. This increased our understanding of their relevance, and subsequently, the understanding of the respondents' answers in the following sections. The second section of the interview guides focuses on the respondents' perception of credit ratings. The third section focuses on the respondents' beliefs regarding the outcome of the VFF industry standard specification.

The questions in the interview guides are primarily open-ended. Open-ended questions

allow the respondents to answer freely and to describe the topic based on their own perception (Saunders et al., 2009). The approach of the interview guides consisted of a combination of wide and specific questions, as the focus was on asking open questions prior to more specific follow-up questions.

4.2.3 Sample

We used the non-probability sampling method to sample the bond market players. The non-probability sampling method is a technique where the sample is selected based on the subjective judgement of the researcher (Tansey, 2007). Non-probability sampling is widely used for qualitative research and depends on the researchers' expertise.

A version of non-probability sampling is judgmental sampling (Tansey, 2007). Judgmental sampling was used to decide which bond market players to interview. The sample was restricted to bond market players who satisfied certain criteria. The criteria required that the respondents possessed relevant knowledge of the Norwegian investment grade corporate bond market and were professionally involved with the market. Additionally, the criteria included that the respondents were familiar with market regulations and the VFF industry standard. By restricting the sample, it was possible to ask the respondents specific questions.

The non-probability sampling technique has no specific rules regarding the sample size (Tansey, 2007). The respondents should not be chosen because they represent the entire population, but rather due to their specific characteristics (Saunders et al., 2009). The primary data sample consists of 14 interviews. There are 3-4 players included in each perspective, which ensures that the findings to some extent are representative for the market. In addition, 4 players were interviewed to collect background information.

Our understanding of the Norwegian investment grade corporate bond market increased throughout the research process. As new and interesting aspects emerged, some of the respondents were contacted with follow-up-questions.

The representatives from one company have chosen to stay anonymous. This company is referred to as Company X. The sample is described in table 4.1.

Table 4.1: Data sample

Company	Name	Role
VFF	Christian Henriksen	Director
Nordic Bond Pricing	Vegard Annweiler	CEO
Nordea Markets	Thea Stensaker	Credit Research Analyst
Danske Bank Markets	Mikael Wangen	Senior Originator, Debt Capital Markets
Issuers		
Company X	Employees	n.a.
BKK	Harald Reikvam	Treasury Manager
Glitre Energi	Håkon Levy	Treasury Manager
Akershus Energi	Claus Nerhagen	Investment Manager for Renewable Investments
Investors		
KLP Kapitalforvaltning	Harald Riise-Hanssen	Portfolio Manager
DNB Asset Management	Svein Aage Aanes	Head of Fixed Income and FX
Folketrygdfondet	Jørgen Krog Sæbø	Chief Investment Officer Fixed Income
Credit rating agencies		
Nordic Credit Rating	Gustav Liedgren	CEO
Scope Ratings	Thomas Faeh	Executive Director
S&P	Magnus Nystedt	Director, Business Development, Nordic and Baltic Region

4.2.4 The interview process

Thorough preparation is crucial to a good interview, as the credibility of the researcher increases, and consequently, the interviewees' responses are more precise (Saunders et al., 2009). The early phase of the research process consisted of extensive research on the Norwegian bond market. This included reading of news, reports and regulations concerning the market. The purpose of this research was to acquire adequate knowledge of the Norwegian bond market and the VFF industry standard in order to know which market players to contact and what questions to ask. Extensive research on each respondent was conducted prior to every interview.

The respondents were contacted through email. The email described the purpose of the study and asked if they were willing to be interviewed. After agreeing to an interview, a time was scheduled and an overview of the questions were sent if asked. In this way, the respondents could prepare, which may have had a positive effect on the data quality.

Due to covid-19, all interviews were virtually conducted through the platforms Microsoft Teams, Zoom or Skype. The majority of the interviews were conducted with only one company representative. In some cases, two representatives participated. The interviews took place in undisturbed environments and lasted between 20-60 minutes. All interviews were conducted in Norwegian.

The respondents were initially asked predetermined questions. Follow-up questions were asked when it was convenient. Notes were taken during the interviews in order to formulate relevant follow-up questions, and to emphasize non-verbal or vocal expressions. Sensitive questions were avoided. If the respondents disclosed sensitive information, they were given the option to be anonymous. The interviews were audio recorded. This made it possible to fully focus on the reflections of the respondents, which may have improved the quality of the analysis. All citations from the interviews were approved by the respondents.

Conducting interviews virtually can be challenging as it can be hard to have a natural flow in the conversation and to make detailed observations. Noticing the respondents' reactions by observing body language, tone of voice and gestures was challenging on a digital platform. However, it was easy to schedule and to do interviews with respondents from all over Norway. The covid-19 pandemic has led to an extensive use of digital platforms, which made the execution of the interviews uncomplicated.

4.2.5 Secondary data collection

The purpose of secondary data is to establish context and to increase knowledge and understanding of the topic (Saunders et al., 2009). The inclusion of secondary data in the thesis creates a foundation for exploring credit ratings in the Norwegian investment grade corporate bond market. Additionally, the secondary data supports the interviewees' responses. The secondary data consists of data from Stamdata, and reports and articles from VFF, Nordic Trustee, Oslo Børs, Finans Norge, brokerage houses, and scholars. The bond market players' web pages were also important sources of information prior to the interviews.

4.3 Data analysis

Template analysis enables a thematic analysis of the data (Braun and Clarke, 2006). The key in this method is to seek for patterns and topics that emerge during the interviews, and to connect these together by the use of codes (Saunders et al., 2009). The codes allow identification of patterns in the data set, which is important in order to answer the research question. The method is flexible as codes can be both predetermined and emerge during the research process.

We used the template analysis method to process and analyze the information from the interviews. After the interviews were conducted, we transcribed them. Transcribing is time consuming but makes the researcher familiar with the data set (Saunders et al., 2009). We read through the transcriptions several times and looked for patterns, cross-similarities, and new topics. Relevant topics were color-coded and categorized. We used the categories "Financial impact" and "Operational impact" for each perspective as these categories emerged throughout the research process. Furthermore, the codes were categorized into sub-categories for different topics within the categories. The purpose of the coding was to make the data set more available for analysis, as the data set was large and complex. An extensive use of codes and categorization of topics were crucial in order to develop patterns and find key themes from the data.

4.4 Research quality

The section assesses the quality of the data and the methodological choices. The research quality is discussed with respect to reliability and validity, ethical concerns and limitations of the study.

4.4.1 Reliability and validity

In qualitative research, reliability and validity are discussed in terms of credibility, transferability, dependability, and confirmability (Creswell and Miller, 2000; Pandey and Patnaik, 2014). Reliability refers to the results being consistent and possible to reproduce with a similar methodology (Golafshani, 2003). Validity describes if the results are truthful and if they measure what is intended.

4.4.1.1 Credibility

Credibility can be described as trustworthiness, and is essential to achieve internal validity (Pandey and Patnaik, 2014). Internal validity refers to the method's ability to measure what was intended. The credibility is strengthened when the strategy for data collection is thoroughly described (Geertz, 1973). The use of interview guides is important to achieve high validity in semi-structured interviews (Saunders et al., 2009). Making the interview guides available, and presenting citations in the analysis, give the reader insights into how the data was collected and what it entails.

4.4.1.2 Transferability

Transferability describes to what extent the findings can be transferred to a larger sample, to other respondents, or to a different sample (Korstjens and Moser, 2018). Transferability refers to the external validity of the research (Geertz, 1973). Replicating the study's results is challenging as only a small sample of Norwegian bond market players have been interviewed. Additionally, the respondents have been interviewed at a specific point in time and their responses are time conditional. The external validity and reliability of the study are therefore limited. However, a comprehensive description of the research process strengthens the transferability (Saunders et al., 2009).

4.4.1.3 Dependability

Dependability refers to the consistency of the findings and involves the opportunity to evaluate the study (Korstjens and Moser, 2018). The study ensures dependability by providing explanations for methodological choices in the data collection and the analysis process. This allows the reader to evaluate the process.

4.4.1.4 Confirmability

Confirmability describes to what extent other researchers can confirm the findings (Korstjens and Moser, 2018). Confirmability is assured by describing the overall research process and how the results evolved. Some of the information shared in the interviews is sensitive and must be held confidential. This decreases the confirmability of the study.

4.4.2 Ethical concerns

Ethics provide frameworks and describe the appropriate behavior of the researcher towards those involved in the research (Saunders et al., 2009). Maintaining a high ethical standard throughout the research process has been of high priority. When explaining relevant theories and methodological choices, we have focused on doing so in a clear and concise way. The findings are not based on our opinions, but rather on the responses of the interviewees.

Establishing trust and acting respectfully and honest towards the respondents are of great importance when conducting interviews (Saunders et al., 2009). Confidentiality and anonymity of some of the respondents are significant ethical concerns of the study. Information provided by some of the respondents is highly sensitive and must be processed accordingly. All respondents have approved the data material used in the thesis. All correspondence, audio recordings and transcripts will be deleted at the end of the research process.

4.4.3 Limitations

There are several methodological limitations of the study. The size of the sample is a potential threat to the quality of the study. However, acquiring in-depth understanding of each market player is time consuming. Thus, the research quality may suffer with a larger sample. Moreover, the aim of the study is not to provide one single conclusion that applies to all market players, but rather to provide a conclusion based on the insights from the respondents.

An additional limitation of the study is the way the respondents were chosen. As the sampling of the respondents is based on our judgments, selection-bias may threaten the quality of the sampling. Our knowledge and understanding of the Norwegian investment grade corporate bond market has increased throughout the research process. Hence, there is a chance that other market players would have been chosen if the sampling was conducted later in the process. This is a potential threat to the viability of the study. However, the extensive research prior to the interviews increases the viability.

The viability of the study can also be threatened by the use of the multiple case study

method. There are great variations within each bond market perspective, and there are even greater variations between the market players across the perspectives. A case study only focusing on one perspective would have improved the ability to make comparisons within the specific perspective. However, this would not be feasible, as the purpose of the study is to achieve a broad understanding of the Norwegian investment grade corporate bond market.

The format of the semi-structured interviews poses as a potential threat to the reliability of the study. The reliability in a qualitative study increases if the interview transcripts and notes are provided (Carlson, 2010). Given the confidentiality of some responses, this is not feasible. However, the availability of the interview guides strengthens the reliability of the research. In addition, it is hard to replicate semi-structured interviews. The technique is flexible, and bias in the interviews can have affected the direction and the following responses of the interviewees. This decreases the reliability of the research.

5 Analysis

The chapter will present the qualitative analysis. The analysis aims to explore the impact of credit ratings in the Norwegian investment grade corporate bond market. The perceptions of credit ratings for issuers, investors and credit rating agencies are analyzed in light of financial and operational impact. The financial impact includes cost aspects of ratings, while the operational impact considers implications of ratings for business activities. Additionally, the potential outcome of the VFF industry standard specification, which takes effect from July 2021, is considered.

The analysis focuses on topics that are perceived as relevant in order to answer the research question. The topics are either results of responses to questions asked by the researchers, or brought to the table by the respondents themselves. The topics will be explored in individual paragraphs. The paragraphs are structured in the following way: presentation of the topic, comparison of respondents' reflections on the topic, and our understanding and own analysis. It should be mentioned that other topics, which are not included in the analysis, may be relevant. However, a prioritization of topics had to be made due to the scope and time limitations of the thesis.

5.1 Issuer perspective

The perspective is based on interviews with representatives from Norwegian corporate bond issuers. The representatives are Claus Nerhagen (Investment Manager for Renewable Investments at Akershus Energi), Harald Reikvam (Treasury Manager at BKK), Håkon Levy (Treasury Manager at Glitre Energi), and two employees from an anonymous corporate bond issuer, referred to as Company X. The section will analyze the impact of credit ratings according to issuers and is divided into financial and operational impact.

5.1.1 Financial impact

The company representatives emphasize that the costs of obtaining a credit rating were considered during the evaluation process. Claus Nerhagen at Akershus Energi (personal communication, 26th of October 2020) explains that a credit rating assessment involves costs in terms of time and money. He elaborates that the company had to evaluate

different credit rating agencies in relation to these two costs before making a decision. Akershus Energi received the first-time rating in January 2019. Among the respondents are also two employees in Company X (personal communication, 13th of October 2020), which at this point is evaluating whether to obtain a credit rating or not. The employees in Company X explain that they have participated in meetings with credit rating agencies in order to clarify what costs are entailed in the process. The company is now assessing whether it pays off to receive a rating or not. Based on these reflections, one can argue that issuers' decision to obtain a rating is well-considered, and that the direct cost is an important factor. Moreover, one can argue that the direct cost will be relatively higher to smaller companies than to larger companies. This may have implications for which issuers that decide to be credit rated. However, we do not have information on the specific direct cost of obtaining a credit rating due to regulations from the European Securities and Markets Authority (ESMA).

According to the company representatives, the indirect costs of obtaining a credit rating are relevant to the rating decision. The employees in Company X explain that they are considering the indirect costs of the rating process, which includes occupation of the management and other work that must be done by the company. However, the representatives from the rated issuers explain that the rating process was easier than expected. Harald Reikvam at BKK (personal communication, 28th of October 2020) explains that the process was uncomplicated, and that they could send the credit rating agency material that the company already possessed, e.g. budget models. Nerhagen argues that the rating process was not burdensome. The reflections on the topic suggest that although there are indirect costs entailed in the rating process, issuers perceive them as manageable. Moreover, there might be additional indirect costs that are not linked to the rating process. From the point in time when the issuer has received a rating, the credit rating agency will start a surveillance process of the issuer. This implies an indirect cost as attention constantly is drawn to the issuer's performance.

Common to the responses of the company representatives is that credit ratings can provide better access to funding. Håkon Levy at Glitre Energi (personal communication, 10th of November 2020) explains that their decision to obtain a credit rating was motivated by the opportunity to secure access to funding. He further explains that the company has

received positive feedback from investors after the credit rating was published. Nerhagen states that when more investors are required to invest in rated bonds, it will be easier to sell rated bonds than unrated bonds. Reikvam underlines that fewer and fewer investors will be able to buy unrated bonds in the future. However, he states that credit ratings are only one of several important factors to investors when making investment decisions. Based on the reflections, one can argue that rated issuers may have better access to funding than unrated issuers. This advantage is likely to further increase when the VFF industry standard specification takes effect.

The company representatives recognize that credit ratings may impact funding costs. The employees in Company X explain that banks have informed them that credit spreads are likely to decrease going from being unrated to rated. However, Levy at Glitre Energi explains that the company has not yet been able to observe a change in bond credit spreads. He further emphasizes that such changes are difficult to measure as it is challenging to separate the different price components. Reikvam at BKK explains that the company has neither experienced changes in funding costs. He explains that the ban of shadow ratings created a vacuum in the market, and consequently; an expectation of more credit ratings. Therefore, there were no surprises when issuers finally received credit ratings, and hence, there were no significant changes in funding costs. The respondents' reflections imply that credit ratings' current impact on funding costs is limited. This can be explained by three reasons; the complexity of measuring changes in credit spreads, the expectation of more credit ratings after shadow ratings ceased to exist, and the fact that the market already is well-informed.

5.1.2 Operational impact

The company representatives argue that investors are familiar with issuers on the Norwegian bond market. Employees at Company X (personal communication, 13th of October 2020) argue that the Norwegian bond market is small, as there are few issuers and investors. They further explain that investors know issuers well, and that previous shadow ratings have contributed to a well-functioning market. They elaborate that this is a reason why the company has not chosen a public rating before. Harald Reikvam at BKK (personal communication, 28th of October 2020) adds that the effect of obtaining a rating has been limited, as market players already possess great knowledge of the company.

Based on these reflections, one can argue that the low prevalence of credit ratings in the Norwegian market is due to the fact that investors and issuers are familiar with each other and that ratings have not been necessary. Hence, one may argue that there is a trust-based relation between investors and issuers. Moreover, the reflections imply that ratings have a limited informational value to Norwegian investors as information asymmetries in the market are already low.

According to the representatives, credit ratings can have a positive impact on the company's corporate governance. The representatives from the rated issuers point out that the rating process provides clear measures and targets to the overall business management. Claus Nerhagen at Akershus Energi (personal communication, 26th of October 2020) explains that having a rating creates awareness of important key numbers in relation to credit score and financing. He suggests that a credit rating has a positive effect on the corporation and its governance. Håkon Levy at Glitre Energi (personal communication, 10th of November 2020) explains that the corporate governance effect was a part of their motivation to obtain a credit rating. These statements suggest that the monitoring role of credit rating agencies may have a positive effect on issuers' actions. Hence, there seems to be other solid impacts of credit ratings on issuers in addition to financial effects.

The responses suggest that credit ratings will impact issuers' investor base in the future. As previously stated, the majority of investors in the Norwegian bond market have until now been able to invest in unrated bonds. However, this will change once the specification of the VFF industry standard takes effect. According to Reikvam at BKK, his company has not received any feedback from investors after obtaining a credit rating. However, he thinks the investors would have demanded a rating in the future. He further argues that issuers who are reluctant to obtain ratings probably have to seek funding from banks and not through the bond market. In addition, Reikvam explains that ratings are necessary for funding outside of Norway. Based on these reflections, one can argue that issuers that will continue to seek funding in the Norwegian bond market, eventually will obtain a credit rating. Additionally, credit ratings are important if the issuer want to attract a foreign investor base.

According to the company representatives, the rating decision depends on credit rating agencies' methodologies. The employees in Company X argue that a potential fear is

that Norwegian companies may receive a lower credit rating than expected when using big, international credit rating agencies. They explain that the fear is due to Norwegian companies being small on an international scale. However, Levy, at Glitre Energi, which received a credit rating from Scope Ratings, explains that this rating agency used a methodology that was well suited for their company's size. These reflections suggest that Norwegian issuers will aim to receive ratings that correctly reflect the credit risk without considering the size negatively. If this is not the case, receiving ratings will seem deterring to issuers as the ratings will differ from what they have been implicitly priced to previously.

5.2 Investor perspective

The perspective is based on interviews with representatives from Norwegian investment funds. The representatives are Jørgen Krog Sæbø (Chief Investment Officer Fixed Income at Folketrygdfondet), Harald Riise-Hanssen (Portfolio Manager at KLP Kapitalforvaltning), and Svein Aage Aanes (Head of Fixed Income and FX at DNB Asset Management). The section will analyze the impact of credit ratings according to investors and is divided into financial and operational impact.

5.2.1 Financial impact

The representatives from the investment funds argue that credit ratings can lower credit spreads for issuers. Harald Riise-Hanssen at KLP Kapitalforvaltning (personal communication, 15th of October 2020) emphasizes that an unrated issuer receiving a credit rating can expect cheaper funding. Svein Aage Aanes at DNB Asset Management (personal communication, 16th of October 2020) argues that the reduction in funding costs may be an incentive for unrated issuers to obtain a rating. Yet, Riise-Hanssen argues that the tightening of the credit spread will be modest for Norwegian issuers due to the previous practice of shadow ratings. Based on the respondents' reflections, issuers receiving ratings can benefit financially in terms of lower funding costs. However, the credit spread reduction may be limited as previous shadow ratings have worked well in reducing information asymmetries between issuers and investors.

The respondents argue that investors are likely to require higher interest payments from

unrated issuers in the future. Aanes argues that unrated issuers may have to offer higher interest rates in order to be prioritized over rated issuers after the specification of the VFF industry standard takes effect. However, Aanes adds that not all Norwegian investors follow the VFF industry standard. Jørgen Krog Sæbø at Folketrygdfondet (personal communication, 15th of October 2020) explains that Folketrygdfondet is governed by its own law and is thus not directly subject to VFF's requirements regarding credit ratings. Krog Sæbø elaborates that the fund therefore is not limited to invest in rated issuers in the same way and can collect potential liquidity premiums by investing in bonds that will be less attractive to VFF funds in the future. The respondents' reflections on the topic suggest that unrated issuers may have to offer liquidity premiums once the VFF industry standard takes effect. This can result in an advantage for investment funds that are not subject to the VFF industry standard.

The respondents emphasize that an increased prevalence of credit ratings in the Norwegian investment grade corporate bond market may attract more foreign investors. Riise-Hanssen states that foreign investors are not used to invest in unrated bonds. Aanes argues that an increased prevalence of credit ratings creates a more transparent and safe investment environment, which may attract foreign investors to their funds. Krog Sæbø argues that even though the pricing in the Norwegian bond market may be affected negatively short-term for some issuers, the entering of foreign investors is an indication of market quality and better pricing in the long-term. Based on these reflections, one can argue that as ratings increase transparency, more foreign investors will enter the market. Consequently, the entering of more investors may increase the market liquidity.

5.2.2 Operational impact

The representatives from the investment funds argue that credit ratings are primarily a supplement to investors' own credit analyses. Jørgen Krog Sæbø at Folketrygdfondet (personal communication, 15th of October 2020) argues that in order to be confident in investment decisions, they do their own analyses in addition to external analyses. Harald Riise-Hanssen at KLP Kapitalforvaltning (personal communication, 15th of October 2020) states that credit ratings are used for calibration of their own analyses. Krog Sæbø adds to the topic that the fund leans on external analyses in the investment decision as well, and that shadow ratings previously served as important input. The reflections suggest

that investors have confidence in their own analyses, and that credit ratings are not crucial to investment decisions. This may be due to that the previous practice of shadow ratings has made investors well-acquainted with the Norwegian bond market. However, the informational value of previous shadow ratings will eventually diminish, and then, credit ratings may be more important to investors.

A perception among the interviewed investors is that the viability of a credit rating will depend on investors' confidence in the credit rating agency. According to Svein Aage Aanes at DNB Asset Management (personal communication, 16th of October 2020) and Krog Sæbø at Folketrygdfondet, investors are likely to prefer credit ratings from agencies with a strong market position in the investors' country of origin. However, Aanes argues that ratings conducted by different credit rating agencies eventually will converge. He explains that agencies assigning too high ratings will lose investor trust, while agencies assigning too low ratings will lose their customer base. Based on the respondents' reflections, one can argue that issuers will obtain ratings from agencies with high credibility in the market in which the issuers operate. Although investors prefer different agencies, ratings will not necessarily differ. This is because credit ratings eventually will converge towards the "correct" assessment.

The representatives from the investment funds believe that the outcome of the VFF industry standard specification will be that issuers obtain credit ratings. Hence, the funds do not have to take specific actions in order to meet the requirements. Aanes at DNB Asset Management argues that most of their portfolios are close to achieving the requirement of a 30 percent unrated bonds share. He elaborates that the remaining share most likely will sort itself out as issuers receive credit ratings. Riise-Hanssen at KLP Kapitalforvaltning further adds that in a situation where issuers are reluctant to obtain credit ratings, the fund is more likely to demand higher interest payments than to sell the bond. He explains that the increased interest payment aims to incentivize the issuer to obtain a rating. The reflections suggest that investors believe that the market will adapt to the specification of the VFF industry standard.

It is important to add that investment decisions will be based on several factors in addition to credit ratings. Krog Sæbø argues that it is ultimately the price and risk that are the decisive factors in the investment decision, and credit ratings are an input in that decision.

Riise-Hanssen adds that credit ratings are only one factor in the investment decision, and that investors also have to consider portfolio diversification.

5.3 Credit rating agency perspective

The perspective is based on interviews with representatives from credit rating agencies. The representatives are Gustav Liedgren (CEO at Nordic Credit Rating), Thomas Faeh (Executive Director at Scope Ratings), and Magnus Nystedt (Director, Business Development, Nordic and Baltic Region at S&P). The section will analyze the impact of credit ratings according to credit rating agencies and is divided into financial and operational impact.

5.3.1 Financial impact

The interviewed credit rating agencies practice an issuer-pay model, which implies that they charge issuers for assessing their creditworthiness. The representatives from the credit rating agencies explain that the cost of assigning a credit rating is not known to the analysts. This is in accordance with regulations from the European Securities and Markets Authority (ESMA). Magnus Nystedt at S&P (personal communication, 6th of November 2020) explains that his agency works with Chinese walls between the analytical and commercial department, which means that these are completely separated. He further argues that this is an improvement from the previous practice of shadow ratings, where analysts were more involved with the origination team. The respondents' reflections on this topic suggest that credit rating agencies strive to avoid conflicts of interest between analytical and commercial activities. The issuer-pay model may suffer from conflicts of interest, as rating agencies may be tempted to assign inflated ratings to their customers. By working with Chinese walls, credit rating agencies can overcome incentives to assign ratings that do not reflect issuers' actual creditworthiness. This improves the viability of credit ratings.

The representatives from the credit rating agencies recognize that there has been a low prevalence of credit ratings in the Norwegian investment grade corporate bond market. Gustav Liedgren (personal communication, 16th of October 2020) explains that Nordic Credit Rating experienced a slower start than expected when establishing in the Nordics in

2018, and especially in the Norwegian market. Liedgren argues that a possible explanation is that Norwegian investors historically have been fairly comfortable with Norwegian issuers, and hence, credit ratings have not been requested. However, the credit rating agency representatives believe that the demand for credit ratings is likely to increase once the specification of the VFF industry standard takes effect. These reflections point to that credit agencies' customer base will widen in the coming years. Hence, the agencies' workload and income streams are likely to increase.

According to the representatives from the credit rating agencies, issuers will benefit from receiving credit ratings in terms of lower funding costs. Liedgren explains that ratings will reduce information asymmetries in the market and make bond investors more comfortable with lending to companies. He argues that rated issuers signal transparency and can access investors that are restricted from investing in unrated bonds, and hence, can pay a lower interest rate on the money they borrow. Similarly, Thomas Faeh at Scope Ratings (personal communication, 28th of October 2020) believes that rated issuers will stand out with a lower credit spread in the future compared to unrated issuers. However, he emphasizes that a credit spread reduction is hard to quantify. The respondents' reflections correspond with economic theory about asymmetric information. A credit rating provides the lender with a measurement of the borrower's financial situation, and hence, it is reasonable to assume that information asymmetries are reduced. This decreases the uncertainty regarding the issuer's default risk, which lowers the credit risk, and consequently, reduces the credit spread.

The representatives from the credit rating agencies argue that ratings provide deep analyses of issuers' creditworthiness. Leading from previous discussions of asymmetric information, deeper analyses will reduce information asymmetries, and consequently, lower credit spreads. Liedgren points out that the issuer-pay model facilitates a valuable information flow from issuer to credit rating agency. This makes the analysts more enlightened and able to create better analysis. In the same way, Nystedt at S&P argues that rating agencies have access to extensive company information, e.g. non-public information, which brokerage houses conducting shadow ratings did not have. Nystedt adds that his agency has industry specialists who have excellent understanding of the industry in question. These responses suggest that credit rating agencies can produce better analyses than

previous practices could provide. While previous shadow ratings and information from Nordic Bond Pricing are based on quantitative data, credit ratings account for both quantitative and qualitative aspects of the issuer. Moreover, credit rating assessments include non-public information, which is not accounted for in previous shadow ratings and information from Nordic Bond Pricing.

According to the representatives from the credit rating agencies, an important feature of credit ratings is that they are forward-looking. Nystedt explains that credit ratings can provide the market with signals of forthcoming developments. Faeh argues that knowledge about customers' future plans gives analysts a certain comfort in their analyses, and that the use of such information can contribute to redefine the market's historical perception of an issuer's credit quality. Faeh explains that it is important that a rating assessment reflects the actual outlook of an issuer, while not releasing specific confidential information. Based on the respondents' reflections, one can argue that the forward-looking aspect of credit ratings increases market transparency. This suggests a reduction in asymmetric information, which eventually can lower credit spreads. In addition, the forward-looking aspect of ratings may affect which issuers that decide to obtain ratings. Issuers with promising future plans, not publicly known, may be more likely to obtain ratings than issuers with less promising prospects. Therefore, a recently assigned credit rating may signal positive prospects to investors. This follows from the signaling theory.

The representatives from the credit rating agencies agree that an issuer's decision to obtain a credit rating will depend on a cost-benefit analysis. Nystedt believes that the rating decision will depend on several factors, such as company size, financing needs, and potential pricing effects. He explains that companies with large volumes outstanding are likely to obtain ratings, while smaller companies might refrain from this. These smaller companies have two options; either to remain in the bond market and accept higher credit spreads, or to leave the bond market and return to bank financing. Liedgren explains that certain companies may refrain from obtaining a credit rating if their need for financing through the bond market will decrease in the future. However, he argues that more companies are entering the bond market as increased regulations make bank financing less attractive. Based on the responses on this topic, the decision to obtain a credit rating will depend on issuers' current and future financing needs. Issuers are likely to evaluate

the advantages of a rating against the costs of obtaining one.

5.3.2 Operational impact

The representatives from the agencies recognize that the market situation for credit rating agencies in Norway has changed. Thomas Faeh at Scope Ratings (personal communication, 28th of October 2020) argues that the ban of shadow ratings was considered as an opportunity to establish Scope Ratings in Norway. Likewise, Gustav Liedgren (personal communication, 16th of October 2020) explains that Nordic Credit Rating was founded as a consequence of the ban of shadow ratings. Magnus Nystedt at S&P (personal communication, 6th of November 2020) further adds that increased competition in the credit rating agency market is positive as issuers now have more alternatives that might be better adapted to their needs. He elaborates that more alternatives may lead to more ratings among issuers, and subsequently, a more transparent market. These arguments suggest that the ban of shadow ratings led to an entering of new credit rating agencies in the Norwegian bond market. Consequently, the competition has increased, and the industry is no longer dominated by three major credit rating agencies. As there are more agencies in the market, one can expect an increased prevalence of ratings among issuers.

The respondents reveal that there are differences between the credit rating agencies in terms of rating methodology. Faeh at Scope Ratings explains that his agency has developed a methodology that is adapted to European companies. He further argues that in comparison, big, international rating agencies have more global methodologies. According to Faeh, Scope Ratings has no requirements regarding the issuer size to reach a certain rating level; a company's credit risk is judged in its entirety. In comparison, Nystedt at S&P explains that their methodology has adapted certain hurdles concerning liquidity of the issuer. He explains that these must be reached for issuers to receive an investment grade rating. Nystedt adds that credit rating agencies are different in terms of investor confidence. The reflections suggest that credit rating agencies' methodologies differ in terms of complexity and range. Consequently, issuers will have to evaluate what is the most important when obtaining a credit rating.

According to the respondents, credit rating agencies have various practices for making the rating process easier for customers. Liedgren at Nordic Credit Rating explains that

the implicit cost of obtaining a credit rating may be a deterrent factor for potential customers. Liedgren elaborates that issuers fear a process that is large, complex and time consuming for the management. However, he emphasizes that the credit rating process is far simpler than issuers might expect. Furthermore, companies with shares listed on the stock exchange will experience that they already internally have in place information required for the rating process. In the same way, Faeh at Scope Ratings explains that his agency tries to make the rating process easy for customers. He elaborates that their customers do not need to translate documents or fill out specific forms. Instead, Scope Ratings retrieves relevant already existing documents from the customers. Based on the information provided by the respondents, one can argue that the agencies offer manageable rating processes for all parties involved.

The representatives from the credit rating agencies emphasize that several actions are taken to avoid conflicts of interest. Faeh at Scope Ratings explains that the use of expectation management can lower the likelihood of inflated ratings. He elaborates that the relevant methodology and how it is applied to the company is discussed with potential customers before a contract is signed in order to manage expectations from the beginning. Liedgren at Nordic Credit Rating argues that stabilizing forces in the market will adjust for inflated ratings. He elaborates that investors will question the viability of too optimistic ratings. Based on the reflections, it is reasonable to assume that conflicts of interest are reduced due to expectation management and stabilizing forces in the market. Expectation management reduces credit rating agencies' incentives to assign inflated ratings as expectations are adjusted early on in the rating process. If inflated ratings were yet to occur, market forces will weaken the viability of these ratings, and consequently, the ratings will no longer be valuable to issuers and investors.

The respondents inform that credit rating agencies are strictly regulated by the European Securities and Markets Authority (ESMA). Liedgren explains that the European regulation is focused on two areas; the quality of the rating process, and the management of conflicts of interest. Nystedt adds to the topic that ESMA regulations affect the process for assigning credit ratings, the way they handle confidential information, and how they work with Chinese walls between analytical and commercial activities. Faeh argues that agencies assigning inflated ratings may lose the certification from ESMA and their mapping that

assures that ratings are comparable and have the same value as those of competitors. These responses suggest that although credit rating agencies are allowed to perform different rating methodologies, ESMA regulations have an important role in the prevention of conflicts of interest.

6 Conclusion

The final chapter will discuss and answer the research question of the thesis. The findings from the analysis are presented in a table and further elaborated in light of the context of the thesis. Furthermore, limitations of the thesis and proposals for further research are discussed.

6.1 Findings and answer to the research question

The purpose of the thesis is to explore the impact of credit ratings in the Norwegian investment grade corporate bond market. We investigate market players' perceptions of credit ratings, in addition to the potential outcome of the VFF industry standard specification. The analysis provides findings which enables an answer to the research question. The research question is as follows:

What is the impact of credit ratings in the Norwegian investment grade corporate bond market?

Despite the low prevalence of credit ratings in the Norwegian bond market, the market is perceived as thoroughly analyzed and relatively well-functioning. There are particularly two explanations to this. Firstly, the previous practice of shadow ratings has contributed to a well-informed market. Secondly, there are relatively few players in the market, which has contributed to a solid and trust-based relation between investors and issuers. Due to these reasons, credit ratings have not been a necessity for bond issuance. This has made the bond market available to small and mid-size companies.

The specification of the VFF industry standard applies directly to VFF Money Market Funds and Fixed Income Funds, but has implications for issuers of industrial and utility bonds. In line with the issuer-pay model, issuers have to pay for ratings such that VFF funds can meet the requirements. In order to be included in Money Market Funds and Fixed Income Funds' investment universes, companies issuing industrial and utility bonds may have to reconsider the value of ratings. Issuers have to consider costs of obtaining a rating in relation to advantages of being rated. Hence, the outcome of the VFF industry standard specification will primarily depend on issuers' evaluation of the impact of ratings.

The impact of credit ratings on issuers, investors, credit rating agencies and the market is presented in table 6.1. We have decided to add the market perspective to highlight the impact of credit ratings on the overall market. The rating decision ultimately lies in the hands of issuers, and therefore, the findings are discussed with emphasis on the issuer perspective.

Table 6.1: The impact of credit ratings

Perspective	Main findings
Issuer	<ul style="list-style-type: none"> • Ratings involve direct and indirect costs. • A concern is that large international credit rating agencies will assign poor ratings to Norwegian companies because of small size. • Ratings can lower credit spreads. • Ratings can improve corporate governance. • Ratings can improve access to funding.
Investor	<ul style="list-style-type: none"> • Ratings provide external analyses and input to internal analyses. • Investors may require lower interest payments from rated issuers and higher interest payments from unrated issuers. • Ratings from different credit rating agencies are perceived differently due to investor confidence.
Credit rating agency	<ul style="list-style-type: none"> • Competition in the rating industry has increased. • More ratings are positive for credit rating agencies' businesses. • Credit rating agencies perform deep and forward-looking analyses of issuers.
Market	<ul style="list-style-type: none"> • The informational value of ratings can contribute to reduce information asymmetries in the market. • Increased transparency due to more ratings can lead to more efficient investment decisions. • Ratings can attract more investors, which can increase market liquidity.

First of all, the process of obtaining a rating involves a significant direct cost to the issuer. Findings suggest that the direct cost of obtaining a credit rating is a crucial factor in the rating decision. Furthermore, the cost will be relatively higher to small and mid-size companies, compared to larger companies. However, new credit rating agencies have entered the Norwegian bond market. These agencies are Scope Ratings and Nordic Credit Rating. Findings suggest that the rating process of these agencies may be better adapted to the small size of Norwegian companies in terms of costs. Due to strict regulations for credit rating agencies, we do not have information on the specific cost of obtaining a credit rating. Consequently, it is challenging to quantify the cost impact of credit ratings.

Issuers are subject to indirect costs both in the process of receiving a first-time credit rating and during the surveillance by the credit rating agency. Findings suggest that the rating process demands time and involvement of the management. However, credit rating agencies seek to simplify the rating process for issuers. This is in line with rated issuers' perception of the rating process being easier than expected. The indirect cost of the credit rating agency's surveillance of the issuer may also be a burden. Being rated implies that attention is continuously drawn to the creditworthiness of the issuer, and this can be a deterrent to companies considering to be rated. However, the continuous surveillance of an issuer will also bring positive information to light. Moreover, more information available from ratings, both positive and negative, will contribute to increased market transparency and efficiency.

A concern to issuers is that credit ratings can contradict the market perception of issuers' creditworthiness. Norwegian companies are small on an international scale, and findings imply that companies fear that this will negatively affect the rating assessment of their creditworthiness. However, findings suggest that investors do not blindly trust credit ratings. Investors are familiar with Norwegian issuers and they conduct their own analyses of issuers' creditworthiness. For several investors, ratings serve as a supplement to their own internal analyses. One can argue that the investors' own analyses function as a safety net for issuers receiving poorer ratings than what they have been implicitly priced to. In addition, credit rating agencies emphasize that their rating methodologies are well suited for Norwegian issuers. Hence, there is less reason to fear poor ratings.

For issuers, an advantage of credit ratings is that credit spreads may decrease as a result of

reduced asymmetric information between issuers and investors. However, findings suggest that rated issuers have not experienced a significant reduction in credit spreads. There are particularly two explanations to this. Firstly, credit spread changes are challenging to quantify. Secondly, previous shadow ratings, and the fact that investors know issuers well, have contributed to a well-informed market. However, credit rating agencies get access to non-public information about issuers and create forward-looking analyses. Consequently, ratings can redefine the market's perception of issuers' creditworthiness. Ratings can signal prospects of the issuer, and this is valuable information to investors. Hence, ratings will provide new information to the market, which may affect credit spreads. Additionally, credit spreads may be more affected once the VFF industry standard specification takes effect. This is because VFF funds may demand higher interest payments from unrated issuers when their portfolios are restricted by a maximum share of unrated industrial and utility bonds.

The obtaining of a credit rating will have a positive impact on the issuer's corporate governance. Credit rating agencies have a monitoring role towards rated issuers. Findings suggest that the monitoring role of credit rating agencies have a disciplinary effect on issuers' decisions. Having a rating provides awareness and clear measures of important key numbers regarding the issuer's creditworthiness. Hence, rated issuers will have to consider their actions in order to maintain or improve the already assigned rating. The monitoring role of credit rating agencies has an important operational impact on issuers.

An additional advantage of credit ratings is improved access to funding. Once the VFF industry standard specification takes effect, ratings will become more important to investment decisions of VFF funds. Hence, rated issuers will have access to a larger investor base compared to unrated issuers. Credit ratings may also improve access to funding from investors not restricted by the VFF industry standard. In addition, an increased prevalence of ratings may attract foreign investors to the Norwegian bond market as foreign investors are more comfortable with rated bonds. Additionally, findings suggest that ratings from different credit rating agencies are perceived differently among investors. Hence, issuers should receive ratings from agencies in which their investors have confidence. From a market perspective, an increased prevalence of credit ratings can attract more investors, and hence, the market liquidity may increase.

The previous practice of shadow ratings enabled inclusion of unrated issuers in investors' investment universes. As shadow ratings have ceased to exist, and VFF will tighten the requirements regarding credit ratings, it will be challenging for these issuers to remain included in the investment universes. However, new credit rating agencies, which are better adapted to Norwegian companies, can make credit ratings more attractive to Norwegian issuers. The establishment of new agencies is particularly convenient to small and mid-size issuers that have traditionally not received ratings from big, international credit rating agencies. Hence, ratings from new agencies can fill the inclusive role of shadow ratings.

The perception among the market players is that many unrated issuers will decide to obtain credit ratings as the phasing in of the VFF industry standard specification begins. This is particularly likely for large issuers and for issuers with large outstanding bond volumes. Consequently, VFF Money Market Funds and Fixed Income Funds may not have to make considerable changes to their investor behavior in order to meet the requirements. However, not all issuers of industrial and utility bonds must obtain ratings in order to be included in the investment universes of the VFF funds. Today, only 14 percent of issuers in the Norwegian bond market have a rating, although 50 percent of the total outstanding bond volume is rated. This implies that VFF funds will manage to meet the requirements, even though not all issuers of industrial and utility bonds decide to be credit rated.

The VFF industry standard specification was recently announced, and hence, there is large uncertainty associated with the outcome. Several unrated issuers might still be considering whether or not to be credit rated. However, an increased prevalence of credit ratings will be beneficial to the overall market. Ratings can attract more investors, which may increase market liquidity. As ratings provide information to the market, asymmetric information between issuers and investors will decrease. This will increase market transparency, and consequently, result in more efficient investment decisions. Although the Norwegian bond market is already quite well-functioning, credit ratings have positive impacts for all market players. Credit ratings have an informational value to investors, and credit rating agencies' businesses are naturally positively affected by an increased prevalence of ratings. The very question is if issuers perceive the advantages to be greater than the disadvantages of being credit rated.

6.2 Limitations of the thesis

The section presents limitations as an extension of the methodological limitations presented in Chapter 4.4.3. The limitations may have affected the quality of the thesis, and hence, the thesis should be seen in light of the limitations.

The scope of the thesis is limited to the Norwegian market for investment grade corporate bonds. Bonds issued by the public sector and financial institutions are excluded, but could have provided valuable insights in the rating discussion. In addition, it would have been relevant to include high yield bonds, as credit ratings may have different impacts in a segment with higher risk. Moreover, the inclusion of high yield bonds could have made it interesting to investigate ratings in relation to bond issuers in the crossover segment between investment grade and high yield.

The thesis focuses on three perspectives in the market; issuers, investors, and credit rating agencies. It would have been of great interest to include additional perspectives in the study, which could have provided broader insights. Potential additional perspectives are regulators, banks and brokerage houses, and trustee.

The data sample is a result of our judgements, and this may have affected the quality of the analysis. Interviews with other interesting candidates were also requested, but the requests were not successful. It would have been valuable to include insights from more unrated bond issuers still in the rating evaluation process. However, this was challenging because the rating decision is of a sensitive nature. Other candidates who would have been interesting to include in the study are representatives from pension funds, insurance companies, and issuers with ratings from S&P, Moody's and Fitch.

The scope and time frame of the thesis enabled a limited sample consisting of only 14 interviews. It would have been beneficial to include more representatives within each perspective. This could have provided a richer study. However, the respondents within each perspective are mostly unified in their responses, and thus, a small sample may not have had negative implications for the study.

6.3 Further research

The section discusses potential further research on the topic of credit ratings in the Norwegian bond market. The thesis addresses only a small part of the impact of credit ratings, and hence, it is of great interest to explore additional elements on the topic.

A suggestion for further research is to explore the impact of credit ratings in other international bond markets. By doing so, one can compare the impacts across countries and identify similarities and differences.

It will be interesting to investigate additional parts of the bond market. By including more perspectives, one can provide a broader analysis of the market. For instance, it can be interesting to study the regulatory perspective. A central player within this perspective is the Financial Supervisory Authority of Norway, which has an important role in regulating and supervising the Norwegian financial markets.

Further research can also benefit from including a more diverse sample within each perspective. In this way, one can explore more internal differences and cross-similarities. For instance, it is interesting to include pension funds and insurance companies in the investor perspective. By including these respondents, one can study the impact of credit ratings in light of the Solvency II directive.

Further research may focus on the quantitative aspects of credit ratings. It will be of great interest to investigate the quantitative impact of ratings in relation to issuer size and change in credit spreads. It can also be useful to use questionnaires in order to understand internal differences within perspectives; for instance between rated and unrated issuers. Moreover, quantitative findings can provide a more concrete answer to the research question. However, we leave such objectives to further research.

References

- Akerlof, G. A. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism. *The Quarterly Journal of Economics*, 84(3):488–500.
- Bebczuk, R. N. (2003). *Asymmetric Information in Financial Markets: Introduction and Applications*. Cambridge University Press.
- Bodie, Z., Kane, A., and Marcus, A. J. (2018). *Investments*. Irwin/McGraw-Hill, 11th edition.
- Bonsall IV, S. B. (2014). The impact of issuer-pay on corporate bond rating properties: Evidence from Moody's and S&P's initial adoption. *Journal of Accounting and Economics*, 57(2-3):89–109.
- Boot, A. W., Milbourn, T. T., and Schmeits, A. (2006). Credit Ratings as Coordination Mechanisms. *The Review of Financial Studies*, 19(1):81–118.
- Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2):77–101.
- Carlson, J. A. (2010). Avoiding Traps in Member Checking. *Qualitative Report*, 15(5):1102–1113.
- Coffe, J. C. (2006). *Gatekeepers: The Professions and Corporate Governance*. Oxford University Press.
- Conelly, B. L., Certo, S. T., Ireland, I. D., and Reutzel, C. R. (2011). Signalling Theory: A Review and Assessment. *The Journal of Management*, 37(1):39–67.
- Creswell, J. W. and Miller, D. L. (2000). Determining Validity in Qualitative Inquiry. *Theory into practice*, 39(3):124–130.
- Deb, P., Manning, M. J., Murphy, G., Penalver, A., and Toth, A. (2011). Whither the Credit Ratings Industry? *Bank of England Financial Stability Paper*, (9).
- Deb, P. and Murphy, G. (2009). Credit Rating Agencies: An Alternative Model. *London School of Economics working paper*.
- Ederington, L. H., Yawitz, J. B., and Roberts, B. E. (1987). The Informational Content of Bond Ratings. *Journal of Financial Research*, 10(3):211–226.
- Elton, J. E., Gruber, M. J., Agrawal, D., and Mann, C. (2001). Explaining the Rate Spread on Corporate Bonds. *The Journal of Finance*, 56(1):247–277.
- ESMA (2019). ESMA Amends Enforcement Decisions for Nordic Banks Following Appeal. Retrieved from <https://www.esma.europa.eu/press-news/esma-news/esma-amends-enforcement-decisions-nordic-banks-following-appeal>.
- Finans Norge (2016). Bortfall av skyggerattinger kan svekke det norske obligasjonsmarkedet. Retrieved from <https://www.finansnorge.no/contentassets/3c8fb921e27d420bbc2767611a45a054/brev-til-finansdepartementet---bortfall-av-skyggerattinger-kan-svekke-det-norske-obligasjonsmarkedet.pdf>.

- Finans Norge (2017). Skyggerating og kapitalmarkedet. Retrieved from <https://www.finansnorge.no/aktuelt/nyheter/2017/03/skyggerating-og-kapitalmarkedet/>.
- Finans Norge (n.d.). "Shadow ratings": Background and a proposal for amending CRAR. Retrieved from https://www.finansnorge.no/contentassets/735d7db6cfe648c7b073b72c3cc38110/shadow-ratings_background-and-a-proposal-for-amending-crar.pdf.
- Geertz, C. (1973). Thick Description: Towards an Interpretive Theory of Culture. *Turning points in qualitative research: Tying knots in a handkerchief*, 3:143–168.
- Ghauri, P., Grønhaug, K., and Strange, R. (2020). *Research Methods in Business Studies*. Cambridge University Press.
- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*, 8(4):597–607.
- Güntay, L. and Hackbarth, D. (2010). Corporate bond credit spreads and forecast dispersion. *Journal of Banking & Finance*, 34(10):2328–2345.
- Jorion, P., Liu, Z., and Shi, C. (2005). Informational Effects of Regulation FD: Evidence from Rating Agencies. *Journal of Financial Economics*, 76(2):309–330.
- Korstjens, I. and Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1):120–124.
- Markowitz, H. (1952). Portfolio Selection. *The Journal of Finance*, 7(1):77–91.
- Mehrana, H. and Stultz, R. (2007). The Economics of Conflicts of Interest in Financial Institutions. *Journal of Financial Economics*, 85(2):267–296.
- Merton, R. C. (1974). On the Pricing of Corporate Debt: The Risk Structure of Interest Rates. *The Journal of Finance*, 29(2):449–470.
- Nordic Bond Pricing (n.d.). Om oss. Retrieved from <https://nordicbondpricing.no/om-oss>.
- Nordic Credit Rating (2019). Nordic Bond Maturities in 2019 - A Slightly More Challenging Affair. Retrieved from https://nordiccreditrating.com/uploads/2019-03/Nordic%20Credit%20Rating%20-%20Nordic%20bond%20maturities%20in%202019%20-%20a%20slightly%20more%20challenging%20affair_0.pdf.
- Nordic Trustee (2018). Norwegian Bond Market Report.
- Nordic Trustee (2019). Nordic Corporate Bond Market Report.
- NOU 2018:5 (2018). Kaptial i omstillingens tid - Næringslivets tilgang til kapital. Retrieved from <https://www.regjeringen.no/no/dokumenter/nou-2018-5>.
- Oslo Børs (2007). Obligasjoner - et sikkert, men spennende alternativ.
- Oslo Børs (2020). Eierstruktur. Retrieved from [https://www.oslobors.no/Oslo-Boers/Statistikk/AArsstatistikk/\(index\)/1](https://www.oslobors.no/Oslo-Boers/Statistikk/AArsstatistikk/(index)/1).
- Oslo Børs (n.d.). Det norske obligasjonsmarkedet - effektivt og fleksibelt marked for innhenting av kapital.

- Pandey, S. C. and Patnaik, S. (2014). Establishing Reliability and Validity in Qualitative Inquiry: A Critical Examination. *Jharkhand Journal of Development and Management Studies*, 12(1):5743–5753.
- Ridder, H. G. (2017). The Theory Contribution of Case Study Research Designs. *Business Research*, 10(2):281–305.
- Rom, M. C. (2009). The Credit Rating Agencies and the Subprime Mess: Greedy, Ignorant, and Stressed? *Public Administration Review*, 69(4):640–650.
- Saunders, M., Lewis, P., and Thornhill, A. (2009). *Research Methods for Business Students*. Pearson Education Limited, 5th edition.
- S&P (2014). Standard & Poor's Ratings Definitions. Retrieved from <https://www.spratings.com/documents/20184/86966/Standard+%26+Poor%27s+Ratings+Definitions/fd2a2a96-be56-47b8-9ad2-390f3878d6c6>.
- S&P (n.d.). Guide to Credit Rating Essentials. Retrieved from https://www.spratings.com/documents/20184/760102/SPRS_Understanding-Ratings_GRE.pdf/298e606f-ce5b-4ece-9076-66810cd9b6aa.
- Standard & Poor's (2012). The Role of Credit Ratings in the Financial System. Retrieved from http://www.markadelson.com/pubs/Role_of_Ratings_in_the_Financial_System.pdf.
- Sundaresan, S. (2009). *Fixed Income Securities and Their Derivatives*. Academic Press, 3rd edition.
- Tansey, O. (2007). Process Tracing and Elite Interviewing: A Case for Non-probability Sampling. *PS: Political Science and Politics*, 40(4):765–772.
- Thagaard, T. (2018). *Systematikk og innlevelse: En innføring i kvalitativ metode*. Fagbokforlaget, 5th edition.
- The European Parliament and the Council of the European Union (2011). Regulation (EU) No 513/2011. Retrieved from <http://data.europa.eu/eli/reg/2011/513/oj>.
- VFF (2017). Verdipapirfondenes forenings bransjestandard for informasjon og klassifisering av rentefond. Retrieved from <https://vff.no/assets/Bransjenormer/Bransjestandarder/Bransjestandard-for-informasjon-og-klassifisering-av-rentefond-vedtatt-18.12.2017-fotnote-19.09.2018.pdf>.
- VFF (2019). Totalmarkedet 1.1.-31.12. 2019, Tabell 4.4 Rentefond. Retrieved from <https://vff.no/historisk-statistikk#2019>.
- VFF (2020). Bransjestandarder. Retrieved from <https://www.vff.no/bransjestandarder>.
- VFF (2020a). Om VFF. Retrieved from <https://www.vff.no/om-vff-vedtekter>.
- VFF (2020b). Verdipapirfondenes forening trapper opp krav om offisiell rating for pengemarkeds- og obligasjonsfonds plasseringer i industripapirer (inkl. kraft). Retrieved from <https://vff.no/assets/Dokumenter/2020/VFF-Offisiell-rating-infobrev-til-utstedere-05.06.20.pdf>.
- Weinstein, M. I. (1977). The Effect of a Rating Change Announcement on Bond Price. *Journal of Financial Economics*, 5(3):329–350.

Ødegaard, B. A. (2017). Bond Liquidity at the Oslo Stock Exchange. *Available at SSRN 2919301*.

Appendix

A1 Interview guides

The interview guides are in Norwegian, as all interviews were conducted in this language.

A1.1 Rated issuers

Introduksjon

Takke for muligheten til intervju.

Presentere oss og formålet med studien.

Spørre om samtykke til å bruke navn og selskapsnavn i studien.

Spørre om samtykke til lydopptak av intervju.

Kontekst

Hva omfatter virksomheten deres?

Vil du fortelle om selskapets obligasjonslån?

Hva er deres syn på tidligere praksiser for definering av investeringsuniverset, herunder skyggerating og informasjon fra Nordic Bond Pricing?

Har selskapet vurdert andre finansieringskilder enn obligasjonslån?

Offisiell kredittrating

Hva er grunnen til at selskapet har skaffet offisiell kredittrating?

Hvilket kredittratingbyrå har selskapet benyttet? Hvorfor valgte selskapet dette byrået?

Hvordan opplevde dere kredittratingprosessen?

Har dere merket noen forskjeller etter selskapet fikk offisiell kredittrating? I kreditt spread, investorbase, selskapsstyring osv.

Spesifiseringen av VFF sin bransjestandard for rentefond

Hva var deres reaksjon på spesifiseringen av VFF sin bransjestandard for rentefond?

Har selskapet gjort en vurdering på hvordan dere nå skal tilpasse dere bransjestandarden?

Hvis ja, hva ligger til grunn for denne vurderingen?

Hvordan tror du andre aktører i markedet vil påvirkes av spesifiseringen av VFF sin bransjestandard?

Hvordan tror du markedet vil utvikle seg etter spesifiseringen av VFF sin bransjestandard trer i kraft?

A1.2 Unrated issuers

Introduksjon

Takke for muligheten til intervju.

Presentere oss og formålet med studien.

Spørre om samtykke til å bruke navn og selskapsnavn i studien.

Spørre om samtykke til lydopptak av intervju.

Kontekst

Hva omfatter virksomheten deres?

Vil du fortelle om selskapets obligasjonslån?

Hva er deres syn på tidligere praksiser for definering av investeringsuniverset, herunder skyggerating og informasjon fra Nordic Bond Pricing?

Har selskapet vurdert andre finansieringskilder enn obligasjonslån?

Offisiell kredittrating

Hva er grunnen til at selskapet ikke har skaffet offisiell kredittrating?

Har selskapet tatt et standpunkt til om det skal skaffe offisiell kredittrating i fremtiden?

Hvis ja, hvilke kredittratingbyråer vurderes?

Hva tror du er konsekvensene av at selskapet får offisiell kredittrating?

Spesifiseringen av VFF sin bransjestandard for rentefond

Hva var deres reaksjon på spesifiseringen av VFF sin bransjestandard for rentefond?

Har selskapet gjort en vurdering på hvordan dere nå skal tilpasse dere bransjestandarden?

Hvis ja, hva ligger til grunn for denne vurderingen?

A1.3 Investors

Introduksjon

Takke for muligheten til intervju.

Presentere oss og formålet med studien.

Spørre om samtykke til å bruke navn og selskapsnavn i studien.

Spørre om samtykke til lydopptak av intervju.

Kontekst

Hva innebærer deres investeringsvirksomhet?

Hvor avhengig er deres obligasjonsinvesteringer av offisielle kredittratings?

Hva er deres syn på tidligere praksiser for definering av investeringsuniverset, herunder skyggerating og informasjon fra Nordic Bond Pricing?

Offisielle kredittratings

Verdsetter dere offisielle kredittratings fra ulike kredittratingsbyråer ulikt?

Hvordan vektlegges egne analyser i forhold til offisielle kredittratings?

Spesifiseringen av VFF sin bransjestandard for rentefond

I hvilken grad berøres dere av VFF sin bransjestandard for rentefond?

Hva var deres reaksjon på spesifiseringen av VFF sin bransjestandard for rentefond?

Har dere gjort en vurdering på hvordan dere nå skal tilpasse dere bransjestandarden?

Hvis ja, hva ligger til grunn for denne vurderingen?

Hvordan tror du andre aktører i markedet vil påvirkes av spesifiseringen av VFF sin bransjestandard?

Hvordan tror du markedet vil utvikle seg etter spesifiseringen av VFF sin bransjestandard trer i kraft?

A1.4 Credit rating agencies

Introduksjon

Takke for muligheten til intervju.

Presentere oss og formålet med studien.

Spørre om samtykke til å bruke navn og selskapsnavn i studien.

Spørre om samtykke til lydopptak av intervju.

Kontekst

Vil du fortelle om kredittratingprosessen deres?

Hva er inntrykket deres av hva som er viktigst for kunden i valg av kredittratingbyrå?

Hvordan skiller dere dere fra andre kredittratingbyråer?

Hvordan er deres ratingprosess tilpasset utstederen?

Hva definerer dere som et effektivt obligasjonsmarked?

Hvilke utfordringer ser dere i dagens obligasjonsmarked?

Hva tenker dere om økt konkurranse på kredittratingsmarkedet?

Offisielle kredittratings

Hvordan sikrer dere en objektiv tredjepartsvurdering?

Hva tilfører offisiell kredittrating til markedet av ny informasjon?

Spesifiseringen av VFF sin bransjestandard for rentefond

Hvordan tror du utstedere vil tilpasse seg spesifiseringen av VFF sin bransjestandard?

Hvordan tror du markedet vil utvikle seg etter spesifiseringen av VFF sin bransjestandard trer i kraft?