A Fundamental Valuation of B2Holding ASA

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Master Thesis

MSc. Applied Economics and Finance

Authors:

Thomas Rotvold Ingebrigtsen – 125275

Anders Mendoza Sveinhaug – 125163

Supervisor:

Poul Wolffsen

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Abstract

This thesis attempts to map the debt purchasing and collection industry in Europe, and value one of its largest incumbents B2Holding by applying relevant valuation theory. In Europe, the total stock of non-performing loans grew to 7 percent after the 2008 Financial Crisis, prompting regulatory powers to raise their attention to banks and financial institutions assets. Regulations encouraged an increase in the sale of non-performing loans and B2Holding managed to become a sizeable European debt purchaser and collector by employing a capital-intensive expansion strategy that utilised the extended supply and low-cost financing. By the end of 2019 they had acquired operational platforms in 23 countries with NOK 23.8 billion in remaining collections.

In 2019 the growth slowed in the industry because of tightening bond markets, increased competitive rivalry and eroding profit margins. B2Holding had to change its strategy to focus on joint ventures and fewer markets, consequently reducing their overall risk profile. Evidence suggested that competitors would adopt similar strategies and reduce internal competition to stabilise profits.

The fundamental share price of B2Holding was ascertained within the NOK 8.06 to 13.34 range, with the median price of 12.94. Compared to the 28.02.2020 share price of NOK 6.18, the median estimate corresponded to a substantial undervaluation of 52.24 percent. We added reliability to our valuation by running a robustness test using a Monte Carlo simulation on the DCF-enterprise valuation. It showed a 95.08 percent probability of observing a share price above NOK 6.18.

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1 Introduction

After the financial crisis of 2008 and subsequent recession in Europe, banks and other credit-granting institutions were distressed by a growing percentage of non-performing loans. Today it continues to be a debated topic among regulatory authorities, and The European Central Bank recognized it as the second-largest downside risk factor in 2019 to the European economy (European Central Bank, 2019). This focus has facilitated growth for companies that purchase and collect on non-performing loans.

Upon research into this industry, we found the company B2Holding ASA, hereafter referred to as only B2Holding. A Norwegian publicly traded debt purchasing and collection firm, listed on the Oslo Stock Exchange. They have become an established player in Europe by employing an aggressive expansion strategy.

Company and industry characteristics have raised several exciting challenges in the fundamental valuation of B2Holding, and a thorough discussion of various valuation theories was a necessary step to align the appropriate theoretical frameworks to the thesis' goal.

We want to thank our supervisor Poul Wolffsen for his commitment to us and guidance throughout this process.

1.1 Problem Statement

The purpose of this thesis is to determine the fundamental value of B2Holding using academically, renowned concepts. We conduct a thorough analysis of the company, industry, and appropriate valuation theories, upon which we base our investment decision. An accurate estimation of the fundamental value reveals whether the share is under- or overvalued by the market. Therefore, our research question becomes:

What is the fundamental share price of B2Holding as of 28.02.2020?

1.1.1 Sub-questions

We identify a series of sub-questions to provide an answer to the problem statement. Each question possesses at least one fundamental issue and requires discussion to answer. We have identified these sub-questions as essential to the problem statement:

- How is B2Holding and its industry characterized?
- How does the environment influence the industry and B2Holding?
- Which resources are B2Holding utilizing, and how?
- What is B2Holding's financial status, and how has it performed relative to its peers?
- Which valuation models adds valuable insight to B2Holding's fundamental share price?
- How is the future outlook of B2Holding defined?
- What is the appropriate cost of capital?
- How robust is the estimated share price?

1.2 Delimitations and Assumption

We assume that the reader is familiar with the economic- and valuation literature. Thus, we have limited our explanations of several theories to an appropriate academic level for the master thesis. Theoretical discussion is focused on their applicability to answer the thesis' questions.

We comprise the thesis of publicly available information. Analysis of company data is, therefore, mainly limited to reports published by B2Holding. We expressed to B2Holding that we wanted to conduct interviews; however, due to unprecedented circumstances following the COVID-19 outbreak, this was not made possible. B2Holding has the majority of operations in debt purchasing and collection, and primary focus when conducting the analysis is limited to that industry. Although they have secondary offerings through the sale of credit information, telemarketing, and consumer loans, they account for a small percentage of the total and categorized as other activities.

We found industry and market data for the entirety of the European continent to be scarce or inadequate for our purposes, especially for several economies not affiliated closely with the European Union. In some instances, it has therefore been necessary to assume that data specific to the European Union and affiliates can adequately describe trends and characteristics of the industry.

A business valuation changes with time as new information arises, and to avoid continuously having to re-evaluate estimates and argumentations, it was decided to set a cut-off date. B2Holding published their 2019 fourth-quarter results on the 28.02.2020, which became our

preliminary cut-off date. Upon writing this thesis, it became increasingly apparent that COVID-19 could have a significant impact on the industry. We, therefore, kept the 28.02.2020 cut-off date on financial data concerning B2Holding and its peers, while extending COVID-19 related information to 23.03.2020. It gave us access to more reliable information and impact assessments from the European Banking Authority and International Monetary Fund. Simultaneously, we attempt to keep a balanced consideration towards the pandemic by not permitting it to guide the whole thesis nor remain negligent to its impact. We do this by limiting the effects of COVID-19 on the base valuations and not let the uncertainty of the current situation sideline the application of relevant theory.

1.3 Evaluation of Sources

The primary theoretical sources have been well-known books, primarily Petersen & Plenborg (2012), Koller et al. (2010), Damodaran (2012) and Grant (2019). Due to the closing of the library at Copenhagen Business School, we have had limited access to the most up-to-date literature on the topic. Therefore, one relevant critic of our book sources is that several of the books used have been updated and re-published more recently then the versions applied throughout the thesis. However, supplementing the theoretical discussions are journal articles primarily from The Journal of Finance, Harvard Business Review and Journal of Financial Economics.

Financial company data is collected from the annual and quarterly reports published by B2Holding and peers. These could contain biases, especially in fair value estimations of certain accounting items. However, all companies are publicly traded and audited, which limits the degree to which biases can misrepresent the financials.

Reports from reputable institutions such as the International Monetary Fund, The European Banking Authority and European commission are among the sources used to analyse the historical and future industry and market movements. Empirical evidence has been peer-reviewed studies, and when available, multiple evidence is used to verify our conclusions. Data on historical share prices, bond prices, macroeconomic factors (unemployment and GDP growth) was collected from Yahoo Finance, Norwegian Central Bank and The World Bank.

1.4 Methodology

In this section, we give a brief overview of the literature and theoretical models to specific sections of this thesis. It will provide the reader with the basis of the sub-questions and how they form the structure of the thesis. All the parts that make up this thesis attempt to answers at least one of our sub-questions. We summarize our thesis structure in figure 1.1.

1.4.1 Strategic Analysis

We are working from the Strategic Fit Framework developed by Grant (2019), which proposes a dynamic approach to strategic analysis. The strategic analysis is both qualitative and quantitative, with the primary objective of identifying and value profit drivers. We fit the analysis to our purposes by utilising the frameworks: PEST, Porter's Five Forces and VRIO. PEST is a useful starting point for strategic analysis and gives an overview of macro-economic trends that influence the overall industry and company. Porter's Five Forces specifies the industry characteristics through analysis of the threat of entrants and substitutes, incumbent rivalry, and power of suppliers and buyers. VRIO is used for the internal analysis, with a focus on resources and assesses them across the four dimensions of value, rarity, inimitability and how the organisation utilise them. Data is primarily collected from recent reports on the European debt markets by The European Commission, The World Bank and Deloitte.

1.4.2 Financial Analysis

The financial analysis consists of indexing and common size analysis, followed by an examination of profitability and liquidity, in accordance with recommendations from Petersen & Plenborg (2012) and Koller et al. (2010). Indexing and common size analysis are specific to B2Holding, while we compare key ratios of profitability and liquidity to the peer group.

Financial statements from B2Holding and its peers are reformulated to obtain consistency and accurate representation of performance.

1.4.3 Forecasting

Our forecast is a collective consideration of strategic and financial analysis'. These provide the foundation for the forecast by identifying value drivers and the realistic considerations to historical levels and future expectations are what ties them together in this section. The forecasted income statements and balance sheets are based primarily on the literature by

Petersen & Plenborg (2012), with supplements from Damodaran (2012) and Koller et al. (2010).

1.4.4 Cost of Capital

Cost of capital is based on the WACC formula and calculated primarily based on Koller et al. (2010) with supplementing theory from Damodaran (2012). When needed, empirical data has been downloaded from The Norwegian Central Bank, Yahoo Finance and Damodaran's datasets.

1.4.5 Valuation Methods

As is discussed in the chapter on valuation theory, we conclude that applying the DCF-enterprise and equity valuation, EVA-model, Dividend Discount model and complementing these with relative valuation was the best fit. The theoretical basis stems from Koller et al. (2010), Peterson & Plenborg (2012) and Damodaran (2012). Accompanying the valuation methods, we run a sensitivity analysis of the estimated share price against key input factors in addition to a Monte Carlo simulation to test the final robustness.

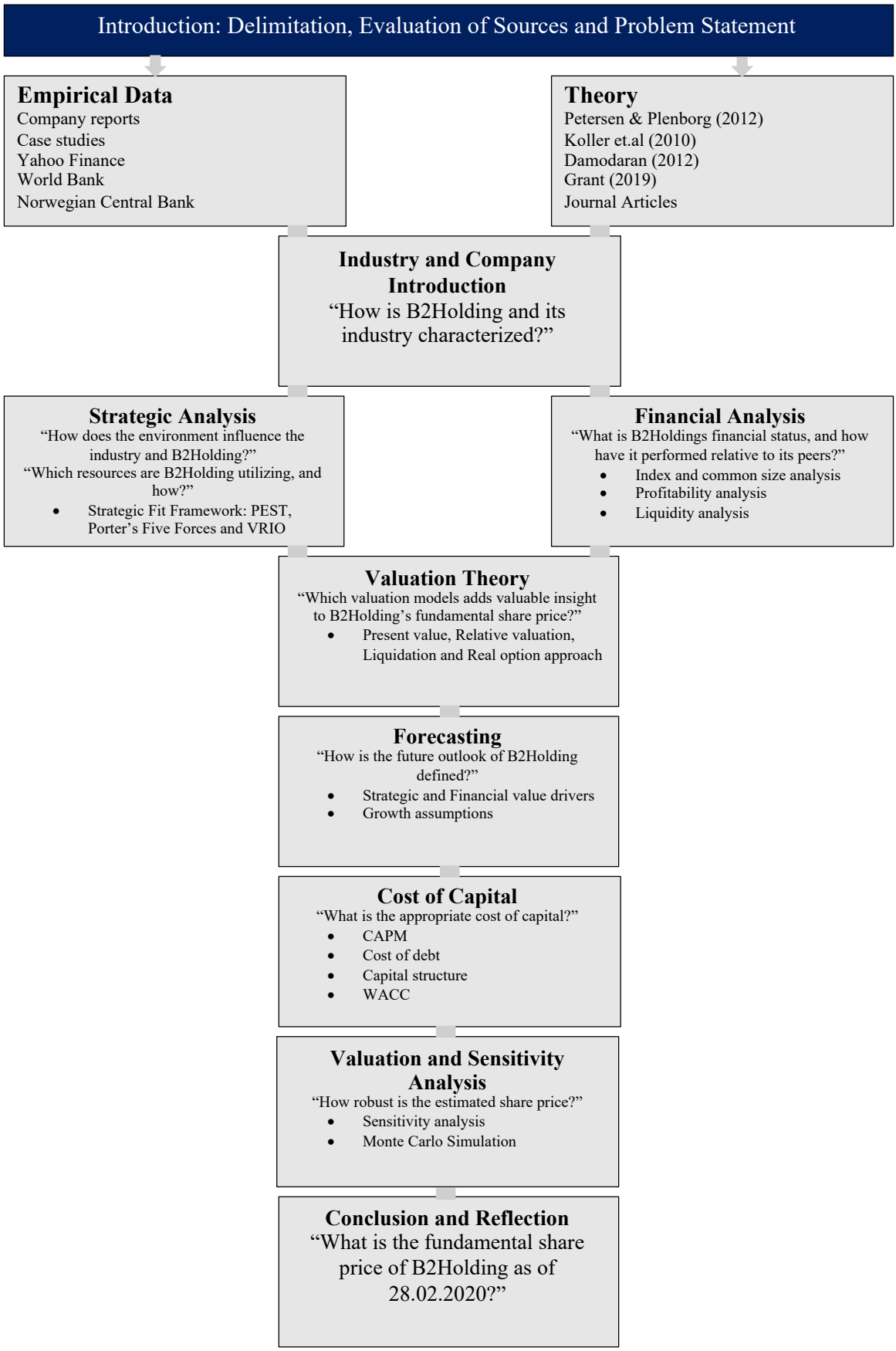


Figure 1.1: Thesis Structure. Source: Own Production

2 Industry and Company Overview

In this section, we introduce the reader to the European debt purchasing and collection industry and B2Holding. We focus primarily on trends and characteristics observed after the 2008 financial crisis to now. Sections 2.1 and 2.2 outline the industry and market. Section 2.3 and 2.4 give valuable overviews of COVID-19's impact and cyclicality in the industry. The descriptions will provide an overview of the strategic analysis conducted later in this paper.

2.1 Debt Purchasing and Collection Industry

When a bank, credit- card company, online clothing store or any other company that may grant credit to their customers have realistic expectations not to have their debt repaid or the debt is past 90 days due (European Central Bank, 2016), they have four main courses of action: realize the debt as a loss, begin in-house collection efforts, outsource collection to a third party for a percentage or fee of the collected debt or sell the debt at a discount. The latter two alternatives define what is called the secondary non-performing loan (NPL) market, which an industry of debt purchasers and collectors are devoted to utilizing for profits. The original holders of individual non-performing loans can pool them together into portfolios and offer them to debt purchasers, most commonly through open auctions but also to selected buyers. The industry then serves as a mechanism for debtors to reduce losses on NPLs by offering a price above zero and below the face value of the portfolio. Various factors such as the days past due, demographic of the debtors, macroeconomics and more, influence the percentage of face value that is covered. The structure of the industry thereby allows the original holders to remove the debt from their balance sheets and cover a part of their expected loss.

The European Banking Authority expressed that *"in the aftermath of the financial crisis, NPLs have been a major concerns for supervisors, policymakers and market participants in the EU"* (European Banking Authority, 2019b). The regulators have since the crisis been interested in ensuring that the current stock of NPLs is reduced, and the future does not build back up to previous levels. Thereby, the industry comprised of debt purchasers and collectors has become a structurally important part of the financial systems after the 2008 financial crisis. It can be illustrated by the findings in the EOS survey of European payment practices in 2018 where most companies lacked the resource to conduct their collections on overdue credit. Furthermore, funds received from outsourcing debt collections are invested in growth. It

showed that nearly half of the 3400 companies surveyed across Europe used funds received from outsourcing debt collection to secure and create new jobs, while 61 percent said the money was going towards their own debt payments (EOS Holding GmbH, 2018). Capital requirements of banks have been influenced through Basel III and the accounting of financial assets by IFRS 9. Basel III and IFRS 9 have an indirect effect on NPL ratios since they target aspects that are affecting the capital available to banks. Through the purchasing of NPLs, the industry is helping banks to comply with increased regulations.

Furthermore, the European Commissions have an "action plan to tackle NPLs in Europe" targeted directly at current NPL ratios and potential build-ups (European Commission, 2019b). These will be evaluated in detail in the strategic analysis. However, the combined effect of these recent regulations has put constraints on banks' ability to provide additional loans to consumers if non-performing loans are not managed actively. Regulators have intended to but strict capital and loss provision requirements on banks to encourage low NPL ratios. It is estimated that debt purchasing and collections returns between EUR 45 to 55 billion each year to the European economy directly and indirectly through these different consequences (Federation of European National Collection Association, 2020).

In 2006, before the financial crisis, the total NPL percentage of total loans within the EU was 2 percent and peaked between 2012 and 2013 at 7 percent (Deloitte- Deleveraging Europe Report, 2019). Although the overall ratio is in decline, NPLs were recognized as the second most important risk factor, after geopolitical uncertainties by the European Central Bank's Financial Stability Review (2019). This assessment was due to the characteristics observed in the economies across Europe. Low interest rates have facilitated risky investments over time, coupled with weaker future growth prospects and concerns regarding current bank profitability. The below figure illustrates the trend of NPL as a ratio of total gross loans, non-performing exposure (NPE) and total volumes of NPLs in EUR billions, in the Euro Area.

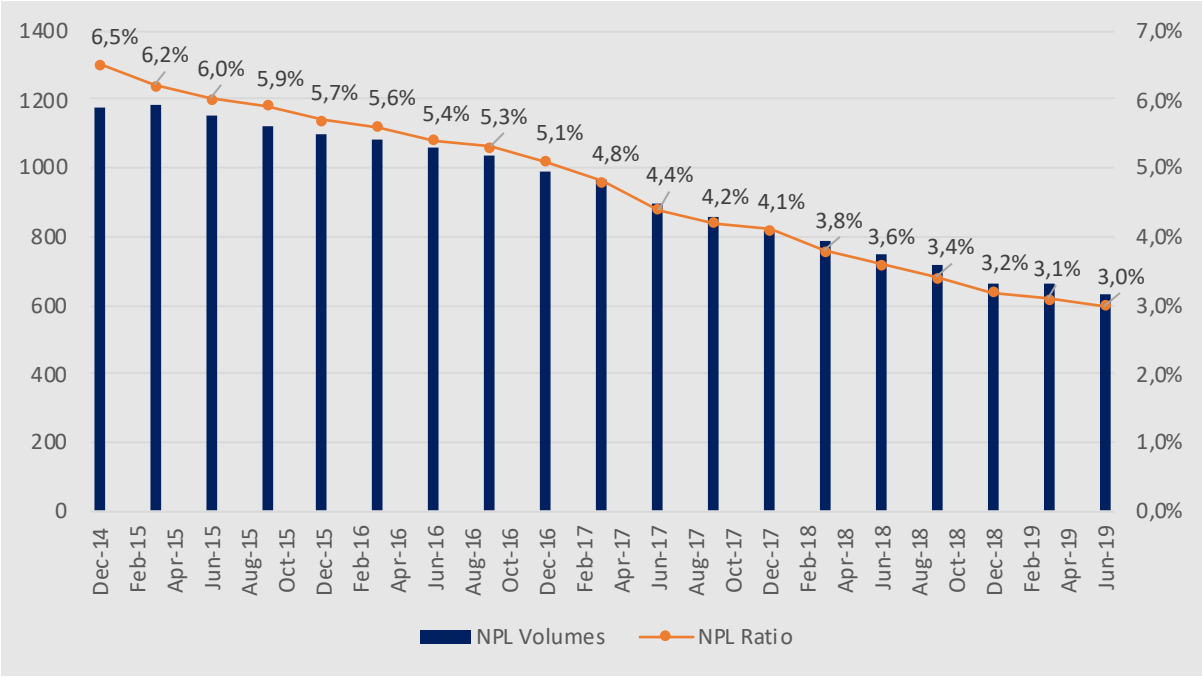


Figure 2.1: Quarterly trend in NPL ratios and NPL volumes (EUR billion). Source: European Banking Authority (2019)*/Own Production*

- ***NPL volume:*** In EUR billion, the amount of non-performing loans and advances.
- ***NPL ratio:*** All non-performing loans and advances divided by the total gross loans and advances.

From figure 2.1, it is evident that the decline has been steady, without any breaks or increases between quarters. However, concerns have been raised by the European Central bank to the relatively slow decline. When seeing figure 2.1 in the context of figure 2.2 below, which demonstrates the increase in the sale of NPL, subsequently providing a decrease in the NPL ratio. It is obvious that part of the decline is the increase in sales due to Basel III and IFRS 9, and not improved asset qualities through European Commission's action plan. However, in total, the regulations have incentivized banks to manage their NPLs and especially the sale of non- performing debt has increased, evident in figure 2.2.

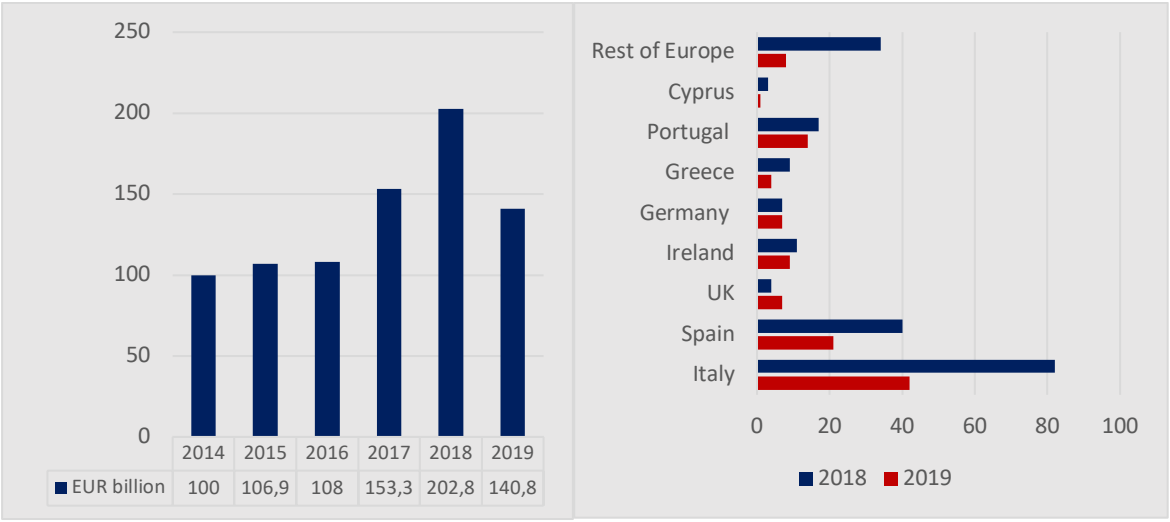


Figure 2.2: European debt purchasing (EUR billion). Source: Deloitte deleveraging report 2019/Own Production

Figure 2.3: Number of deals by country. Source: Deloitte deleveraging report 2019/Own Production

In terms of face value, the total European NPL portfolio is approximately EUR 636 billion, and debt purchasing reached over EUR 200 billion in 2018, nearly doubling in two years from EUR 108 billion in 2016. The largest domestic markets, accounting for approximately 66 percent of the total face value, are Italy, France, Spain and Greece (Deloitte- Deleveraging Europe Report, 2019). Although in the number of deals, Greece and France are lagging.

Evident from the figures discussed, the industry has experienced high growth in recent years. It is, however, expected to slow, with the European debt collection entering a more mature phase (Standard & Poor Global, 2019). This is based on a less intentional stimulus of the industry through bond markets. Debt collectors have leveraged their businesses through access to relatively low-cost financing through cheap speculative-grade bond markets. Late 2018 saw a tightening of the speculative-grade bond markets which has risen the potential cost of debt. When bonds that financed the peak of 2018 in purchased portfolios start to mature, Standard and Poor (2019) expect that European debt collectors must attend their debt more actively and slow growth.

The representation in figure 2.4 gives a picture of the situation as of June 2019 in selected countries in Europe, in terms of the face value of NPLs and their ratio. There are substantial fluctuations between European countries in regards to both metrics.

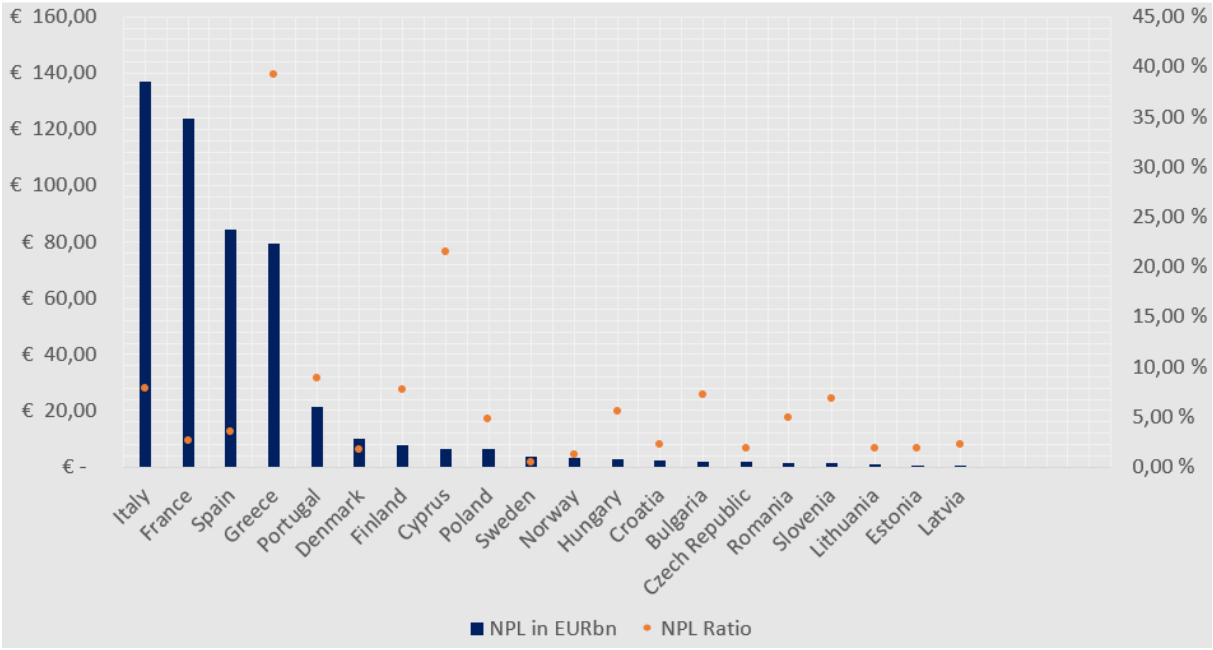


Figure 2.4: NPL Volume and Ratio for Selected Countries. Source: International Monetary Fund (2020a) & B2Holding (2020a) /Own Production

2.2 Market Situation

The debt purchasing and collection industry simultaneously service two markets. The purchasing part of the industry services the secondary NPL market and we have discussed this from an industry standpoint above. The collecting part services consumers by offering them solutions to their debt problem. B2Holding explain it by providing their customers, i.e. the debtors, with more maintainable payment agreements than their previous schedules and in the long-term help their customers be financially independent of their debt (B2Holding, 2019c). This latter market is the primary focus here, but as we will discuss in section 2.4, they are connected tightly.

Intrum's European consumer report (2019) found that on average 24 percent of the people surveyed had borrowed money or reached the credit card limit in the last six months before the study and 45 percent felt their bills were outpacing their income in growth. They also found that technology has provided consumers with easy access to credit via smartphones and computers, a trend most consumers (60 percent) are concerned about (Intrum - Consumer report, 2019). Deloitte UK, (2019), reported that credit spending among private consumers is gaining momentum and rising towards levels not seen since pre-financial crisis times within the European Union. With the above observation seen in relation to empirical

studies on credit and NPLs, we find a market in large part governed by macro-economic factors. For example, Dell'Ariccia and Marques (2006) empirically show that future defaults are more likely right after a period of strong credit growth. A reason for this is that during economic growth, lenders tend to be less risk-averse and grant more credit to capture market shares, which will increase NPLs during downturns when consumers ability to repay debt decreases. With current regulations put on financial institutions, this development will again provide rises to the secondary NPL market offerings. Beck et al. (2013) found significant evidence in support of the hypothesis that real GDP growth is the primary driver of NPL ratios. Inversely, this indicates that NPL ratios are lower during economic growth and consumers ability to repay debt is stronger.

2.3 COVID-19

The effects of the COVID-19 are still uncertain, and providing an overview of its impact of debt purchasing and collection is difficult. However, both on international and domestic levels, economic relief has been either proposed or implemented to reduce insolvency and bankruptcy. These measures can reduce the potential rise in NPLs during and after the pandemic and allow the collection to maintain acceptable levels.

The European Commission has developed an economic aid framework for member states, allowing for increased flexibility from budgetary constraints to support their economies (European Commission, 2020a). The framework allows for direct grants up to EUR 8 million to companies, subsidised interest rates on loans and using banks full lending capacity to aid small and medium-sized companies. These measures could help a large portion of struggling businesses in servicing their debt through the pandemic. An important aspect is that the true extent of COVID-19's effects on the economy might be lagging and unobservable in the present. We discuss more on the future impact in section 3.1.2.

2.4 Sensitivity to the Business Cycle

The Business Cycle consists of fluctuations between expansions, contractions, peaks and low points (Bodie et al., 2011) and they tend to last between 1-8 years and is generally not synchronised between economies contrary to bank for international (Bank for International Settlements, 2014). In section 2.2, we observed a market that influences debt purchasing and

collection on both ends of the industry. On one side, during economic growth, the collection part of the industry is benefitting from already owned portfolios, as consumers have a stronger ability to repay their debts. While on the other side, during economic stagnation and downturns, the supply of NPLs increase and purchasing can thrive. We, therefore, view the industry in one sense as non-cyclical. It is not to say that profitability is stable throughout the cycle but that different opportunities arise during the stages. During expansion and at the peaks, the ability to collect is more robust than in the subsequent stages. Instead, it is then more opportunities for investing in growth through acquiring new portfolios. The findings from section 2.1 – 2-4 are summarized and supplemented with company information from B2Holding below to provide an overview of shifting market and industry conditions.

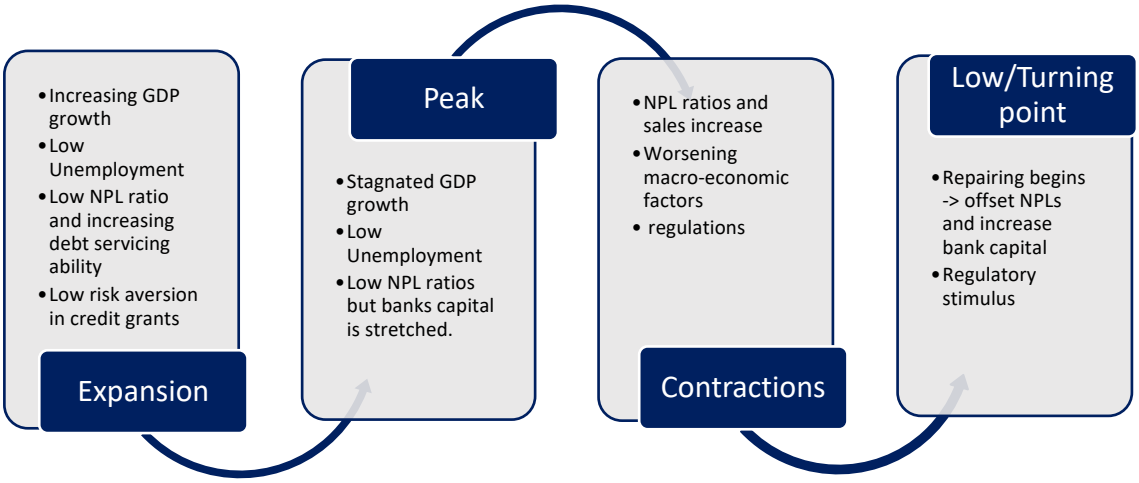


Figure 2.5: Business Cycle. Source: B2Holding Registration Document/Bodie et.al (2014)/Own Production

2.5 B2Holding

B2Holding is a debt purchasing and collection company publicly traded on the Norwegian stock exchange. Since operations began in Norway in 2011, the company has deployed an expansion strategy permitting them access to 23 European countries, either through joint ventures, acquisitions or greenfield initiatives (B2Holding, 2019c). At the end of 2019, the purchased loan portfolios amounted to NOK 13.5 billion on the balance sheet and estimated remaining collections (ERC) of NOK 23.8 billion (B2Holding, 2020b). However, 2019 was a challenging year in terms of net profits and portfolio losses, and B2Holding responded by

implementing a new strategic direction. They identified the need for a more cost-efficient collection profile and less capital-intensive investment strategy. Erik Just Johnsen, the CEO, stated in 2019 that the new strategy might lead to fewer markets pursued and instead focused attention on benefitting from economies of scale in the largest and most attractive markets through joint- ventures (Sveen, 2019).

2.5.1 Historical developments

The company was established by Jon Harald Nordbrekken and Olav Dalen Zahl. Nordbrekken had previous experience from the industry, both as CEO of Intrum Justitia and Aktiv Kapital. He also founded the first B2Holding in 2005, before changing its name and selling it to Hercules Kapital in 2008. Zahl also had experience from Aktiv Kapital and worked with Nordbrekken. After Nordbrekken finished a three-year non-compete following the sale of the first B2Holding, they established the B2Holding of today in 2011 (B2Holding, 2019c).

The company began expanding in Sweden, Finland and Estonia in 2012, through acquisitions of Sileo Kapital AB and OK Perinta. Continued expansion through acquisition, led to B2Holding owning Interkreditt (Norway), Creditreform (Latvia) and Ultimo (Poland). B2Kapital was established as a subsidiary of B2Holding in 2013 in Croatia, to be closer to the entire NPL process and become the preferred partner in large NPL markets (B2Kapital, 2020). By the end of 2014 estimated remaining collections had grown from NOK 1.371 billion (2013) to NOK 4.430 billion (B2Holding, 2019c).

After a quiet 2015, with no acquisitions and focus on already existing markets, B2Holding had a total of nine acquisitions from 2016-2018 and B2Kapital initiated four new greenfield operations in Greece, Bosnia and Herzegovina, Italy and Cyprus during the period. Noticeable acquisitions included Verifica in Spain and NACC in France, rendering access to two of the largest debt markets in Europe (B2Holding, 2019c). In 2018, estimated remaining collections reached NOK 22.262 billion.

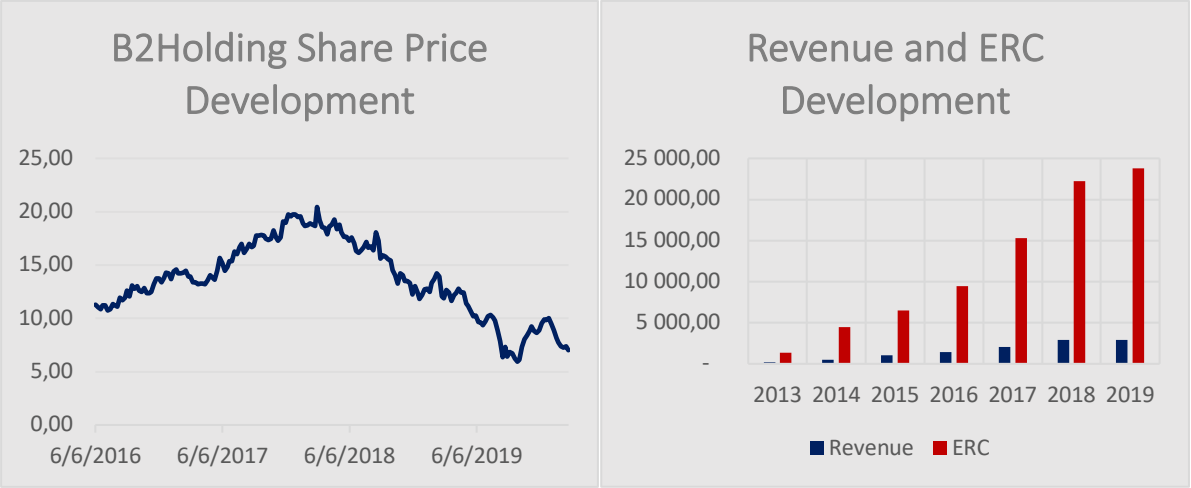


Figure 2.6: Weekly Adjusted Close Development. Source: Yahoo Finance (2020)*/Own Production*
Figure 2.7: Revenue and ERC development. Source: B2Holding Reports 2013-2019/Own Production

The IPO in June of 2016, had a price range of 11.25 to 13.50 per share (B2Holding, 2016b). The share price peaked at approximately NOK 20.50 during June of 2018. The share began showing downward trends when reports showed credit losses of purchased portfolios, and growth began to slow compared to previous years. The founder Olav Dalen Zahl resigned from his CEO position in August of 2019, the news was followed by a further decrease in the share price of 14 percent (Klevstrand & Bjerknes, 2019). Yearly revenues dropped for the first time in company history, from 2018-2019, down NOK 32 million. It was attributed to the significant credit loss on debt portfolios in Croatia, Bulgaria and Romania amounting to NOK 390 million (B2Holding, 2019b). Erik Just Johnsen, previously with the Swedish competitor Intrum, was appointed **interim CEO** after Zahl's departure, before being retained as permanent CEO in February of 2020. As of 28.02.2020, the share price was **NOK 6.18**.

2.5.2 Ownership

Representing the most recent complete ownership structure is displayed in table 2.1. It is from the end of 2018, since then, 900 000 new shares have been issued totalling the outstanding shares to 409 932 598 in February 2020 (B2Holding, 2020b). All shares are of the same class and represent one voting right each.

Shareholder Breakdown (2018)	Number of shares	Percent of total
Prioritet Group AB	52 200 000	12,76 %
Rasmussengruppen AS	43 073 236	10,53 %
Valset Invest AS	25 000 000	6,11 %
Stenshagen Invest AS	17 393 376	4,25 %
Verdipapirfondet DNB Norge (IV)	11 973 145	2,93 %
Velven Gård AS	9 000 000	2,20 %
Bryn Invest AS	8 676 690	2,12 %
K11 Investor AS	8 191 680	2,00 %
Rune Bentsen AS	8 191 680	2,00 %
Verdipapirfondet Alfred Berg Gambak	7 553 369	1,85 %
Arctic Funds Plc 1	6 934 734	1,70 %
Storebrand Norge I Verdipapirfond	6 723 344	1,64 %
Verdipapirfondet Pareto Investment	6 381 405	1,56 %
Arctic Funds Plc 2	5 986 327	1,46 %
Greenway AS	5 802 368	1,42 %
Swedbank Robur Nordenfond	5 400 000	1,32 %
Verdipapirfondet Alfred Berg Norge	5 331 620	1,30 %
Verdipapirfondet DNB Norge Selektiv	5 098 096	1,25 %
Remaining shareholders (less than 1%)	170 121 528	41,59 %
Total	**409 032 598,00**	**100,00 %**

Table 2.1: Shareholder breakdown. Source: B2Holding Annual Report 2018/Own Production

2.5.3 Market Presence

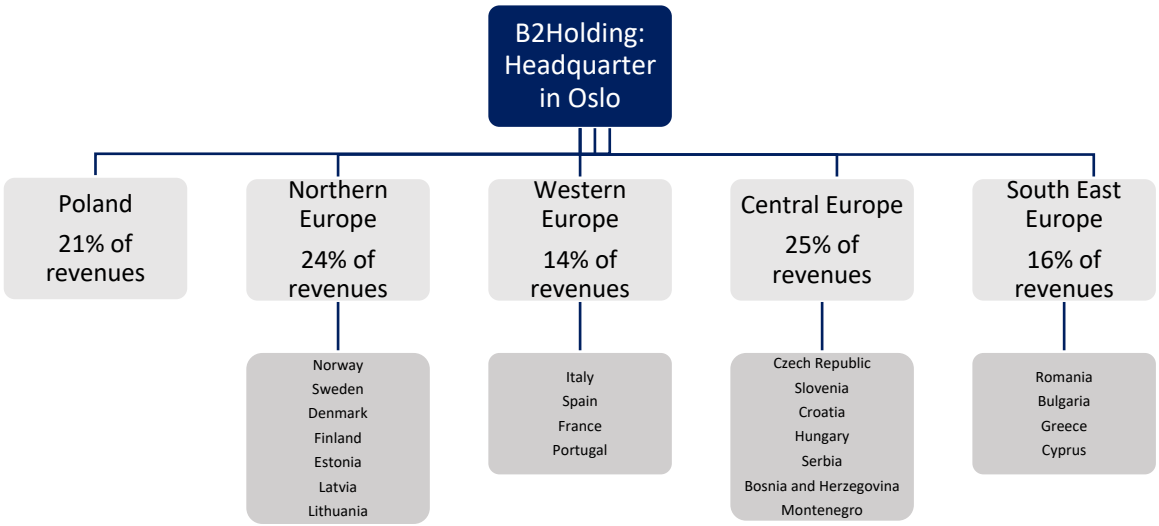
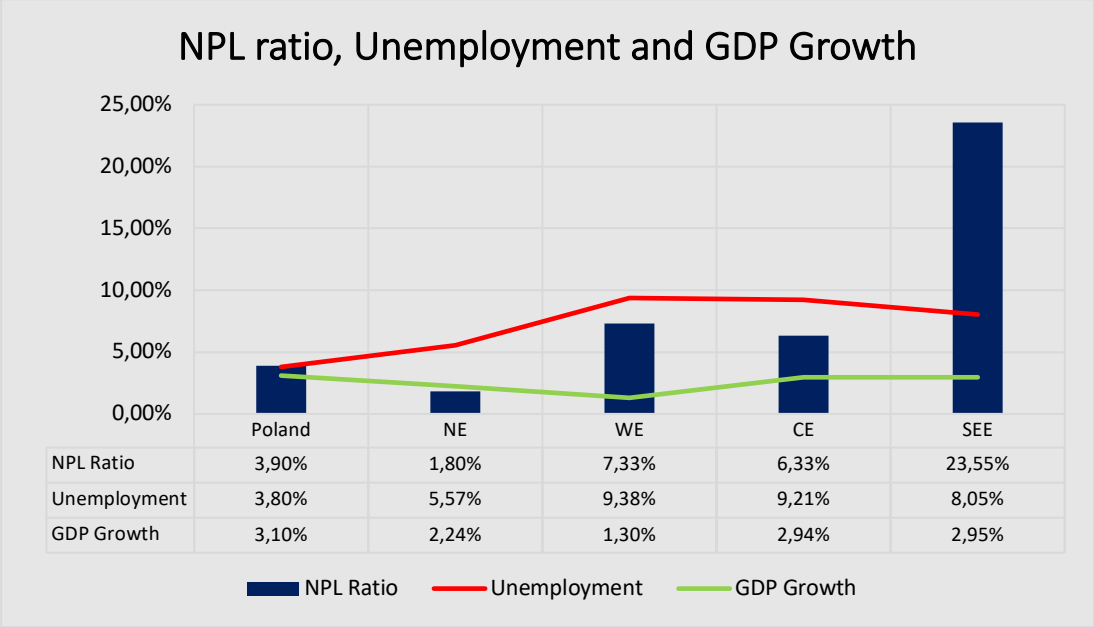


Figure 2.8: Revenue by market region. Source: B2Holding Q4 2019 results/Own Production

Three phases characterize the different types of NPL markets: early, growth and maturing. The *early phase* is characterized by limited NPL markets, with international banks initiating most of the trades and local banks only providing low-quality data. In the *growth phase*, local banks are more active on the market and competition among debt purchasers are increasing. The time from debt is considered non-performing to its availability on the market is shortened. In the *maturing phase*, NPL purchasing is an integrated part of financial systems; countries

express low levels of NPLs and joint- ventures among purchasers become more frequent (B2Holding, 2019c). References to regions hereafter will follow the division set by B2Holding in Figure 2.8. With empirical evidence mentioned in section 2.2, supporting the link between GDP growth, unemployment and NPL ratio, and place them along the three phases.



	Poland	NE	WE	CE	SEE
NPL Ratio	3,90%	1,80%	7,33%	6,33%	23,55%
Unemployment	3,80%	5,57%	9,38%	9,21%	8,05%
GDP Growth	3,10%	2,24%	1,30%	2,94%	2,95%

Figure 2.9: Average NPL ratio, Unemployment and GDP growth. Source: Ceic Data, 2020d, 2020c, 2020a, 2020e, 2020b; International Monetary Fund, 2020c, 2020b; Macrotrends.net, 2020*/Own Production*

Poland is a stable and mature NPL market. Deleveraging strategy through portfolio sales is widely utilised by institutions (Deloitte- Central European NPL markets, 2018).

Central Europe is trending towards maturing, and non-performing loans sales are the most common deleveraging strategy in the banking industry (Deloitte- Central European NPL markets, 2018). Exceptions are Bosnia and Herzegovina and Montenegro, where NPL markets are still in the early phase, according to B2Holding (2019b). The two countries have relatively high NPL ratios, 8.77 and 7.43 percent respectively, compared to more mature markets as Poland with 3.90 percent (International Monetary Fund, 2020a), and as the market progresses first-mover advantages could become critical.

Western Europe has some of the largest NPL markets, with Italy, France and Spain, accounting for approximately EUR 343 billion of the total market of EUR 636 billion (Deloitte- Deleveraging Europe Report, 2019). The French market is lagging in infrastructure, and despite large NPL volumes, trade frequency is low compared to the other countries, and banks rely

more on an in-house resolution of NPLs. However, it's expected to change when the implementation of regulatory restrictions fully take place, encouraging banks to avoid build-ups (Deloitte- Deleveraging Europe Report, 2019). France is subsequently in the early-mid growth phase, while Italy, Spain and Portugal are in the intersect of growth and mature (B2Holding, 2019c).

In ***Northern Europe,*** macroeconomic factors have been stable, with average GDP growth of 2.24 percent (International Monetary Fund, 2020c). Both the Nordic and Baltic countries show mature market signs with low NPL ratios and high frequency of debt trades. (Deloitte- Central European NPL markets, 2018; Deloitte- Deleveraging Europe Report, 2019).

South-East Europe shows among the highest NPL ratios in Europe, with Cyprus and Greece displaying 19.52 and 41.99 percent, respectively (International Monetary Fund, 2020a). Both countries experience economic downturns between 2010 and 2014, showing substantial negative GDP growth (Deloitte- Deleveraging Europe Report, 2019) and have become attractive NPL markets with regulatory backing and abundant supply (B2Holding, 2019c). The region as a whole is in the early growth phase.

What is evident from the above discussion, is that B2Holding is situated in developed and stable markets across Europe, while simultaneously having positioned themselves in potentially high growth markets with the possibility of exploiting first-mover advantages. The regions are in general matured or close to maturing, with some country-specific exceptions. It confirms that the European debt purchasing and collection industry is maturing, as stated in section 2.1.

2.5.4 Activities

B2Holding is primarily involved in debt purchasing and collection, either through joint ventures, fully owned portfolios, or third-party collections. *Interest income from purchased loan portfolios* (Fully Owned portfolios) are entirely under the administration of the company, and all collections acquired goes directly to B2Holding. *Profit from shares in associated companies* (Joint ventures) are when B2Holding and another company or more are investing together in a portfolio, agreed-upon terms regarding cost and collection allocation is a significant concern. However, it allows the company to enter markets with limited risk and

diversify (B2Holding, 2019c). In *third- party collection*, the original creditor still owns the debt, but B2Holding is conducting the collection, for percentages of the collected amounts.

Other non-core activities are *consumer lending, sale of credit information, telemarketing, fraud prevention and sale of loan portfolios.*

Business Activities	
Interest Income from purchased loan portfolios	82,81%
Profit from shares in associated companies	1,97%
Other operating revenues *(Inc. Sale of portfolios and credit information, consumer lending, telemarketing, and fraud prevention)*	15,23%

Table 2.2: Revenues by Activities. Source: B2Holding Q4 2019 report/Own Production

2.5.4.1 Debt Purchasing and Collection

B2Holding invest in secured and unsecured portfolios, with unsecured amounting to approximately 70 percent of the total. Generally, secured portfolios are comprised of fewer loans with a higher individual face value, typically mortgages with collateral in the estate. Unsecured portfolios consist of far smaller loans, for example, outstanding credit card debt and unpaid utility bills (B2Holding, 2019c). According to the most recent figures, fully owned portfolios account for 82.81 percent of revenues. Joint ventures are only at 1.97 percent, despite a recent increase. However, it is expected to grow relative to owned portfolios in the coming years. The strategic transition began in mid-2019, which saw joint ventures with Waterfall Asset Management in Sweden and Cyprus, and later an agreement to collaborate with the Italian company Banca Sella in servicing the NPL market in Italy (B2Holding, 2020b).

Nevertheless, the purchasing process employed by the company is displayed below in figure 2.10, which is also relevant for third-party servicing and joint-venture evaluations.

Figure 2.10: The debt purchasing process. Source: B2Holding Registration document/Own Production

Sourcing and opportunity pipeline is based on market knowledge and relationship with suppliers of NPLs, and tracking of trading volumes and transactions (B2Holding, 2019c). Portfolios are analysed by the investment centre in Luxembourg together with local expertise,

and values range from 3 to 70 percent of the face value. Expected returns on portfolios will usually be 14-20 percent (B2Holding, 2019c).

NOK 1 000	2014	2015	2016	2017	2018	2019
Net credit gain/loss from purchased loan portfolios	518	5 298	- 14 621	76 919	- 57 625	- 400 127

Table 2.3: Net credit gain/loss on purchased loan portfolios. Source: B2Holding reports 2013-2019/Own Production

Table 2.3 shows the net credit gain/loss development in purchased loan portfolios. Portfolios are valued at acquisition according to their already impaired value (B2Holding, 2019a). The gains and losses are products of the portfolio's collections below/overestimations for any given year, less any changes in future estimations. The most recent year displays the most substantial negative value, mainly attributed expectations on secured portfolios in Central and South-East Europe (B2Holding, 2019a). They have taken action to ensure that similar losses are not recognized in the future, with the implementation of stricter valuation processes and a support team dedicated only to secured portfolios

2.5.4.2 Other Activities

The acquired subsidiary Creditreform in Latvia specializes in gathering of credit information for sale to financial institutions. Also, subsidiaries in Sweden, Poland and Romania have a license to provide consumer lending. Verficia in Spain offers telemarketing and fraud prevention. B2Holding also sells off loan portfolios when they are no longer attractive to the company contributing to other revenues in the income statement (B2Holding, 2019a).

2.6 Peer Group

The purpose of a peer group is to establish benchmarks throughout this thesis. The companies are all publicly traded and selected based on their business mix, size and European presence. We only considered publicly traded companies with business characteristics that are comparable to B2Holding, in line with the literature of several sources, Koller et al. (2010) and Damodaran (2012) among them. Privately held companies present problems in terms of available information and accounting practise that can differ from public companies. While diverging characteristics can provide inaccurate comparisons in financial and strategic analysis'. Two examples of companies that in practice illustrate these problems are EOS collection and Lowell, two large companies within B2Holding's industry. EOS collection is

owned by the privately held Otto Group (EOS Holding GmbH, 2018), providing us with scarce information about the financial situation specific to the EOS collection subsidiary. Although they do provide consolidated figures, they have subsidiaries in many different industries and cannot be accurately compared to B2Holding. Lowell is UK based, and a vast majority of their operations are limited to their domestic market. They have begun an expansion to the Nordics and Germany (Lowell, 2018). However, subsequently, the Nordics are the only over-lapping market presence, which, in our estimation, makes the comparative foundation inadequate to B2Holding. Following is a short introduction of the companies that were deemed comparative to B2Holding.

2.6.1 Arrow Global Group PLC

Arrow Global Group PLC is a British company specializing in non-performing debt portfolios and asset management (Arrow Global Group, 2019a). Arrow Global both purchase and advises companies on their debt portfolios and assets, creating a synergy effect throughout their business. Arrow Global operates in five countries with a total 120-month ERC portfolio of 2 408 million euro (31.12.2018) (Arrow Global Group, 2019b). Their new strategy has been led by geographical expansion and asset diversification. They have also stated that their current platform size is where economies of scale can be exploited—indicating, as B2Holding has, that expansion will subside for more heavy investments in already established markets. Among the markets they compete with B2Holding are two central markets, Portugal and Italy (Arrow Global Group, 2019a). Due to Arrow not having released their full-year analysis at the cut-off date, we will examine their numbers from 2014 to 2018.

2.6.2 Axactor SE

Axactor SE was established in 2015 and have become one of the leading debt collectors in the market. They are with B2Holding publicly traded on the Oslo Stock Exchange and compete both on portfolio purchasing and third-party servicing in Northern and Western Europe. They have, similar to the other companies taken advantage of the opportunities offered in recent years for geographic expansion. In total, Axactor has presences six countries, with a 120-month ERC

portfolio of 1 652 million euro (Axactor SE, 2020b). For Axactor, we apply particular caution in comparisons to B2Holding, especially in their first full year of operations. It would, however, be remiss not to include Axactor in the peer group despite added challenges, they are the second-largest Norwegian debt collector on the Oslo Stock Exchange and a close competitor to B2Holding.

2.6.3 Hoist Finance

Hoist Finance is the second Nordic-based company in our peer group and second-largest company. They are traded off the Swedish Stock Exchange, operating in eleven countries with an ERC of 3 700 million euro (31.12.2019) (Hoist Finance, 2020). Hoist Finance is one of the most experienced and mature companies in the market with over 20 years' experience. This longevity in operations has allowed for reputation and relationship building on some of the most attractive markets, such as France, Spain, Italy and Poland, where they are in direct competition with B2Holding. Their core business is through the purchase of non-performing debt, but also offers retail deposits in Germany and Sweden (Hoist Finance, 2019). Their funding model differentiates from B2Holding's in their capacity for investor deposits, accounting for close to 60 percent of their total (Hoist Finance, 2019), making them less sensitive to bond markets than B2Holding, allowing for stable funding.

2.6.4 Intrum

Intrum is the European market leader in credit management, and debt collection, with more than 9 000 employees spanned across 24 countries with a total ERC of EUR 6 200 million(31.12.2019) (Intrum, 2020). The company was established in 1934, therefore being the oldest and most experienced company in our peer group. Their strategic focus also bears a resemblance to B2Holding's newly established direction, stating their intent to be increasingly selective of new investment opportunities and use economies of scale to grow. They also emphasize their intent to partner through joint ventures in the future (Intrum, 2019).

2.6.5 Kruk Group

Kruk Group's operations are mostly limited to central Europe for now and aim at becoming a market leader for the region. Threatening to B2Holding's strong position in Poland and established platforms in the previously defined central European market. However, they are in the process of establishing significant operations in Spain and Italy, stating that they are positioned to take advantage of the right opportunity if it arises (Kruk S.A., 2020). The company specializes in debt management through both secured and unsecured debt portfolios. The company has over 3 000 employees and ERC of 1 815 million euro (31.12.2019)(Kruk S.A., 2020).

2.7 Part Conclusion

The industry has been primarily influenced by developments in regulations, especially towards the banking and financial institutions following the financial crisis of 2008. As we discussed in section 2.1, this indirect stimulus of debt purchasing and collections has led the industry to become integral to the financial systems. A key characteristic is the industry's apparent low sensitivity to the business cycles, where opportunities can be utilised throughout. B2Holding is one of the companies that have exploited the growth and deployed a rapid expansion strategy that lasted until 2019. Acknowledging that changes in industry characteristics were influencing their ability to create value, they saw a need for a new strategic direction. It demanded structural changes allowing for a less capital-intensive investment plan and more attention to joint ventures. Similar developments were observed in the peer group introductions, with several of the companies devoting themselves to a more collaborative strategy.

3 Strategic Analysis

The purpose of our strategic analysis is divided into two parts. First, the analysis provides more in-depth insight into how the competitive environment has developed. Second, in consolidation with the recent financial analysis, it serves as the foundation for the forecasting. Therefore, combining both qualitative and quantitative becomes essential. As Porter emphasises "*The point of industry analysis is not to declare the industry attractive or unattractive but to understand the underpinnings of competition and root causes of profitability*" (Porter, 2008:29).

It is well-known that a properly developed strategy improves a company's chances of reaching its targets and that it relies on understanding the external environment, develop and exploit internal resources and capabilities, and successful implementation. Academic literature proposes several different models and toolkits that guide the strategic analysis. These do not necessarily offer a dynamic approach to strategic analysis but somewhat standalone structures that often culminate in a SWOT analysis. Dividing a complete analysis of a company's strategy into Strengths, Weaknesses, Opportunities and Threats is arbitrary and undermines dynamic resources (Grant, 2019). Furthermore, the distinction of internal factors into strengths and weaknesses and external factors into opportunities and threats is a simplifying which do not provide the framework with substantial value. Instead, we utilise the strategic fit framework by Grant (2019). The framework allows for the combination of different toolkits and emphasizes the interlink between external and internal factors. Grant argues that the industry environment is limited to impact from three factors; **1)** customers, **2)** suppliers and **3)** competitors, and that macroeconomic factors do not necessarily have a substantial effect on the industry environment. However, we do not consider this to be the case of the debt purchasing and collection industry, as macroeconomic factors have a significant impact according to the industry overview. Therefore, we find it necessary to include a PEST-framework in the strategic fit to get a thorough and comprehensive analysis of B2Holding's environment. The complete model is depicted below.

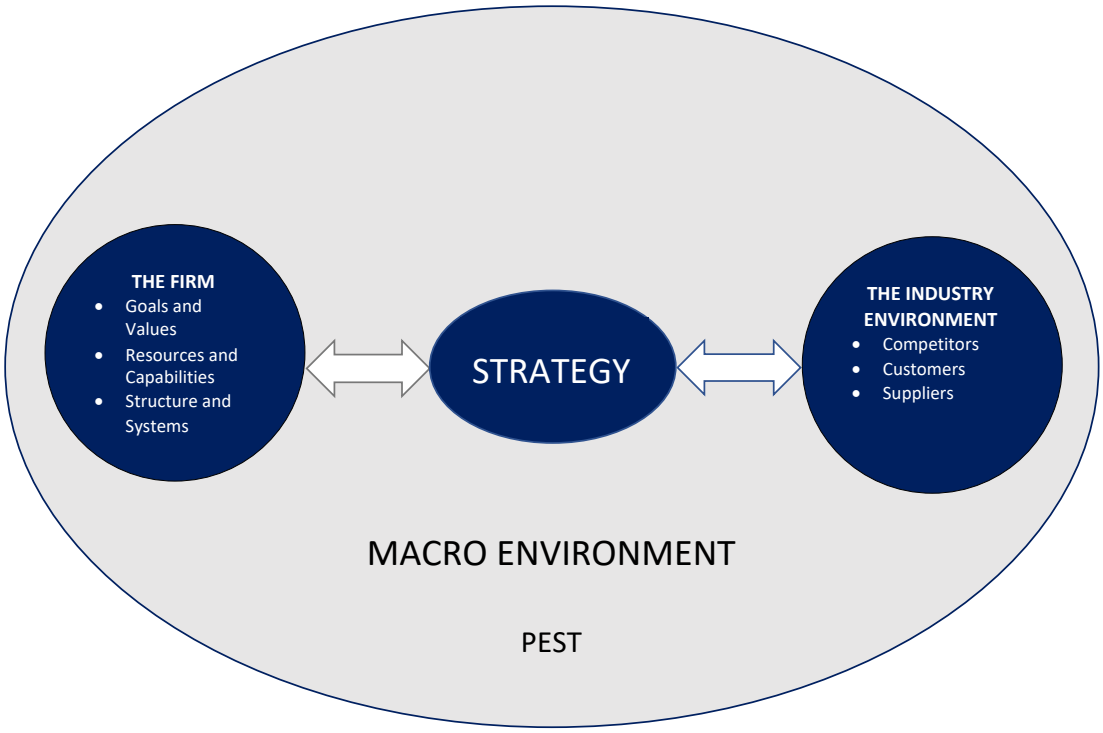


Figure 3.1: Strategic Analysis Framework. Source: Own Production

3.1 PEST

The PEST-framework breaks down the macro-environment into Political, Economic, Social and Technological factors. By providing an evaluation of these factors, a more thorough overview is provided, as the macrolevel factors impact both the environment and the profitability outlook for the industry. Our assessments in this analysis will be embedded in the discussions in the external and internal analysis.

3.1.1 Political Factors

Politically, the debt purchasing and collection industry have been supported through policymakers' actions towards the banks following the financial crisis of 2008. One of the actions taken was the implementation of Basel III. The regulatory framework developed to improve capital adequacy, stress- testing and market liquidity risks (Lüders et al., 2010) in the banking sector, has facilitated growth in the market. The most substantial changes imposed by Basel were new requirements for tier 1 (capital for continued activities and solvency) and tier 2 (capital for repayment of depositors and senior creditors if insolvency) capital (European Council, 2019). Basel III required banks to hold at least 8 percent of risk-weighted assets in

equity, where 4.5 percent is common equity tier 1, the highest quality of tier 1 capital (Lüders et al., 2010). Basel III made it considerably more critical for banks to relieve themselves of assets, such as non-performing loan portfolios, in order to comply with the regulations.

Within the European Union, the "action plan to tackle NPLs in Europe" was developed by the European Commission, to accelerate the reduction of NPLs. With the action plan, there was developed new guidelines for banks in the EU on how to approach NPLs now and reduce future build-up (European Central Bank, 2017). The action plan requires increased loss provisions, up to 100 percent, for unsecured non-performing loans issued less than three years prior and nine years for secured loans, in an attempt to force pro-active debt management. For the debt purchasing and collection industry, the result of the action plan is that companies is more likely to reduce the amount of NPL, consequently increasing sales.

The implementation of IFRS 9 began in 2018 and had an impact on financial services through their reporting on financial assets and liabilities. The objective of IFRS 9 was to create new principles in the financial reporting so useful and significant information became more accessible than previously, and easier to examine and analyse companies future cash flows (Grant Thornton, 2015). The most notable change to the debt purchasing and collection is the change in estimation of expected credit losses (Gea-Carrasco, 2015). Previous regulations allowed banks to keep NPLs on the balance sheet as assets until losses were incurred, while the new IFRS 9 requires loss provisions on credit based on expectations. Thus, companies have had to more critically consider the health of their assets and sell non- performing loans to get them off the balance sheets, which has a positive impact of debt purchasing and collection companies.

3.1.2 Economic Factors

Much of economic research after 2008 has been attributed to finding explanatory factors of the financial crisis and drivers of economic growth and stability. The countrywide deterioration of loans is one of these factors. According to empirical evidence, macroeconomic factors, as GDP growth and unemployment rate, have been closely linked to the NPL ratios in countrywide case studies in Spain, Greece and Italy (Kaskarelis & Siklós, 2019). As mentioned in section 2.2, Beck et al. (2013) also found significant evidence from a

study of 75 countries that real GDP growth was the main driver of increased NPLs. They also explored cross- country differences after observing that country-specific effects were disproportionate to their decline in GDP growth. Besides GDP growth, increased lending rates, currency movements and share prices had a direct or indirect impact on banks asset quality. Which can help explain the large fluctuations in NPL ratios from figure 2.4 in section 2.1, where Greece and Cyprus displayed significantly larger ratios.

Movements in bond markets affect the debt collectors, who have leveraged their businesses through the vast supply of NPL combined with cheap financing (Standard & Poor Global, 2019). According to the report, increased competition, eroding profitability, and more expensive bond financing, will decrease investment and force debt collectors to turn to more active management of their debt. As a result, the debt purchasing and collection industry are facing a more mature industry. Currency movements can also directly affect B2Holding, as they operate inside and outside the Euro area. They have operational hedges through underlying bonds in EUR, as it is the currency closest connected to the currencies B2Holding operates with (B2Holding, 2019a). Large fluctuations in the Norwegian Krone is of significant concern. It is well-known that the NOK is correlating positively with the oil price. In 2015 for instance, OPEC depleted large amounts of oil into the market, so the oil price dropped significantly, which led to NOK weakening against the Euro (Frøjd & Dale, 2019).

The European Commission (2020b) recognizes COVID-19 as a significant downside risk factor to the economy, and The International Monetary Fund (2020c) expects the impact to be approximating levels last seen during the financial crisis in 2020, but recovery to happen already in 2021. European banks have asked for IFRS 9 regulations to be scaled back, not to increase non-performing loan provision and cause problems meeting the capital requirements (Strauss & Morris, 2020). No reports of IFRS 9 cutbacks are available, and it is difficult to estimate how or how much this virus will impact debt collection companies given the information at this stage.

3.1.3 Social Factors

Private consumers in Europe have become increasingly dependent on borrowing to finance bill payments and products bought on down-payment is rising (Intrum - Consumer report,

2019). Furthermore, the same study found that out the 24 000 participants, 45 percent expressed that bills grew at a higher rate than their income. With the rising trends in borrowing in combination with an increase in bills to income ratio, could mean more retail NPL portfolios. However, the trend is not significant in the long run and does not have a substantial effect on the outlook of the industry.

3.1.4 Technological Factors

The new strategic direction of B2Holding is focused on finding cost-efficient collection methods and technology have increasing importance in shaping debt collection. Technological advances in automation and mobile applications have positively affected cost to collect in the industry (McKinsey & Company, 2019). The automated process lets debt collectors contact consumers by phone, email and text messages cheaper than with human resources, and mobile applications provide debtors with the overview of payment plans and interest rates.

Automation of processes and decision making has also increased in recent years (Hartman, 2019). Advances in automated data analytics can improve portfolio pricing and valuation. Digital debt collection is a newer and less capital intensive way of approaching clients, creating online portals and giving access to debt information directly to the debtor (McKinsey & Company, 2019). Subsidiaries of B2Holding are testing technology to improve on the cost to collect, for example, Ultimo in Poland, decreased its cost from 41 – 34 percent between 2016 and 2018 (B2Holding, 2019a).

3.2 Industry Analysis

The industry analysis through Porter's five forces provides a comprehensive understanding of the challenges and opportunities B2Holding have. Through an examination of the three sources of horizontal competition: substitutes, entrants and rivals; and of the two sources of vertical competition: the power of suppliers and power of buyers; we improve the understanding of critical success factors and challenges in the industry (Grant, 2019). In our assessment, the framework is a useful tool to gain better knowledge about how the profitability outlook is for the debt purchasing and collection industry. Also, it gives us an indication of the position of B2Holding in the industry, which is valuable in the forecasting.

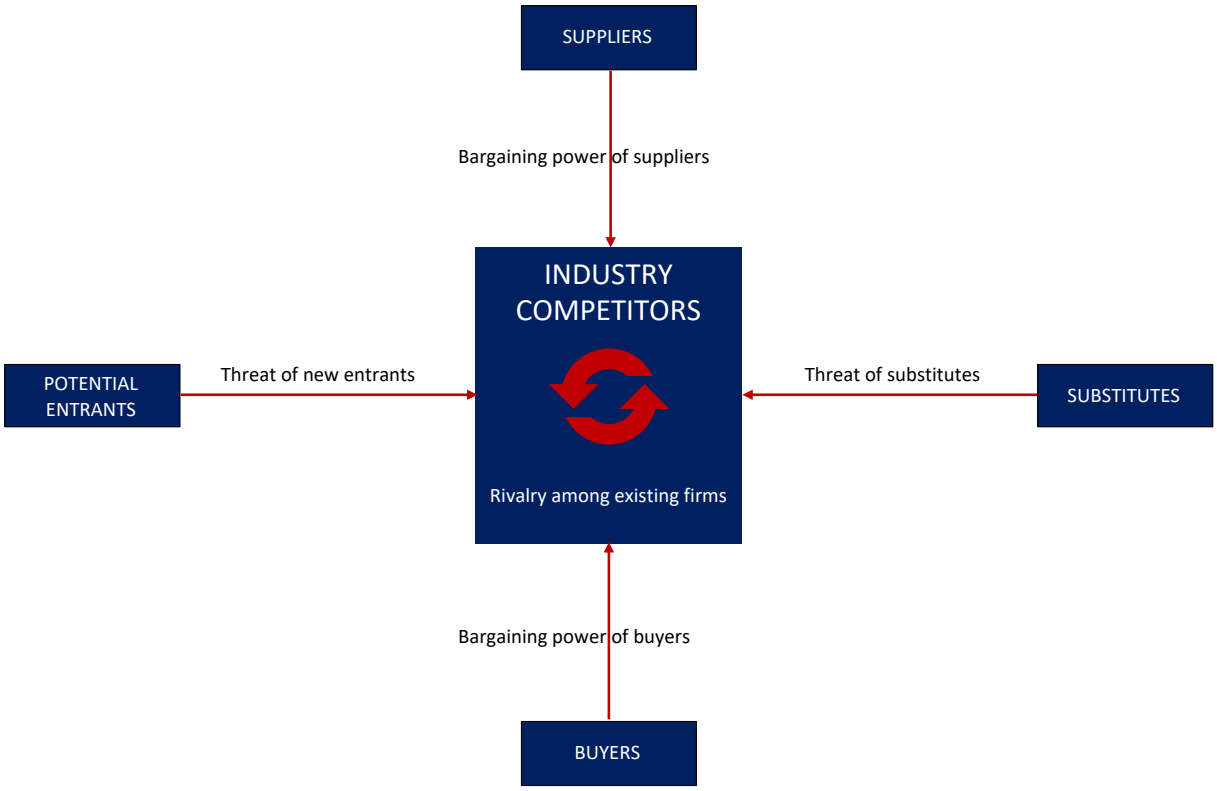


Figure 3.2: Porter's Five Forces of Competition Framework. Source: (Grant, 2019)*/Own Production*

3.2.1 Substitutes

As shown in the industry introduction, debt purchasing and collection has become a structurally important part of financial systems. Securing revenues for companies from non-performing loans, they would otherwise not retrieve.

The most apparent substitution threat to B2Holding is from the debt sellers themselves if they choose to conduct in-house collections. However, through regulatory powers both inside Europe and globally, keeping non-performing loans on the balance sheets reduces the banks' funds available to issue new loans (EOS Holding GmbH, 2019). The mentioned political factors, Basel III, IFRS 9 and European Action Plan, are reducing the attractiveness of in-house collection and Deloitte's deleveraging report (2019) confirmed that banks are divesting in-house platforms.

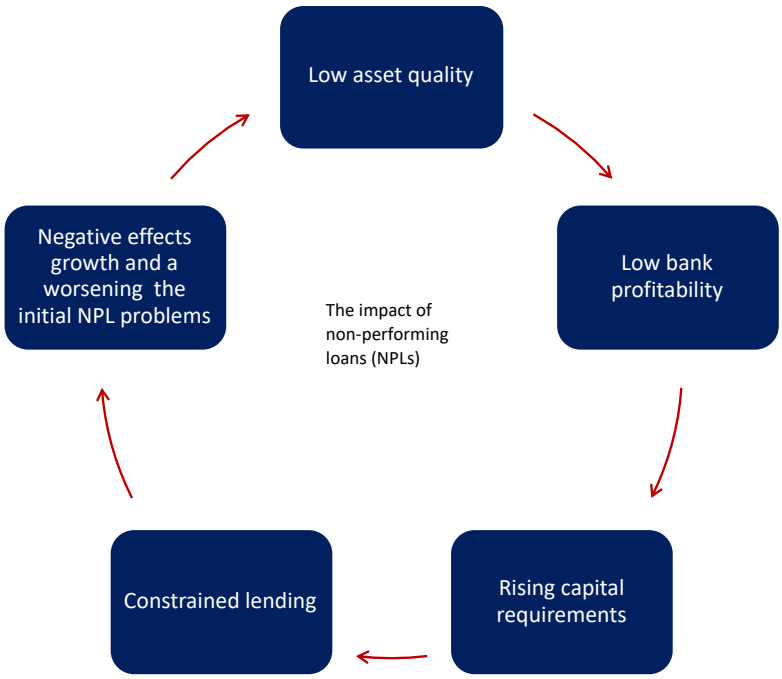


Figure 3.3: The impact of NPLs. Source: (B2Holding, 2019a)*/Own Production*

Figure 3.3 illustrates the current impact of keeping low-quality assets on the balance sheet on future profitability, and how in-house debt collection can negatively influence a company which does not have the necessary resources or capacity to conduct the process. The consequences resemble what the regulatory framework discussed in section 3.1.1 wants to prevent. Financial institutions represent most of the suppliers in the debt purchasing and collection industry, where capital requirements are particularly important. The effect of increased NPL levels is, therefore, both undesirable and damaging, as it rises capital requirements and restrains lending terms. Evidently, the figure shows why the in-house collection is not favoured and why it is not a particularly strong substitute in the industry.

A more prevalent substitute are software platforms targeting business with NPL stock and offering simple digital solutions to collections. With digital advances in machine learning and automation, the availability of online platforms has increased (Lilja, 2020). These do not require the businesses to sell their debt nor hire the more traditional debt collectors, such as B2Holding and its peers. Some recent examples of companies offering this service are Tieto and PAIR Finance (Dahlqvist, 2020; Stricker, 2020). Their services include tailored collection strategies to each company, and using cheap digital methods of messaging, emailing, and

applications to recover non-performing loans. As we discussed in section 3.1.4, the same digitalization has benefitted the traditional debt collectors in cost reduction, but their core business is reliant on the purchasing of NPL. This development is still considered to be in an early phase.

As banks divest in-house collection and the fact that banks will face reduced capital if managing the debt independently, the threat of substitutes is low from banks themselves, indicating a positive future profitability and growth potential (Porter, 2008a). However, with digitalization increasing software platforms offerings to the market, their profitability might be substantially impeded depending on the extent traditional debt collectors can exploit the same cost reductions. It could mean that B2Holding and their peers can increase offers on portfolios or lower their fees on third party collections, reducing the substitution effect.

3.2.2 Threat of Entry

According to B2Holding (2019b) there are five significant entry barriers: Know-how, data analytics, scalability of operations, reputation, and capital requirements. These barriers can help explain why the industry has only sporadic emergence of large debt purchasers and collectors in Europe, despite elevated NPL supply, regulatory stimulus, and low-cost debt financing. Specifically, for the Norwegian market, capital requirements was identified as the main barrier to entry (Jestilä, 2019). Axactor is one of the companies in recent years that have been able to overcome the entry barriers and expand from Sweden to five other countries in Northern and Western Europe.

However, with the more recent developments in cost of financing through bond markets and eroding profitability due to competition among incumbents, the threat of entry is currently low. Significant know-how and correct data analysis determine the accuracy of valuation and collection, which are becoming more important to ensure acceptable profit margins. It is therefore our estimation that the threat level of entry in the future will remain low or decrease further. Consequently, the future outlook of the industry profitability from threat of entry is positive, as it is not whether the entry occurs, but the threat which influences the industry profitability (Porter, 2008a).

3.2.3 Rivalry Between Established Competitors

In many cases, the industry rivalry serves as the most significant factor of Porter's framework (Grant, 2019). The trends provide insightful knowledge and foundation for industry development, in addition to the overall market condition and profitability outlook.

Examining the development of purchased loan portfolios can indicate industry growth. Purchased loan portfolios serve as one of the primary value drivers in the debt purchasing and collection industry, with the ability to purchase portfolios being a fundamental part of the growth.

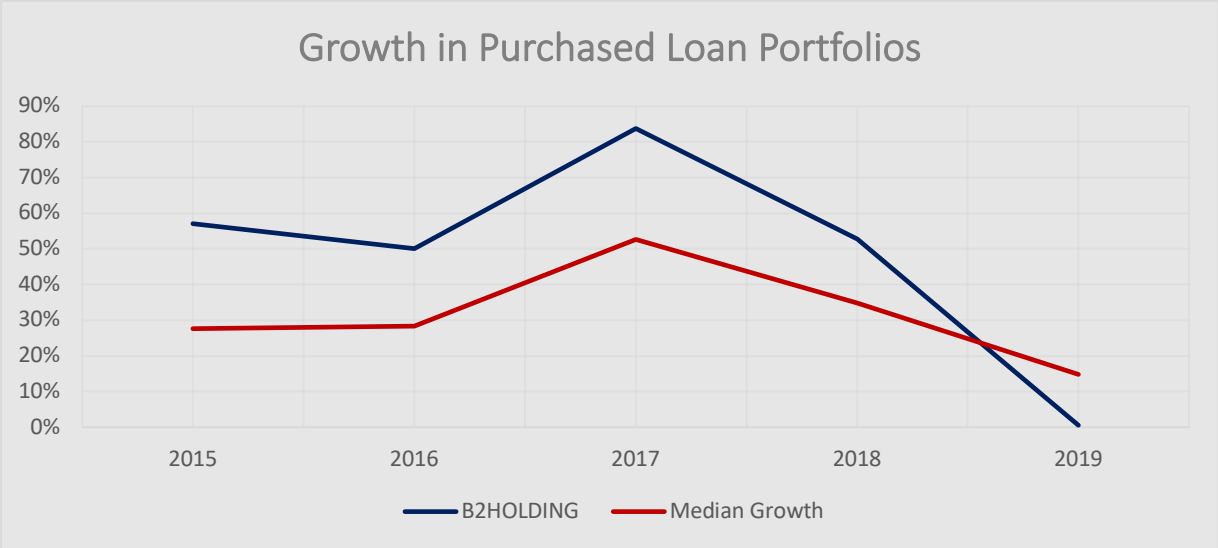


Figure 3.4: Growth in purchases loan portfolios. Source: B2Holding & Peer-group Annual Report 2014-2019/Own Production

Illustrated in figure 3.4 is the growth in purchased loan portfolios for B2Holding and the median growth of the peer group. Examining the development, we can see a considerable decline in purchasing for both B2Holding and peers from 2017. With the growth in portfolios being a fundamental part of the development, and with evidence suggesting the industry will not experience the same high growth as previously, we can expect this to influence the profitability. As Porter (2008) explains, low industry growth often equals high competitive environment, which frequently means declining profitability.

With the growth in purchased loan portfolios stagnating, future growth may not experience the same trend as previously. This trend is accompanied by eroding profits on already owned portfolios. As mentioned, the financial crisis led to growth in the industry, facilitated by

regulators and cheap financing, before recent years decline in NPL ratios, leading to portfolio prices going up and in turn, reducing profitability. It is indicated by B2Holding's and the peer group's decreasing ROIC and ROE over the last four years.

	2016	2017	2018	2019
ROE	14,50 %	12,92 %	11,87 %	6,69 %
ROIC	8,36 %	7,97 %	7,65 %	5,77 %

Table 3.1: ROE and ROIC. Source: B2Holding & Peer-group Annual Reports 2016-2019/Own Production

As European banks are reducing their overall NPLs, the market has seen increased diversification of asset classes on offer, especially shipping and real estate related non-performing assets/loans (Deloitte- Deleveraging Europe Report, 2019). We might therefore see debt collectors diversify into new asset classes where they encounter less competition (Standard & Poor Global, 2019). The market is also expected to see more mergers and joint ventures going forward when debt collectors more actively managing their risk exposure and increase profits. Several of the companies in the peer group have announced more collaborating strategies, and B2Holding themselves recently stated their intent to partner through joint ventures in portfolio purchasing (B2Holding, 2020b). This shift could be a result that the industry acknowledges the severe rivalry conditions now present. Future diversification of risk and reduction of overall risk profile through collaborations could ease pricing competition and stabilize profits.

3.2.4 Bargaining Power of Buyers

When referring to buyers in debt collection, we define the companies or private consumers that owe on non-performing debt as the buyer. For buyers to have the power they must obtain leverage over the incumbent companies, and is measurable through their ability to force prices down, require better quality or service (Porter, 2008a). The buyers are weak if they are fragmented with little influence on the product or price. Evidence supporting formal buyer power in debt collection is limited in our estimation. The consumers cannot choose their collector and mechanisms for buying their original debt at similar discounts are not present. However, we make the case that buyers/debtors have informal power through negotiating with debt collectors. Evident from company reports, there is a focus on establishing and

maintaining good relationships when meeting with customers. It is essential for reaching agreements quickly, reduce the cost to collect and avoid legal expenses (B2Holding, 2019a). Nevertheless, the overall assessment is that buyer power is low.

3.2.5 Bargaining Power of Suppliers

Suppliers with power can increase prices, reduce product/service quality, or sell to rivals. Among reasons for their power are few suppliers, and the end-consumer is powerful (Porter, 2008a). The number of NPL suppliers are increasing across Europe, as the retail sector is more actively pursuing debt sales (Deloitte- Deleveraging Europe Report, 2019). The regulatory changes discussed previously, have increased the financial institutions need for debt selling as deleveraging strategy to free capacity for new loans. The COVID-19 might well impact the NPL ratios, as the previous recession saw an increase from 2 to 7 percent, this time, the impact could according to the International Monetary Fund become even more consequential. As discussed, there are signs that action has been taken early to reduce the possible effects through deregulation and taking advantage of banks full capacity. Measures which could ensure that businesses survive and debtors can meet their obligations during the crisis.

In the industry rivalry, we analysed that the profit drop in debt purchasing and collection as a result of increased competition among incumbents and to a lesser extent, the threat of entry. Furthermore, the regulatory measures put of financial institutions addressing future build-ups of NPLs make sure that supplier power stays low.

3.2.6 Profitability Outlook

Competitive Force	Relevant Structural features of the industry	Impact on past profitability	Changes in the future industry structure	Degree and course of impact on future profitability
Substitutes	In- house solution by banks and credit institutions. Digitalized online platforms are emerging.	*Weak*	Regulatory changes regarding recognizing NPL and prevent future build ups. More cost-efficient to outsource collections. Increasing supply to consumers of digital platforms but dependent on traditional debt collectors' exploitation.	*Stable – Positive*
New Entrants	Have seen examples of competitors entering in recent years. Axactor SE established in 2015.	*Moderate*	Current and expected conditions indicate a stricter market to enter, with lower margins and higher know-how demands.	*Increasing - Positive*
Internal Rivalry	Relatively few but large European debt collectors. Was facilitated largely by regulatory powers, which led to high growth and expansion of many companies.	*Strong*	Recent years changes have increased industry rivalry. NPL ratios are decreasing. However, NPL sales have remained high. Companies are increasingly diversified to avoid competition.	*Increasing - Negative*
Buyer Power	Debtors as "buyers" have little to no formal power, as they cannot buy their debt or choose their collector.	*Weak*	Reputational concerns for debt collectors, although no evidence of formal powers to buyers in the future.	*Stable – Positive*
Supplier Power	NPL became an increasingly significant concern for credit granters after the financial crisis. They were forced by regulations to handle NPLs.	*Strong*	Decreasing NPL ratios across Europe can facilitate higher supplier power. COVID-19 could increase NPL ratios again and decrease their power, but too early to tell and regulators more equipped to handle this crisis than the 2008 financial crisis.	*Stable – Positive*

Table 3.2: Profitability Outlook. Source: Own Production

Our analysis showed that recent years had seen changes in the threat of substitutions and new entrants, indicating a moderate positive impact on future profitability. Where the threat

of entrants had a moderate impact previously, seeing the sporadic establishment of new competitors, industry characteristics now is indicating that this will become even rarer. From a substitution standpoint, the traditional debt collector is threatened by more digitally focused companies, that offer a similar service but does not require companies to sell their debt. However, the evolution is still in an early phase and difficult to estimate the impact on profitability concretely. Especially considering that much of the same technology can be utilised by B2Holding and its peer for cost reduction, reducing the substitution effect. Industry rivalry is, however, a more obvious threat to profitability. Recent years have seen the increased competition on portfolios and subsequently lower profit margins. Trends indicates that joint ventures will increase in efforts to reduce competition, which could limit the adverse effects. Overall, the profitability outlook is hovering around a stable/slight decrease but positive future for debt collectors. Meaning that profits are not expected to reach negative levels, although it could drop below current levels.

3.3 Internal Strategic Analysis

A fundamental part of the strategy formulation is matching the company's resources and capabilities to the opportunities and challenges they face in the market, and developing sustained advantages relative to the competition (Grant, 2019). A substantial amount of recent literature on the internal strategy of companies have emerged from this resource-based view. It is predicated on the notion that the company's strategy formulation and specific resource mix must be seen in the context of its environment. If a company can utilise a resource or capability for value creation that competitors or potential entrants cannot partake in the future, and it is not easily replicated or imitated, they have a sustained competitive advantage in the market (Barney, 1991).

In light of the external analysis and industry overview from section 2, we can conclude which resources or capabilities B2Holding utilise to create value and advantages. To systematically assess this, we apply the VRIO framework.

3.3.1 VRIO Framework

VRIO is an acronym for Value, Rarity, Inimitability and Organisation, which provides a framework for assessing company resources. The question of ***value*** should be analysed

according to whether the resource enables the company to take advantage of opportunities or neutralize threats (Barney, 1995). If the resource is deemed valuable in the context of the company's environment and industry characteristics, the second dimension of ***rarity*** is considered. For the resource to be rare, it must be seen compared to other industry participants. Thus, less scarcity equals less rare. It is important to note that a valuable, non-rare resource may provide a necessity for competing, called a competitive parity. However, if the resource is scarce in the industry, the question of ***inimitability*** becomes essential. Without inimitability, the advantage is temporary. There are two dimensions at which resource can be imitated; duplication or substitution (Barney, 1995). According to Barney (1995), the resources can be challenging to imitate along the two dimensions for three explanations: *The importance of history, many small decisions and social complexity.* Lastly, if the resource checks all the three boxes, the way the company is organized decides whether it is taken advantage of in the long-term. In general, what allows the ***organisation*** to exploit the full potential of a resource is its complementary resources, those who on a standalone basis provide limited advantages, but facilitate other ones (Barney, 1995).

Our identification of relevant resources is in close relation to the competitive nature of the industry analysed above. We concluded that industry rivalry has increased in recent years; bond markets have tightened, making it more difficult to obtain financing in the future. We discussed that a possible effect of the eroding profit margins in the industry might put more emphasis on data analytics and know-how to compete and maintain a high threat to potential entrants. Specifically, for B2Holding, we mentioned their new strategic direction in section 2.5, scaling back on their geographical expansion strategy. With this in mind, we have identified three resources worth exploring in our VRIO framework: **1)** B2Holding's ability to attract funding for new investments, **2)** their geographical diverse market presence and **3)** their integrated process of debt purchasing. Our findings can be summarized in the table below and following is the discussion on which it is based.

Resource/Capability	Valuable	Rare	Inimitability	Organisation	Conclusion
Financing capacity	Yes	No			Competitive parity
Geographical diverse presence	Yes	Yes	No		Temporary competitive advantage
Integrated debt purchasing process	Yes	Yes	Yes	Yes	Sustained competitive advantage

Table 3.3: VRIO summary. Source: Own Production

3.3.1.1 Funding Capacity

Opportunities in the NPL markets arise quickly, and having access to capital is critical for taking advantage of them (B2Holding, 2019c). It is undoubtedly a valuable resource in terms of being competitive, but the question is more relevant in terms of B2Holding's capacity compared to the size of its competitors' resource.

Credit Ratings	S&P	Moody
B2Holding	BB-	Ba3
Arrow Global Group	BB-	Ba3
Intrum	BB+	
Axactor SE	BB+	
Hoist Finannce	NA	Baa3

Table 3.4: Credit ratings. Source: Moody's/Standard and Poor's/Own Production

Considering recent developments showing tightening in bond markets, evaluation of the company's credit rating is a useful indicator of their investment capacity relative to competitors. Ratings from Moody's and Standard and Poor's shows that B2Holding has the lowest credit rating among several of its competitors and are likely to have a disadvantage financing through bond markets. B2Holding does have access to a revolving credit facility with some of Scandinavia's largest banks, DNB ASA, Nordea and Swedbank, totalling EUR 510 million or approximately between NOK 5-6 billion depending on currency rates. With the additional operating cash flow, they estimate an investment capacity of NOK 5 billion annually (B2Holding, 2019a). Which, in comparison with a sample of its competitors is a low to average capacity. Intrum, Hoist and Axactor report of annual investing capacities between NOK 4 and

8 billion (Axactor SE, 2019; Hoist Finance, 2019; Intrum, 2019). As we have discussed previously, the industry's high capital intensity constitutes a necessity for competitive funding capacity. However, there is no rarity found associated with B2Holding's specific funding; they lack in credit rating, and their revolving credit does not provide enough capacity to out-compete the sampled competitors.

3.3.1.2 Geographical Diverse Presence

Critical to B2Holding's strategy until 2019 has been to diverse investments across countries inside Europe and set up local presence through acquisitions, joint- ventures and greenfield initiatives. A consequence has been that they have acquired a low average estimated remaining collection in each country. At the same time, however, allowed for relationship-building locally and possibly opened for first-mover advantages in some countries like Montenegro, Bosnia and Herzegovina and Cyprus, where markets are underdeveloped (B2Holding, 2019c; Deloitte- Deleveraging Europe Report, 2019). B2Holding recognize local knowledge as a key to establishing and maintaining a solid reputation among debt suppliers in these territories.

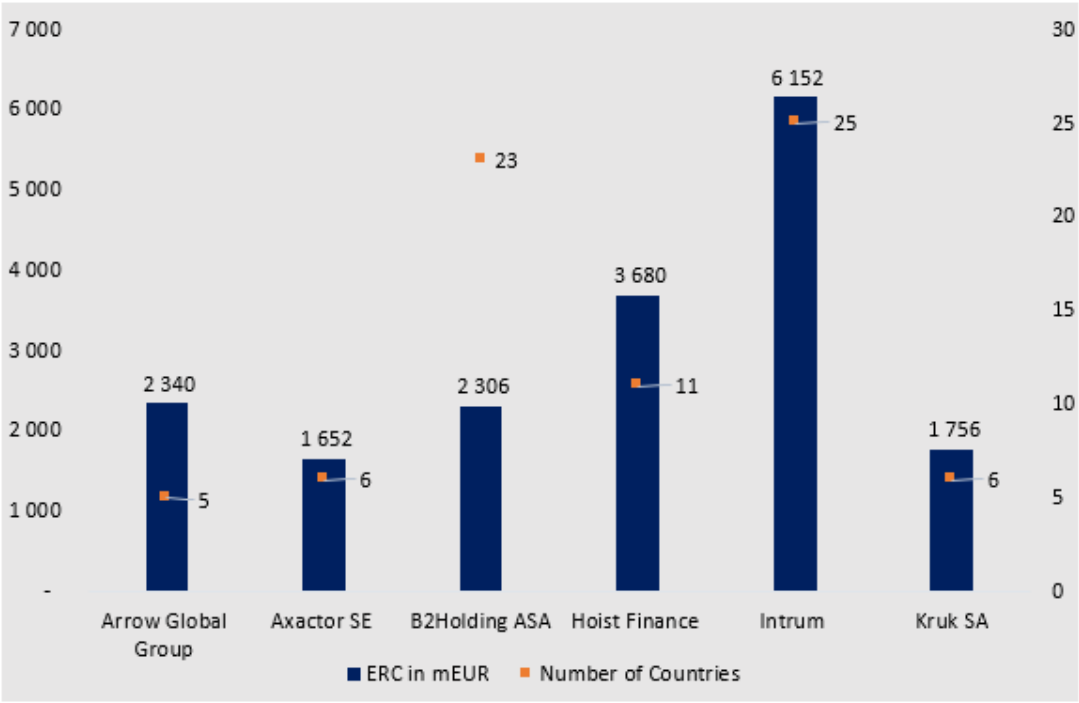


Figure 3.5: Total ERC and Country presence. Source: Company Reports/Own Production

B2Holding presence in 23 countries is relatively rare compared to its competitors. Intrum is the only company in our sample size with more (24), and they are also the largest in terms of

ERC. They are, however, established in more mature markets and currently have no presence in markets like Montenegro and Bosnia and Herzegovina, that is expected to grow in the near future. Hoist (11), Axactor (6), Arrow (5) and Kruk (5) have all expanded geographical in 2018 and 2019, indicating that B2Holdings diverse local presence can be duplicated in the long-term. The table below show competition in the markets defined by B2Holding. It is evident that B2Holding is currently competing with at least two peers in each of its markets, and Intrum is present in all of them.

Regions	Poland	Northern Europe	Western Europe	Central Europe	South East Europe
B2Holding	x	x	x	x	x
Intrum	x	x	x	x	x
Arrow Global Group			x		
Axactor		x	x		
Hoist Finance	x		x		x
Kruk SA	x			x	x

Table 3.5: Company Presence by Defined Regions. Source: Company Report/Own Production

Also, their diverse presence has been the subject of discussion within the company, and they have expressed that they wish to exploit economies of scale. It is assumed that their funding capacity would not allow for this in all their current markets nor has that been expressed as a viable option. However, with the organizational changes taking effect, the resource, if it were inimitable, would not have the organizational backing to constitute a sustained competitive advantage. Although, with their presence in developing markets, they possess data and knowledge that provides a temporary advantage, which could be exploited when the decision on markets to increase investments and the ones to divest.

3.3.1.3 Integrated Debt-Purchasing Process

The debt purchasing process is an integrated part of B2Holding, consisting of four stages: Sourcing and opportunity pipeline, analysis and valuation, acquisition and integration and debt collection, displayed previously in figure 2.10.

Sourcing and opportunity pipeline exploit their relationships with local debt sellers. Although the purchasing is primarily publicly announced auctions, the tracking of volumes, transactions

and utilization of local relationships in specific markets, can provide a head start to the process by delivering insight into which portfolios will be available and when. NPL portfolios can also be offered to individual companies in advance, and in some markets, B2Holding are offered portfolios without competition, due to previous deals with the supplier or reputation (B2Holding, 2019c).

When B2Holding become aware of or are offered a portfolio, the *analysis and valuation* begin. Depending on portfolio size, different mechanisms for valuing the portfolio take place. Under EUR 5 million, regional directors execute deals, from EUR 5-20 million the investment office in Luxembourg conduct valuation and sign off deals to local offices and with deals above 20 million the investment committee or board of directors' review deals before they are executed (B2Holding, 2019c). The investment office in Luxembourg is unique for B2Holding. Their diverse portfolio has provided substantial data from across Europe, which is utilised to analyse debtor profiles in each portfolio. Secured and corporate debt is analysed at a case by case rate and accumulated to give an indictive portfolio price. From portfolio data is received, the office continuously monitors them through the whole process (B2Holding, 2019c).

The first data are based on samples from the complete portfolios. If the indictive price is accepted, they receive more data and begin *acquisition and integration*. During this stage, the indictive price model is updated with additional data, and macroeconomic factors are included in the analysis. Including unemployment rates, GDP growth, and with their local expertise, they conduct market analysis of consumer trends. Unique for mortgages secured in real estate, the local expertise provides a valuation of the collateral to the analysis. If the portfolio is acquired, it is integrated into the business, and *debt collection* process starts immediately.

The integrated process and utilization of the diverse data accrued across Europe in the centralized Luxembourg office are unique for B2Holding. It is valuable in correctly assessing portfolios, which was regarded especially important in the increasingly fierce industry rivalry to maintain profit margins. It is rare, in that no other companies analysed have a similar data collection and central data processing facility. For competitors, it would demand substantial investment across an extended period to duplicate. The historical importance of several years of geographical expansion and subsequent data collection should not be underestimated. Equally important is the social complexity surrounding the process, with several different

departments and key people collaborating according to a well-defined system of decision making. Their organisation is equipped to take advantage of the resource, and this constitutes a sustained competitive advantage.

3.4 Part Conclusion

The underpinnings of profitability found on industry level were connected to an increasingly competitive market among incumbents, pressing profits down and prices on portfolios up. Growth decreased on purchased loan portfolios in 2019 for B2Holdings and its peers, indicating that the high growth experience previously will stagnate. COVID-19's impact could significantly change that expectation, but regulatory powers are actively trying to reduce its potential harm on the economy. Internally, the company has a sustained advantage in their integrated portfolio purchasing process and temporary from their diverse portfolio, resources they will utilise to maintain their profit margins. Their financing capacity is on par with the competition, allowing them to stay competitive on portfolio purchasing. The industry as a whole is set for more diverse investments as companies look to reduce their risk profile and for similar reasons, more will adopt B2Holdings strategy of collaboration.

4 Financial Analysis

This section will offer insight to the economic performance of B2Holding and comparisons with its peers. It is essential in preparation for the subsequent forecasting and combination with strategic analysis considerations will determine the future growth and development of the company. The financial analysis will be conducted in three parts: an index and common size analysis, a profitability analysis, and liquidity analysis. The financial statements are rearranged primarily according to Petersen & Plenborg (2012), with explanatory supplements from Koller et al. (2010). The additional source provides a safeguard both with regards to our interpretation of the rearrangement proposed by Petersen & Plenborg (2012) and their theoretical basis. The timeframe is set from the first available accounting figures for B2Holding until its most recent, i.e. 2014-2019.

Indexing measures the development of the major accounting items in the period. At the same time, the *common size* analysis of the income statement will look at the various accounting items as a percentage of the revenues. For the balance sheet, it will be measured towards the invested capital. Indexing is valuable in terms of looking at trends in key operating items and is supplemented with a common size analysis reflecting their relative size. Contrary to the indexing and common size analysis, which are isolating the performance of B2Holding, the *profitability analysis* is used to review the company's financial strengths and their ability to create profit and a solid return to their shareholders in comparison with its peers. Solid profitability is an adequate indicator of company health, and it influences the ability to establish and maintain beneficial relationships with customers and suppliers. *Liquidity* is important in any industry and indicates whether firms can service their debt and execute profitable investments (Petersen & Plenborg, 2012). In our assessment debt purchasing and collection industry is highly sensitive to liquidity. Core business activities are primarily financed through bank loans and bonds, requiring robust financial health through short- and long- term liquidity risk to meet their obligations.

4.1 Rearrangement of the Financial Statements

4.1.1 Rearranging the Income Statement

To prepare the income statement and balance sheet for the financial analysis, we must rearrange the items into either operating or financial activity. This rearrangement is critical since the operating activities are the main value drivers of the company, as well as what makes a company unique and difficult to imitate (Petersen & Plenborg, 2012). Financing activities are practically easier to copy, therefore, not considered a key value driver. Rearrangement is completed in part because accounting decisions and practices can misrepresent the historical performance of the company, and partly because of the most interesting and relevant aspect is the operational component's ability to return capital. Naturally, financial activities cannot be overlooked in the greater context; however, for forecasting purposes of revenues and operating expenses, having the components divided increases reliability.

According to Koller et al. (2010), **one-time charges** should be excluded from operating activities, as it may deceive the historical performance of a company and affect our view on the future. It is important to note that this does not apply when charges are rare but reoccurring for instance with several years apart, and only when it is reasonable to conclude that the charge will not reappear. One way of identifying such charges in examining notes in financial statements and evaluate the charges the company classify as one-time charges. Naturally, literature cannot provide a definitive answer to the classification of each one-time charge found, and it is up to the analysts to individually assess the charges. In the context of B2Holding, they classify their most substantial portfolio revaluation in 2019, coming from secured loans in Central Europe amounting to NOK 388 million as a non-recurring charge. This charge must be allocated either financial expenses or kept as part of the operating side of our analytical income statement. Our approximation to this problem is based on observing B2Holding's historical revaluations of portfolios previously displayed in table 2.3 before 2019 as net credit gain/loss from purchased loan portfolios. The item has remained relatively stable, fluctuating from the most substantial positive of NOK 77 million to a negative revaluation of NOK -57 million, compared to 2019's negative above NOK 400 million.

Further, as outlined in section 2.5.5.1, there has been decisive action from B2Holding ensuring similar charges will not happen in the future and contributing to our conclusion here is the discussion on B2Holding's integrated purchasing process from the internal analysis. These considerations combined concludes that the substantial write-off, in the second quarter of 2019 B2Holding is considered a one-time charges exempt from the income statement (B2Holding, 2019b). **Other non-recurring expenses** include IPO expenses in 2016 and personnel expenses (B2Holding, 2016c, 2017b). All non-recurring items will be allocated to financial expenses.

Profit from investments in associated parties/joint ventures are core business activities, and their profits are kept in the operating income.

Pension cost is recognized under interest-bearing liabilities, subsequently a financing activity in both the income statement and balance sheet. It is, therefore moved from personnel expenses and allocated financial expenses.

NOK 1 000	2014	2015	2016	2017	2018	2019
Wages, salaries and other benefits paid	- 106 024	- 223 809	- 279 582	- 361 779	- 521 661	
Social security costs and payroll taxes	- 22 523	- 50 837	- 58 025	- 93 427	- 87 782	
Cost of external temporary staff			-	- 15 468	- 47 688	
Other personnel costs, including training and recruitment costs	- 6 469	- 18 315	- 19 685	- 16 040	- 26 305	
Total personnel expenses	**- 135 016**	**- 292 961**	**- 357 292**	**- 486 714**	**- 683 436**	**- 887 889**

Table 4.1: Personnel Expenses. Source: Own Production

Taxes are deducted from the adjusted EBIT to retrieve B2Holding's NOPAT using the effective tax rate for the respective year. As financial expenses affect the tax expense positively, the associated tax advantage is added back to obtain the net income.

NOK 1 000	2014	2015	2016	2017	2018	2019
Interest Income from purchased loan portfolios	399 388	909 544	1 205 942	1 680 221	2 537 113	2 713 165
Net credit gain/loss from purchased loan portfolios	518	5 298 -	14 621	76 919 -	57 625 -	12 127
Profit from shares in associated parties	283	230	152	70 083	47 757	64 113
Other Revenues	110 838	161 397	190 200	255 538	378 376	496 671
Revenues	**511 027**	**1 076 469**	**1 381 673**	**2 082 761**	**2 905 621**	**3 261 822**
External expenses of services provided -	118 901 -	189 304 -	231 665 -	285 539 -	363 312 -	447 245
Personnel expenses -	135 016 -	254 961 -	352 192 -	486 714 -	683 436 -	882 889
Other Operating Expenses -	152 167 -	187 594 -	245 398 -	286 837 -	416 651 -	422 852
EBITDA	**104 943**	**444 610**	**552 418**	**1 023 671**	**1 442 222**	**1 508 836**
Depreciation and Amortisation -	11 986 -	27 953 -	29 875 -	35 893 -	56 126 -	107 352
Impairment losses	-	-	-	-	- -	26 915
Adjusted EBIT	**92 957**	**416 657**	**522 543**	**987 778**	**1 386 096**	**1 374 569**
Tax on operating profit -	16 264 -	71 346 -	113 693 -	253 786 -	273 360 -	481 394
NOPAT	**76 693**	**345 311**	**408 850**	**733 992**	**1 112 736**	**893 175**
IPO expenses	-	- -	12 000	-	-	-
Non-recurring personnel expenses	- -	38 000 -	5 100	-	- -	5 000
Revaluation one-off write down	-	-	-	-	- -	388 000
Other non-recurring expenses	-	- -	2 800	-	- -	23 000
Defined contribution pension cost -	1 190 -	1 223 -	1 533 -	3 572 -	8 242	-
Financial Income	1 845	2 200	1 604	3 290	4 652	12 651
Financial Expenses -	43 905 -	161 661 -	223 834 -	358 157 -	618 378 -	794 463
Net exchange gain/(loss)	21 844	25 237 -	66 138	18 283	43 973 -	11 858
Net financial expenses before tax -	**21 406 -**	**173 447 -**	**309 801 -**	**340 156 -**	**577 995 -**	**1 209 670**
Tax on financial expenses	3 745	29 700	67 406	87 395	113 990	423 644
Change in deferred taxes -	6 940 -	3 479	-	-	-	-
Net financial expenses after tax -	**24 601 -**	**147 226 -**	**242 395 -**	**252 761 -**	**464 005 -**	**786 026**
Net profit/loss of the period	**52 092**	**198 085**	**181 077**	**481 231**	**648 731**	**107 151**

Table 4.2: Analytical Income Statement. Source: Own Production

4.1.2 Rearranging the Balance Sheet

Following the rearrangement of B2Holding's income statement, the associated items in the balance sheet are rearranged in the same manner to ensure consistency. The goal is to attain the invested capital, defined as the amount a company has invested in its primary operations (Koller et al., 2010). The rearrangement is essential to obtain a clear picture of balance sheet items historical levels, which are applied as baselines in the forecasting.

Deferred tax assets occur in connection with tax loss carryforwards or assets that are identified at a lower value in the balance sheet for tax purposes (Petersen & Plenborg, 2012). As tax assets are associated with operational activities, deferred tax assets are recognized as an operational item. ***Deferred tax liabilities*** are classified in the same manner.

As explained previously, ***Investment in associated parties/joint ventures*** are part of the core business and categorized as an operating item on the balance sheet.

Other short-term assets include minor receivables, prepayments and accrued income (B2Holding, 2019a). All the items are recognized as operating activities and therefore allocated current operating assets.

Tax payable are classified as an operating liability (Petersen & Plenborg, 2012).

Other current liabilities and other long-term liabilities are classified as financial activities. Ideally, Petersen & Plenborg (2012) suggest that financial instruments such as derivatives are separated in operating and financial activities pending on their nature. However, with limited information on the derivatives nature, separating is not feasible. Consequently, they will be recognized as a financial activity as operating and financial hedges are both recognized as a financial choice. In addition, ***net exchange gain/loss*** is regarded as a financial activity in the income statement.

Bank overdraft is classified as an interest-bearing liability in the annual report, therefore being allocated as a financing activity (B2Holding, 2019a).

Other long-term financial assets are for the most part derivative financial instruments, consequently being recognized in the same manner as other current liabilities and other long-term liabilities, and allocated as a financial asset (B2Holding, 2019a).

Cash and short-term deposits are assessed as a financial activity since it does not influence the operating activities of the company.

NOK 1 000	2014	2015	2016	2017	2018	2019
Deferred tax assets	11 930	26 349	64 004	65 778	97 219	188 765
Goodwill	302 122	317 675	394 800	522 366	785 230	777 764
Tangible and Intangible assets	104 829	100 282	90 529	201 015	273 812	362 529
Investments in associated companies and joint ventures	1 895	1 598	3 935	5 564	12 144	387 041
Purchased loan portfolios	2 016 705	3 167 628	4 751 878	8 731 632	13 346 098	13 419 720
Loan receivables	168 182	259 819	311 296	414 580	357 801	345 160
Participation loan/notes	-	-	-	161 167	588 846	541 683
Total Non-Current Operating Assets	**2 605 663**	**3 873 351**	**5 616 442**	**10 102 102**	**15 461 150**	**16 022 662**
Accounts receivable	27 985	20 432	50 734	74 989	34 908	-
Other short-term assets	32 346	49 524	72 071	131 884	245 392	558 568
Total Current Operating Assets	**60 331**	**69 956**	**122 805**	**206 873**	**280 300**	**558 568**
Deferred tax liabilities	32 417	59 307	51 027	95 709	162 925	171 475
VAT, payroll and other indirect taxes	22 405	33 460	29 483	-	-	-
Accounts and other payables	121 223	107 703	156 486	266 603	300 536	265 081
Income taxes payable	8 949	25 825	62 097	56 531	47 121	28 684
Total Non-Interest Bearing Liabilities	**184 994**	**226 295**	**299 093**	**418 843**	**510 582**	**465 240**
Net Working Capital	**- 124 663**	**- 156 339**	**- 176 288**	**- 211 970**	**- 230 282**	**93 328**
INVESTED CAPITAL (OPERATING ASSETS)	**2 481 000**	**3 717 012**	**5 440 155**	**9 890 133**	**15 230 870**	**16 115 992**

Total Equity	**1 372 152**	**1 671 911**	**2 424 890**	**3 148 381**	**4 355 490**	**4 236 804**
Long-term interest bearing loans and borrowings	1 053 475	2 526 121	3 217 715	5 738 696	10 768 808	10 140 978
Short-term interest bearing loand and borrowings	159 336	-	-	989 436	363	1 497 563
Other current liabilities	155 621	252 231	142 660	306 213	381 621	344 900
Other long-term liabilities	34 564	31 427	64 528	70 207	97 757	159 528
Bank overdraft	-	-	-	125 655	59 115	96 634
Total Interest-Bearing Liabilities	**1 402 996**	**2 809 779**	**3 424 903**	**7 230 207**	**11 307 664**	**12 239 603**
Other long-term financial assets	-	-	192 030	36 455	34 582	4 531
Cash and short-term deposits	294 148	764 678	217 608	452 000	397 702	355 884
Total Interest-Bearing Assets	**294 148**	**764 678**	**409 638**	**488 455**	**432 284**	**360 415**
Net Interest-Bearing Debt	**1 108 848**	**2 045 101**	**3 015 265**	**6 741 752**	**10 875 380**	**11 879 188**
INVESTED CAPITAL (FINANCIAL ASSETS)	**2 481 000**	**3 717 012**	**5 440 155**	**9 890 133**	**15 230 870**	**16 115 992**

Table 4.3: Analytical Balance Sheet

4.2 Indexing and Common Size Analysis

4.2.1 Indexing

On the operating side of the business, the increased income from fully owned portfolios has driven the growth, averaging 83 percent of total revenues in the period and total growth of 579 percent, however only 7 percent from 2018-2019. It further emphasizes what has been expressed as a challenging 2019. Total growth in revenues was 538 percent, with a CAGR of 45 percent. Also, influencing the development in EBITDA was increasing operating expenses, as expected in a growing business, of 330 percent. Significantly lower growth than in revenues, indicating strong cost management.

Naturally, financial expenses have grown as the business expanded over the period. We discussed the impact of tightening speculative-grade bond markets in the strategic analysis, potentially increase the cost of debt for companies financing through bonds. This shift could help explain why financial expenses have increased at a higher rate between 2017- 2019. As an indicator of the cost of financing through bonds, we can examine the coupon rates B2Holding have offered. In 2017 they issued a bond on the Oslo Stock Exchange with a coupon rate of 4.75 percent + EURIBOR, and in 2019 their offer increased to 6.35 percent + EURIBOR for a new bond (B2Holding, 2018d, 2018b). Indicative of the tightening bond market. Net profits in 2016 decreased by 9 percent, mainly due to non-recurring IPO expense, personnel expense, and exchange rate loss. Revaluation of mentioned secured portfolio in Central Europe was the predominant cause of an 83 percent fall from 2018 to 2019 in net profits.

Seeing all the income items graphed together, further emphasises why the strategic change was implemented and why it is expected that future growth assumption must be adjusted based on the strategic analysis, and not purely historical.

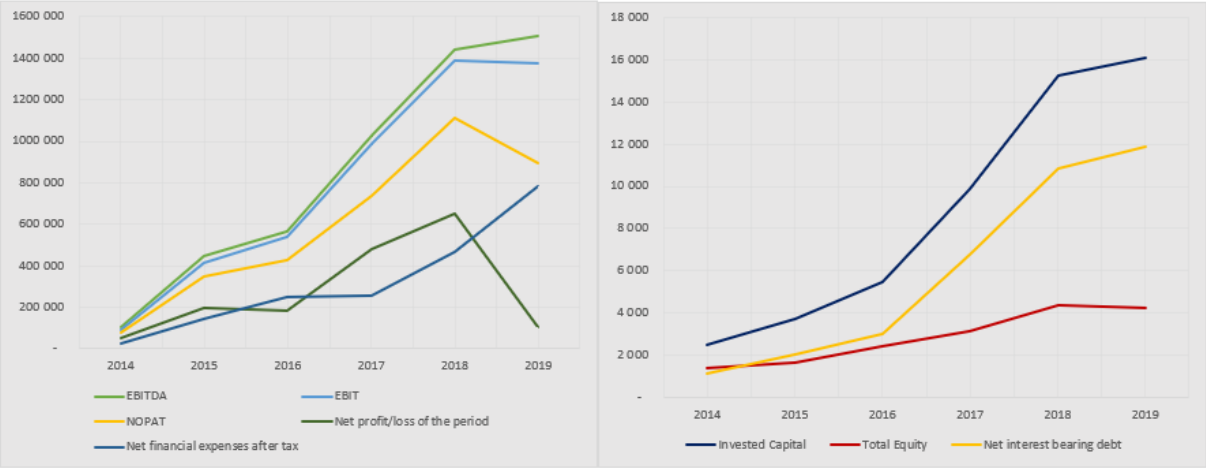


Figure 4.1: Development of key financials. Source: Own Production

On the balance sheet side of the index analysis, purchased loan portfolio has driven the total non-current operating assets approximating a 500 percent increase since 2014. It further indicates the magnitude of the expansion strategy put forth since the company's founding. However, traces of the new strategic direction is also evident on the balance sheets, as purchased loan portfolios grew by 1 percent in 2019 due to lower purchase rate (B2Holding, 2020b). In total, Non-current operating assets experienced growth of only 4 percent, mostly from joint venture investments, in 2019. Current operating assets increased by 826 percent, driven by growth in other short-term assets. B2Holding was allowed to increase the share capital in 2018 (B2Holding, 2019a), which resulted in growth in total equity. By the end of 2019, total equity had increased 209 percent from 2014. Interest-bearing liabilities has increased with 772 percent, driven by growth in long-term borrowings associated with the purchase of loan portfolios, signifying how financing through debt has been the predominant strategy of B2Holding. Short-term borrowings experienced significant growth in 2019, explained by a 150 million euro bond maturing in 2020 (B2Holding, 2020b).

4.2.2 Common Size Analysis

From the index analysis, we found a significantly higher growth in revenues than operating expenses. Personnel costs have remained relatively stable, between 23-27 percent of revenues. The improvement on EBITDA stems mostly from lower other operating expenses and external expenses for services provided, decreasing to 13 and 14 percent in 2019, respectively. Other operating expenses include IT, travelling, consultancy fees, office

equipment and more. Where one explanation for their reduction as a percentage of revenue could be economies of scale, subsequently by improving contracts with IT suppliers, consultants and more. External expenses include payments for information on portfolios which if we isolate have remained approximately the same of NOK 10 million from 2014 until 2019. A possible explanation would be their increasingly vast geographical presence and ability to gather information based on their data, contrary to external sources. However, we do iterate that concluding on these reasonings are limited, as annual reports are only touching the surface of these expenses and do not elaborate on their development. Combined with stable external expenses, the EBITDA margin has improved. 2015 had a remarkable improvement in the EBIDTA margin. The margin increased from 21 to 41 percent as a result of reductions in expenses discussed above and economies of scale. From the analytical income statement in section 4.1.1, revenues more than doubled in the period. The EBITDA margin experience a decline of 4 percent in 2019, due to increased personnel costs related to a servicing platform in Greece and costs related to organizational changes (B2Holding, 2020b). Depreciation and amortisation and impairment losses have had a stable effect on adjusted EBIT, but varying tax expenses on operating profit have caused NOPAT to fluctuate between 27 – 38 percent from 2015 – 2019. Further, in 2019, taxes raised due to B2Holding not recognizing deferred tax assets related to the write-down of its portfolios (B2Holding, 2020b).

Financial expenses were identified in the index analysis to have increased considerably, and in the common size analysis, it has increased from 9 to 24 percent relative to revenues. Financial expenses are alongside personnel expenses, the most influential cost factors of B2Holding. Net profits have remained positive throughout the period but damaged by increasing financial expenses in 2019. Significant decrease in net profit is a result of factors discussed earlier, including a one-off write-down of portfolios.

Common size analysis of the income statement	2014	2015	2016	2017	2018	2019
Revenues	100%	100%	100%	100%	100%	100%
External expenses of services provided	-23%	-18%	-17%	-14%	-13%	-14%
Personnel expenses	-26%	-24%	-25%	-23%	-24%	-27%
Other Operating Expenses	-30%	-17%	-18%	-14%	-14%	-13%
EBITDA	**21%**	**41%**	**40%**	**49%**	**50%**	**46%**
Depreciation and Amortisation	-2%	-3%	-2%	-2%	-2%	-3%
Impairment losses	0%	0%	0%	0%	0%	-1%
Adjusted EBIT	**18%**	**39%**	**38%**	**47%**	**48%**	**42%**
Tax on operating profit	-3%	-7%	-8%	-12%	-9%	-15%
NOPAT	**15%**	**32%**	**30%**	**35%**	**38%**	**27%**
IPO expenses	0%	0%	-1%	0%	0%	0%
Non-recurring personnel expenses	0%	-4%	0%	0%	0%	0%
Revaluation one-off write down	0%	0%	0%	0%	0%	-12%
Other non-recurring expenses	0%	0%	0%	0%	0%	-1%
Defined contribution pension cost	0%	0%	0%	0%	0%	0%
Financial Income	0%	0%	0%	0%	0%	0%
Financial Expenses	-9%	-15%	-16%	-17%	-21%	-24%
Net exchange gain/(loss)	4%	2%	-5%	1%	2%	
Net financial expenses before tax	-4%	-16%	-22%	-16%	-20%	-37%
Tax on financial expenses	1%	3%	5%	4%	4%	13%
Change in deferred taxes	-1%	0%	0%	0%	0%	0%
Net financial expenses after tax	**5%**	**14%**	**18%**	**12%**	**16%**	**24%**
Net profit/loss of the period	**10%**	**18%**	**13%**	**23%**	**22%**	**3%**

Table 4.4: Common Size Analysis of Income Statement

The common size analysis of the balance sheet shows that purchased loan portfolios decreased relative to invested capital, amounting to 83 percent in 2019, down from 88 percent the previous year. A natural development from the new strategic direction was a spike in associated parties. Nearly at zero percent for the examined period up until 2019, then amounting to 2.4 percent most recently. Current operating assets have remained stable relative to invested capital.

Interest-bearing debt fluctuates, with noticeable spikes in short-term debt and long-term debt has been influenced by fulfilment of bond obligations. For example, 2019 saw the maturing of a EUR 150 million bond, resulting in a decrease in long-term debt. B2Holding has become increasingly dependent on debt financing, as seen in net interest-bearing debt, which in 2019 accounted for 76 percent of the debt and equity side of the balance sheet, a significant increase since the beginning of the periods 45 percent.

Common size analysis of the balance sheet	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*
Deferred tax assets	0%	1%	1%	1%	1%	1%
Goodwill	12%	9%	7%	5%	5%	5%
Tangible and Intangible assets	4%	3%	2%	2%	2%	2%
Investments in associated companies and joint ventures	0,1%	0,0%	0,1%	0,1%	0,1%	2,4%
Purchased loan portfolios	81%	85%	87%	88%	88%	83%
Loan receivables	7%	7%	6%	4%	2%	2%
Participation loan/notes	0%	0%	0%	2%	4%	3%
Total Non-Current Operating Assets	**105%**	**104%**	**103%**	**102%**	**102%**	**99%**
Accounts receivable	1%	1%	1%	1%	0%	0%
Other short-term assets	1%	1%	1%	1%	2%	3%
Total Current Operating Assets	**2%**	**2%**	**2%**	**2%**	**2%**	**3%**
Deferred tax liabilities	1%	2%	1%	1%	1%	1%
VAT, payroll and other indirect taxes	1%	1%	1%	0%	0%	0%
Accounts and other payables	5%	3%	3%	3%	2%	2%
Income taxes payable	0%	1%	1%	1%	0%	0%
Total Non-Interest Bearing Liabilities	**7%**	**6%**	**5%**	**4%**	**3%**	**3%**
Net Working Capital	**-5%**	**-4%**	**-3%**	**-2%**	**-2%**	**1%**
INVESTED CAPITAL (OPERATING ASSETS)	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Total Equity	**55%**	**45%**	**45%**	**32%**	**29%**	**26%**
Long-term interest bearing loans and borrowings	42%	68%	59%	58%	71%	63%
Short-term interest bearing loand and borrowings	6%	0%	0%	10%	0%	9%
Other current liabilities	6%	7%	3%	3%	3%	2%
Other long-term liabilities	1%	1%	1%	1%	1%	1%
Bank overdraft	0%	0%	0%	1%	0%	1%
Total Interest-Bearing Liabilities	**57%**	**76%**	**63%**	**73%**	**74%**	**76%**
Other long-term financial assets	0%	0%	4%	0%	0%	0%
Cash and short-term deposits	12%	21%	4%	5%	3%	2%
Total Interest-Bearing Assets	**12%**	**21%**	**8%**	**5%**	**3%**	**2%**
Net Interest-Bearing Debt	**45%**	**55%**	**55%**	**68%**	**71%**	**74%**
INVESTED CAPITAL (FINANCIAL ASSETS)	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 4.5: Common Size Analysis of Balance Sheet. Source: Own Production

4.3 Profitability Analysis

For this analysis to provide valuable insight and knowledge to the forecasting, the ratios calculated are considered along two dimensions: **First**, the level of the ratios. **Second**, the historical development (Petersen & Plenborg, 2012). Assessing the level is based on comparisons and establishment of averages across the peer group. Historically, there are essential considerations to trends and cyclicality both on peer group and B2Holdings level. Natural trends in profitability ratios across the industry can explain fluctuations on the company level, thus provide valuable information to the forecasting. One caveat of profitability analysis on a theoretical basis is their focus on the face value in the books, instead of market values (Brealey et al., 2011). The sensitivity to this will vary as some assets, such as brand reputation, are more heavily invested in and valued between sectors increasing the difference between book and market values. Our assessment of the debt purchasing and collection industry is that market and book values, especially of equity, are closely connected. The price to book value multiple can be indicative of the industries sensitivity to assets not

recognized in the balance sheet. Extracted from the multiple analysis conducted in section 8.4, we see that price to book is relatively low, not exceeding 2.0 for any of the companies analysed. We are therefore confident that the profitability ratios chosen provide an adequate analysis for our purposes.

We acknowledge that the results of the analysis must be considered with caution, as there are missing values for both Axactor and Arrow. As mentioned in the presentation of Axactor, they were only recently established, in 2015, which has had an impact on their financials for their first full year of operations. Therefore, we have opted to exclude Axactor's 2016 figures from averages calculations as significant outliers skew the results.

4.3.1 Return on Invested Capital

Return on invested capital (ROIC) is among the most used ratios in profitability analysis, as it measures the overall profitability through displaying the efficiency of capital engaged in operational activities (Petersen & Plenborg, 2012). ROIC alone cannot explain precisely where returns are generated; however, it gives insight to the companies access to capital and borrowing costs. Higher ROIC than peers can indicate high attractiveness and subsequently, cheaper access to financing.

$$ROIC = \frac{NOPAT}{INVESTED\ CAPITAL}$$

Equation 4.1: Return on Invested Capital. Source: Petersen & Plenborg (2012)/Own Production

The data collected from B2Holding and its peers show the ROIC each year and the average across the examined period. The intuition is that for each NOK invested in B2Holding they generate NOK 0.0725 in return, the simple mean of the peer group is 0.0984. Missing values for Axactor in 2014 and 2015, also considering their short lifetime, and Arrow Global's missing 2019 figures, creates challenges in interpreting and concluding definitively from the results. However, some takeaways are relevant. Economic value added or EVA indicates whether companies ROIC is above or below the WACC. When ROIC is higher than WACC, it suggests that capital is utilised so that it generates higher returns than the investors demand and that growth adds value. B2Holding's WACC was calculated at 5.78 percent, and the ROIC has

continuously been higher after 2014. Excluding the youngest company in our sample, Axactor, the remaining companies show trend similarities. The average peaked in 2015 before it has steadily declined. This decline was expected, especially in 2018 and 2019, because of the high growth experienced in the industry until recently where it seems that it is trending towards a more mature situation. From the 2019 figures, we obtain an almost identical average on industry level compared to our WACC estimate. Decomposing ROIC to profit margin and turnover rate provides more in-depth insight to the drivers of this decline.

ROIC	2014	2015	2016	2017	2018	2019	Average
Arrow Global Group	8,39 %	11,52 %	11,27 %	10,09 %	9,48 %	N/A	10,15 %
Axactor SE	N/A	N/A	-6,37 %	2,08 %	3,89 %	5,98 %	1,39 %
B2Holding ASA	3,52 %	10,16 %	8,48 %	7,84 %	7,70 %	5,82 %	7,25 %
Hoist Finance	4,17 %	4,66 %	4,81 %	4,17 %	3,90 %	4,04 %	4,29 %
Intrum	21,01 %	21,57 %	20,17 %	11,41 %	9,59 %	3,97 %	14,62 %
Kruk Group	15,34 %	15,62 %	12,18 %	12,23 %	11,34 %	9,03 %	12,62 %
Peer Group	12,23 %	13,34 %	12,11 %	7,99 %	7,64 %	5,76 %	9,84 %

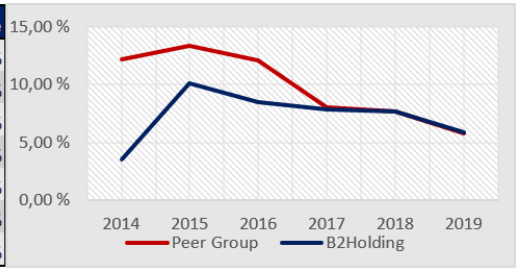


Table 4.6:Return on Invested Capital. Source: Own Production

4.3.1.1 Profit Margin and Turnover Rate

Profit margin is a measurement of a company's operating efficiency, examining net operating profit as a percentage of net revenues. While the turnover rate is an expression of a company's capability to manage invested capital (Petersen & Plenborg, 2012). Both are preferably high, and the conclusion is safest made compared to the industry or peer group's average as satisfactory levels fluctuate between sectors.

$$Profit\ Margin = \frac{NOPAT}{Net\ Revenues}$$

Equation 4.2: Profit Margin. Source: Petersen & Plenborg (2012)/Own Production

$$Turnover\ Rate = \frac{Net\ Revenues}{Invested\ Capital}$$

Equation 4.3: Turnover Rate. Source: Petersen & Plenborg (2012)/Own Production

Both ratios are showing trend similarities and indicative of a more maturing industry. Before 2018 B2Holding had a stable development in their profit margin compared to the competitors. Several companies struggled with its profit margins from 2018 -2019, with exceptions of Hoist Finance and Axactor. B2Holding's turnover has had a steady decline from 2015 until 2018,

which explains B2Holding's fall in ROIC from 2015 to 2018, despite the increased profit margin in the same period. Invested capital is greatly affected by purchased loan portfolios, which averaged at 85.51 percent of invested capital during the period. Strategically, we concluded that the integrated purchasing process at B2Holding constituted a competitive advantage, which could be a contributing factor to the company's ability to attain a higher profit margin than the industry in recent years.

A satisfactory turnover rate is related to the industry the companies operates within. Compared to the peer group, B2Holding has a lower turnover rate for the entire period. The turnover rate is declining, and the average is moving closer to that of B2Holding. B2Holding's turnover rate of 20.24 percent in 2019 means invested capital is held in the firm for four years and 343 days. Considering that the length of the loan portfolios could be 20 years, it is an acceptable turnover rate (B2Holding, 2019a). The decline, however, suggests that companies within debt purchasing and collection have their investments tied up longer.

Profit Margin	2014	2015	2016	2017	2018	2019	Average
Arrow Global Group	36,60 %	40,56 %	38,13 %	29,87 %	26,74 %	N/A	34,38 %
Axactor SE	N/A	N/A	-23,97 %	11,25 %	17,65 %	24,67 %	7,40 %
B2Holding ASA	15,01 %	32,08 %	30,64 %	35,24 %	38,30 %	27,38 %	29,77 %
Hoist Finance	27,13 %	26,59 %	28,34 %	27,85 %	29,22 %	30,62 %	28,29 %
Intrum	23,61 %	23,79 %	27,63 %	25,87 %	24,73 %	10,23 %	22,64 %
Kruk SA	42,29 %	40,05 %	39,30 %	35,88 %	39,00 %	32,01 %	38,09 %
Peer Group	32,41 %	32,75 %	33,35 %	26,14 %	27,47 %	24,38 %	29,42 %

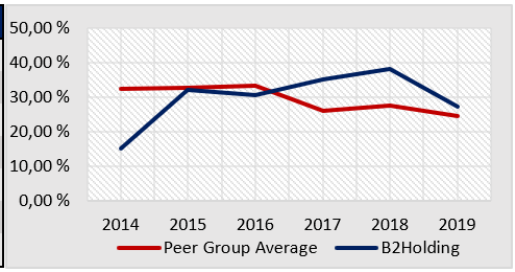


Table 4.7: Profit Margin. Source: Own Production

Turnover Rate	2014	2015	2016	2017	2018	2019	Average
Arrow Global Group	20,88 %	24,98 %	25,47 %	29,06 %	28,19 %	N/A	25,72 %
Axactor SE	N/A	N/A	19,22 %	16,62 %	20,80 %	23,14 %	19,95 %
B2Holding ASA	20,60 %	28,96 %	25,67 %	21,06 %	19,08 %	20,24 %	22,60 %
Hoist Finance	15,36 %	17,53 %	16,97 %	14,98 %	13,36 %	13,19 %	15,23 %
Intrum	60,66 %	62,42 %	52,69 %	18,67 %	19,80 %	21,45 %	39,28 %
Kruk SA	36,25 %	38,97 %	30,34 %	33,52 %	28,65 %	27,92 %	32,61 %
Peer Group	33,29 %	35,97 %	31,37 %	22,57 %	22,16 %	21,43 %	27,80 %

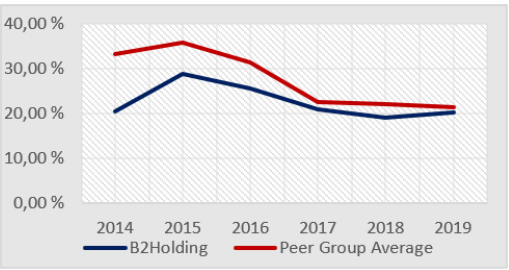


Table 4.8: Turnover Rate. Source: Own Production

4.3.2 Return on Equity

Return on Equity (ROE) is another measure of a company's profitability. ROE expresses the shareholders' return on investments within the company (Petersen & Plenborg, 2012).

Contrary to ROIC, ROE considers the leverage of the company and provide insight to how much they can generate back in shareholder value.

$$Return\ on\ Equity = \frac{Net\ earnings\ after\ tax}{Book\ value\ of\ equity} * 100$$

Equation 4.4: Return on Equity. Source: Petersen & Plenborg (2012)/Own Production

As expected, the ROE of 2019 is considerably weak, due to net earnings after tax being reduced from the revaluation in Q2. B2Holding's ROE in prior years have fluctuated, although remained relatively satisfactory between 2015 to 2018. Again, we can see a collective decline in the industry, affecting every company except Axactor. Whereas Intrum experienced a negative ROE in 2019.

Return on Equity	2014	2015	2016	2017	2018	2019	Average
Arrow Global Group	14,99 %	21,84 %	15,72 %	20,44 %	15,59 %	N/A	17,71 %
Axactor SE	N/A	N/A	-6,11 %	0,89 %	0,73 %	5,55 %	0,26 %
B2Holding ASA	3,80 %	11,85 %	7,47 %	15,28 %	14,89 %	2,53 %	9,30 %
Hoist Finance	12,89 %	10,07 %	14,26 %	14,02 %	13,37 %	12,35 %	12,83 %
Intrum	34,23 %	37,02 %	35,54 %	6,70 %	7,57 %	-1,14 %	19,99 %
Kruk SA	25,95 %	26,04 %	20,10 %	20,21 %	19,07 %	14,14 %	20,92 %
Peer-Group	22,01 %	23,74 %	21,40 %	12,45 %	11,26 %	7,73 %	16,43 %

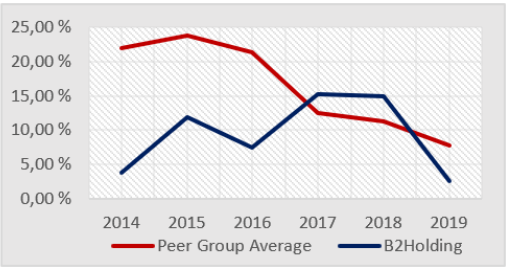


Table 4.9: Return on Equity. Source: Own Production

4.4 Liquidity Analysis

The purpose of the analysis is assessing B2Holding's short- and long-term liquidity risk. Both important factors when analysing a company's credit risk and can provide information about managements current and future degree of freedom (Petersen & Plenborg, 2012). It is important to note that liquidity ratios are measuring exactly that, liquidity. Assets that can be sold or used in an instant, which in turn can render ratios dated upon analysis. A solution to this is focusing on the historical development, rather than the most recent values. In the context of B2Holding, this analysis can then shed light on their historically lower credit rating than their peers, but we exercise caution to the ultimate conclusion on managerial flexibility.

4.4.1 Current Ratio

The current ratio is a measure for short-term liquidity risk examining the coverage ratio of assets over liabilities in the event of liquidation (Petersen & Plenborg, 2012). All things equal, it is desirable with a high current ratio, as it signifies whether the current assets can cover

short-term liabilities. The ratio should be seen in relation to comparable firms and exercise caution in interpretation due to differences in accounting of liquidation value and the book value of current assets. However, it does serve as a useful benchmark. It is important to note that natural fluctuations might occur when bonds mature; they are then allocated current liabilities, which skews the ratio downwards for the specific year. This re-allocation, explains in part the fluctuations at B2Holding from 2016 to 2019, where 2017 and 2019 had the face value of maturing bonds allocated to current liabilities. It is partly mitigated by examining the period's average, as we have established that bonds are a common financing method; all the companies should experience similar fluctuations, although not necessarily at the same time. B2Holding's average ratio (0.22) is below the peer group's (0.37). B2Holding's considerably lower current ratio suggests they are inferior positioned to cover their current liabilities and subsequently have a higher risk associated with short-term liquidity.

$$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities}$$

Equation 4.5: Current Ratio. Source: Petersen & Plenborg (2012)/Own Production

Current Ratio	2014	2015	2016	2017	2018	2019	Average
Arrow Global Group	0,21	0,21	0,31	0,22	0,23	N/A	0,23
Axactor SE	N/A	N/A	0,20	2,08	1,11	0,31	0,93
B2Holding ASA	0,13	0,17	0,31	0,12	0,36	0,25	0,22
Hoist Finance	0,19	0,25	0,10	0,09	0,11	0,13	0,14
Intrum	0,65	0,60	0,42	0,45	0,86	0,66	0,61
Kruk SA	0,13	0,11	0,09	0,18	0,16	0,22	0,15
Peer Group	0,29	0,29	0,23	0,60	0,49	0,33	0,37

Table 4.10: Current Ratio. Source: Own Production

4.4.2 Financial Leverage and Interest Coverage Ratio

In measuring the long-term liquidity risk for B2Holding, we have examined both the financial leverage and interest coverage ratio. High leverage and low-interest coverage ratio are indicating high long-term liquidity risk. The Financial leverage utilises the balance sheet, creating a relative representation of the historical development between liabilities and equity. Useful in establishing trends in financing across an industry. The interest coverage ratio is based on income statement items, EBIT and net financial expenses. As a trend analysis, it provides information about the relationship between operational growth in returns as the

EBIT and net financial expenses. A business that can grow its earnings before interest and taxes relative to their financial expenses is desirable. Together they provide an overview that can explain long-term liquidity risk and attribute to the credit rating differences explanation.

$$Financial\ Leverage = \frac{Total\ Liabilities}{Equity}$$

Equation 4.6: Financial Leverage. Source: Petersen & Plenborg (2012)/Own Production

$$Interest\ Coverage\ Ratio = \frac{EBIT}{Net\ Financial\ Expenses}$$

Equation 4.7: Interest Coverage Ratio. Source: Petersen & Plenborg (2012)/Own Production

The debt collection industry is leverage intensive, displayed in the figure below with an average leverage ratio in the period for all companies of 3.20. B2Holding's financial leverage has steadily been increasing since 2014, correspondingly with increased portfolio investments, predominately debt-financed. The interest coverage ratio before 2017 was significantly lower for B2Holding, in more recent years they are still behind but closer to the peer average than previously. It is a worrying industry trend that the ratio is in decline. B2Holding's slightly lower ratio after 2017, can contribute to explaining why rating agencies, such as Moody's and Standard & Poor, are more critically assessing the company.

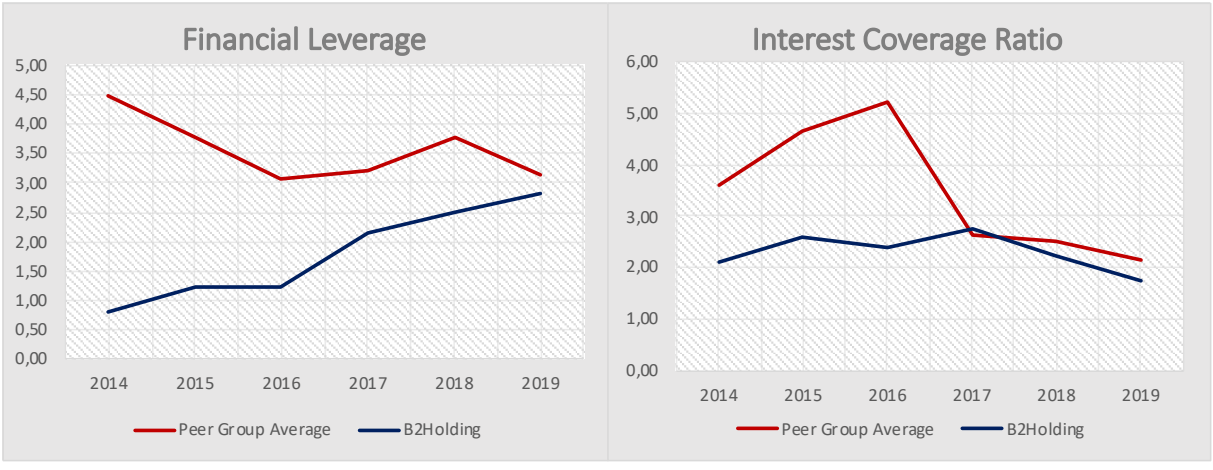


Figure 4.2: Financial Leverage and Interest Coverage ratio. Source: Own Production

4.5 Part Conclusion

The historical trends in indexing and common size analysis shows growth in every aspect of the company. A significant impact on the bottom line in 2019 was attributed to the revaluation of the secured portfolio in central Europe. However, due to rearrangements of financials, it was evident that growth had stagnated or declined in several other factors not directly influenced by the revaluation. Net interest-bearing debt development shows how dependent B2Holding has become to debt financing and as discussed in the strategic analysis, the coming years will according to Standard & Poor's see debt collectors forced to attend their debt more actively. Also considering the findings in the strategic analysis, the high growth experience previously is not expected to reach similar levels in the coming years. As expected from the strategic analysis of industry rivalry, both ROIC and ROE have been in decline in recent years, with B2Holding performing close to the peer group's average. Broadly decreasing turnover rate has been the leading cause of declining ROIC. However, B2Holding has outperformed the peers in profit margin, which we linked to their competitive advantageous purchasing process. From the liquidity analysis, B2Holding has a higher short-term liquidity risk than its peers and approximately equal long-term risk. This discrepancy could contribute to justifying their low credit ratings and be indictive towards their future investment capacity if bond markets continue to tighten.

5 Forecasting

The forecasting is a product of the strategic and financial analysis conducted previously, aimed at projecting B2Holding's financial statements into the future. There are several frameworks proposed by literature. However, they vary in their considerations to the mentioned analysis'. For example, Penman (2013) discusses a simple valuation method, where you solely base your forecasting on the development in the financial statements. The method, however, does not consider the strategic aspect of the company, which we recognize to be an essential factor to examine when conducting our forecast. Another example is Koller et al. (2010), who suggests estimating market shares and prices to forecast revenues. In this case, both aspects are difficult to calculate accurately, and reliable information is scarce specific to debt purchasing and collection industry.

Therefore, we implement the forecast proposed by Petersen & Plenborg (2012). The approach differs from the simple valuation method with an in-depth analysis of the strategic value drivers of the company, and how these affect the financial value drivers. Thereby, we gain a better knowledge of the company and how both the strategic approach and past financial performances may develop in the future. The forecast is our base scenario, where our assumptions about development in growth and margins are the realistic baseline. Later, in section 9, we will conduct a sensitivity analysis that will examine how our forecasting model is affected by changes in the underlying ratios and assumptions made here.

The forecasting framework is built upon the competitive position of B2Holding, including their historical sales growth and ability to return profits from operations, and the outlook of the industry and competitiveness of the company. An example of this dynamic approach is to the unsustainable high growth experience by B2Holding in NPL purchasing and revenues due to their expansion strategy. Projecting on prior performance without making significant considerations to shifting industry conditions, would undermine the strategic analysis. However, we seek to limit speculation by using historical performance as a baseline when it is applicable.

Theory does not provide a definitive answer to the question of the time frame of the explicit forecasting period. One must instead consider when it is realistic to assume that the terminal period growth rate is reached and how uncertainty increases the further into the future cash flows are estimated (Petersen & Plenborg, 2012). The competitive advantage period refers to

the time frame in which companies are outside stable growth, according to when competitive advantages are maintained (Damodaran, 2012). Further, Koller et al. (2010) suggest 10-15 years for fluctuating and high growth firms. In the strategic analysis, we predicted that profitability on industry level would develop in a stable/slight decreasing manner, yet positive, and that B2Holding would remain close to their historical performance based on their competitive advantages. We obtained both a temporary and sustained advantage in our VRIO, and the assessment is therefore that a 10-year explicit forecast period adequately encapsulates the high growth stage, while not exceeding an unreasonable level of uncertainty.

5.1 Forecasting Assumptions

B2Holding is entering a new phase in the debt collection industry after experiencing high growth and development since its establishment. From the external strategic analysis, our expectations going forward is that profit margins will not reach the levels seen before 2018-2019, due to new emphasis on the industry rivalry. However, we argue from an internal strategic view that B2Holding is among the companies that have the capabilities to maintain their current profit margins in the future. With the discussion in section 3.3.3.1, we found that the funding capacity for B2Holding cannot be characterized as a competitive advantage. It is indicating that the future expansion rate and growth will not experience the same rate as previously.

Further influencing our considerations in the projections is the impact of strategically shifting to more joint venture investments in fewer markets, than the aggressive expansion in fully owned portfolios seen in the past. From the indexing, we observed that income from fully owned portfolios averaged at 83 percent of total revenues in the examined period, and associated parties/joint ventures have averaged between 1-2 percent of total revenues. The recent development in 2019, saw joint ventures grow by 34 percent, only based approximately six months after the implementation of the new strategic plan, which means that the full-year effect is not yet recognized in revenues from joint ventures. Although we have limited information about the newly formed partnership with Banca Sella in Italy and Waterfall Asset Management in Sweden and future agreements, our expectations are that profit from shares in joint ventures will exceed the most recent trend. Further, considering findings in the strategic analysis on joint ventures gaining more focus on an industry level and

B2Holding only recently changing their strategy, a 6 percent addition to the baseline of 34 percent is applied. First-year growth in joint ventures is, therefore, 40 percent. In 2019, fully owned portfolios showed 7 percent increase in income. These recent developments are assessed as more representative of the future than the full historical picture, where fully owned portfolios had a CAGR of 45 percent. Other revenues are based on the 2019 growth.

According to Damodaran (2012), companies maintaining high and stable growth up until the terminal period is an unrealistic assumption. Given the most recent developments in profitability measures and industry characteristics, we find it reasonable to assume that B2Holding's growth follows a stabilizing trajectory towards the terminal period. We keep the growth in joint ventures at 40 percent until 2023 before tailing off towards terminal growth to accommodate the strategic considerations. While fully owned portfolio and other revenues are more conservatively decreasing each year towards terminal growth. All reach terminal growth in 2029 before the terminal period.

Operating expenses have been reasonably stable against revenues, evident from the common size analysis in section 4.2.2. Although much of the new strategic path is based on increasing exploitation of economies of scale, we conservatively assume a linear relationship between expenses and revenues, keeping their EBITDA margin at the average of 41 percent.

Depreciation and amortisation are assumed to be level with the 2019 figures, 0.69 percent of the non-current operating assets for the past year. While impairment losses have historically been negligible and excluded in the forecast, the fluctuations in financial expenses have been significant, our best approximation for the future is relying on the average of 15 percent for the forecast.

NOK 1 000	2019	2020E	2021E	2022E	2023E	2024E
Interest Income from purchased loan portfolios	2 713 165	2 886 428	3 054 764	3 215 995	3 367 918	3 508 360
Net credit gain/loss from purchased loan portfolios	- 12 127	-	-	-	-	-
Profit from shares in associated parties	64 113	89 758	125 661	175 926	236 595	305 141
Other Revenues	496 671	637 117	798 251	976 299	1 164 903	1 355 154
Net Revenues	**3 261 822**	**3 613 303**	**3 978 677**	**4 368 219**	**4 769 417**	**5 168 655**
Personnel expenses	- 447 245	- 578 128	- 636 588	- 698 915	- 763 107	- 826 985
Other Operating Expenses	- 882 889	- 975 592	- 1 074 243	- 1 179 419	- 1 287 743	- 1 395 537
EBITDA	- 422 852	- 578 128	- 636 588	- 698 915	- 763 107	- 826 985
EBITDA	**1 508 836**	**1 481 454**	**1 631 257**	**1 790 970**	**1 955 461**	**2 119 149**
Depreciation and Amortisation	- 107 352	- 111 251	- 128 453	- 141 442	- 155 290	- 169 552
Impairment losses	- 26 915	-	-	-	-	-
Adjusted EBIT	**1 374 569**	**1 370 203**	**1 502 805**	**1 649 528**	**1 800 171**	**1 949 596**
Taxes	- 481 394	- 301 445	- 330 617	- 362 896	- 396 038	- 428 911
NOPAT	**893 175**	**1 068 759**	**1 172 188**	**1 286 632**	**1 404 133**	**1 520 685**
Net financial expenses after tax	- 786 026	- 541 995	- 596 801	- 655 233	- 715 413	- 775 298
Net profit/loss of the period	**107 149**	**526 763**	**575 386**	**631 399**	**688 721**	**745 387**

NOK 1 000	2025E	2026E	2027E	2028E	2029E	2030E
Interest Income from purchased loan portfolios	3 635 223	3 746 533	3 840 496	3 915 540	3 970 357	4 025 942
Net credit gain/loss from purchased loan portfolios	-	-	-	-	-	-
Profit from shares in associated parties	376 718	444 312	499 533	534 072	541 549	549 131
Other Revenues	1 536 007	1 695 125	1 820 102	1 899 939	1 926 538	1 953 510
Net Revenues	**5 547 948**	**5 885 970**	**6 160 132**	**6 349 551**	**6 438 445**	**6 528 583**
Personnel expenses	- 887 672	- 941 755	- 985 621	- 1 015 928	- 1 030 151	- 1 044 573
Other Operating Expenses	- 1 497 946	- 1 589 212	- 1 663 236	- 1 714 379	- 1 738 380	- 1 762 717
EBITDA	- 887 672	- 941 755	- 985 621	- 1 015 928	- 1 030 151	- 1 044 573
EBITDA	**2 274 659**	**2 413 248**	**2 525 654**	**2 603 316**	**2 639 762**	**2 676 719**
Depreciation and Amortisation	- 183 745	- 197 229	- 209 246	- 218 992	- 225 726	- 228 886
Impairment losses	-	-	-	-	-	-
Adjusted EBIT	**2 090 913**	**2 216 019**	**2 316 409**	**2 384 324**	**2 414 037**	**2 447 833**
Taxes	- 460 001	- 487 524	- 509 610	- 524 551	- 531 088	- 538 523
NOPAT	**1 630 912**	**1 728 494**	**1 806 799**	**1 859 773**	**1 882 948**	**1 909 310**
Net financial expenses after tax	- 832 192	- 882 895	- 924 020	- 952 433	- 965 767	- 979 287
Net profit/loss of the period	**798 720**	**845 599**	**882 779**	**907 340**	**917 182**	**930 022**

Table 5.1: Forecasted Income Statement. Source: Own Production

5.2 Forecasted Balance Sheet

When forecasting the balance sheet, we follow the same approach as previously discussed, as it ensures consistency in the forecast. The purpose of the balance sheet forecast is obtaining year by year invested capital, which is applied later in the valuation.

Table 5.2 displays the forecasted grouped items necessary to obtain the invested capital. Be focusing on the different groups of items. We limit factors open to errors and uncertainty to the forecasted balance sheet.

From the ratios to revenues in 2019, there was a positive ***net working capital***, a first in company history. Based on the strategic analysis, this was expected in 2019 from restructuring and implementing the new strategic plan but is not representative of forecasting, as the company is expected to invest in growth. However, prior years saw net working capital as

negative as 22 percent of revenues, and a more stable trajectory is expected going forward, averaging a negative 5 percent of revenues.

Total non-current operating assets are mainly driven by purchased loan portfolios and increases in the forecast of joint ventures. Investments in associated parties and joint ventures grow relative to portfolios per expectations from the strategic analysis on industry rivalry trending towards more joint ventures and B2Holding's plan.

Revenue		*3 613 303*	*3 978 677*	*4 368 219*	*4 769 417*	*5 168 655*
NOK 1 000	2019	2020E	2021E	2022E	2023E	2024E
Total Non-Current Operating Assets	*512%*	18 500 111	20 370 824	22 365 283	24 419 414	26 463 515
Total Current Operating Assets	*11%*	397 463	437 654	480 504	524 636	568 552
Total Non-Interest Bearing Liabilities	*16%*	578 128	636 588	698 915	763 107	826 985
Net Working Capital		- 180 665	- 198 934	- 218 411	- 238 471	- 258 433
INVESTED CAPITAL	16 115 992	18 319 446	20 171 891	22 146 872	24 180 943	26 205 082

Revenue	*5 547 948*	*5 885 970*	*6 160 132*	*6 349 551*	*6 438 445*	*6 528 583*
NOK 1 000	2025E	2026E	2027E	2028E	2029E	2030E
Total Non-Current Operating Assets	28 405 492	30 136 164	31 539 876	32 509 702	32 964 838	33 426 346
Total Current Operating Assets	610 274	647 457	677 615	698 451	708 229	718 144
Total Non-Interest Bearing Liabilities	887 672	941 755	985 621	1 015 928	1 030 151	1 044 573
Net Working Capital	- 277 397	- 294 298	- 308 007	- 317 478	- 321 922	- 326 429
INVESTED CAPITAL	28 128 095	29 841 866	31 231 869	32 192 224	32 642 916	33 099 916

Table 5.2: Forecasted Balance Sheet. Source: Own Production

5.3 Terminal Period

With the terminal value in forecasting, often counting for more than 60 percent of the complete value of the company, careful estimation of the terminal growth rate is essential (Petersen & Plenborg, 2012). Growth in the terminal period can theoretically not exceed long-term growth rate in the economy, or the economy would consume and become the economy. Instead, a proxy of long-term company growth is often based on the indicators of economic growth. Koller et al. (2010) argue theoretically that the most accurate estimation should use the expected long-term rate of consumption growth plus inflation, while practitioners often use forecasted GDP-growth in the economy. The variables in the theoretical approach are difficult to obtain, due to the complexity and lack of reliable information regarding the entire industry, increasing the uncertainty of the estimate. When estimating the terminal growth rate, we, therefore, apply the practitioners approach using GDP growth.

As B2Holding is based in Norway, it could be a reasonable assumption to use the forecasted GDP-growth specific to Norway. However, as B2Holding's generated income is relatively equal

in all the regions they operate in, and Damodaran (2012) suggests that for companies operating across its domestic border it is more suitable to use an average GDP for the operational area. Our approximation is the 5-year forecasted GDP growth of 1.4 percent inside the Euro Area (European Central Bank, 2020). The Euro Area is applied as it covers a large part of B2Holding's operational area and is based on a thorough analysis by the European Central Bank. Besides, with B2Holding's close connection to the Euro, an assessment based on the Euro area is suitable.

6 Valuation Approaches

A significant part of firm valuation is deciding which methods are worth exploring and if they can add value to the report. There are four main categories of valuation: Present value, Relative valuation, Liquidation and Contingent claim/Real options valuation (Petersen & Plenborg, 2012). Our discussion surrounding the theoretical basis and applicability will conclude with a set of valuation methods that will later be used to estimate the share price of B2Holding. Each of the approaches differs in terms of information needed and underlying premises, however, they share the same three attributes needed to function as a reasonable valuation method; **1)** realistic assumptions, **2)** relevant and measurable variables, and **3)** adds valuable insight to the fundamental value of B2Holding.

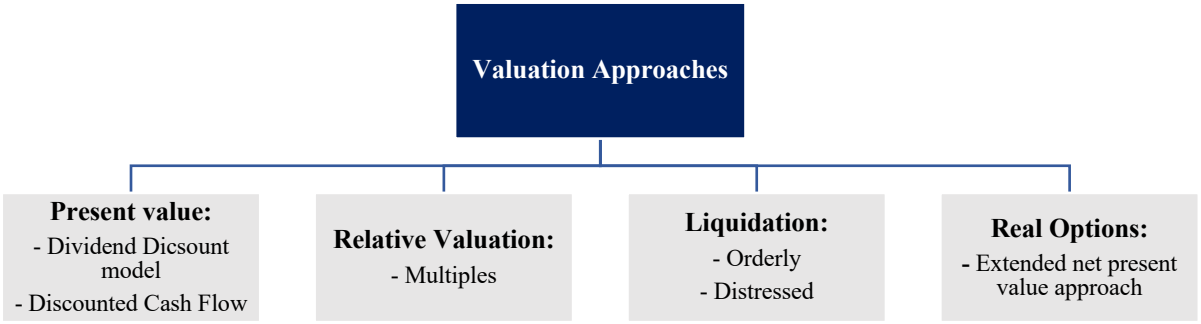


Figure 6.1: Valuation Approaches. Source: Petersen & Plenborg (2012)/Own Production

6.1 Present Value

Present value refers to the models that estimate a company's intrinsic value based on forecasted cash flows, discounted at a factor that reflects the time value of money and risk. These principles are embedded in all present value approaches, making them theoretically equivalent and yielding the same results. However, in practice, they offer attributes that make some superior to others given the situation and company (Petersen & Plenborg, 2012). Critiques point out the deterministic nature of the present value approaches (Brealey et al., 2011). It is assuming that management passively allows projects to run their course, without the flexibility to change direction in the future when new information arises. Regardless, the present value provides valuable insights discussed in the different approaches below.

6.1.1 Dividend Discount Model

The Dividend Discount Model (DDM) is based on the fundamental idea that the only cash flow one receives from owning a publicly traded share are the future dividends and the price at which one sells it (Damodaran, 2012). DDM is a straightforward way of calculating the equity value of a company. The underlying basis that drives DDM are the ones that have developed more holistic present value approaches, such as the Economic Value Added and Discounted Cash Flow approaches (Petersen & Plenborg, 2012). The model is limited in that it is sensitive to the relationship between the growth and discount rate. As the variables converge in terminal growth, the value of the share increases towards infinity. Due to the model's focus on dividends, it will also consistently underestimate companies reducing dividends to invest in future growth. However, it relies on far fewer variables than most techniques and implementation is straightforward.

Utilizing the estimated CAPM provides the discount rate and expected dividends are estimated using combinations of historical data and future expectations. For B2Holding, we specify the DDM as a two-stage model:

$$Value\ of\ Stock = \sum_{t=1}^{n} \frac{E(Div_t)}{(1 + r_E)^t} + \frac{E(Div_{n+1})}{(r_E - g)} \times \frac{1}{(1 + r_E)^n}$$

Equation 6.1: Two-stage Discount Dividend Model. Source: Petersen & Plenborg (2012)/Own Production

Where:

E(DPS) = Expected dividends per share

r_E *= Cost of equity*

Applying the two-stage model enable us to capture the value of fluctuating dividends during a specific period, before it is expected to stabilize in perpetuity using the Gordan growth formula for terminal value (Damodaran, 2012). According to Damodaran (2012), DDM is best applied when companies have established dividend pay-out policies, and these can be expected to remain stable in the future.

Dividend Payout	2016	2017	2018	2019
Net Profit	181 077	481 231	648 731	107 151
Dividend	61 490	122 979	184 469	32 794
Dividend Payout Ratio	33,96%	25,56%	28,44%	30,61%

Table 6.1: Dividend Pay-out. Source: B2Holding Reports/Own Production

With an established policy of 20-30 percent pay-out ratio to net profits, B2Holding have remained close to their target since its IPO, only deviating upwards. The average has been 29.94 percent, corresponding to a retention rate close to 70 percent. Arguably, the DDM will, therefore, undervalue B2Holding. However, by applying the model with careful considerations and caution when interpreting the results, the model serves useful in comparison with the other present value models.

6.1.2 Discounted Cash Flow Approach

One of the most popular valuation methods is "The Discounted Cash Flow Model" or DCF-model. It has been widely used by practitioners and receives academic support in its basis on historical accounting values. The foundation of discounted cash flow valuation is that the value of an asset can be derived from all the future cash flows produced by the asset. It is subsequently the in- and outflows of cash generated with a forward-looking focus, that values the company—an extension of DDM, which assumes only ownership of a share's future dividends. The model offers a more comprehensive analysis and valuation of the company; however, it comes with far more assumptions and variables that must be considered. It is not further helped by the fact that the majority of the value creation happens in the terminal period, rendering it sensitive to the assumptions made the furthest into the future. Meaning the uncertainty is highest when the model is most sensitive to small changes.

Nevertheless, with its weaknesses, it is still among the most used valuations and gives valuable insight to companies' cash-generating abilities. It can be specified either towards the estimation of enterprise value or directly of equity value (Petersen & Plenborg, 2012). DCF equity approaches are practically more difficult to apply consistently than DCF enterprise, due to the inclusion of capital structure in the cash flows to equity. The capital structure is likely to fluctuate between periods which can go unnoticed, causing errors in the valuation (Koller

et al., 2010). Instead, it assumes continuity in capital structure in enterprise valuation, ideally by applying a company's target capital structure (Koller et al., 2010).

The formula sums up all future cash flows to the firm at the weighted average cost of capital to get the Net Present Value of the asset. For valuing equity directly, the formula is modified, to sum the future cash flows to equity and discounted by the CAPM. Using a two-stage approach gives:

$$Enterprise\ Value = \sum_{t=1}^{n} \frac{FCFF_t}{(1+WACC)^t} + \frac{FCFF_{n+1}}{WACC - g} \times \frac{1}{(1+WACC)^n}$$

Equation 6.2: Two-stage DCF enterprise value. Source: Petersen & Plenborg (2012)/Own Production

Where:

FCFFt = The cash flows to the firm in each period t

WACC = Weighted average cost of capital

The terminal value assumes a constant discount and growth rate in perpetuity, while the forecast period of the formula can fluctuate in terms of cash flow, growth, and discount rate. As discussed in the forecasting section, a key consideration is that the terminal value calculation must begin far enough into the future that a stable growth rate can be a realistic assumption.

To mitigate biases in historical data, Koller et al. (2010) and Damodaran (2012) both use combinations of historical and forward-looking estimations techniques on several variables rendering the valuation relevant for the future. This fusion also emphasizes the importance of combining financial and strategic analysis in DCF valuation.

6.1.3 Economic Value Added - EVA

Economic value added or EVA differs from the above present value approaches by relying on accrual accounting data, instead of cash flow data (Petersen & Plenborg, 2012). However, it is theoretically consistent with the other present value approaches. The approach is computed from WACC and capital invested (Damodaran, 2012), and calculates the surplus value from investments, given by:

$$EVA = After\ Tax\ Operating\ Income - (Cost\ of\ Capital) \times (Capital\ Invested)$$

Equation 6.1: Economic Value Added. Source: Damodaran (2012)/Own Production

The starting point of the valuation is the invested capital at year zero, given by book value of equity plus net interest-bearing debt (Petersen & Plenborg, 2012). Fitted to a two-stage model, this becomes similar to the DCF two-stage model, replacing cash flow with economic value added.

$$Enterprise\ Value = Invested\ Capital_0 + \sum_{t=1}^{n} \frac{EVA_t}{(1+WACC)^t} + \frac{EVA_{n+1}}{WACC - g} \times \frac{1}{(1+WACC)^n}$$

Equation 6.3: EVA - Enterprise value. Source: Petersen & Plenborg (2012)/Own Production

In contrast to DCF approaches, EVA has its limitations not from biases in the estimation of cash flows and therein assumption, but rather accounting practises. Financial statements must be corrected for one-time charges, operating leases and R&D expenses (Damodaran, 2012). An important assumption is the clean- surplus, saying that all revenues, expenses, gains and losses are recognized in the income statement during the forecast period and not directly on equity (Petersen & Plenborg, 2012). If the financial statements are correctly adjusted, and the clean-surplus assumption is not violated, the EVA provides an unbiased valuation. It also provides insight and helps explain the difference between market and book value of equity in a company (Petersen & Plenborg, 2012).

6.2 Relative Valuation – Multiples

While the present value approaches to value the company through dividends/cash flows, growth and risk parameters, the purpose of a relative valuation are to price assets based on similar assets in the market (Damodaran, 2012). Multiples are frequently used to arrive quickly at a price for an asset, however, they are often misused or over-simplified (Petersen & Plenborg, 2012). For the valuation to indeed be valuable, it takes rigours consideration and consistency in all parts of the valuation. Choosing truly comparable firms requires that they are similar in economic features and outlook, depending on the multiple, these features can, for example, be tax-rate, growth rate, depreciation, and business activities. Accounting standards should be the same for each company and of the same quality to reduce errors in the valuation (Petersen & Plenborg, 2012). This problem can be mitigated by looking at

companies using the same or similar accounting standards, and rearrangement of financial statements in a consistent manner.

A multiple valuation requires fewer assumptions and is more likely to reflect the present mood in the market. Considering an industry where all shares are moving up, the relative valuation is likely to produce higher values than an intrinsic valuation (Damodaran, 2012), which is both positive and negative of the approach. By reflecting the mood of the market, under- and overvalues can occur without misuse on behalf of the analyst, simply if markets are not efficiently valuing the comparable firms, it is likely to cause errors in valuation. Furthermore, it is easily manipulated either through choices in comparable firms or multiples. This potential bias can be mitigated by exploring a variety of multiples and increasing the reliability of the baseline by adding firms in the comparison.

6.3 Liquidation

Estimating the amount all company assets could be sold for and settling outstanding liabilities, either in a distressed or orderly fashion provides the liquidation value. Typically, in healthy industries, liquidation value provides the lowest valuation of a company and is only unbiased when the value estimated from present values and multiples yield results below liquidation (Petersen & Plenborg, 2012). Liquidation adds insignificant value when companies are not in distress, and there is no reason to believe that alternative use of assets yields a higher return. As per the financial status of B2Holding, there is no reason to believe that the company is in any financial distress at the current moment and valuation from liquidation would not add insight to the value of the company and is therefore exempt from our valuation.

6.4 Real Options Valuation

Real options differ from the present value approaches discussed above by opening for managerial flexibility, allowing the company to act in the future based on new information (Brealey et al., 2011). Uncertainty generally has negative connotations. The beta that is required to estimate the discount rate in present value models is a measure of the uncertainty and ultimately conceived as the risk which lowers the value of the company. Contrary, the positive effects of uncertainty is what provides value in real options, given managerial flexibility (Damodaran, 2012). Managerial actions/flexibility are numerous and Koller et al.

(2010) outline some of the appropriate actions to consider after an initial investment: Defer, abandon, expand or contract, extend or shorten, switching and follow on options. Similar versions of these are found in the literature of Damodaran (2012) and Brealey et.al (2011). A discussion on what types of real options might we find at B2Holding and if enough information to conduct the analysis is attainable, determines whether it can add value to this report. One specification before the discussion is how real options should be applied. Contrary to present value and relative valuation, real options are less suited to the valuation of entire companies. Company's consists of multiple real options, although the majority is correlating significantly with each other and are mutually exclusive (Damodaran, 2012). To illustrate this point, one can consider that B2Holding had exercised a real option when they decided to abandon their previous expansion strategy. This exercise was mutually exclusive towards options, for example, to extend or shortened the same strategy. The change in strategic direction is a clear sign of managerial flexibility within B2Holding, which is a pre-requisite for the entire discussion on real options. However, with the mutual exclusivity illustrated above, the application of real options to B2Holding in its entirety would create noise in the estimates and limit the value of the insight. Instead, an appropriate way of incorporating real option value is evaluation of individual investments. By isolating one or a few real options from the discounted cash flow estimation before adding it back as a separate share price driver offers less noise (Damodaran, 2012). According to Damodaran (2012), there should be individual opportunities within companies that have a high degree of uncertainty. Subsequently, the discussion on real options is more importantly whether B2Holding have an investment in the pipeline that could constitute a significant real option added value to the discounted cash flow model. Some examples from B2Holding worth discussing are whether any recent portfolio acquisitions or their newest collaboration agreements could potentially fulfil the criteria of real options. Damodaran (2012) describes three questions or stages of analysis to possible real options in a way of determining if they add value. **The first** is considering initial investment as a direct pre-requisite or important for later investments. **The second** is concerning exclusivity and if the company obtains competitive advantage on following investments. **The third** is evaluation the sustainability of the advantage obtained. It is obvious that to answer all three much information is needed, and still there is likely to be significant noise in the estimates. Bruner

(2004) offer a similar method of identifying real options and explains that real options are present when companies can provide services or products no one else can.

6.4.1 Individual Portfolio Acquisitions

Possible real options at B2Holding could be concerning specific portfolio acquisitions. However, as our discussion below will point to, they fail on several stages of analysis, especially the second stage of the above framework. For there to be exclusivity or competitive advantage in a portfolio acquisition, at the very least NPLs would need to be a scarce resource or the acquisition offers exclusive rights to future investments. It is evident from figure 2.1 and 2.2 in the industry introduction that NPLs have declined, but simultaneously the offered portfolios have been rising. With a general increase in the number of deals in recent years, according to figure 2.3. The International Monetary Fund speculates that the consequences of COVID-19 on the economy can be as detrimental as the collapse of the housing bubble that contributed to the 2008 financial crisis. It would undoubtedly increase NPL again and possibly force more credit-granting institutions to offset their bad loans to the debt purchasing industry. This development would ensure that NPLs would not become a scarce resource. The exclusivity in rights is also insignificant. The market is primarily based on auction, meaning that NPL portfolios are offered to several companies and rarely are the purchase of a portfolio with rights to future offerings (B2Holding, 2019c). Also, we could argue that portfolios acquired fail the first stage in the analysis. Considering the initial investment as the auction price paid, and later investments follow this in the capital put towards the collection of the portfolio. For there to be value in, for example, an option to delay the collection investment, there would need to be a reason that collection now was less valuable than in the future. From a time-value of money perspective, this would be incorrect but also from an intuitive perspective on factors determining the price of NPLs, where the age or days past due are essential (B2Holding, 2019c). It would make far more sense to begin collection immediately, as the practice of B2Holding currently is. Furthermore, the argument of Bruner (2004) is not relevant, as B2Holding's service offerings do not substantially differ from its competitors, as evident in the peer presentation in section 2.6.

6.4.2 Banca Sella and Waterfall Asset Management

More prevalent are the specific collaboration agreements made by B2Holding in 2019 with Banca Sella in Italy and Waterfall Asset Management in Sweden and Cyprus. Contrary to specific portfolio acquisitions, these collaborations could intuitively fulfil stage 1 to 3 of Damodaran's (2012) identification process. These alternatives failings are more down to information. From available information, as annual reports and other company publications, it is limited to that there are agreements in place to service individual markets. Although, specifics on how the timing of investments and indicators of the size of the agreements are scarce. Again, limiting the precision of our estimates and forcing speculation disproportionate to the value added by obtaining an addition to the discounted cash flow valuation. Had it been made possible to obtain credible information and data from the company on the specifics of the agreements, that might have constituted a real option worth pursuing in this thesis.

6.5 Conclusions on Valuation Approaches

Approaches to valuation vary in their sophistication and have considerably different assumptions about the real world. Explained in the sections above are the most frequently used and suggested approaches, where we have discussed the most suitable and relevant methods in our valuation for B2Holding. The DDM offers insight into the value creation of dividends, while DCF focuses on the cash-generating ability of the B2Holding. EVA model indicates whether shareholders value is created or destroyed through the company. Each of the methods are based on the present value approach but provide different insights and worth to our final valuation. Also, we presented a relative valuation using multiples. The method aims to value the assets using similar assets in the market, which requires fewer assumptions and is more likely to reflect the present mood in the market. In combining the present value approaches and the relative approach, we provide the tools and measures needed to value B2Holding accurately. Real options could have added some value to the valuation of B2Holding through the extended present value model. However, as we discussed extensively, the possible real options lack information or did not fulfil the criteria proposed by Bruner (2004) and Damodaran (2012).

7 Weighted Average Cost of Capital

The Economic value added, Discounted cash flow and Dividend discount model require the entire or part of the weighted average cost of capital (WACC) to value the company. Ideally, the WACC accurately reflects the market's expected rate of return of a company, which is the individually appraised cost of equity and debt weighted at the firm-specific capital structure. The reasoning is that all investors, debt and equity, are considered risk-averse and demand compensation for risk-bearing (Brealey et al., 2011). The weighted average cost of capital combines the company's equity and debt premiums based on the capital structure, accommodating both sets of stakeholders. We require the below variables to complete the formula:

$$WACC = \frac{MV_{Equity}}{MV_{Equity} + MV_{Debt}} \times R_e + \frac{MV_{Debt}}{MV_{Equity} + MV_{Debt}} \times R_d(1-t)$$

Equation 7.1: Weighted Average Cost of Capital. Source: Petersen & Plenborg (2012)/Own Production

7.1 Capital Structure

Capital structure in the WACC should reflect the targeted capital structure of the company (Koller et al., 2010). It is argued that this can only apply if the management of the company has an explicitly communicated target mix and actively attempts to achieve it. For B2Holding, there is no announced target mix but reports that they are monitoring their capital structure continuously and will take action if it is not acceptable (B2Holding, 2019a). In their calculations of the capital structure at the end of 2018, they acquire 60 percent equity and 40 percent debt. The equity is based on the company's perceived fair value assessment of purchased loan portfolios, not the book value nor market value of equity. Intuitively, we could have assumed a 60/40 split as their target and evaluated whether they actively manage towards that. In our understanding of the literature, the method used in their calculation does not provide an unbiased capital structure. Further, as they have not announced any actions to influence their market valued capital structure, the preferred method in literature, we lack legitimate reasons for assuming that the 60/40 split is accurately representing the capital structure in WACC estimation.

$$Equity\ to\ Enterprise\ Value = \frac{Shareholder\ Equity}{Shareholder\ Equity + Net\ Interest - \ bearing\ Debt}$$

Equation 7.2: Equity to Enterprise Ratio. Source: Petersen & Plenborg (2012)/Own Production

Instead, we estimate the capital structure using a mix of observable market and book values. A common approach is using shareholder equity and net interest-bearing debt (NIBD). The estimation is ideally based on market values, as it best represents the opportunity cost of investors and lenders, according to Petersen & Plenborg (2012). Calculating the market value of debt becomes less accurate when companies mix their debt portfolio with bonds and bank loans, as B2Holding does, and therefore is book values a reasonable proxy in many cases according to Koller et al. (2010). Further, we argue that the WACC's impact from the timing of the capital structure estimation should be minimal. As the WACC is a long-term measurement of the company's expected return throughout the valuation, relying solely upon a daily share price could make conclusions dependent on the direction of fluctuations in the market and share price around the day chosen. Instead, we apply an average 3-year share price multiplied by the average number of outstanding shares. The equity to enterprise ratio is calculated at **0.32**, corresponding to **0.68** debt to enterprise value ratio. This ratio is kept constant throughout our valuations.

Equity to enterprise value	
3-year average share price	13,88
3-year average shares outstanding	396 162
Net Interest-bearing Debt	11 879 188
E/EV Ratio	0,32

Table 7.1: Equity Ratio. Source: Own Production

7.2 Corporate Tax rate

The tax rate should be equal to the marginal tax rate, not the effective tax rate (Koller et al., 2010). Since effective tax rate reflects short- term effects of a company's tax management, the marginal tax rate should be applied to reflect the long- term taxation of the company in WACC calculations. The Norwegian marginal tax rate of 2020 is applied at **22 percent** (Norwegian Department of Finance, 2019).

7.3 Equity Cost of Capital

The capital asset pricing model (CAPM) answers questions about how risk should affect the price of an asset. The CAPM assumes that investors can hold diversified portfolios and by doing so, mitigate firm-specific risk. Therefore, it is only the systematic risk that is reflected in the model, and the share's premium is proportionate to its sensitivity to the market through the beta (Brealey et al., 2011).

$$CAPM = R_f + \beta(Market\ risk\ premium)$$

Equation 7.3: Capital Asset Pricing Model. Source: Petersen & Plenborg (2012)/Own Production

The CAPM relies on several assumptions, among them are: ***Firstly***, the assumption that all investors can trade all shares on the market without taxes and transactions costs and borrowing and lending rates are equal. ***Secondly***, investors hold portfolios that are consistent with the maximum returns on traded securities for any given level of volatility. ***Third***, it is assumed that investors have homogeneous expectations. The risk- free interest rate and market risk premium are, therefore, the same for all companies on the market, and only the beta fluctuates to accommodate the systematic risk embedded in the share. The CAPM has been empirically tested and subsequently criticized. Fama & French (1992) tested the validity of the beta and concluded that returns of equity was related inversely to company size and positively to proportions of book value to market value. Fama & French (2016) argued that the traditional backwards-looking beta estimations are not suited to solve for the future return of an asset. Further, to assume equal borrowing and lending rates and not including factors that mitigate the uncertainty of inflation have been criticized (Brealey et al., 2011).

Despite the criticism levelled at the CAPM, the consensus among the reviewed literature, including Koller et al. (2010) and Brealey et al. (2012), is that there currently exists no prevailing model over the CAPM in cost of equity estimation. Further, by not solely relying on historical data for variable estimations but also consider forward-looking techniques, we can reduce the model's shortcomings.

7.3.1 Beta

The beta of a company reflects its underlying risk concerning the market portfolio, that has a beta of 1. An asset- beta of 1 suggests that the asset is *as risky as the market*, and a beta of zero would be the beta of a *completely risk-free asset.* The beta can be expressed as:

$$\beta = \frac{Cov(r_i, r_m)}{Var(r_m)}$$

Equation 7.4: Beta Expression. Source: Damodaran (2012)/Own Production

Measuring this relationship can be achieved through regressing the returns of the specific share against returns on a proxy for the market (Koller et al., 2010). This method provides a raw beta estimate and requires thoughtful considerations to model specifications. ***First***, we must decide on an index or indices that can adequately represent the market. It is common to use indices from the exchange where the share is traded, which is seldom a problem in large diversified markets. However, when domestic market indices are correlated in large part with an industry or a few companies, it is suitable to include international market proxies (Koller et al., 2010). We apply the Norwegian OSEAX index comprised of all shares on the exchange, which been found to significantly correlated with the petroleum industry (Boldanov et al., 2015), and compare this to a more international index. As displayed in the market presence in section 2.5.2, B2Holding's operations are limited to Europe and have no plans of expanding elsewhere. As a representation of the European market, we use the *S&P Europe 350*, comprised of 350 companies from 16 developed European economies (Standard & Poor, 2020). ***Second***, is the length and interval of observations. There is no prevailing answer in literature, with suggestions ranging from 2-5 years of observations and intervals from days to months.

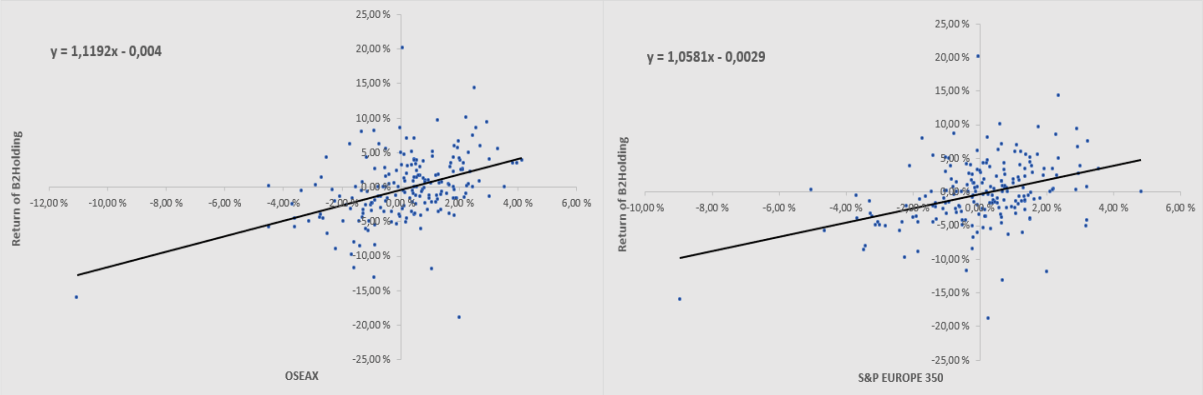


Figure 7.1: B2Holding returns regressed against OSEAX and S&P Europe 350. Source: Yahoo Finance/Own Production

The above table is the result of running a regression of B2Holding's weekly returns against OSEAX and S&P Europe 350, corresponding to an average beta estimate of *1.089*. As the share was only listed on the exchange in June 2016, we chose to use the maximum length of weekly observations which is approximately in the middle of the 2-5-year recommendation. Smoothing techniques are a common way of mitigating the reliance on historical returns in the beta and is based on the notion that when companies are assumed to maintain operations in perpetuity, grow and diversify; their betas will approach the market beta (Koller et al., 2010). Koller et al. (2010) propose the technique used by Bloomberg, where the raw beta is weighted at 2/3 and the market beta 1/3, resulting in a final beta of **1.06.** It is close to the market beta of 1, meaning it is approximately as risky as the market.

7.3.2 Risk- free Interest Rate

The risk-free interest rate corresponds to an investment with a beta of zero, i.e. no covariance between the asset and the market (Koller et.al, 2010). It is often assumed that long-term government bonds are suitable proxies for the risk-free rate. Especially in a high functioning and international economies where default risk is minimal (Brealey et al., 2011). A common proxy for companies traded on the Oslo Stock Exchange is, therefore, the 10-year Norwegian government bond rate. The bond yields in Norway have been historically low in recent years, falling below 1.0 percent on occasions and averaging below 2 percent the last five years (Norges Bank, 2020b). The Norwegian Central Bank explains this as temporary effects caused by lowering the policy rate to stimulate investments but expect both the yield and policy rates to fluctuate above current levels in the future, reflecting swings in the economic cycle (Norges Bank, 2018).

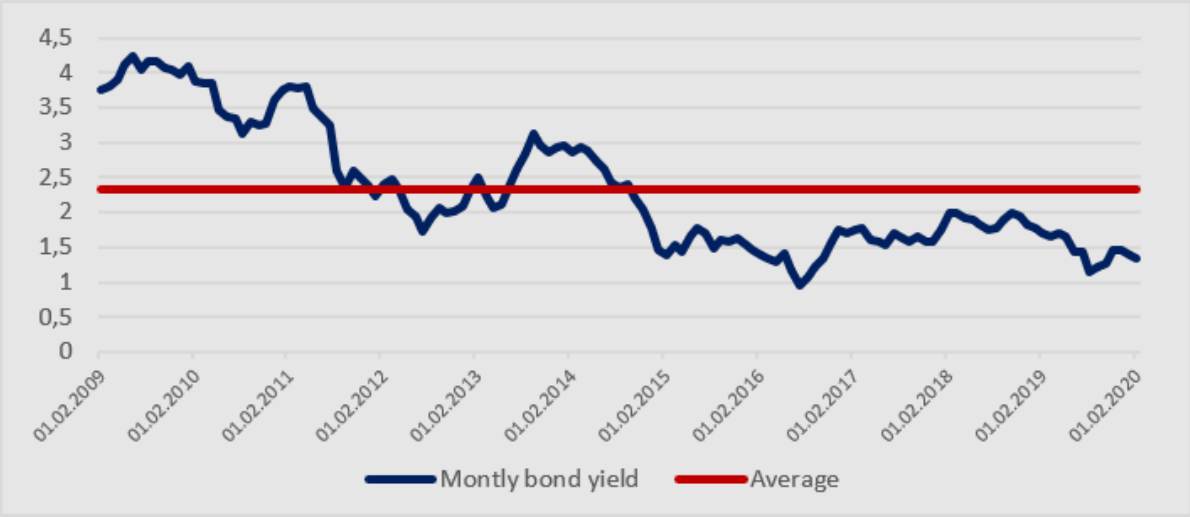


Figure 7.2: Average Yield 10Y Norwegian Government Bond. Source: Norwegian Central Bank/Own Production

An approximation to the risk-free rate and attempting to account for cyclicality in its movements against the economic cycle, we propose that applying the ten-year average of 10-year Norwegian government bond yields, more adequately reflects a long-term perspective on the risk-free rate. This approach will better capture the risk-free rate throughout the infinite life of B2Holding, where it is a realistic assumption that the risk-free rate will fluctuate above its current historic low. Using the average calculated from the Norwegian central bank's yield curve, we obtain our risk- free rate of **2.32 percent**.

7.3.3 Market Risk Premium- MRP

The market risk premium, the added return above the risk-free rate that investor demand for holding a share (Koller et al., 2010), is an unobservable variable and theory does not offer a superior answer to guide its estimation. However, according to Koller et al. (2010), models tend to agree that MRP is between 4.5-5.5 percent.

One solution is observing historical returns of the market portfolio. Koller et al. (2010) recommend using arithmetic average, consistency in the use of bonds or T-bills between the risk-free rate and MRP estimation and going as far back as possible in time. Credit Suisse's Global Investment Returns Yearbook (2019) computes the market risk premium based on historical returns dated back to 1900. It found a *6.0 percent* arithmetic mean MRP using bonds in Europe. Damodaran, who applies a similar method but with a shorter time frame starting from 1960, estimated the 2020 MRP at *5.20 percent* (Damodaran, 2020b).

A different approach is finding what investors apply as risk premiums in the real world. PWC (2019) obtained, through a survey of Norwegian practitioners, that the average applied MRP was *5 percent*, both in the respective year (2019) and as the average across the last four years of the survey while Statista (2020) has acquired data from professors, company managers and analysts, suggesting an average MRP of *6 percent*.

Given that there are no prevailing method or complete consistency in estimations across various sources, the average is assumed to provide the most objective estimate. Consequently, the market risk premium used is **5.55 percent**.

7.3.4 Capital Asset Pricing Model- Calculation

Applying our estimated variables to equation 7.3 provides:

$$8.2\% = 2.32\% + 1.06 \times 5.55\%$$

7.4 After-Tax Cost of debt

Ideally, the cost of debt found is uniquely representative for B2Holdings ability to finance long-term projects through debt adjusted for the associated tax benefit. There are several alternatives to consider for estimating the cost of debt. A recommended approximation is finding yield to maturity on the company's traded debt to obtain the pre-tax cost of debt. Ideally, this debt would be investment grade, long- term, liquid and option free bonds (Koller et al., 2010). *Firstly*, B2Holding's bonds are far from liquid, and their maturity expires between 2020-2023 (Oslo Børs, 2020). *Secondly*, their bonds are speculative-grade at BB-. Since investment-grade bonds have a low probability of default, this approach generally provides a good approximation to the true cost of debt. Although, when bonds are speculative-grade their default rate increases, subsequently lowering their expected return, then the yield to maturity methods fails to recognize the premium of the default probability and causes larger errors in the approximation (Koller et al., 2010). We must, therefore, consider other methods of obtaining an estimate.

Using the bond ratings spread and risk- free interest rate is one way of calculating the cost of debt that includes a premium for the probability of default. Which makes the method more suited to companies with lower bond ratings than investment grade. The credit spread and the risk- free interest rate can be combined, as shown below:

$$Pre - tax\ Cost\ of\ Debt = Riskfree\ Rate + Default\ Spread$$

Equation 7.5: Pre-tax Cost of debt. Source: Koller et al. (2012)/Own Production

The credit spread represents the premium over the government bond, i.e. the risk- free interest rate. Damodaran (2020) calculates two default spread tables, differentiating the default spreads for companies from emerging markets or with a market capitalization less than USD 5 billion. As B2Holding's market capitalization is below USD 5 billion, their corresponding credit spread for a BB- rating is 2.40 percent (Appendix 14). Using the above equation:

$$4.72\% = 2.32\% + 2.40\%$$

This approximation does violate the consistency between the variables. Our risk-free rate was based on Norwegian Government bonds, while the credit spread Damodaran propose is based on US bonds. Furthermore, with reports of tightening speculative-grade bond markets, there is a probability of default spreads rising.

Alternatively, we can interpret the actual interest paid against the interest-bearing liabilities the company holds, giving the equation:

$$Borrowing\ Cost = \frac{Interest\ Expenses}{Interest - Bearing\ Liabilities}$$

Equation 7.6: Net Borrowing Cost. Source: Petersen & Plenborg (2012)/Own Production

From the table below, we have displayed B2Holding's borrowing costs since 2014 and till 2019. Considering B2Holding's reported pre-tax cost of debt of 6.0 percent in their 2018 Annual Report, it corresponds closely to the average from the last two years of 5.98 percent.

Net Borrowing Cost	2014	2015	2016	2017	2018	2019
Financial Expenses	43 905	161 661	223 834	358 157	618 378	794 463
Interest-bearing liabilities	1 402 996	2 809 779	3 424 903	7 230 207	11 307 664	12 239 603
Cost of Debt Approximation	3,13%	5,75%	6,54%	4,95%	5,47%	6,49%

Table 7.2: Borrowing Cost 2014-2019. Source: B2Holding Annual Reports 2014-2019/Own Production

None of the approximations applied is ideal in the case of B2Holding. The default spread provides the lowest answer, which could be explained by their calculations against US Government bonds. Our best estimate is a consideration to B2Holdings reported 2018 cost of

debt and its close comparison with our borrowing cost calculation for the last two years. Subsequently, 5.98 percent is used as a pre-tax cost of debt, corresponding to **4.66 percent** after the Norwegian tax rate of 22 percent is applied to equation 7.7.

$$After - tax\ Cost\ of\ Debt = Pre - tax\ Cost\ of\ Debt\ \times (1 - tax)$$

Equation 7.7: After-tax Cost of Debt. Source: Own Production

7.5 Part Conclusion and WACC Calculation

Using the discussed theoretical approaches to estimate the critical variables to WACC calculation, we obtain the WACC of 5.78 percent, summarized below. Several challenges arose during the discussions, mainly for the cost of debt and capital structure estimations. We had to conclude based on the available information and our understanding of the literature, to provide what we estimate to be the appropriate cost of capital. However, we will more thoroughly discuss impacts of concluding differently on critical variables in the sensitivity analysis conducted later in the thesis.

Weighted Average Cost of Capital	
Debt Ratio	0,68
Equity Ratio	0,32
After-tax Cost of Debt	4,66%
CAPM	8,20%
Weighted Average Cost of Capital	5,78%

Table 7.3: Weighted Average Cost of Capital. Source: Own Production

8 Valuation

This section is a product of our strategic and financial analysis, assumptions about the future, and considerations to applicable valuation theory. The set-up of the valuation models is based on Petersen & Plenborg (2012). This choice is mainly down to acquiring consistency between forecasting framework applied and the set-up in this part. However, templates proposed by Damodaran (2012) and Koller et.al (2010) are similar, if not identical on some models and the choice of another template should theoretically not have any impact our share price estimation. The share price at information cut-off was 6.18, which is used as the benchmark for under-/overvaluation calculation.

8.1 Dividend Discount Valuation

Between a one- and two-stage DDM, we concluded that the two-stage model would most accurately capture the value of B2Holding. We are forecasting the first stage from 2020, where dividends are expected to fluctuate from the infinite growth rate of 1.40 percent to the end of 2029, before terminal growth in perpetuity. B2Holding have expressed of target pay-out ratio between 20 to 30 percent, with the actual average ratio being 29.94 percent the previous four years. Since the historical average is within the target ratio, we apply this to the DDM. The discount factor is equal to the cost of equity at 8.20 percent, calculated using the CAPM.

The DDM estimated a share price of NOK 8.06. As discussed in section 6.1.1, the DDM provides an underestimation when the pay-out ratio is below 100 percent. Subsequently, we expected a low DDM valuation for B2Holding. Although it corresponds to an undervaluation of 23.3 percent by the market, it is the lowest share price found by the applied techniques.

Over half (56.4 percent) of the equity value originates from the terminal period, highlighting the model's sensitivity to assumptions about the company's growth in perpetuity. However, compared to the DCF approaches' terminal periods, it is a significantly lesser part of the total value creation.

Dividend Discount Model	2019	2020E	2021E	2022E	2023E	2024E
Net Profit	107 151	526 763	575 386	631 399	688 721	745 387
Dividend Payout	31%	30%	30%	30%	30%	30%
Dividend		158 029	172 616	189 420	206 616	223 616
Return on Equity		8,20%	8,20%	8,20%	8,20%	8,20%
Present Value of Dividends		146 053	147 444	149 535	150 749	150 788

Dividend Discount Model	2025E	2026E	2027E	2028E	2029E	2030E
Net Profit	798 720	845 599	882 779	907 340	917 182	930 022
Dividend Payout	30%	30%	30%	30%	30%	30%
Dividend	239 616	253 680	264 834	272 202	275 155	279 007
Return on Equity	8,20%	8,20%	8,20%	8,20%	8,20%	8,20%
Present Value of Dividends	149 332	146 115	140 979	133 920	125 113	

Terminal Growth Rate	1,40%
PV Explicit Forecast	1 440 029
PV Terminal Period	1 865 663
Estimated EV	3 305 691
Shares Outstanding	409 933
Share Price B2Holding	**NOK 8,06**

Figure 8.1: Dividend Discount Model. Source: Own Production

8.2 Discounted Cash Flow Valuation

We conduct both the DCF- enterprise and DCF- equity valuations. Finding the Free Cash Flow to the Firm (FCFF) for the enterprise valuation is based on the forecasts of NOPAT adjusted for depreciation and amortisation, change in net working capital and capital expenditures before it is discounted at the WACC. While the equity approach utilises the FCFF found in the enterprise set-up, adjusted from net new financial liabilities and financial expenses to obtain Free Cash Flow to Equity (FCFE) and discounted at the cost of equity. As we discussed in section 6.1.2, both models theoretically provide the same results but often not in practice.

Our estimations are close in its final share price, separated by NOK 0.40, where the DCF- equity provides the highest share price at NOK 13.34 and DCF- enterprise equals NOK 12.94. Respectively, this corresponds to undervaluation by the market of 53.7 and 52.2 percent.

As discussed in section 6.1.2, a limitation of the DCF-valuation is its reliance on value creation in the terminal period. In both approaches, we obtain the majority of the share price beyond our explicit forecast. In the enterprise approach, the present value before the terminal period is negative, which results in 110.0 percent value creation beyond 2029. The equity approach relies on 95.8 percent of value in the terminal period. This relationship puts increased pressure on assumptions in the stable growth period, and slight changes in variables will significantly

impact the share price. It will be a topic discussed and examined in the sensitivity analysis conducted in section 9.1.

Discounted Cash Flow Enterprise-Model	2019	2020E	2021E	2022E	2023E	2024E
NOPAT	893 175	1 068 759	1 172 188	1 286 632	1 404 133	1 520 685
Add: Depreciation & Amortisation	16 115 992	111 251	128 453	141 442	155 290	169 552
Less: Change Net Working Capital	-	273 993 -	18 269 -	19 477 -	20 060 -	19 962
Less: Capital Expenditures		2 588 700	1 999 166	2 135 900	2 209 421	2 213 653
FCFF	-	1 134 697 -	680 257 -	688 349 -	629 938 -	503 454
WACC		5,78%	5,78%	5,78%	5,78%	5,78%
Present Value FCFF	-	1 072 696 -	607 947 -	581 565 -	503 134 -	380 139

Discounted Cash Flow Enterprise-Model	2025E	2026E	2027E	2028E	2029E	2030E
NOPAT	1 630 912	1 728 494	1 806 799	1 859 773	1 882 948	1 909 310
Add: Depreciation & Amortisation	183 745	197 229	209 246	218 992	225 726	228 886
Less: Change Net Working Capital	- 18 965	- 16 901	- 13 708	- 9 471	- 4 445	- 4 507
Less: Capital Expenditures	2 125 722	1 927 901	1 612 957	1 188 818	680 862	690 394
FCFF	- 292 100	14 723	416 795	899 417	1 432 257	1 452 309
WACC	5,78%	5,78%	5,78%	5,78%	5,78%	5,78%
Present Value FCFF	- 208 502	9 935	265 885	542 412	816 555	

Terminal Growth Rate	1,40%
PV Explicit Forecast	- 1 719 194
PV Terminal Period	18 903 807
Estimated EV	17 184 613
NIBD	11 879 188
MV Equity	5 305 425
Shares Outstanding	409 933
Share Price B2Holding	**NOK 12,94**

Figure 8.2: DCF Enterprise Model. Source: Own Production

Discounted Cash Flow Equity-Model	2019	2020E	2021E	2022E	2023E	2024E
FCFF	893 175 -	1 134 697 -	680 257 -	688 349 -	629 938 -	503 454
Net New financial liabilities	11 879 188	578 035	1 259 662	1 342 987	1 383 168	1 376 415
Net financial expenses	-	541 995 -	596 801 -	655 233 -	715 413 -	775 298
FCFE	-	1 098 658 -	17 396 -	595	37 818	97 662
Cost of Equity		8,20%	8,20%	8,20%	8,20%	8,20%
Present Value FCFE	-	1 015 395 -	14 859 -	470	27 593	65 855

Discounted Cash Flow Equity-Model	2025E	2026E	2027E	2028E	2029E	2030E
FCFF	- 292 100	14 723	416 795	899 417	1 432 257	1 452 309
Net New financial liabilities	1 307 648	1 165 364	945 202	653 042	306 470	310 761
Net financial expenses	- 832 192	- 882 895	- 924 020	- 952 433	- 965 767	- 979 287
FCFE	183 356	297 192	437 978	600 026	772 961	783 782
Cost of Equity	8,20%	8,20%	8,20%	8,20%	8,20%	8,20%
Present Value FCFE	114 270	171 178	233 149	295 206	351 467	

Terminal Growth Rate	1,40%
PV Explicit Forecast	227 994
PV Terminal Period	5 240 996
Estimated Equity Value	5 468 989
Shares Outstanding	409 933
Share Price B2Holding	**NOK 13,34**

Figure 8.3: DCF Equity Model. Source: Own Production

8.3 Economic Value Added Valuation

The EVA model is less sensitive to the terminal period, as most of the value is based on the already invested capital and value creation or destruction is added through the present value calculation over the lifetime of B2Holding. Although this method is less reliant of assumptions

concerning its terminal period, the majority of value still originates from a single element. 93.8 percent of value is attributed to invested capital at the beginning of the period and should not be considered with any less caution than other models.

The EVA model estimate is identical to the DCF-enterprise method, with a share price of NOK 12.94 and undervaluation of 52.2 percent. As we have mentioned several times, the present value models are theoretical equivalent, and naturally, it is desirable to obtain the same share prices from the different methods. Achieving it adds reliability that model specifications and assumptions are kept consistent across different aspects, it does, however, not add reliability to the result in terms of the fundamental value of B2Holding. The fundamental value is still influenced by the overall considerations made. It is also worth noting that the DCF- equity and DDM did not provide the same valuations.

Economic Value Added Model	2020E	2021E	2022E	2023E	2024E
Revenues	3 613 303	3 978 677	4 368 219	4 769 417	5 168 655
NOPAT	1 068 759	1 172 188	1 286 632	1 404 133	1 520 685
Invested Capital, beginning of period	16 115 992	18 319 446	20 171 891	22 146 872	24 180 943
WACC	5,78%	5,78%	5,78%	5,78%	5,78%
Cost of Capital	931 504	1 058 864	1 165 935	1 280 089	1 397 659
EVA	137 254	113 324	120 697	124 044	123 027
PV	129 755	101 278	101 973	99 075	92 893

Economic Value Added Model	2025E	2026E	2027E	2028E	2029E	2030E
Revenues	5 547 948	5 885 970	6 160 132	6 349 551	6 438 445	6 528 583
NOPAT	1 630 912	1 728 494	1 806 799	1 859 773	1 882 948	1 909 310
Invested Capital, beginning of period	26 205 082	28 128 095	29 841 866	31 231 869	32 192 224	32 642 916
WACC	5,78%	5,78%	5,78%	5,78%	5,78%	5,78%
Cost of Capital	1 514 654	1 625 804	1 724 860	1 805 202	1 860 711	1 886 761
EVA	116 259	102 691	81 939	54 571	22 238	22 549
PV	82 986	69 296	52 271	32 910	12 678	

Terminal Growth Rate	1,40%
Invested Capital, beginning of period	16 115 992
PV Explicit Forecast	775 113
PV Terminal Value	293 510
Estimated EV	17 184 615
NIBD	11 879 188
MV Equity	5 305 427
Shares Outstanding	409 933
Share Price B2Holding	**NOK 12,94**

Figure 8.4: Economic Value Added Model. Source: Own Production

8.4 Multiple Valuation

Rather than pricing an asset through cash flows, dividend or economic value added, the multiple approach value the asset through similar assets in the market. Discussed in section 6.2, we covered and explained the theoretical background of the approach and made clear

why we wanted to conduct a multiple valuation. In application, some specifications must be made; which multiples to use and their terms, explicitly the choice between current, trailing, or forward multiples. Koller et.al (2010) argues that forward multiples are most accurate in share price estimation, while Damodaran (2012) suggests that the choice between the terms are often down to biases in the analyst's perception of the share. We add to this that the application of several present value models in this paper is dependent on the accuracy of our forecast assumptions. There is an argument to be made for keeping at least one model independent of growth projections and assumptions and instead focused on clearly observable variables. Therefore, we apply the current multiple approach.

Multiples can be divided into sets of multiples that either estimates enterprise or equity value (Petersen & Plenborg, 2012). Below is the first set of multiples represented by EV/EBITDA and EV/Revenues, and the second by Price-to-Sales (P/S) and Price-to-Book (P/B). The first two are valuable in terms of looking at the enterprise value, ignoring the capital structure and allowing for straightforward comparisons between the companies. P/S is valuable as it generally remains unaffected by the accounting differences across the comparable companies. P/B is commonly used when analysing a capital-intensive industry, as differences between book and market values are generally low but can reveal important relationships. Their strengths and weaknesses are summarized in the table below. We acknowledge that no standalone multiple can explain the value of B2Holding accurately and without bias, therefore all four are included in the final estimation.

Multiple	Strengths	Weaknesses
EV/EBITDA	• Unaffected by depreciation and tax rates • Neutral to differences in capital structure • Reliable proxy for operating cash flow	• Does not account for value created through tax management • Ignores capital expenditure
EV/Revenues	• Capital structure neutral • Insight to value through sales	• Can be deceiving if the high ratio is because of investors belief of higher revenues in the future
P/S	• Not affected by accounting differences • Reveals relationship investors have to revenues	• Does not take into account whether the company generates income • Does not consider debt level
Price/Book	• Appropriate when assets drive value creation • Widely used in capital intensive industries	• Accounting differences impact book values

Table 8.1: Strengths and Weaknesses of Multiples. Source: Petersen & Plenborg/Koller et.al/Own Production

Comparable firms are based on the established peer group, with three additions by PRA Group, Encore Capital Group and DDM Group. These are debt collectors with a broader global focus on debt collection. Arrow Global Group is excluded as their financials for 2019 was not available at information cut-off. The inclusion is partly due to the exclusion of Arrow but also to increase the baseline to provide more reliable results. The results can be affected by different accounting standards. As Encore Capital Group and PRA Group are US based, they apply GAAP standards as opposed to IFRS. As discussed in section 6.2, there are other caveats

to the multiple approach concerning factors such as tax rate, growth prospects and depreciation. It is practically difficult to have a truly comparable and large enough sample in the multiple analysis if all criteria must be met. We instead exercise caution in the interpretation and evaluate each multiple separately.

Company	NIBD	MV Equity	Shares out	BV Equity	Revenues	EBITDA	EV/Revenues	EV/EBITDA	P/S	P/B
Axactor	855	225	184,5	378	285	92	3,79	11,72	0,79	0,60
Intrum	49 635	28 645	121,1	24 893	15 985	6 344	4,90	12,34	1,79	1,15
Hoist Finance	22 373	4 077	89,3	4 898	3 596	1 366	7,36	19,36	1,13	0,83
Kruk	2 552	2 618	19,0	1 959	1 260	484	4,10	10,67	2,08	1,34
PRA Group	2 926	629	45,5	1 169	1 017	273	3,50	13,02	0,62	0,54
DDM Group	165	43	13,6	32	63	13	3,30	16,00	0,69	1,37
Encore Capital Group	3 495	1 156	31,1	1 022	1 395	470	3,33	9,89	0,83	1,13
Mean							4,32	13,29	1,13	0,99
Median							3,79	12,34	0,83	1,13
B2Holding	11 879	2 533	409,9	4 237	3 262	1 509	4,42	9,55	0,78	0,60
Implied Share Price							1,15	16,44	6,59	11,68
Average Share Price										**NOK 8,97**

Table 8.2: Multiple Analysis. Source: Annual reports/Own Production

The multiple analysis provides a broad range from an implied share price of NOK 1.15 to 16.44, and the overall fluctuation limits our ability to conclude based on the analysis accurately. Ideally, would all the multiples have provided the same assessment of over-/undervaluation, but in this case, EV/Revenues indicates an overvalued share opposed to the other multiples showing undervaluation. In comparison with the DCF and EVA approaches, the P/B multiple's implied share price is the closest at 11,68. The difference between EV/Revenues and P/S can be explained by the enterprise value's inclusion of debt. In a capital- intensive industry like debt purchasing and collection, the EV/Revenues will increase comparatively to P/S; we see this comparing their respective industry medians of 3.79 and 0.83. P/B is low, which is expected in industries where tangible assets are the primary value drivers. Although the average share price yields a satisfactory outcome of NOK 8.97, the uncertainty and ambiguousness make it challenging to conclude adequately based on our calculations. It corresponds to an undervaluation by the market of approximately 31.1 percent.

8.5 Part Conclusion

A simple mean from all our valuation models suggests a share price of NOK 11.25, with a median of NOK 12.94. We argued in the discussion of the DDM that it would undervalue the share based on the relatively low payout ratio, and the multiple analysis provided unclear conclusions with large fluctuations. DCF-Equity estimated the share at NOK 13.34 and DCF-

enterprise and EVA-model valued B2Holding at NOK 12.94. The overall range of 8.06 to 13.34 indicates that the stock is undervalued, independent of the valuation models we emphasize. The valuation corresponds to an average undervaluation of 45.07 percent with a range between 23.33 to 53.67 percent.

The present value approaches are based on aggregate considerations to numerous factors influencing our decisions about growth, WACC calculation and profit margins. They work as our base case scenario, and its robustness should be tested to add certainty to the undervaluation we found in this chapter.

9 Sensitivity Analysis

Our present value approaches all rely heavily on analysis' conclusions about the critical value drivers such as EBITDA margin, the relevant cost of capital and future growth of B2Holding. It is, therefore, standard practise to include a sensitivity analysis to assess the influence of changing different value drivers on the valuations (Petersen & Plenborg, 2012). We focus on the discounted cash flow to enterprise valuation. In part because it is among the most common and reliable approaches, and the high uncertainty related to the model assumption in terminal period.

This section also utilises a Monte Carlo simulation, which provides a compelling analysis of uncertainty in several of our key value drivers at once and statistical verification of our results based on a large number of simulations (Petersen & Plenborg, 2012).

9.1 Sensitivity Analysis

We conduct two sensitivity analysis', first we allow for changes in the WACC and growth rate, and second for changes in EBITDA margin and growth rate. With EBITDA margin, we indirectly assess the impact of changes in value drivers such as revaluation of purchased loan portfolios, personnel costs associated with collections and revenues from different collection sources. In the valuation process, these considerations are related to the numerator. For the denominator, it is the WACC and growth rate in terminal value that is the value drivers assessed. From the DCF-enterprise valuation, the terminal value exceeded 100 percent of the value creation, due to negative present value in the explicit forecast period. This characteristic is highlighting the appropriateness of critically assessing our assumption. We have found that value driver fluctuations are often arbitrary in sensitivity analysis, for instance allowing for 10-20 percent increase and decrease. Instead, we thoroughly discuss how our decision making has affected the different variables and from there, assess a range applied to the analysis.

As discussed in the ***cost of debt*** calculation B2Holding was not suitable to the conventional approaches, using yield to maturity and credit spreads. Therefore, we made an approximation based on net borrowing costs. Although it closely mirrored the cost of debt B2Holding had reported, we acknowledge that the approach was not ideal. In table 7.2, we found that the net borrowing cost for B2Holding had fluctuated between 5 and 6.5 percent from 2015 to

2019. We chose to use the average of the last two years to represent the future cost of debt. The average value is not affected solely by a period where the borrowing expenses could be either excessive or low. We found it to be more reliable than using a full historical average or merely the most recent average. However, with the 2019 net borrowing cost, the WACC would have risen to 6.05 percent. While using the 3- year average would provide a WACC of 5.64, below our current estimate of 5.78. The cost of debt applied in our estimations is therefore considered as the base case, with the other options being optimistic or conservative. Another factor to be discussed is the calculation of ***beta***. The literature does not have a definitive solution to the beta calculation. Evident with suggestions of regressing between 2 and 5 years of observations as an example. We decided to run a regression against both S&P Europe 350 and OSEAX for the maximum length of weekly observations of B2Holding's, yielding an adjusted beta of 1.06. A different method would be running a regression of weekly observations for two years, which would result in an adjusted beta of 1.32, yielding a WACC of 6.26 percent in the process. It is difficult to accurately pinpoint why the two betas differ to the extent they do but reducing the length of observations will intuitively result in a larger impact from share price fluctuations caused by idiosyncratic risk. One example is from the historical introduction of B2Holding in section 2.5.1, the announced departure of the previous CEO Olav Dalen Zahl resulted in 14 percent decrease in the share price. Such fluctuations will have a greater impact when the length is shortened. As discussed in section 7.3.1, we argued that using the maximum length more applicable in the case of B2Holding. It covers more of the relationship between the company and the market, i.e. the systematic risk. However, a case could be made for the 2-year approach; subsequently, we allow the WACC to increase to 6.28 percent.

As suggested by Koller et al. (2010), the capital structure in WACC should reflect the company's long-term target. With B2Holding is not reporting a long-term target, we reviewed different methods of obtaining a suitable capital structure. Discussed in section 7.1, we applied a 3-year average share price when calculating the market value of equity. It was done to limit influence from fluctuations in the market and the share price on any given day. As with the recent development in the market, B2Holding's would be significantly affected by the situation. For instance, applying the share price at the cut-off date (28.02.2020) would give an

equity-to-enterprise ratio of 17.6 percent, yielding a WACC of 5.27 percent. By this practice, the WACC value would have declined by almost 10 percent, consequently, increasing the share price significantly. The scenario illustrates how the timing of capital structure estimation can significantly impact the share price, an effect we aimed at minimizing. However, to account for the difference, we apply a lower extremity of 5.28 percent. In total, we are allowing the WACC in our sensitivity analysis to fluctuate between 6.28 and 5.28 percent.

		Terminl Growth Rate										
		0,90%	1,00%	1,10%	1,20%	1,30%	1,40%	1,50%	1,60%	1,70%	1,80%	1,90%
WACC	6,28%	2,57	3,25	3,96	4,69	5,45	6,24	7,07	7,93	8,83	9,77	10,75
	6,18%	3,61	4,32	5,06	5,83	6,63	7,46	8,33	9,24	10,19	11,18	12,22
	6,08%	4,69	5,44	6,21	7,02	7,86	8,74	9,66	10,61	11,61	12,66	13,76
	5,98%	5,82	6,60	7,42	8,27	9,15	10,08	11,04	12,05	13,11	14,22	15,38
	5,88%	6,99	7,81	8,67	9,57	10,50	11,48	12,49	13,56	14,68	15,85	17,09
	5,78%	8,22	9,08	9,99	10,93	11,91	12,94	14,02	15,15	16,33	17,58	18,88
	5,68%	9,50	10,41	11,36	12,36	13,39	14,48	15,62	16,82	18,07	19,39	20,78
	5,58%	10,84	11,80	12,80	13,85	14,95	16,10	17,31	18,57	19,91	21,31	22,79
	5,48%	12,24	13,25	14,31	15,42	16,58	17,80	19,08	20,43	21,84	23,34	24,92
	5,38%	13,71	14,78	15,90	17,07	18,30	19,59	20,95	22,38	23,89	25,48	27,17
	5,28%	15,25	16,38	17,57	18,81	20,11	21,48	22,93	24,45	26,06	27,76	29,56

Table 9.1: Sensitivity Analysis of WACC. Source: Own Production

In table 9.1, it displays how the changes in the terminal growth rate and WACC affects the share price. We can see that alterations in the WACC result in more significant changes in the estimated share price than changes in the terminal growth rate. Illustrated with the box in table 9.1, a share price spread of 125 percent shows that the share price is sensitive to realistic changes in the two parameters. Still, changes in the fundamental ratios we examine to be realistic provide an undervaluation of B2Holding. Realistic changes in the WACC yields 59.7 percent spread in the share price, which signifies the importance of a correct estimation, as discussed above.

The EBITDA-margin was set at 41 percent as operating expenses have historically been relatively stable against revenues for B2Holding. From the industry rivalry analysis, the market demonstrated trends showing threatened margins. However, B2Holding have resources that allow them to realistically keep their EBITDA margin in perpetuity close to their historical average. However, uncertainty has increased due to COVID-19, which can result in long-term effects on the EBITDA margin. Therefore, we allow for fluctuations in the sensitivity analysis between 38.5 and 43.5 percent, with a realistic range between 40 – 42 percent, illustrated in table 9.2. As with WACC, the share price is more sensitive to changes in the EBITDA-margin

than the terminal growth rate, yielding a spread of 44 percent. Keeping the EBITDA margin at historical levels is essential for the perceived share price from DCF valuation.

EBITDA	Terminl Growth Rate										
	0,90%	1,00%	1,10%	1,20%	1,30%	1,40%	1,50%	1,60%	1,70%	1,80%	1,90%
38,50%	2,79	3,58	4,41	5,27	6,17	7,10	8,09	9,12	10,20	11,33	12,53
39,00%	3,88	4,68	5,52	6,40	7,32	8,27	9,27	10,32	11,43	12,58	13,80
39,50%	4,96	5,78	6,64	7,53	8,46	9,44	10,46	11,53	12,65	13,83	15,07
40,00%	6,05	6,88	7,75	8,66	9,61	10,61	11,65	12,74	13,88	15,08	16,34
40,50%	7,13	7,98	8,87	9,80	10,76	11,77	12,83	13,94	15,11	16,33	17,61
41,00%	8,22	9,08	9,99	10,93	11,91	12,94	14,02	15,15	16,33	17,58	18,88
41,50%	9,30	10,18	11,10	12,06	13,06	14,11	15,21	16,35	17,56	18,83	20,16
42,00%	10,39	11,28	12,22	13,19	14,21	15,28	16,39	17,56	18,79	20,07	21,43
42,50%	11,47	12,38	13,33	14,32	15,36	16,44	17,58	18,77	20,01	21,32	22,70
43,00%	12,56	13,48	14,45	15,46	16,51	17,61	18,77	19,97	21,24	22,57	23,97
43,50%	13,64	14,58	15,56	16,59	17,66	18,78	19,95	21,18	22,47	23,82	25,24

Table 9.2: Sensitivity Analysis of EBITDA. Source: Own Production

The consequences of the ongoing COVID-19 situation and how this will impact the different key ratios in the terminal period could have been examined to a further extent. Instead, we assume that changing the variables based on the above discussion sufficiently demonstrated the robustness of our results regarding changes in the terminal period. Increasing uncertainty of estimations with the inclusion of COVID-19 impact ten years into the future serves only to provide more confusion in the outer values of our sensitivity analysis. It is more relevant to discuss its impact on revenues in the explicit forecast period, as we do in the following Monte Carlo simulation.

9.2 Monte Carlo Simulation

To further examine the robustness of our estimations, we perform a Monte Carlo simulation. The Monte Carlo simulation allows for more variables to change at the same time and rely upon probability distributions from a multitude of simulations to assess the statistical reliability of the estimated share price (Petersen & Plenborg, 2012). The Monte Carlo simulation is run following suggestions from Brandimarte (2014) and applied on our DCF Enterprise model.

9.2.1 Monte Carlo Assumptions

To perform the simulation, we are required to decide which ratios that will be interpreted and utilised in the model. We have decided to apply the ratios which are most influential on the share price of B2Holding; revenue growth, EBITDA-margin, WACC and terminal growth rate. From the previous section, we examined that the share price of B2Holding is sensitive to alterations in these variables in the terminal period. The Monte Carlo simulation allows for

changes in the same variables in the explicit forecast and terminal period. In addition to the ratios, the determination of which distribution-method to apply is essential.

Brandimarte (2014) discusses multiple distribution-methods you can apply when executing a Monte Carlo simulation, whereas we have decided to focus on the normal distribution and triangular distribution. Normal or Gaussian distribution is the most common distribution-method (Brandimarte, 2014). When applying the normal distribution in our model, the values distributed concerning our base value is symmetric, which means that we get statistically reliable values for our estimations in both directions. The other method examined was the triangular distribution method. The triangular distribution is a form of beta distribution which depends on a unit interval (Brandimarte, 2014). The triangular distribution method differs from the normal distribution in terms of depending on an interval set of variables and does not necessarily have to be symmetric values concerning the base value. Instead, one determines the range of the values through three variables: **1)** the minimum expected outcome, **2)** the most likely outcome, and **3)** the maximum expected outcome.

For revenue growth to account for uncertainty related to COVID-19, we apply the normal distribution method with 0.01 standard deviations from our current growth rates. For all the other vital ratios, we have applied the triangular method. The values used in the triangular method is the same as used in the sensitivity analysis, discussed in the previous section. The most likely outcome for all parameters is the base case from our valuation model. The respective upper and lower values for WACC was set to 6.28 and 5.28 percent, while the terminal growth rate alters between 0.9 and 1.9 percent. For the EBITDA-margin, we have extended the range slightly from our sensitivity analysis, distributed between 38 and 44 percent. This change is an extended consideration to COVID-19 impact in the explicit forecast period. It can influence the relationship between cost to collect and collection rates. If the debtors find it harder to service their debt, it can diminish the economies of scale in collection.

9.2.2 Simulation Results

Illustrated in Table 9.3 is the results of our Monte Carlo simulation. Because of the high uncertainty in the variables discussed in the previous section, we expect large fluctuations in our findings and run 100 000 simulations using Oracle Crystal Ball Excel add-on to provide a

reliable result. The full analysis is accessible in Appendix 15 – 19. The average value of our simulations was NOK 13.19, representing a NOK 0.25 or 1.9 percent increase from our base case. The mean value is significantly affected by the minimum and maximum values of our estimations, ranging between - 0.96 and 34.13. A higher share price than our base case could be explained by high outliers, slightly supported by the positive skewness.

Monte Carlo Statistics	
Simulations	100 000
Base Case	12,94
Mean	13,19
Median	12,92
Standard Deviation	4,52
Variance	20,47
Skewedness	0,33
Kurtosis	3,02
Minimum	-0,96
Maximum	34,13

Table 9.3: Monte Carlo Statistics. Source: Own Production

It is recommended to examine the median value above the average as it is less affected by skewness. The median value of our simulations was 12.92 NOK, slightly below our base case. Moreover, the results yielded a probability of 95.08 percent for the share price being above the share price of the cut-off date (NOK 6.18). While the 95 percent confidence interval showed a large spread between 5.08 and 22.73, containing both our estimated 12.94 and the actual 6.18 share price. Implying that the share price is almost certain to be undervalued in the market, although we cannot statistically disprove the validity of the actual share price based on the Monte Carlo set-up (Appendix 19).

The sensitivity of the ratios used in the Monte Carlo simulation was examined. The share price of B2Holding is particularly sensitive to changes in the WACC, with a downside effect of 48 percent on the variance in the share price. Consequently, changes in WACC was the most influential ratio, with the terminal growth rate and EBITDA-margin in 2030 being the second and third most impactful with upside effects of 23.0 and 19.3 percent, respectively.

9.3 Part Conclusion

The sensitivity analysis is a useful tool to examine changes in the value drivers used in the valuation. It also emphasizes the importance of good proxies when calculating the fundamental ratios. Both analyses illustrated that B2Holding's share price is sensitive to changes in underlying value drivers. As expected from a relatively low base WACC of 5.78 percent, small changes can have significant impacts in perpetuity. A similar effect was identified in the terminal growth rate. However, we defined a realistic spread from our base case in both sensitivity analysis and found undervaluation inn all values inside the predefined area. To further test the robustness, we utilised a Monte Carlo simulation to allow for a more randomized spread in the key value drivers. With a mean value slightly above our base case and an identical median value, we find our results interesting. Due to high uncertainty, the 95 percent-confidence interval provided a large spread containing both the actual and estimated share price of B2Holding.

10 Conclusion

This thesis started with the research question: "What is the fundamental value of B2Holding ASA as of 28.02.2020?". In our attempt to answer it we defined a clear set of sub-questions to guide the structure of the thesis and appropriate analysis needed to identify specific value drivers, trends and characteristics of the debt purchasing and collection industry in Europe. We have made strategic, financial, historical, and future considerations to acquire the necessary variables for our valuations.

The industry overview showed regulatory powers that have targeted financial institutions and their non-performing loans after the 2008 financial crisis and subsequent recession, which led to increased sale of NPLs. This stimulus, coupled with cheap financing through speculative-grade bond markets, led to several large companies exploiting the growth potential and cross border geographical expansions trended in the industry.

The strategic analysis indicated a shift in the industry. Financing through bonds in the speculative market became more expensive from late 2018, the same year debt purchasing peaked at over EUR 200 billion, and industry rivalry became damaging to profits in the following year. This transformation was confirmed by the financial analysis of the latest figures, showing eroding profit margins on peer group and B2Holding's level. The considerations culminated in a forecast of B2Holding's financial statements. We had a thorough discussion of some of the most well-known valuation techniques and decided to apply DDM, DCF-enterprise, DCF- equity, EVA, and multiples.

The estimated share price is a result of analysis based on reliable data collection and respected empirical theory. We concluded with share price estimations ranging from NOK 8.06 to 13.34, and an average of NOK 11.25, corresponding to an undervaluation of 45.07 percent compared to the NOK 6.18 price as of 28.02.2020. The recommendation becomes a buy. Although the sensitivity analysis displayed a high degree of fluctuations in the share price with changes in key variables, it overall contributed to the certainty of the valuation models estimations. The Monte Carlo simulation found a 95.08 percent probability of observing a share price above the current price.

11 Reflection

We will briefly discuss some aspects that could not be fitted to the final thesis but could have made exciting insights into B2Holding. Further, we outline some issues related to the COVID-19 pandemic.

In working with this thesis, we discovered exciting connections from the industry of debt purchasing and collection to macro-economic factors. We touched the surface of these connections several times during our discussions. It was, however, not explored in full detail, in part because large-scale data about the industry was difficult to obtain and the limitations of our thesis. An interesting angle would be looking directly at the correlations in economic cycles, macro-movements and debt purchasing and collection industry.

We wanted to explore real options valuation regarding B2Holding as we believed there where exciting opportunities in their pipeline about their collaboration agreement, as discussed in section 6.4.2. We weighed the costs and benefits of applying a real options framework for some of the relevant projects, concluding that real options would not add any significance to the insight already provided by the several other methods employed given the shortage of information. However, if more data were made accessible, the real options approach could have added value to the thesis.

We have addressed COVID-19 several times during the thesis and attempted to have informed discussion about its impact based on the information available until 23.03.2020. Despite the extended cut-off from 28.02.2020, information was still vague about its long-term economic impact, rendering it challenging to estimate the degree to which it should influence our assumptions. Replicating the thesis today would, in all likelihood, have seen the pandemic play a more significant role as a downside effect on the share price estimation.

We are confident that our analysis and conclusions are relevant and accurately answers the research question but given more information but acknowledge that additional insights could have contributed to the thesis.

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13 Appendix

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Appendix 1. Consolidated Income Statement – B2Holding

NOK 1 000	2014	2015	2016	2017	2018	2019
Interest Income from purchased loan portfolios	399 388	909 544	1 205 942	1 680 221	2 537 113	2 713 165
Net credit gain/loss from purchased loan portfolios	518	5 298	- 14 621	76 919	- 57 625	- 400 127
Profit from shares in associated parties	283	230	152	70 083	47 757	64 113
Other Revenues	110 838	161 397	190 200	255 538	378 376	496 671
Total Revenues	**511 027**	**1 076 469**	**1 381 673**	**2 082 761**	**2 905 621**	**2 873 822**
External expenses of services provided	- 118 901	- 189 304	- 243 665	- 285 539	- 363 312	- 447 245
Personnel expenses	- 136 206	- 294 184	- 358 824	- 490 287	- 691 678	- 887 889
Other Operating Expenses	- 152 167	- 187 594	- 248 198	- 286 837	- 416 651	- 445 852
Depreciation and Amortisation	- 11 986	- 27 953	- 29 875	- 35 893	- 56 126	- 107 352
Impairment losses	-	-	-	-	-	- 26 915
Operating Profit (EBIT)	**91 767**	**377 434**	**501 111**	**984 205**	**1 377 854**	**958 569**
Financial Income	1 845	2 200	1 604	3 290	4 652	12 651
Financial Expenses	- 43 905	- 161 661	- 223 834	- 358 157	- 618 378	- 794 463
Net exchange gain/(loss)	21 844	25 237	- 66 138	18 283	43 973	- 11 858
Net financial items	**- 20 216**	**- 134 224**	**- 288 368**	**- 336 584**	**- 569 753**	**- 793 670**
Profit before tax	**71 551**	**243 210**	**212 743**	**647 621**	**808 101**	**164 899**
Income tax expenses	- 12 519	- 41 646	- 46 288	- 166 391	- 159 370	- 57 750
Change in deferred taxes	- 6 940	- 3 479	-	-	-	-
Profit after tax	**52 092**	**198 085**	**181 077**	**481 230**	**648 731**	**107 151**

Appendix 2. Consolidated Balance Sheet – B2Holding

NOK 1 000	2014	2015	2016	2017	2018	2019
Deferred tax assets	11 930	26 349	64 004	65 778	97 219	188 765
Goodwill	302 122	317 675	394 800	522 366	785 230	777 764
Tangible and Intangible assets	104 829	100 282	90 529	201 015	273 812	362 529
Investments in associated companies and joint ventures	1 895	1 598	3 935	5 564	12 144	387 041
Purchased loan portfolios	2 016 705	3 167 628	4 751 878	8 731 632	13 346 098	13 419 720
Loan receivables	168 182	259 819	311 296	414 580	357 801	345 160
Participation loan/notes	-	-	-	161 167	588 846	541 683
Other long-term financial assets	-	-	192 030	36 455	34 582	4 531
Total non-current assets	**2 605 663**	**3 873 351**	**5 808 472**	**10 138 557**	**15 495 732**	**16 027 194**
Accounts receivable	27 985	20 432	50 734	74 989	34 908	-
Other short-term assets	32 346	49 524	72 071	131 884	245 392	558 568
Cash and short-term deposits	294 148	764 678	217 608	452 000	397 702	355 884
Total current assets	**354 479**	**834 634**	**340 413**	**658 873**	**678 002**	**914 452**
Total Assets	**2 960 142**	**4 707 985**	**6 148 886**	**10 797 431**	**16 173 734**	**16 941 646**

Share Capital	30 904	31 187	36 912	36 952	40 903	
Other paid in capital	1 403 198	1 426 790	2 083 216	2 087 317	2 835 895	
Other capital reserves	1 415	7 162	13 867	17 852	20 436	
Foreign currency translation reserve	47 847	126 368	29 533	319 011	314 381	
Other equity	- 109 540	81 313	262 890	687 438	1 143 274	
Total equity attributable to parent company's shareholders	**1 373 824**	**1 672 820**	**2 426 418**	**3 148 570**	**4 354 889**	**4 236 179**
Equity attributable to non-controlling interests	- 1 672	- 909	- 1 528	- 189	601	625
Total Equity	**1 372 152**	**1 671 911**	**2 424 890**	**3 148 381**	**4 355 490**	**4 236 804**
Deferred tax liabilities	32 417	59 307	51 027	95 709	162 925	171 475
Long-term interest bearing loans and borrowings	1 053 475	2 526 121	3 217 715	5 738 696	10 768 808	10 140 978
Other long-term liabilities	34 564	31 427	64 528	70 207	97 757	159 528
Total non-current liabilities	**1 120 456**	**2 616 855**	**3 333 270**	**5 904 612**	**11 029 490**	**10 471 981**
Short-term interest bearing loand and borrowings	159 336	-	-	989 436	363	1 497 563
Bank overdraft	-	-	-	125 655	59 115	96 634
VAT, payroll and other indirect taxes	22 405	33 460	29 483	-	-	-
Accounts and other payables	121 223	107 703	156 486	266 603	300 536	265 081
Income taxes payable	8 949	25 825	62 097	56 531	47 121	28 684
Other current liabilities	155 621	252 231	142 660	306 213	381 621	344 900
Total current liabilities	**467 534**	**419 219**	**390 726**	**1 744 438**	**788 756**	**2 232 861**
Total equity & liabilities	**2 960 142**	**4 707 985**	**6 148 886**	**10 797 431**	**16 173 734**	**16 941 646**

Appendix 3. Index Analysis – Income Statement

Index Analysis - Income Statement	2014	2015	2016	2017	2018	2019
Interest Income from purchased loan portfolios		128%	33%	39%	51%	7%
Net credit gain/loss from purchased loan portfolios		923%	-376%	-626%	-175%	-79%
Profit from shares in associated parties		-19%	-34%	46007%	-32%	34%
Other Revenues		46%	18%	34%	48%	31%
Revenues		**111%**	**28%**	**51%**	**40%**	**12%**
External expenses of services provided		59%	22%	23%	27%	23%
Personnel expenses		89%	38%	38%	40%	29%
Other Operating Expenses		23%	31%	17%	45%	1%
Total operating expenes		56%	31%	28%	38%	20%
EBITDA		**324%**	**24%**	**85%**	**41%**	**5%**
Depreciation and Amortisation		133%	7%	20%	56%	91%
Impairment losses						
Adjusted EBIT		**348%**	**25%**	**89%**	**40%**	**-1%**
Tax on operating profit		339%	59%	123%	8%	76%
NOPAT		**350%**	**18%**	**80%**	**52%**	**-20%**
IPO expenses				-100%		
Non-recurring personnel expenses			-87%	-100%		
Revaluation one-off write down						
Other non-recurring expenses				-100%		
Defined contribution pension cost		3%	25%	133%	131%	-100%
Financial Income		19%	-27%	105%	41%	172%
Financial Expenses		268%	38%	60%	73%	28%
Net exchange gain/(loss)		16%	-362%	-128%	141%	-127%
Net financial expenses before tax		**710%**	**79%**	**10%**	**70%**	**109%**
Tax on financial expenses		693%	127%	30%	30%	272%
Change in deferred taxes						
Net financial expenses after tax		**498%**	**65%**	**4%**	**84%**	**69%**
Net profit/loss of the period		**280%**	**-9%**	**166%**	**35%**	**-83%**

Appendix 4. Index Analysis – Balance Sheet

Index Analysis - Balance Sheet	2014	2015	2016	2017	2018	2019
Deferred tax assets		121%	143%	3%	48%	94%
Goodwill		5%	24%	32%	50%	-1%
Tangible and Intangible assets		-4%	-10%	122%	36%	32%
Investments in associated companies and joint ventures		-16%	146%	41%	118%	3087%
Purchased loan portfolios		57%	50%	84%	53%	1%
Loan receivables		54%	20%	33%	-14%	-4%
Participation loan/notes					265%	-8%
Total Non-Current Operating Assets		**49%**	**45%**	**80%**	**53%**	**4%**
Accounts receivable		-27%	148%	48%	-53%	-100%
Other short-term assets		53%	46%	83%	86%	128%
Total Current Operating Assets		**16%**	**76%**	**68%**	**35%**	**99%**
Deferred tax liabilities		83%	-14%	88%	70%	5%
VAT, payroll and other indirect taxes		49%	-12%	-100%		
Accounts and other payables		-11%	45%	70%	13%	-12%
Income taxes payable		189%	140%	-9%	-17%	-39%
Total Non-Interest Bearing Liabilities		**22%**	**32%**	**40%**	**22%**	**-9%**
Net Working Capital		**25%**	**13%**	**20%**	**9%**	**-141%**
INVESTED CAPITAL (OPERATING ASSETS)		**50%**	**46%**	**82%**	**54%**	**6%**

Total Equity		**22%**	**45%**	**30%**	**38%**	**-3%**
Long-term interest bearing loans and borrowings		140%	27%	78%	88%	-6%
Short-term interest bearing loand and borrowings		-100%			-100%	412452%
Other current liabilities		62%	-43%	115%	25%	-10%
Other long-term liabilities		-9%	105%	9%	39%	63%
Bank overdraft					-53%	63%
Total Interest-Bearing Liabilities		**100%**	**22%**	**111%**	**56%**	**8%**
Other long-term financial assets				-81%	-5%	-87%
Cash and short-term deposits		160%	-72%	108%	-12%	-11%
Total Interest-Bearing Assets		**160%**	**-46%**	**19%**	**-11%**	**-17%**
Net Interest-Bearing Debt		**84%**	**47%**	**124%**	**61%**	**9%**
INVESTED CAPITAL (FINANCIAL ASSETS)		**50%**	**46%**	**82%**	**54%**	**6%**

Appendix 5. Arrow Global Group Financials

GBP 1000	2014	2015	2016	2017	2018	2019
Revenues	110 742	165 454	235 930	319 015	361 797	-
Operating Expenses	- 64 362	- 90 817	- 140 898	- 213 071	- 255 013	-
EBIT	**46 380**	**74 637**	**95 032**	**105 944**	**106 784**	**-**
Taxes on EBIT	- 5 852	- 7 523	- 5 061	- 10 644	- 10 022	-
NOPAT	**40 528**	**67 114**	**89 971**	**95 300**	**96 762**	**-**
Net Finacial Items	- 22 257	- 35 365	- 63 665	- 55 385	- 66 792	-
Net Income	**18 271**	**31 749**	**26 306**	**39 915**	**29 970**	**-**

GBP 1000	2014	2015	2016	2017	2018	2019
Goodwill	47 623	79 490	128 081	152 779	262 679	-
Other Intangible Assets	11 043	20 643	39 144	43 493	44 264	-
Property, Plant and Equipment	2 881	3 649	3 584	10 168	7 761	-
Investment in subsidiary undertakings	-	-	-	-	-	-
Portfolio Investments	477 513	609 793	782 792	951 467	1 087 030	-
Investment in associates	11 419	12 158	10 371	-	-	-
Loan notes	1 378	862	-	-	-	-
Deferred Tax Assets	300	639	3 692	7 780	8 113	-
Total Non-Current Operating Assets	**552 157**	**727 234**	**967 664**	**1 165 687**	**1 409 847**	**-**
Trade and other receivables	16 569	34 781	35 484	56 885	94 206	-
Loan notes	-	-	21 315	-	-	-
Total Current Operating Assets	**16 569**	**34 781**	**56 799**	**56 885**	**94 206**	**-**
Trade and other payables	-	7 648	-	16 569	52 476	-
Deferred tax liability	2 852	4 396	14 859	21 940	14 930	-
Defined benefit liability	-	-	1 721	-	-	-
Trade and other payables	33 058	83 906	76 261	81 790	145 181	-
Current tax liability	2 355	3 755	5 469	4 528	7 915	-
Total Non-Interest Bearing Liabilities	**38 265**	**99 705**	**98 310**	**124 827**	**220 502**	**-**
Net Working Capital	**- 21 696**	**- 64 924**	**- 41 511**	**- 67 942**	**- 126 296**	**-**
INVESTED CAPITAL (OPERATING ASSETS)	**530 461**	**662 310**	**926 153**	**1 097 745**	**1 283 551**	**-**

Total Equity	**121 874**	**145 356**	**167 391**	**195 321**	**192 258**	**-**
Senior secured notes	378 564	447 545	681 158	763 740	920 798	-
Revolving credit facility	35 404	71 479	74 169	153 036	242 121	-
Bank overdrafts	-	-	7 698	1 332	2 696	-
Derivative liability	1 872	1 281	1 433	2 865	502	-
Other borrowings	-	-	12 077	10 724	11 635	-
Senior secured notes interest	7 289	6 832	5 430	6 670	5 542	-
Total Interest Bearing Liabilities	**423 129**	**527 137**	**781 965**	**938 367**	**1 183 294**	**-**
Cash and Cash equivalents	14 542	10 183	23 203	35 943	92 001	-
Total Interest Bearing Assets	**14 542**	**10 183**	**23 203**	**35 943**	**92 001**	**-**
Net Interest-Bearing Debt	**408 587**	**516 954**	**758 762**	**902 424**	**1 091 293**	**-**
INVESTED CAPITAL (FINANCIAL ASSETS)	**530 461**	**662 310**	**926 153**	**1 097 745**	**1 283 551**	**-**

Appendix 6. Axactor SE Financials

EUR 1000	2016	2017	2018	2019
Revenues	37 074	89 785	206 909	285 159
Operating Expenses	- 43 562	- 74 970	- 160 603	- 193 020
EBITDA	**- 6 488**	**14 815**	**46 306**	**92 139**
Depreciation and amortisation	- 3 126	- 5 327	- 6 009	- 10 115
EBIT	**- 9 614**	**9 488**	**40 297**	**82 024**
Taxes on EBIT	727	611	- 3 770	- 11 667
NOPAT	**- 8 887**	**10 099**	**36 527**	**70 357**
Net Finacial Items	- 2 283	- 7 515	- 34 137	- 49 389
Net Income	**- 11 170**	**2 584**	**2 390**	**20 968**

EUR 1000	2016	2017	2018	2019
Intangible assets	18 347	18 359	19 170	21 487
Goodwill	53 491	53 582	55 577	56 170
Deferred assets	1 442	3 945	7 564	9 742
Property, plant and equipment	2 365	2 499	2 683	2 903
Right-of-use assets	-	-	-	5 846
Purchased debt portfolios	127 989	317 150	728 820	1 041 919
Other non-current receivables	998	1 065	293	765
Other non-current investments	415	191	778	193
Total non-current operating assets	**205 047**	**396 791**	**814 885**	**1 139 025**
Stock of secured assets	-	154 101	200 009	129 040
Accounts Receivable	5 652	8 047	9 459	13 135
Other current assets	7 563	13 070	12 774	14 960
Total current operating assets	**13 215**	**175 218**	**222 242**	**157 135**
Deferred tax liability	5 960	5 887	11 124	17 591
Lease liabilities	-	-	-	3 481
Other non-current liabilities	3 400	3 002	1 180	1 415
Accounts payable	6 648	4 029	4 522	5 902
Taxes payable	387	1 376	1 610	6 570
Lease liabilities	-	-	-	2 549
Other current liabilities	8 962	17 603	24 172	26 491
Total non-interest bearing liabilities	**25 357**	**31 897**	**42 608**	**63 999**
Net Working Capital -	**12 142**	**143 321**	**179 634**	**93 136**
INVESTED CAPITAL (OPERATING ASSETS)	**192 905**	**540 112**	**994 519**	**1 232 161**

Total Equity	**182 888**	**291 834**	**328 170**	**377 626**
Interest bearing debt	25 149	237 571	567 829	466 378
Current portion of interest bearing debt	48 852	61 189	169 296	463 555
Total Interest bearing liabilities	**74 001**	**298 760**	**737 125**	**929 933**
Restricted cash	1 510	1 878	3 184	3 739
Cash and cash equivalents	62 476	48 604	67 592	71 657
Total Interest bearing assets	**63 986**	**50 482**	**70 776**	**75 396**
Net Interest bearing debt	**10 015**	**248 278**	**666 349**	**854 537**
INVESTED CAPITAL (FINANCIAL ASSETS)	**192 905**	**540 112**	**994 519**	**1 232 161**

Appendix 7. Hoist Finance Financials

SEK 1000	2014	2015	2016	2017	2018	2019
Revenues	1 604 675	2 216 058	2 522 676	2 756 421	3 265 000	3 596 000
Operating Expenses	- 1 100 667	- 1 525 370	- 1 639 052	- 1 804 460	- 2 085 000	- 2 230 000
EBITDA	**504 008**	**690 688**	**883 624**	**951 961**	**1 180 000**	**1 366 000**
Depreciation and Amortisation	- 30 281	- 46 866	- 52 796	- 55 943	- 61 000	- 122 000
EBIT	**473 727**	**643 822**	**830 828**	**896 018**	**1 119 000**	**1 244 000**
Taxes on EBIT	- 38 386	- 54 609	- 115 949	- 128 386	- 165 000	- 143 000
NOPAT	**435 341**	**589 213**	**714 879**	**767 632**	**954 000**	**1 101 000**
Net Finacial Items	- 255 238	- 358 691	- 297 730	- 314 872	- 364 000	- 496 000
Net Income	**180 103**	**230 522**	**417 149**	**452 760**	**590 000**	**605 000**

SEK 1000	2014	2015	2016	2017	2018	2019
Acquired loan portfolios	8 586 782	11 014 699	12 385 547	14 765 989	20 605 000	24 303 000
Bonds and other securities	1 951 241	1 303 214	2 538 566	3 689 021	3 635 000	2 769 000
Shares and participations in joint ventures	215 347	205 557	241 276	237 586	215 000	201 000
Intangible assets	171 048	235 632	243 340	287 038	387 000	382 000
Tangible assets	32 000	41 623	40 815	42 394	59 000	269 000
Deferred tax assets	70 885	62 688	47 269	21 241	22 000	32 000
Total non-current operating assets	**11 027 303**	**12 863 413**	**15 496 813**	**19 043 269**	**24 923 000**	**27 956 000**
Prepayments and accrued income	58 192	72 384	85 593	85 196	53 000	106 000
Other assets	209 941	501 062	193 470	198 832	425 000	511 000
Total current operating assets	**268 133**	**573 446**	**279 063**	**284 028**	**478 000**	**617 000**
Tax liabilities	52 326	21 639	52 887	84 091	92 000	86 000
Other liabilities	555 186	357 284	432 865	393 370	380 000	823 000
Deferred tax liabilities	50 419	183 999	163 264	147 523	188 000	150 000
Accrued expenses and deferred income	124 797	180 941	203 442	210 541	232 000	154 000
Provisions	68 704	52 116	55 504	87 027	68 000	89 000
Total Non-Interest Bearing Liabilities	**851 432**	**795 979**	**907 962**	**922 552**	**960 000**	**1 302 000**
Net Working Capital	**- 583 299**	**- 222 533**	**- 628 899**	**- 638 524**	**- 482 000**	**- 685 000**
INVESTED CAPITAL (OPERATING ASSETS)	**10 444 004**	**12 640 880**	**14 867 914**	**18 404 745**	**24 441 000**	**27 271 000**

Total Equity	**1 397 190**	**2 288 760**	**2 925 297**	**3 228 305**	**4 413 000**	**4 898 000**
Deposits from the public	10 987 289	12 791 377	11 848 956	13 227 450	17 093 000	21 435 000
Debt securities issued	1 493 122	1 238 469	3 125 996	4 355 000	5 950 000	5 900 000
Subordinated debts	332 796	336 892	341 715	803 257	839 000	852 000
Total Interest Bearing Liabilities	**12 813 207**	**14 366 738**	**15 316 667**	**18 385 707**	**23 882 000**	**28 187 000**
Cash	340	281	3 073	202	-	-
Treasury bills and Treasury bonds	2 316 110	3 077 827	2 273 903	1 490 152	2 653 000	2 729 000
Lending to credit institutions	1 292 711	858 516	1 061 285	1 681 458	1 187 000	3 075 000
Lending to the public	157 232	77 994	35 789	37 455	14 000	10 000
Total Interest Bearing Assets	**3 766 393**	**4 014 618**	**3 374 050**	**3 209 267**	**3 854 000**	**5 814 000**
Net Interest-Bearing Debt	**9 046 814**	**10 352 120**	**11 942 617**	**15 176 440**	**20 028 000**	**22 373 000**
INVESTED CAPITAL (FINANCIAL ASSETS)	**10 444 004**	**12 640 880**	**14 867 914**	**18 404 745**	**24 441 000**	**27 271 000**

Appendix 8. Intrum Financials

SEK 1 000 000	2014	2015	2016	2017	2018	2019
Revenues	5 184	5 628	5 910	9 571	13 369	15 985
Operating Expenses	- 3 754	- 4 004	- 3 948	- 6 706	- 9 464	- 13 925
EBIT	**1 430**	**1 624**	**1 962**	**2 865**	**3 905**	**2 060**
Taxes on EBIT	- 206	- 285	- 329	- 389	- 599	- 424
NOPAT	**1 224**	**1 339**	**1 633**	**2 476**	**3 306**	**1 636**
Financial Income	13	11	11	17	60	63
Financial Expenses	-196	-178	-176	-990	-1423	-1984
Net Income	**1 041**	**1 172**	**1 468**	**1 503**	**1 943**	**- 285**

SEK 1 000 000	2014	2015	2016	2017	2018	2019
Goodwill	2 719	2 810	3 120	29 565	33 055	33 358
Capitalized expenditures for IT development and other intangibles	171	159	193	341	456	802
Client relationships	37	61	63	2 703	3 670	6 079
Right of use assets	59	68	47	81	-	888
Investment property	40	38	41	58	256	-
Shares in joint ventures	-	6	12	-	4 746	6 539
Other shares and participations	-	1	1	3	1	-
Portfolio investments	6 197	7 027	8 733	21 149	24 830	28 508
Deferred Tax Assets	35	33	25	692	620	1 300
Total non-current operating assets	**9 258**	**10 203**	**12 235**	**54 592**	**67 634**	**77 474**
Accounts receivable	307	285	305	755	719	1 860
Client funds	568	569	588	902	917	1 060
Other long-term receivables	17	11	6	36	33	183
Inventory of real estate	-	-	-	93	2 429	382
Other receivables	633	510	557	931	1 553	1 334
Prepaid expenses and accrued income	157	180	167	737	890	1 343
Tax assets	48	42	87	347	273	382
Other intangible fixed assets	87	80	63	187	237	212
Total current operating assets	**1 817**	**1 677**	**1 773**	**3 988**	**7 051**	**6 756**
Other long-term liabilities	4	3	16	374	395	1 303
Provisions for pensions	133	174	157	175	263	387
Other long-term provisions	3	3	-	9	5	19
Deferred tax liabilities	390	522	638	1 206	1 729	1 938
Client funds payable	568	569	588	902	917	1 060
Account payable	159	139	140	572	488	512
Income tax liabilities	142	128	136	364	241	422
Advances from clients	16	14	46	64	59	88
Other current liabilities	325	613	325	541	852	810
Accrued expenses and prepaid income	789	698	718	1 794	2 056	3 014
Other short-term provisions	-	-	27	143	149	149
Liabilities in operations held for sale	-	-	-	1 168	-	-
Total Non-Interest Bearing Liabilities	**2 529**	**2 863**	**2 791**	**7 312**	**7 154**	**9 702**
Net Working Capital	**- 712**	**- 1 186**	**- 1 018**	**- 3 324**	**- 103**	**- 2 946**
INVESTED CAPITAL (OPERATING ASSETS)	**8 546**	**9 017**	**11 217**	**51 268**	**67 531**	**74 528**
Total Shareholder's Equity	**3 041**	**3 166**	**4 130**	**22 439**	**25 672**	**24 893**
Liabilities to credit institutions	1 727	2 340	1 520	2 703	6 534	6 186
Bond loans	3 231	3 124	3 706	32 052	33 254	40 644
Long-term leasing liabilities	-	-	-	-	-	474
Liabilities to credit institutions	85	17	56	-	296	-
Bond loans	-	-	1 077	1 000	1 000	1 000
Commercial paper	728	635	1 124	2 269	2 123	2 794
Short-term leasing liabilities	-	-	-	-	-	443
Total Interest Bearing Liabilities	**5 771**	**6 116**	**7 483**	**38 024**	**43 207**	**51 541**
Cash and cash equivalents	266	265	396	881	1 348	1 906
Assets in operations held for sale	-	-	-	8 314	-	-
Total Interest Bearing Assets	**266**	**265**	**396**	**9 195**	**1 348**	**1 906**
Net Interest-Bearing Debt	**5 505**	**5 851**	**7 087**	**28 829**	**41 859**	**49 635**
INVESTED CAPITAL (FINANCIAL ASSETS)	**8 546**	**9 017**	**11 217**	**51 268**	**67 531**	**74 528**

Appendix 9. Kruk SA Financials

PLN 1000	2014	2015	2016	2017	2018	2019
Revenues	489 789	613 823	792 171	1 061 349	1 169 687	1 259 743
Operating Expenses	- 270 270	- 351 904	- 429 610	- 621 901	- 671 493	- 775 361
EBITDA	**219 519**	**261 919**	**362 561**	**439 448**	**498 194**	**484 382**
Depreciation and Amortisation	- 11 358	- 10 540	- 13 538	- 18 677	- 19 923	- 44 043
EBIT	**208 161**	**251 379**	**349 023**	**420 771**	**478 271**	**440 339**
Taxes on EBIT	- 1 036	- 5 516	- 37 671	- 39 987	- 22 128	- 37 153
NOPAT	**207 125**	**245 863**	**311 352**	**380 784**	**456 143**	**403 186**
Finance income	1 392	2 792	363	310	148	211
Finance costs	- 56 715	- 44 394	- 63 038	- 85 897	- 125 879	- 126 341
Net Income	**151 802**	**204 261**	**248 677**	**295 197**	**330 412**	**277 056**

PLN 1000	2014	2015	2016	2017	2018	2019
Property, Plant and Equipment	20 265	19 957	27 473	28 669	26 354	82 973
Goodwill	1 024	1 024	54 004	54 003	62 010	47 206
Other intangible assets	11 018	11 805	19 693	26 830	33 877	50 252
Investments	1 380 179	1 620 579	2 676 202	3 169 303	4 121 782	4 411 438
Derivatives	3 539	2 841	-	8 637	1 450	4 219
Total non-current operating assets	**1 416 025**	**1 656 206**	**2 777 372**	**3 287 442**	**4 245 473**	**4 596 088**
Investment property	-	-	-	-	35 188	34 655
Trade receivables	10 949	8 391	13 452	16 623	28 143	23 988
Other receivables	16 534	26 719	28 145	64 244	23 088	31 852
Inventories	524	587	485	494	197	37
Total current operating assets	**28 007**	**35 697**	**42 082**	**81 361**	**86 616**	**90 532**
Derivatives	2 668	589	-	1 375	3 870	3 924
Trade and other payables	60 613	83 555	166 047	143 449	176 054	101 303
Employee benefit obligations	27 646	29 239	34 396	28 715	44 678	49 539
Income tax payable	-	-	4 079	14 401	15 600	6 673
Provisions	264	264	-	-	-	7 156
Deferred tax liability	1 724	3 178	4 057	14 444	9 182	6 498
Total Non-Interest Bearing Liabilities	**92 915**	**116 825**	**208 579**	**202 384**	**249 384**	**175 093**
Net Working Capital	**- 64 908**	**- 81 128**	**- 166 497**	**- 121 023**	**- 162 768**	**- 84 561**
INVESTED CAPITAL (OPERATING ASSETS)	**1 351 117**	**1 575 078**	**2 610 875**	**3 166 419**	**4 082 705**	**4 511 527**

Total Equity	**585 083**	**784 278**	**1 237 504**	**1 460 522**	**1 732 750**	**1 959 093**
Borrowings, debt securities and leases	838 649	935 011	1 646 411	1 897 223	2 500 043	2 705 727
Total Interest Bearing Liabilities	**838 649**	**935 011**	**1 646 411**	**1 897 223**	**2 500 043**	**2 705 727**
Cash and Cash equivalents	70 545	140 742	267 384	173 284	147 302	150 274
Other assets	2 070	3 469	5 658	18 042	2 786	3 020
Total Interest Bearing Assets	**72 615**	**144 211**	**273 042**	**191 326**	**150 088**	**153 294**
Net Interest-Bearing Debt	**766 034**	**790 800**	**1 373 369**	**1 705 897**	**2 349 955**	**2 552 433**
INVESTED CAPITAL (FINANCIAL ASSETS)	**1 351 117**	**1 575 078**	**2 610 875**	**3 166 419**	**4 082 705**	**4 511 527**

Appendix 10. Forecasting Growth

Forecasting Growth	2019	2020E	2021E	2022E	2023E	2024E
Growth in Interest Income from purchased loan portfolios	6,94%	6,39%	5,83%	5,28%	4,72%	4,17%
Growth in Profit from shares in associated parties	34,25%	40,00%	40,00%	40,00%	34,49%	28,97%
Growth in other revenues	31,26%	28,28%	25,29%	22,30%	19,32%	16,33%

Forecasting Growth	2025E	2026E	2027E	2028E	2029E	2030E
Growth in Interest Income from purchased loan portfolios	3,62%	3,06%	2,51%	1,95%	1,40%	1,40%
Growth in Profit from shares in associated parties	23,46%	17,94%	12,43%	6,91%	1,40%	1,40%
Growth in other revenues	13,35%	10,36%	7,37%	4,39%	1,40%	1,40%

Appendix 11. Forecasting Balance Sheet

NOK 1 000	2019	2020E	2021E	2022E	2023E	2024E
Total Equity	4 236 804	5 862 223	6 455 005	7 086 999	7 737 902	8 385 626
Net Interest-Bearing Debt	11 879 188	12 457 223	13 716 886	15 059 873	16 443 041	17 819 456
INVESTED CAPITAL	16 115 992	18 319 446	20 171 891	22 146 872	24 180 943	26 205 082

NOK 1 000	2025E	2026E	2027E	2028E	2029E	2030E
Total Equity	9 000 990	9 549 397	9 994 198	10 301 512	10 445 733	10 591 973
Net Interest-Bearing Debt	19 127 104	20 292 469	21 237 671	21 890 713	22 197 183	22 507 943
INVESTED CAPITAL	28 128 095	29 841 866	31 231 869	32 192 224	32 642 916	33 099 916

Appendix 12. Beta Regression S&P 350

Regression Statistics	
Multiple R	0,378155141
R Square	0,143001311
Adjusted R Square	0,138537776
Standard Error	0,044865223
Observations	194

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0,064488274	0,064488274	32,03768225	5,44039E-08
Residual	192	0,386474542	0,002012888		
Total	193	0,450962816			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	-0,002904301	0,003225844	-0,900322798	0,369076352	-0,009266944	0,003458342	-0,009266944	0,003458342
X Variable 1	1,058055609	0,186929545	5,660183941	5,44039E-08	0,68935643	1,426754788	0,68935643	1,426754788

Appendix 13. Beta Regression OSEAX

Regression Statistics	
Multiple R	0,425035375
R Square	0,18065507
Adjusted R Square	0,176387648
Standard Error	0,043868536
Observations	194

ANOVA

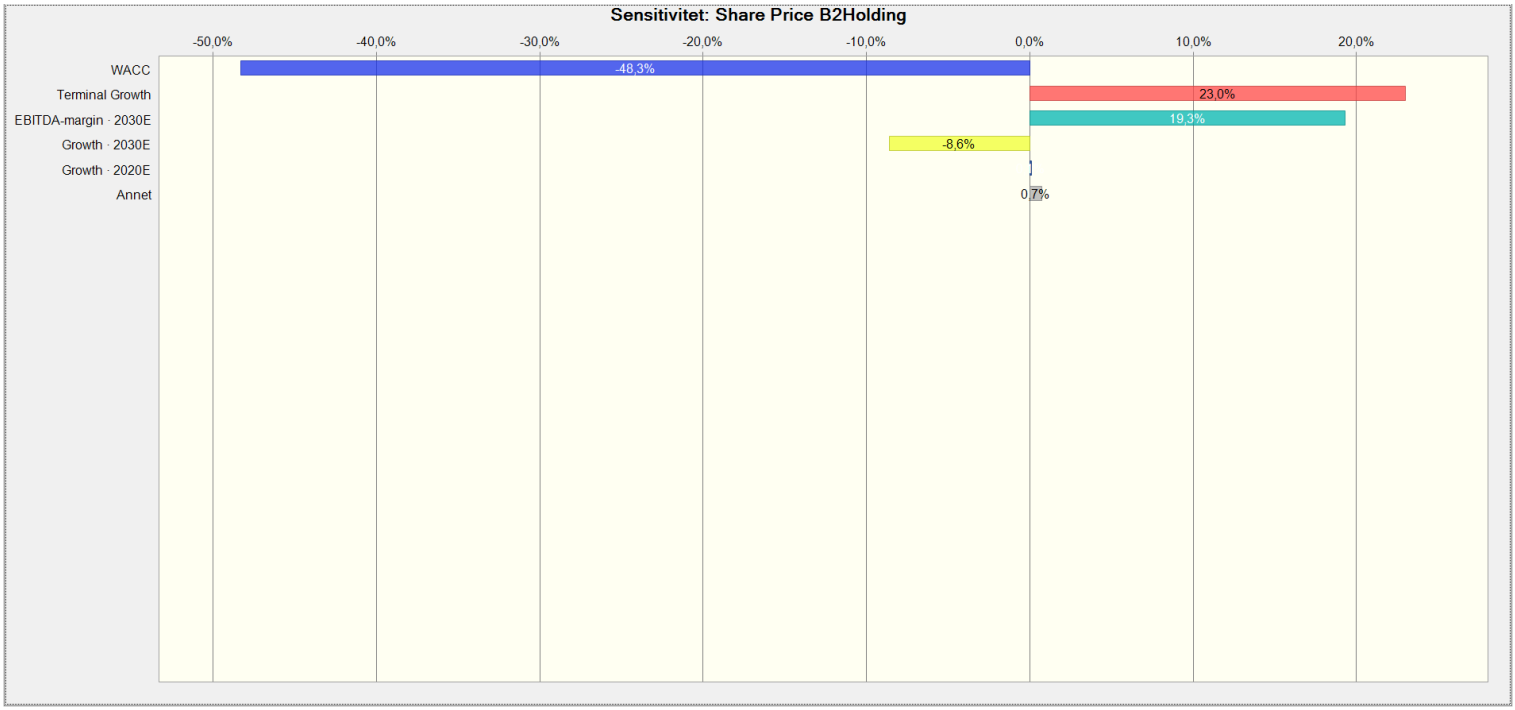
	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0,081468719	0,081468719	42,33354251	6,52356E-10
Residual	192	0,369494097	0,001924448		
Total	193	0,450962816			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	-0,003951491	0,003165044	-1,248479205	0,213375837	-0,010194213	0,00229123	-0,010194213	0,00229123
X Variable 1	1,11921293	0,172016621	6,506423173	6,52356E-10	0,77992795	1,45849791	0,77992795	1,45849791

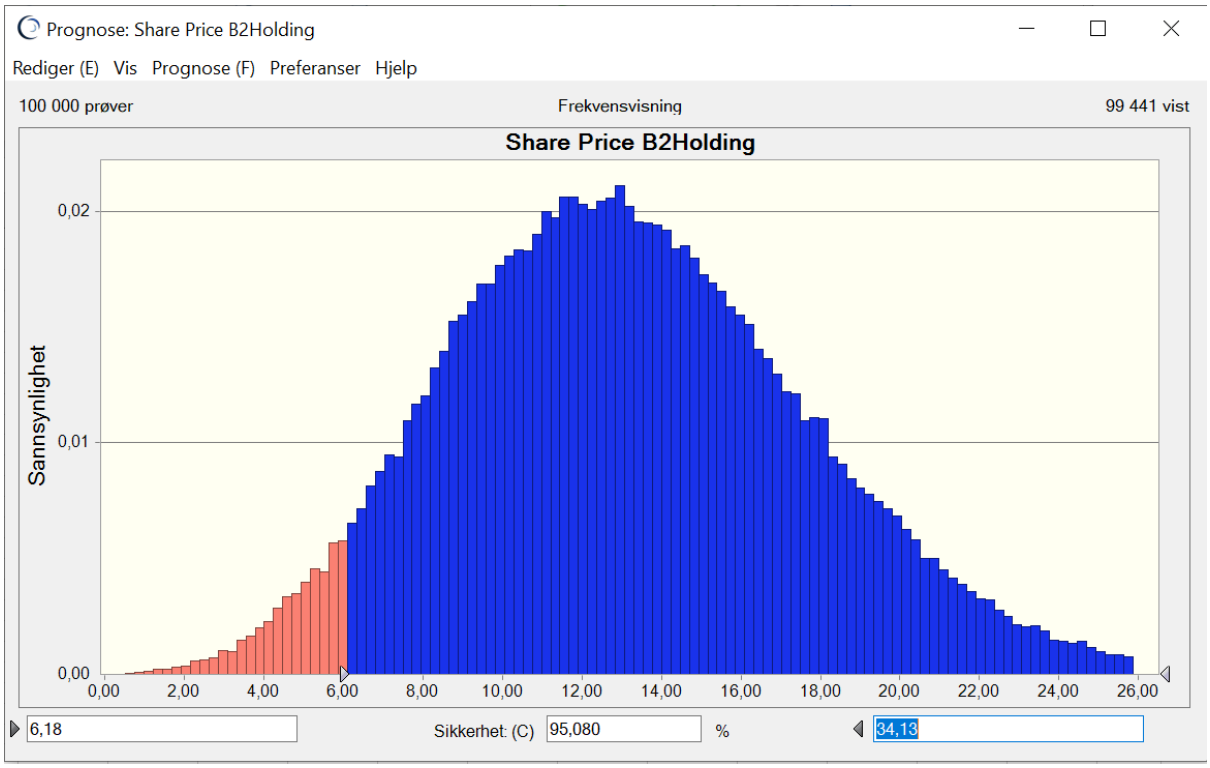
Appendix 14. Damodaran Credit Rating

For firms with market cap < $ 5 Billion			
If interest coverage ratio is			
greater than	≤ to	**Ratings is**	**Spread is**
12,5	**100000**	Aaa/AAA	0,63%
9,5	**12,499999**	Aa2/AA	0,78%
7,5	**9,499999**	A1/A+	0,98%
6	**7,499999**	A2/A	1,08%
4,5	**5,999999**	A3/A-	1,22%
4	**4,499999**	Baa2/BBB	1,56%
3,5	**3,999999**	Ba1/BB+	2,00%
3	**3,499999**	Ba2/BB	2,40%
2,5	**2,999999**	B1/B+	3,51%
2	**2,499999**	B2/B	4,21%
1,5	**1,999999**	B3/B-	5,15%
1,25	**1,499999**	Caa/CCC	8,20%
0,8	**1,249999**	Ca2/CC	8,64%
0,5	**0,799999**	C2/C	11,34%
-100000	**0,499999**	D2/D	15,12%

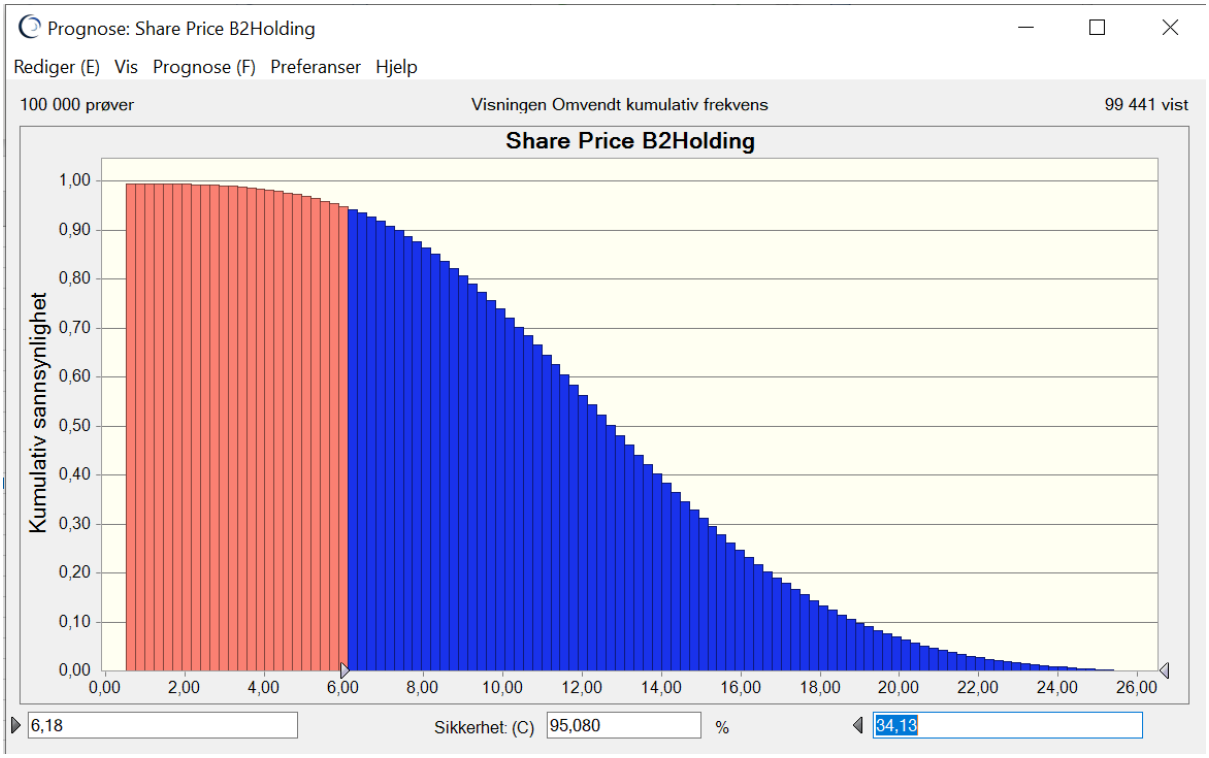
Appendix 15. Sensitivity Share Price B2Holding



Appendix 16. Probability Outcome of Share Price B2Holding



Appendix 17. Reverse Cumulative Probability B2Holding



Persentil	Prognoseverdier
0%	(0,96)
10%	7,58
20%	9,27
30%	10,61
40%	11,79
50%	12,92
60%	14,09
70%	15,39
80%	16,95
90%	19,21
100%	34,13

Appendix 18. Correlation of parameters

Appendix 19. 95% Confidence Interval B2Holding