



Equity Valuation of Zalando SE

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Abstract

This dissertation covers the equity valuation of the German online fashion retail company, Zalando SE. The objective of the valuation is to determine Zalando's fair share price as of 6th May 2021 and to provide an investment recommendation.

To justify the forecasting assumptions, an overview of the firm as well as of the external environment is presented. In the valuation process two different methods are applied: The Discounted Cash Flow Model (DCF) and the Relative Valuation. Furthermore, to account for the current economic uncertainties, a sensitivity analysis on the estimated share value was conducted. Finally, the results are compared with the assessment made in the Bank of America report.

Overall, this leads to a target price per share of EUR 129, which corresponds to a 51.9% upside compared to its current share price of EUR 85. My recommendation for Zalando SE is, therefore, a buy.

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Keywords: Zalando, Fashion e-commerce, Equity Valuation, Discounted Cash Flow, Relative Valuation

Abstract

Esta dissertação apresenta a avaliação patrimonial da empresa alemã de retalho de moda online, Zalando SE. O objetivo da avaliação é determinar o preço justo das ações da Zalando a partir de 6 de maio de 2021 e fornecer uma recomendação de investimento.

Para justificar as hipóteses de previsão, é apresentada uma visão geral da empresa, bem como do ambiente externo. No processo de avaliação, são aplicados dois métodos diferentes: O Modelo de Fluxo de Caixa Descontado (DCF) e a Avaliação Relativa. Além disso, para ter em conta as atuais incertezas económicas, foi realizada uma análise de sensibilidade sobre o valor estimado das ações. Finalmente, os resultados são comparados com a avaliação feita no relatório do Bank of America.

Globalmente, isto conduz a um preço-alvo por ação de EUR 129, o que corresponde a um aumento de 51.9% em relação ao seu preço atual por ação de EUR 85. A minha recomendação para Zalando SE é, portanto, uma compra.

Título: Equity Valuation – Zalando SE

Autor: Marc Müller

Palavras-chave: Zalando, Comércio online de moda, Avaliação Patrimonial, Fluxo de caixa descontado (DCF), Avaliação relativa

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List of Abbreviations

DCF	Discounted Cashflow
IS	Income Statement
BS	Balance Sheet
APV	Adjusted Present Value
WC	Working Capital
LT	Long Term
FCFF	Free Cash Flow to the Firm
PP&E	Property, Plant and Equipment
CAPEX	Capital Expenditures
TV	Terminal Value
Mn	Million
FCFE	Free Cash Flow to Equity
ITS	Interest Tax Shield
S&D	Selling and Distribution
DDM	Dividend Discount Model
CAPM	Capital Asset Pricing Model
WACC	Weighted Average Cost of Capital
MRP	Market Risk Premium
PE	Price-to-Earnings
PEG	Price-Earnings-Growth
Bn	Billion
PLG	Personal Luxury Goods
CAGR	Compounded Annual Growth Rate
YoY	Year-over-Year
IPO	Initial Public Offering
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization
FF3	Fama and French Three Factor Model
COGS	Cost of Goods Sold
ERP	Equity Risk Premium
FY	Fiscal Year

pp.	Percentage Points
ROIC	Return on Invested Capital
MV	Market Value
IMF	International Monetary Fund
FCF	Free Cash Flow
E/V	Equity-to-Value Ratio
D/V	Debt-to-Value Ratio
D&A	Depreciation and Amortization
GDP	Gross Domestic Product
FV	Firm Value
EV	Enterprise Value
D/E	Debt-to-Equity Ratio
PV	Present Value
BoA	Bank of America
IB	Investment Bank

1 Introduction

The objective of this dissertation is to assess a fair share price for Zalando SE and give an investment recommendation (buy, sell or hold). As Europe's most fashionable tech company, Zalando provides digital solutions for every aspect of the fashion journey. The company offers its customers fashion from head to toe, i.e. clothes, shoes, accessories and beauty, while providing logistics and marketing services for its partners.

With the outbreak of the COVID-19 pandemic and the associated lockdown measurements of physical stores, it seemed interesting to pursue a company that could potentially offer a suitable solution to an industry that has been severely negatively affected. Since its inception, the company has invested heavily in its role as an interface between offline and online fashion, with marketing campaigns and free delivery and return services.

The research question for this dissertation can be phrased as follows:

“What is the fair value of Zalando SE as of May 6th 2021, and what is the implicit investment recommendation?”

This dissertation is divided into seven chapters. First, a literature review is presented, outlining the most relevant valuation methods. Second, a brief macro-outlook and industry overview are provided. Third, Zalando’s business model and past performance are analyzed, followed by the valuation. Here the fair value is determined by using the chosen methodologies. Lastly, the result is compared with the equity report of the Bank of America.

2 Literature Review

In order to correctly determine the value of a company, it is a basic prerequisite to be familiar with the common valuation methods.

2.1 Valuation Methodologies

(Damodaran, 2011) refers to the following three models: Discounted Cash Flow valuation, Relative valuation and Contingent Claim valuation.

2.1.1 Discounted Cash Flow Valuation

The DCF analysis is one of the most commonly used approaches to assess the value of an asset. To determine the intrinsic value (Net Present Value) of the asset, this method takes into account all expected future cash flows and discounts them (Damodaran, 2013).

Equation 1: NPV

$$Value = \sum_{t=1}^{t=n} \frac{CF_t}{(1+r)^t}$$

where,

n = life of the asset

CF_t = Cash Flow in period t

r = discount rate reflecting the riskiness of estimated cash flows

A more precise explanation of how the expected future cash flows and the discount rate are to be determined is given in the following paragraphs.

Furthermore, a distinction must be made as to whether only the equity stake in a company is to be valued (2.1.1.1), whether the entire company is to be valued (2.1.1.2) or whether the company is to be valued in individual parts (2.1.1.3).

2.1.1.1 Dividend Discount Model

The longest standing and simplest present value model is the DDM. It treats cash flows and share dividends as interchangeable, as the model assumes long-term investors who receive cash returns only in the form of dividends (Pinto et al., 2014).

Equation 2: DDM General Formula

$$\text{Value per share of stock} = \sum_{t=1}^{t=\infty} \frac{E(DPS_t)}{(1 + k_e)^t}$$

where,

$E(DPS_t)$ = expected dividend per share in period t

k_e = cost of equity

With regard to forecasting dividends, various growth models have been developed over time. The two most well-known of these are the *Gordon Growth Model* and the *Two-Stage Dividend Discount Model*.

The former is strongly dependent on the assumption made regarding the growth rate, as it assumes that dividends grow at a constant rate indefinitely (Pinto et al., 2014), whereas the later model is divided into two phases. An initial phase in which the growth rate is unstable, followed by a steady state with a long-term stable rate (Damodaran, 2007).

It should be noted that this model has some deficiencies, among others, it can only be applied to mature companies with verifiable dividend payments.

2.1.1.2 Free Cash Flow Methods

There are three common approaches to obtaining the free cash flow used previously (Equation 1). First, there is the Free Cash Flow to the Firm (FCFF), second, the Free Cash Flow to the Equity (FCFE) and last but not least, the Adjusted Present Value (APV) (Rosenbaum & Pearl, 2013).

2.1.1.2.1 Free Cashflow to the Firm

The free cash flow to the firm comprises the amount of cash flow available to all stakeholders (bondholders, stockholders and preferred stockholders) after the deduction of operating and investment costs (Pinto et al., 2014). The most conventional way to reach the FCFF is as follows (Rosenbaum & Pearl, 2013):

Equation 3: FCFF

Sales
- Costs of Goods Sold (COGS)
- Selling, General and Administrative Expenses (SGA)
= Earnings Before Interest and Taxes (EBIT)
- Tax
= Net Operating Profits After Taxes (NOPAT)
+ Depreciation & Amortisation
- Capital Expenditures (CAPEX)
-/+ Increase/Decrease in Net Working Capital (Change NWC)
= Free Cash Flow to the Firm (FCFF)

In accordance with what has already been mentioned in Equation 1, the FCFF will be discounted to obtain the firm value. As suitable discount rate the weighted average cost of capital (WACC) is applied. Finally, the Terminal Value (TV) will be discounted and added, but more on that later (Luehrman, 1997).

2.1.1.2.2 Free Cash Flow to the Equity

In the case of the free cash flow to equity, only free cash flows are measured that are determined for the equity portion of the company (Koller, Goedhart, & Wessels, 2015).

Equation 4: FCFE, Starting With Net Income

Sales
- Costs of Goods Sold (COGS)
- Selling, General and Administrative Expenses (SGA)
= Earnings Before Interest and Taxes (EBIT)
- Interest
- Tax
= Net Operating Profits Less Adjusted Taxes (NOPLAT)
+ Depreciation & Amortisation
- Capital Expenditures (CAPEX)
-/+ Increase/Decrease in Net Working Capital (Change NWC)
+ Net Borrowings
= Free Cash Flow to the Equity (FCFE)

Alternatively, it is also feasible to derive the FCFE via the FCFF as can be seen below.

Equation 5: FCFE, Starting With FCFF

Free Cash Flow to the Firm (FCFF)
- Interest * (1-Tax)
+ Net Borrowings
= Free Cash Flow to the Equity (FCFE)

Just as with the FCFF, the FCFE must be discounted to obtain the equity value of the company. In contrast to the FCFF, however, the cost of equity rather than the WACC is used as the discount factor. Again, the TV has to be discounted and added (Damodaran, 2001).

2.1.1.3 Adjusted Present Value

The Adjusted Present Value (APV) model initially assumes a purely equity-financed company as the starting point (Koller et al., 2015). Afterwards, benefits and costs of borrowing are added (Damodaran, 2013).

Equation 6: APV Formula

$$\text{Value of the firm} = V_u + PV(ITS) - PV(\text{Bankruptcy Costs})$$

Firstly, to arrive at the value of the unlevered firm, the model uses the unlevered cost of equity (k_e) to discount the FCFF (Fernández, 2007).

Equation 7: Unlevered Cost Of Equity

$$k_e = k_u + \frac{D}{E}(k_u - k_d)$$

where,

k_e = observed cost of equity

k_u = unlevered cost of equity

$\frac{D}{E}$ = market debt-to-equity ratio

k_d = cost of debt

Secondly, the present value of the interest tax shield (benefits of debt) is calculated and added (Damodaran, 2013).

Equation 8: Value Of Tax Benefits

$$\text{Value of Tax Benefits} = \frac{\tau_c \times k_d \times D}{k_d} = \tau_c \times D$$

where,

τ_c = corporate tax

k_d = cost of debt

D = market value of debt

And finally, drawbacks, namely, cost of bankruptcy are subtracted (Damodaran, 2012).

Equation 9: PV Expected Bankruptcy Costs

$$\text{PV Expected Bankruptcy Cost} = \text{Probability of Default} \times \text{PV of Bankruptcy Cost}$$

Overall, the APV of a company is the sum of the individual parts mentioned above. However, one of the major weaknesses of the model is the precise determination of both bankruptcy costs and default probability.

Due to the circumstance that it is not possible to project the FCF of a company indefinitely, a terminal value is needed (Rosenbaum & Pearl, 2009). As mentioned at the beginning (2.1.1.2.1), the TV is discounted and added to the FCF to determine the value of the company.

2.1.1.4 Key Inputs in DCF Valuation

2.1.1.4.1 Terminal Value

In the following, I will present the two generally accepted methods for determining a TV.

2.1.1.4.1.1 Perpetuity Growth Method

This scenario assumes that the FCF of the last year of a company grows in perpetuity. A steady state must therefore prevail (Damodaran, 2011).

Equation 10: PV Of Terminal Value

$$PVTV = \frac{FCF}{r - g}$$

where,

PVTV = Present Value of the Terminal Value

FCF = Free Cash Flow

g = Growth Rate

r = Discount Rate

It is important to note that, depending on the free cash flow method selected, either the WACC or the Cost of Equity must be used as the discount factor (Damodaran, 2011).

(1) FCFF is discounted via the WACC

(2) FCFE & APV is discounted via the Cost of Equity

2.1.1.4.1.2 Exit Multiple Method

Here the terminal value is computed by taking into account the current long-term trading multiple (LTM) of comparable companies.

Equation 11: Exit Multiple

$$\text{Terminal Value} = \text{EBITDA}_n \times \text{Exit Multiple}$$

where,

n=terminal year of the projection period

2.1.1.4.2 Growth rate

When it comes to estimating a company's growth rate, there exist three different ways to do so, namely:

- (1) Estimation based on the historical growth rate
- (2) Taking an equity analyst's growth rate
- (3) Analyzing the firm's fundamentals

According to (Koller et al., 2015), the growth rate of a company should not be higher than that of the economy in which it operates. Also, to be as accurate as possible in the estimation, industry growth and inflation should be incorporated.

2.1.1.4.3 Cost of Debt

A firm's cost of debt can be estimated as follows:

- (1) using the firm's committed yield on commercial debt (long-term bonds) as a proxy (Cooper & Davydenko, 2007)

or

- (2) Assigning a credit rating and calculating the average yield on a portfolio of long-term bonds with the same credit rating (Koller et al., 2015).

Both options show that debt is determined on the basis of market prices and not book-values.

2.1.1.4.4 Discount rate

The discount factor accounts for significant differences in the various DCF valuation methods.

According to (Damodaran, 2012), the discount rate (r) has included the risk-free rate (r_f) plus a certain premium and is thus a function for the riskiness of the cash estimates.

2.1.1.4.4.1 Cost of Equity

A company's equity investors expect a certain rate of return, namely cost of equity, for bearing the risk of holding any asset different to the risk-free. In this context, the most recognized models to compute this rate of return are the Capital Asset Pricing Model (CAPM) and the Fama-French three-factor model (Pinto, 2015).

Capital Asset Pricing Model

(Jagannathan & WANG, 1996) state that in CAPM the ERP is certainly influenced by the relationship between the observed asset and the market portfolio.

Equation 12: CAPM

$$E(R_i) = R_f + \beta_i[E(R_M) - R_f]$$

where,

$E(R_i)$ =Expected Return of security i

R_f =Risk free rate

β_i =Beta of security i

$[E(R_M) - R_f]$ =Equity Risk Premium (ERP)

$E(R_M)$ =Expected Return on the market portfolio

Fama French Three Factor Model

With the addition of two more risk factors, size and value, Fama and French extend the CAPM. This appears to increase the accuracy of expected returns.

Equation 13: FF3 Model

$$E(R_i) = R_f + \beta_i^{mkt} [E(R_M) - R_f] + \beta_i^{size} E(SMB) + \beta_i^{value} E(HML)$$

where,

SMB = difference in returns of a portfolio of small stocks and a portfolio of big stocks

HML = difference in returns of a portfolio with high book-to-market stocks and a portfolio of low book-to-market stocks

While the former model illustrates a more economically based and objective approach, the FF3 model is based more on empirical data. Hence, the most applied model for determining the cost of equity capital is the CAPM (Damodaran, 2013).

2.1.1.4.4.2 Beta

In general, the β -factor expresses the exposure of an asset to market risk (Pinto, 2015) or, in other words, the systematic risk. While an asset with a beta of 1 expresses a high correlation to the market, a beta value of <1 reflects a lower and >1 a correspondingly higher risk to the market.

In order to obtain a beta estimate, an ordinary least squares regression of the stock return on the market return is performed (Pinto et al., 2014). The result is an unadjusted beta version. According to (Blume, 1975), adjustments have to be made.

Equation 14: Blume Adjusted Beta

$$\text{Adjusted } \beta = \frac{2}{3} \times \text{Unadjusted } \beta + \frac{1}{3} \times 1$$

where,

Unadjusted β = Beta computed by regression

2.1.1.4.4.3 Equity Risk Premium

The equity risk premium (ERP) indicates the additional return expected by market participants for taking a higher risk when investing in portfolios other than risk-free portfolios.

As a common proxy for the market portfolio, one uses the MSCI World Index (Koller et al., 2015). Moreover, literature states that the ERP is between 5% and 7% (Dimson, Marsh, & Staunton, 2003).

For the valuation of Zalando, the equity risk premium (ERP) is calculated as a weighted average based on the operating country significance. Estimates are taken from Damodaran database.

2.1.1.4.4.4 Country Risk Premium

Investors ask for this additional premium when investing in a foreign country. The country risk premium is intended to compensate for macroeconomic effects such as political instability, inflation, etc. (Damodaran, 2012).

As Zalando operates throughout Europe, this risk can be assumed to be diversified and is therefore not taken into account.

2.1.1.4.4.5 Risk Free Rate

If, after a given holding period of an asset, the actual return is equal to the expected return, this is referred to as the risk-free rate (Damodaran, 2008).

As there are no completely risk-free investments, the yield of long-term debt instruments of highly rated countries is usually taken as an approximation, since their default risk is minimal. Furthermore, to avoid exchange risk, the currency of the risk-free rate should match that of the cash flows.

In Zalando's case, a 10-year German government bond, as a proxy for the risk-free rate, will be used.

2.1.1.4.4.2 Weighted Average Cost of Capital

As a commonly used discount rate, the WACC relates the cost of capital to the company's financing structure, taking into account the effective tax rate (Farber, Gillet, & Szafarz).

Equation 15: WACC

$$WACC = k_E \times \frac{E}{V} + k_D \frac{D}{V} \times (1 - t)$$

where,

k_E =Cost of Equity

k_D =Cost of Debt

$\frac{E}{V}$ =Equity Ratio

$\frac{D}{V}$ =Debt Ratio

t =Tax Rate

It should be noted that the market values for equity and debt capital are to be used for the calculation of the WACC (Booth, 2002).

2.1.2 Relative Valuation

The relative valuation methodology places the target company in relation to its peer group. With the help of this benchmark, the value of the company at a specific point in time can then be determined. Factors such as investor sentiment and the market environment are thereby incorporated. For highest accuracy, forward-looking multiples (Rosenbaum & Pearl, 2013) and a qualitatively appropriate peer group (Koller et al., 2005) should be chosen. More specifically, the companies included in the peer group should have similar business profiles and similar forecasts for growth and ROIC (Koller et al., 2005). As a supplement to the intrinsic DCF valuation, this method is ideally suited.

Valuation multiples can be divided into price multiples and enterprise value multiples (Pinto et al., 2014). The most widely used of these are the Price-Earnings-Ratio (PER), Price-Earnings-Growth (PEG), the EV/EBIT and EV/EBITDA (Koller et al., 2005).

2.1.2.1 P/E Ratio

As a multiplier frequently used by analysts, the P/E ratio reflects the ratio of the current share price (company value) to expected earnings (profit) for the next year.

Despite its popularity, there is also a major drawback: returns can be affected by the capital structure, leading to biased estimates (Fernández, 2001).

2.1.2.2 PEG Ratio

By taking the previously mentioned P/E ratio and dividing it by the expected growth rate, this metric creates a more accurate picture of whether a stock is over- or undervalued (Fernández, 2001). However, since the correct prediction of the growth rate is very difficult and it assumes that the long-term future growth is captured by the short-term growth forecast (Easton, 2004), the PEG multiple will not be considered.

2.1.2.3 EV/EBITDA

EV/EBITDA considers the company's debt level and is therefore less susceptible to manipulation with regard to capital structure changes than the P/E ratio and PEG (Koller et al., 2015). For companies with different debt levels, this multiple is therefore most suitable (Pinto et al., 2014).

2.1.2.4 EV/Sales

This multiple is mainly used in the valuation of early-stage or high-growth companies. It allows analysts to reduce accounting differences to their minimum and the impact of the capital structure on equity multiples. In particular, it can be a helpful tool for industries with unstable or negative earnings (Koller et al., 2015).

2.1.3 Contingent Claim Valuation

The use of this method allows the valuation of assets with option-like characteristics (Damodaran, 2013) Instead of having a static decision as their basis, real options assume a dynamic series of decisions (Mun, 2006).

2.1.4 Final Consideration

Taking into account the literature presented, the DCF valuation, complemented by the relative valuation, seem to be the most appropriate approach for Zalando. Despite the recent changes in the capital structure due to the bond issues and loans in 2020, Zalando is anticipated to retain its equity-based structure. Moreover, the DCF valuation, even though highly assumption based, provides a complete company analysis and is the most popular among practitioners. For the relative valuation the following multiples are used, namely, P/E, EV/Sales and EV/EBITDA. As the company does not pay dividends, the DDM is not applied either.

3 Industry Overview

In order to forecast Zalando's financial performance, it is essential to have a thorough understanding of the economic environment as well as the industry-specific context the company works in. In the following, I will address precisely these two aspects by providing a macroeconomic outlook with reference to potential threats and opportunities that may come to the industry.

3.1 Macroeconomic Outlook

Even one year after the pandemic outbreak, the global outlook remains highly uncertain. Viral mutations and the rising number of deaths remain a concern, despite the fact that vaccination coverage continues to increase. The economic recovery of individual countries and sectors varies widely and relies upon various measures taken and the degree of political help. Now, the outlook depends not only on containing the virus with vaccines, but also on how effectively economic policies can restrict the damage of this crisis (IMF, 2021).

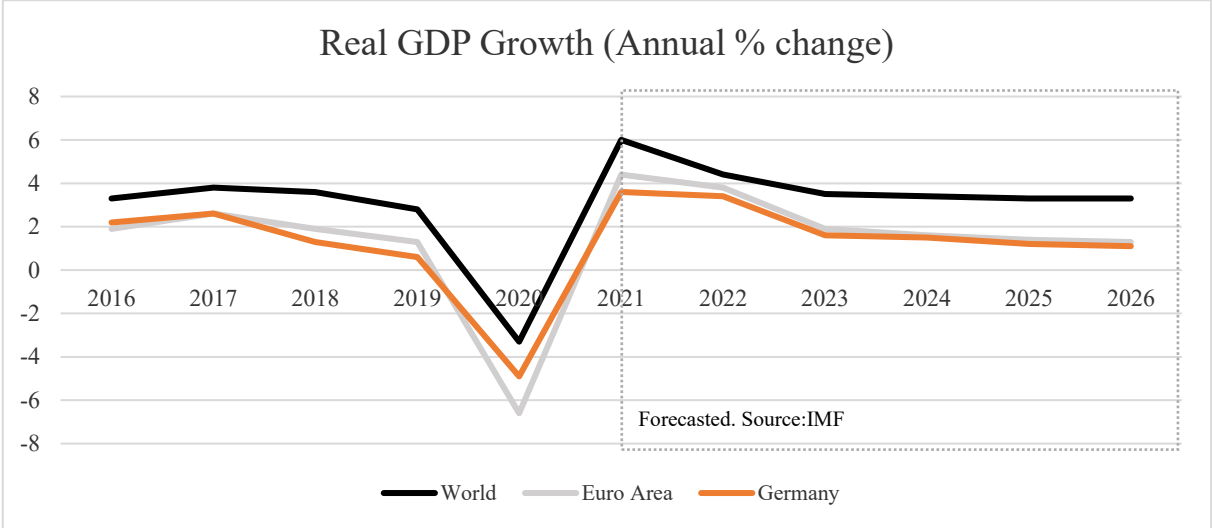
As Figure 1 reveals, global growth is estimated at 6% in 2021 and 4.4% in 2022 (IMF, 2021).

This is based on the following assumptions: First, expected vaccine-driven recovery and, second, continued adjustment of economic activity to depressed mobility (IMF, 2021).

What remains to be closely monitored, however, is the development of financial conditions (IMF, 2021).

In the following, the real GDP growth of the Eurozone, with Germany as Zalando's headquarters and part of the DACH region (also including Austria and Switzerland), is set in relation to the World, as these represent the company's market.

Figure 1: Real GDP Growth



As the decline clearly shows, overall growth expectations fell sharply immediately after the COVID-19 outbreak, reflecting low market confidence. Nevertheless, experts expect a V-shape recovery, with pre-pandemic growth rates as early as mid-2020 and a peak in 2021 before growth levels off slightly and stabilizes again (IMF, 2021).

While the effects of the pandemic did not leave Zalando unaffected in 1Q20, the company, as a fashion e-commerce marketplace, was able to take advantage of the momentum with the help of its forward-looking strategic orientation and reported FY20 as its strongest year to date in terms of revenues (Zalando, 2020a).

According to (BoF and McKinsey & Company, 2021), the industry saw the equivalent of six years of growth in online shopping penetration in just eight months.

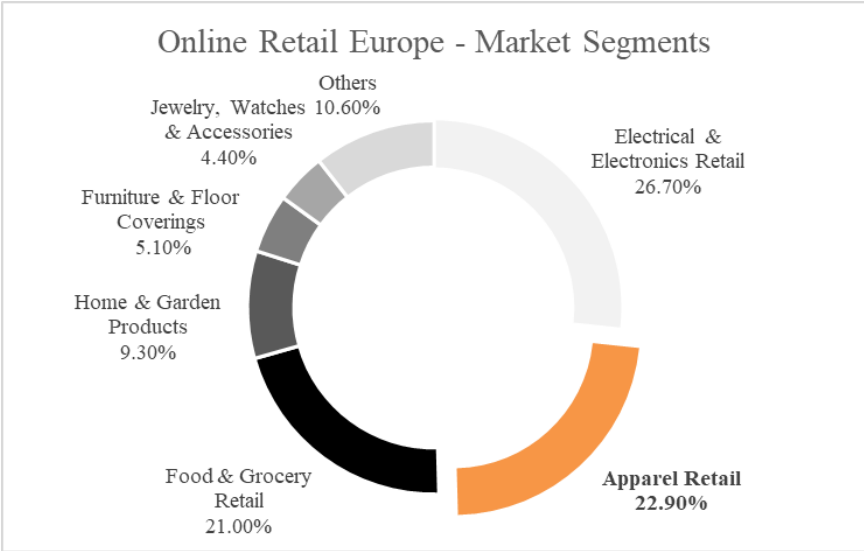
Even though the growth curve of online shopping will slow down, the overall trend is likely to remain. This is a finding of a recent survey in which more than fifty percent of the consumers said they are less likely to shop in physical stores after the closure, primarily because the measures against the virus make the shopping experience less pleasant (BoF & McKinsey & Company, 2021).

3.2 Industry Analysis

For a more accurate definition of the industry, a top-down approach is used. Starting with the European online retail market as a whole, and moving on to the e-commerce of fashion and the fashion industry.

The total online retail market in Europe was valued at USD 403.9 Bn in 2020 and is estimated to reach USD 579.8 Bn by 2025, at a CAGR of 7.5% from 2020-25. Within this, electrical and electronics retailing captures the largest market segment, followed by apparel and food (Marketline, 2021a).

Figure 2: Online Retail Europe – Market Segments



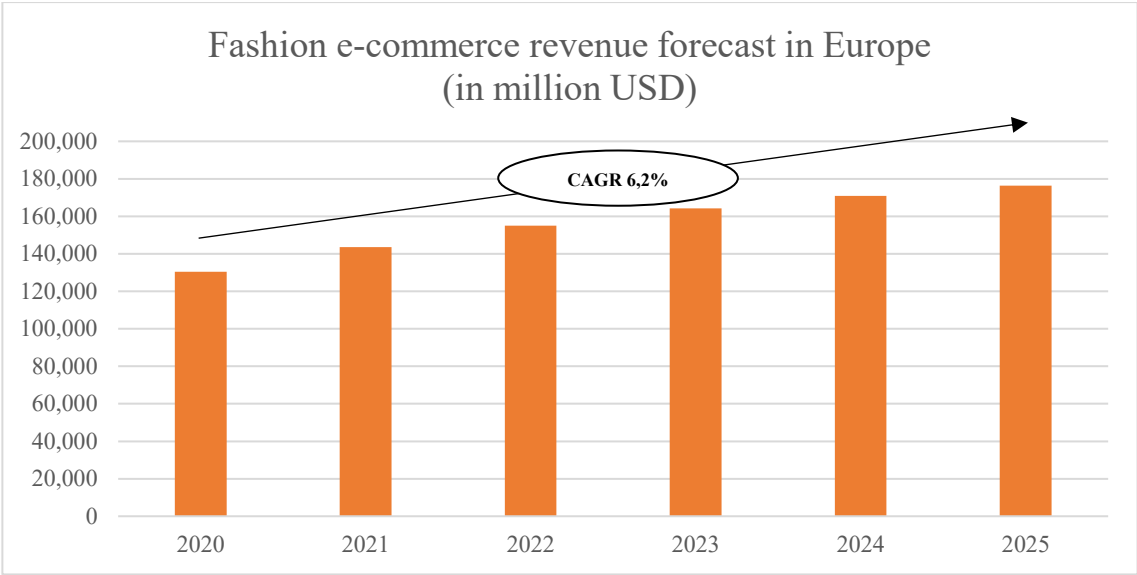
Source: Marketline (2021)

As highlighted in the chart above, the "apparel" segment is of particular relevance for Zalando, as it represents the company's largest product category (Marketline, 2021a).

Furthermore, it is worth mentioning that this sector is divided into the following three categories, namely, large e-commerce marketplaces which offer a wide range of products, multi-label online fashion stores which offer a wide range of brands, and fashion retailers that build e-commerce capabilities alongside their traditional offline channels (BoF & McKinsey & Company, 2021).

This market segment alone is expected to generate revenues of USD 176.450 Bn by 2025, at a CAGR of 6.23% during 2020-25 (Statista, 2020).

Figure 3: Fashion e-commerce revenue forecast in Europe



Source: Statista (2020)

Nevertheless, online-only retailers in this sector are still constrained by a natural barrier when it comes to increasing their share of the overall fashion market (BoF & McKinsey & Company, 2021).

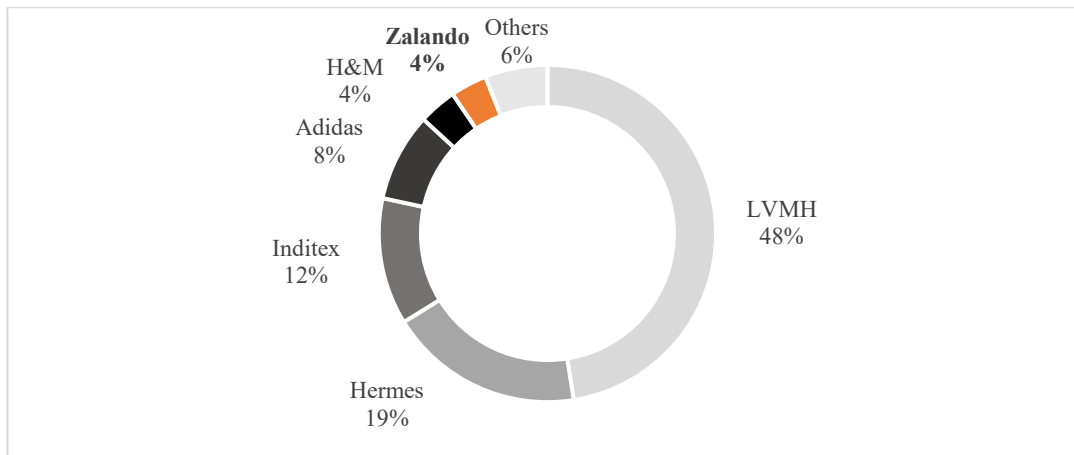
3.2.1 Industry Players

Since Zalando, as a multi-label online fashion store, falls into a very specific segment within the fashion industry overall, the following section attempts to classify the company in terms of its share of the European fashion market, which itself is highly segmented.

It should be noted that the two biggest personal luxury goods (PLG) companies, LVMH and Hermes (Mosendz, P., 2014) are competitors whose main revenue driver is not Europe, which makes this comparison more difficult and may even distort the market proportions. Nevertheless, it is worth listing them here, as they are representative of fashion industry.

Based on market capitalization, it quickly becomes clear that already firmly established fashion retailers, with e-commerce capabilities alongside their traditional offline channels, still have a dominant position. However, with its 4% market share, Zalando already represents a considerable share compared to other multi-label online fashion stores such as ASOS (1%), Farfetch UK (2%), etc., which have been grouped among others.

Figure 4: Players size in terms of total industry market capitalization



Source: Refinitiv Eikon (2021)

3.3 Risks and Opportunities

The following section presents opportunities that Zalando potentially will be able to seize due to its financial performance which is based on its customer base and its operational network, as well as potential risks that may arise from increased debt and market trend shifts. Additionally, a SWOT analysis is provided in Appendix 1 to further illustrate Zalando's strengths and weaknesses.

While on the one hand the company is targeting additional growth through further business expansion in Central and Eastern Europe in FY21/22, driven by overall market developments such as increased disposable income, a growing base of middle-class consumers and rising living standards, on the other hand certain threats cannot be ignored (Marketline, 2021b).

Hence, Zalando is exposed to a highly competitive sector with intense price competition due to low entry barriers. The company has to compete with both already established competitors, namely, third-party brands that use capital to provide their own direct-to-consumer online services, and new market entrants. Moreover, fashion has a limited shelf-life and it is difficult to estimate the right mix of basics and the latest trends in the appropriate quantities. Besides, there are major seasonal fluctuations, and products may not be accepted in some countries. Finally, the sale of counterfeit products, credit card fraud and non-delivery of goods should not be neglected. These frauds are difficult to

combat and can lead to high costs and low customer confidence in online shopping (Marketline, 2021b).

4 Company Overview

As equity valuation depends to a large extent on the assumptions made, they should be preceded by an understanding of the respective business and its strategy, as well as a precise examination of historical performances. Only then trends can be optimally identified that will have an impact on the future.

4.1 Business Analysis

Zalando SE, based in Berlin, is a fashion and lifestyle platform founded in 2008 by Robert Genz and David Schneider. Since then, the company has established itself as Europe's leading online fashion platform, serving customers from 17 different countries. The assortment includes a range of shoes, clothing, accessories, beauty products and sporting goods for women, men and children. With more than 3,500 brands, from fashion companies to designer works to its own products, Zalando's Fashion Store offers its customers a wide range of selection. Product purchases can be made via desktops, tablets and smartphones. From the very beginning, Zalando has set new standards in online retailing with its offer of free delivery and up to 100-day return policy. The company's geographical presence can be subdivided into DACH and Rest of Europe with 14,194 employees from more than 130 countries (Refinitiv Eikon, 2021).

4.1.1 Zalando's Vision and Strategy

"It is our ambition to become the Starting Point for Fashion in the markets we serve." (Zalando, 2020a).

To achieve this goal, Zalando is relying on its platform strategy. The company envisions the platform in its final stage to be not only convenient to use, but also to offer customers a frictionless selection of all product categories, styles and price ranges with personalized recommendations (Zalando, 2020a).

Zalando is aware that the creation of this multi-brand marketplace is only possible with the help of strong partner relationships and therefore supports their digitization process (Zalando, 2020a).

Moreover, the firm is convinced that its combination of fashion retail, convenience and technology will create great value for all parties involved (Zalando, 2020a).

All in all, the aim is to continue to grow faster than the online fashion market and to generate further market share (Zalando, 2020a).

4.1.2 COVID-19 Response

While the entire fashion industry was significantly affected by the COVID-19 pandemic, Zalando succeeded in taking advantage of the opportunities that arose during this challenging period and continued to build on its strategic strengths.

The past year (2020) has shown that e-commerce is becoming an increasingly important part of society. The extreme life changes caused by the pandemic have further accelerated the "shift from offline to online". Zalando's good positioning in the market has enabled it to capitalize on the momentum and take a central role in supporting its partners. In particular, companies with little online presence were integrated into Zalando's platform. The company also offered its marketing and fulfillment services. Consequently, its partners were able to increase their sales and expand their product ranges on Zalando's marketplace. Despite a great amount of uncertainty in the market, Zalando succeeded in topping its initial guidance for the year 2020 (Zalando, 2020a).

4.1.3 Business Development

With further growth of the active customer base (42m), deeper customer relationships with stable order frequency (5.0 per active customer) and the expansion of its partner program, the company is setting clear strategic priorities (Zalando SE, 2021a). Subsequently, these general points will be concretized.

First, Zalando is trying to shift from traditional fashion campaigns to engaging fashion stories (e.g., "#TogetherIamstrong"), creating a brand narrative and social-first mentality. As a result,

the company has increased its investment in social media on relevant platforms, which has also led to greater marketing efficiency by reducing the cost per reach (Zalando, 2020a).

Second, with the creation of enhanced customer experiences via "Brand Homes", where partners can showcase their collections in new and inspiring ways, or "pre-owned", where used clothing can be sold in exchange for store credit, more long-term loyalty and trust is built (Zalando, 2020a).

Third, Zalando plans to expand its European logistics network, which currently comprises ten locations, by five new sites by 2023 to further ensure the best possible convenience. The company is also clearly pursuing its growth strategy with the opening of two more outlet stores in Mannheim and Ulm and the expansion of the platform in six new markets (Zalando, 2020a).

With the acquisition of Fision, a developer of mobile body scanners, in late 2020, Zalando has addressed a well-known online shopping problem of finding the right size and fit to reduce return rates (Zalando, 2020a).

In order to be able to take advantage of investment opportunities regardless of prevailing market conditions and to grow further, two convertible bonds were issued in FY20 (Zalando, 2020a).

Finally, Zalando offers stationary stores online customer contact with "Connected Retail" and also provides its customers and partners simple marketing and logistic concepts with ZMS (Zalando Marketing Services), ZFS (Zalando Fulfillment Solutions), ZSS (Zalando Shipping Solution) and ZRS (Zalando Return Services) (Zalando, 2020a). By incorporating all of the above services into the Company's platform business model, the Company seeks to achieve a higher profit margin in the long term (Zalando SE, 2021b).

4.2 Share Price Development

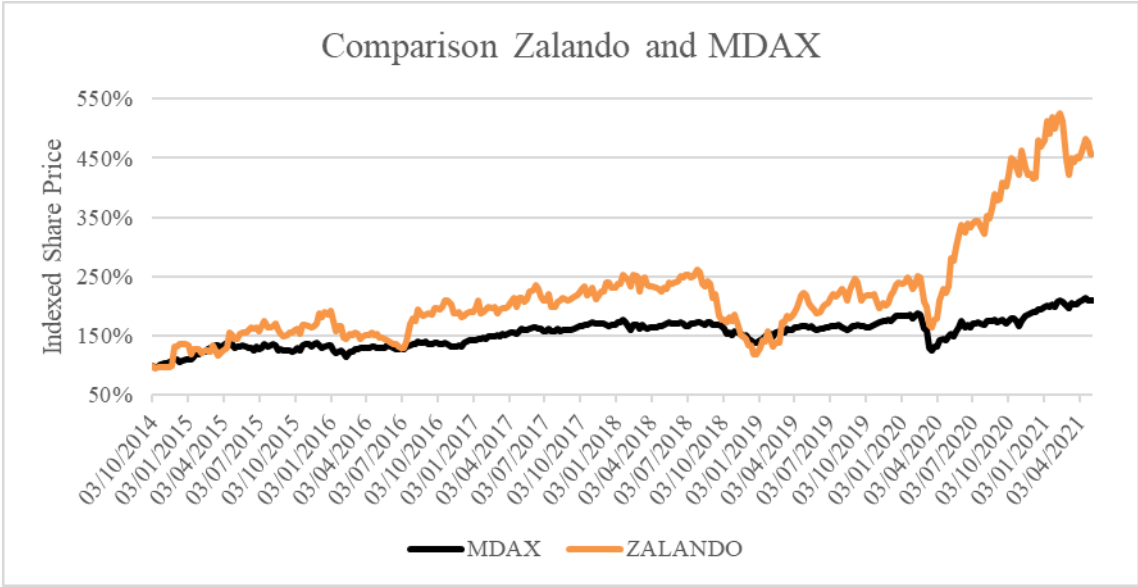
On October 01, 2014, Zalando SE was officially listed at Deutsche Börse's XETRA with an initial offer volume of EUR 605m (incl. over-allotment). Its share price was EUR 21.50 and a total of 28.2m shares have been allocated.

Shortly thereafter (June 22, 2015), the company was admitted to the Mid-Cap DAX (MDAX), which is the second-largest German index after the DAX30 and comprises the 60 largest companies by market capitalization and volume. Zalando is also listed in four other indices.

Of the total 255.3m shares outstanding, 67% are in free float, corresponding to 171.1m shares. The three largest shareholders of the company are Kinnevik AB (21.11%), Baillie Gifford & Co. (11.56%), and Anders Holch Polvsen (10.05%) (Zalando,2020a). The average daily trading volume of shares in 2020 was 2.4 Mn.

The Zalando share was also not exempt from the market low caused by COVID-19 at the beginning of March. Nevertheless, as a company of the so-called "stay-at-home" sector, they managed to take advantage of the positive momentum and achieve a new all-time high of EUR 91.06 at year-end (December 30, 2020) (Zalando,2020a).

Figure 5: Evolution of Zalando's Share Price compared to Index



Source: Refinitiv Eikon (2021)

The chart shows Zalando's relative returns since IPO. The company has outperformed its benchmark index (MDAX) since then, with an extreme breakout to the upside since March 2020. This underlines the effectiveness of the company's strategy and the creation of long-term value.

4.3 KPI Analysis

To manage its business and achieve long-term value creation, Zalando tracks the following financial and non-financial performance indicators in particular.

4.3.1 Historical Revenue Analysis

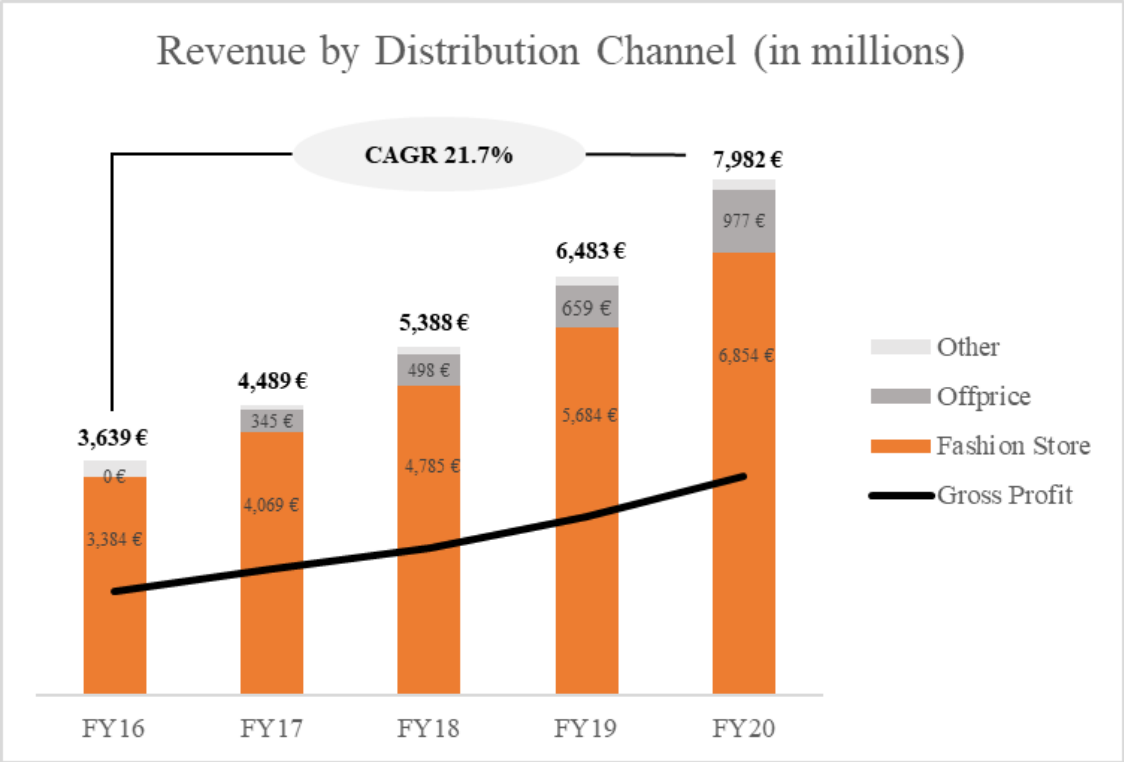
Zalando's sales are divided into the Fashion Store, Off-price and Other segments. Zalando's online shop (Zalando app and website) is clearly the main revenue generator with EUR 6,854m, representing 86% of total revenue in FY20. As shown in the graph, the revenues of Off-price were only added in FY17. This consists of the "Zalando Lounge", the stationary outlet stores and B2B overstock management. Also accounting for a small part only is Others, which consolidates still-developing services such as Zalando Marketing and Zalon.

The CAGR of 21.7% over the last 5 years reflects exceptionally strong growth. The main reason for this growth, especially in FY20 (23.1% YoY), was Zalando's platform strategy combined with new customer growth.

A clear trend in customer demand for digital offerings was further reinforced by the COVID-19 pandemic, which resulted in Zalando adding over 250 new partners to its program.

Finally, the new customer mix led to a decrease in the return rate, which also had a positive impact on the company's revenue (Zalando, 2020a).

Figure 6: Revenues by Segment

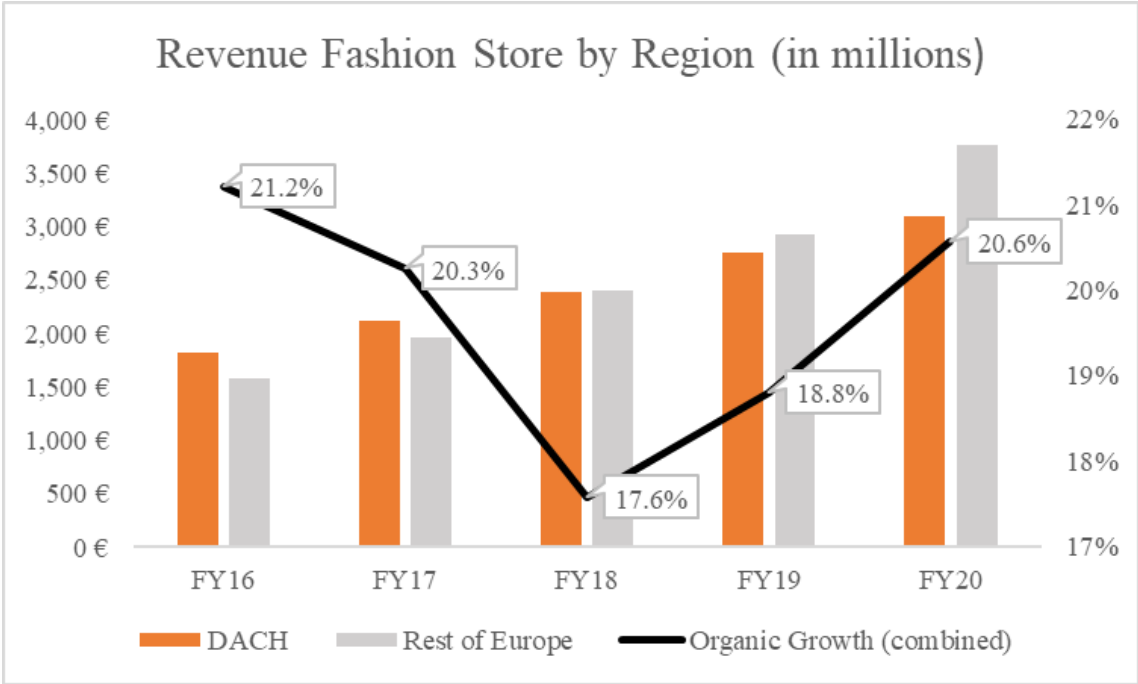


Source: Zalando's annual report (2020) and own analysis

In further consideration and breakdown of the main sales channel is the geographical segmentation of Zalando into DACH and Rest of Europe.

While the DACH region with Germany as headquarters represented the revenue origin until FY18, a change is emerging. In FY18, the DACH region represents the now smaller contribution to total revenue with slightly less than half of the total revenue. With Zalando's expansion into new European markets such as Ireland and the Czech Republic (summer 2018), the Rest of Europe segment is gaining in importance. Despite an impressive CAGR of 14.3% in the DACH region over the last 5 years, Rest of Europe is growing at an average of 24.4% per year, making it the main revenue driver. Organic Growth (combined) reflects the consolidated sales growth YoY of both regions (Zalando, 2020a).

Figure 7: Revenues by Region



Source: Zalando's annual report (2020) and own analysis

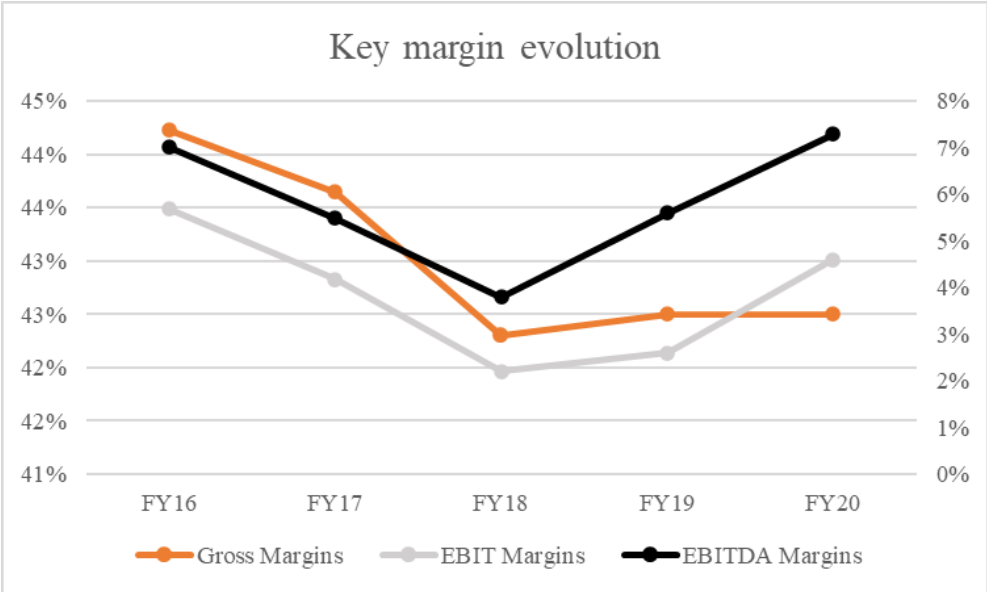
4.3.1.1 Margin Analysis

With Zalando strategically focused on growth and thus further expanding its first-mover advantage through investments, the high costs are putting pressure on the otherwise high margins. Nevertheless, a positive trend can be identified, showing increasing development due to general economies of scale and savings efforts. Both EBITDA and EBIT margins have

improved strongly. Zalando's EBIT margin of 4.6% in FY20 increased by 2 pp. YoY, mainly due to a lower fulfillment cost ratio of 1.6 pp.

The company's gross margin of 42.5% was negatively impacted by inventory write-downs and country and product mix effects in early 2020. Even the lower excess inventories and inventory write-downs due to the high level of sales later this year could not fully offset this (Zalando, 2020a).

Figure 8: Key margin evolution

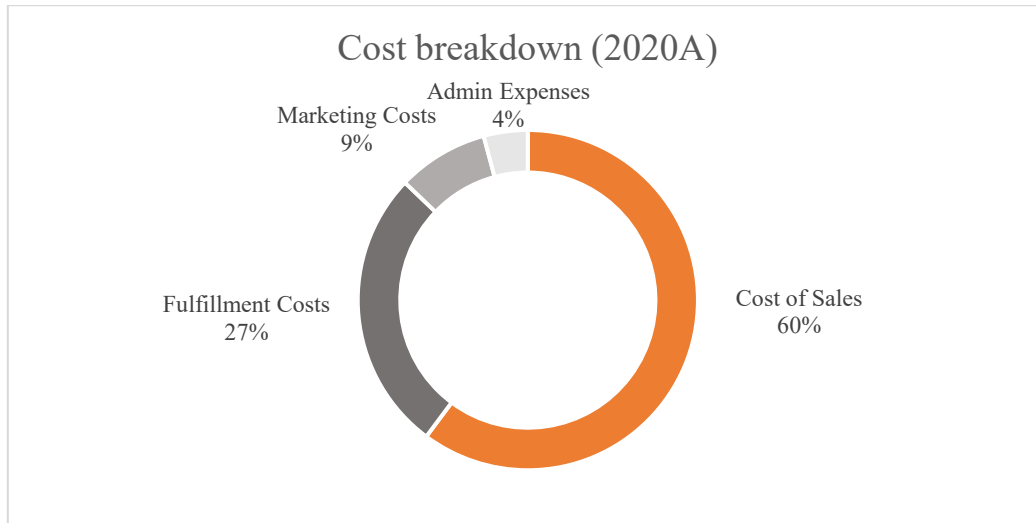


Source: Zalando's annual report (2020) and own analysis

4.3.2 Historical Cost Analysis

The company's costs are composed as follows.

Figure 9: Cost breakdown



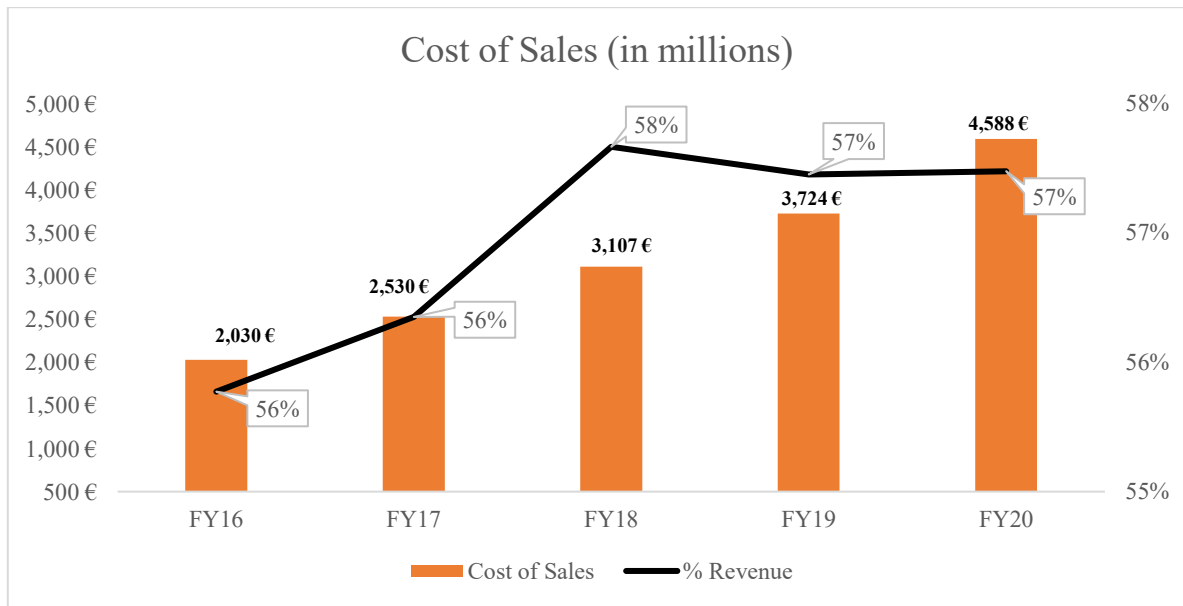
Source: Zalando's annual report (2020) and own analysis

With more than half of the total costs, cost of sales is the largest cost block, followed by fulfillment costs, which account for about one third. Compared to those, marketing costs and administrative expenses constitute only a small part.

If one now delves deeper, it becomes clear that 86% of the cost of sales is used for the cost of materials. At EUR 3,953.9m in FY20, the cost of materials is the main cost driver at Zalando. The remainder consists of personnel expenses, inventory write-downs, third-party services and infrastructure costs.

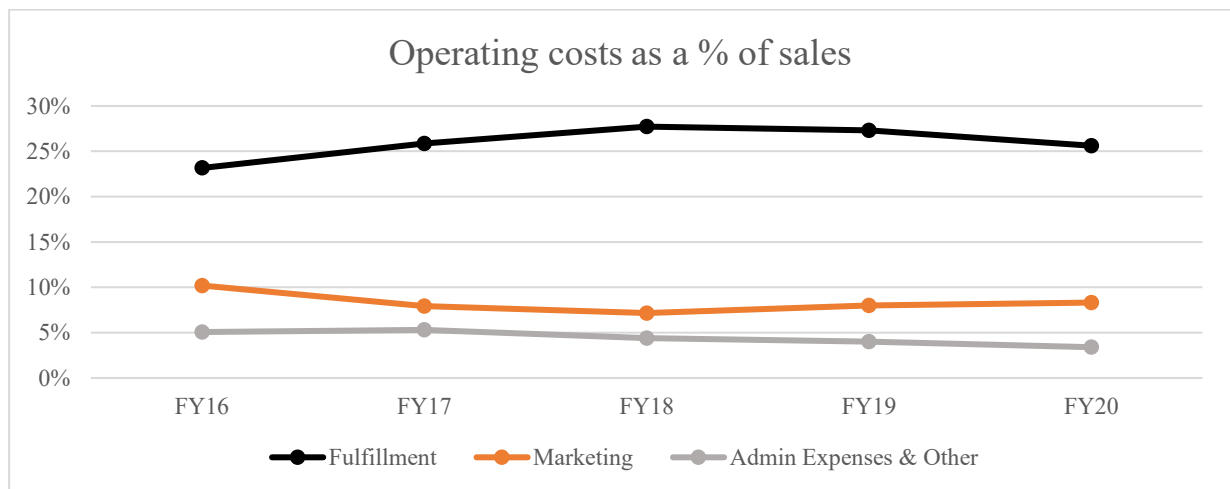
Furthermore, with an increase from EUR 3.724m in FY19 to EUR 4.588m in FY20, cost of sales grew by 23.2%. Nonetheless, costs have increased in proportion to revenue, so that Costs/revenue have remained relatively stable at 57% over the past five years (Zalando, 2020a).

Figure 10: Cost of Sales



Source: Zalando's annual report (2020) and own analysis

Figure 11: Operating costs as a % of sales



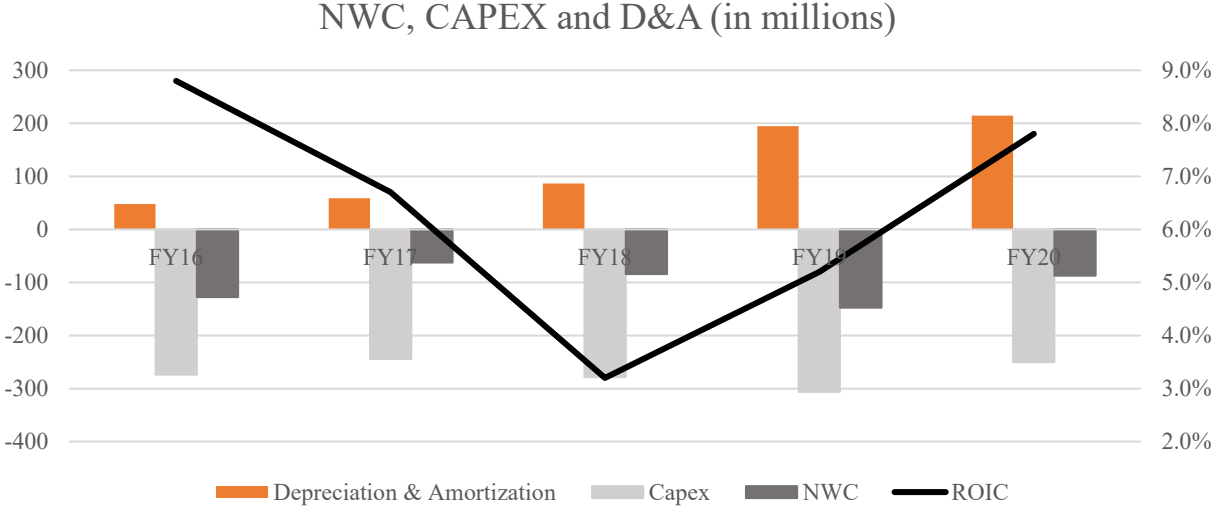
Source: Zalando's annual report (2020) and own analysis

For the fulfillment cost ratio, an improvement of 1.6 pp. from 27.3% in FY19 to 25.7% in FY20 has been recorded. This was mainly due to lower logistics costs enabled by a lower returns rate and better capacity utilization. In contrast, the marketing cost ratio YoY increased by 0.2 pp. In 2020, the company acknowledged the increased customer demand and raised its investment in personalized marketing, resulting in more sales and greater awareness of its brand marketing

campaigns such as "We will hug again." In addition, overhead cost efficiency and top line growth reduced the administrative expense ratio by 0.6 pp. YoY (Zalando,2020a).

4.3.3 NWC, CAPEX and D&A

Figure 12: NWC, CAPEX and D&A



Source: Zalando’s annual report (2020) and own analysis

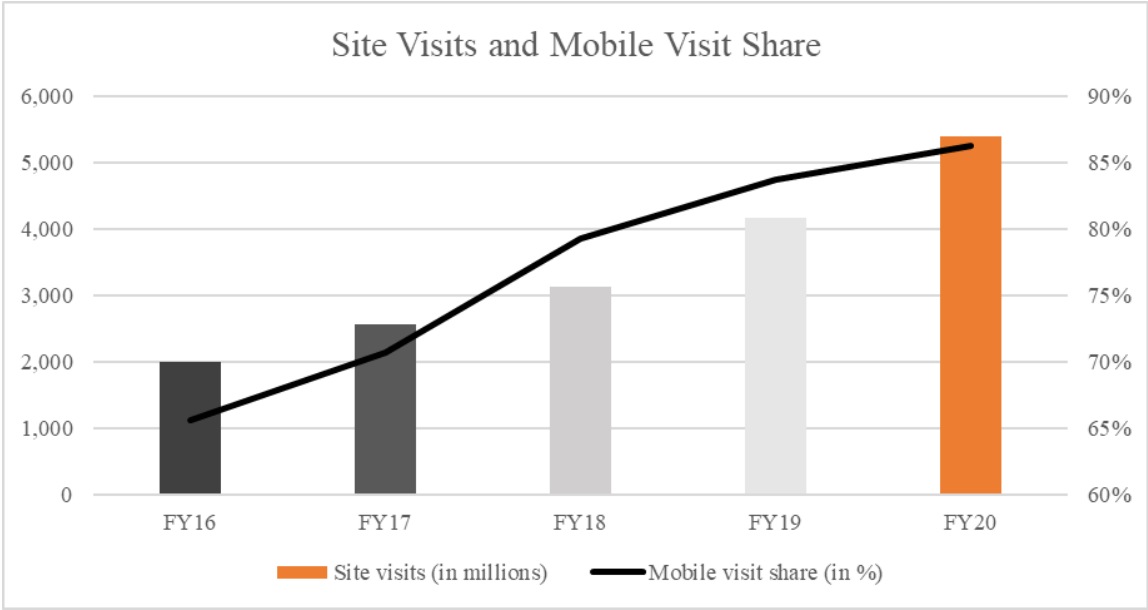
In terms of CAPEX, Zalando continues to focus on growth, hence spending has remained relatively constant over the last five years, even in 2020 when the economy has slowed down. This includes investments in logistic infrastructure at fulfillment centers as well as in internal software development.

With regards to the NWC, as inventories and trade and other receivables increased due to higher business volume in FY20, the company was able to increase the value from EUR -147.7m in FY19 to EUR -87.4m in FY20.

Finally, the increase in Depreciation and Amortization is caused by further investments in long-term assets (Zalando, 2020a).

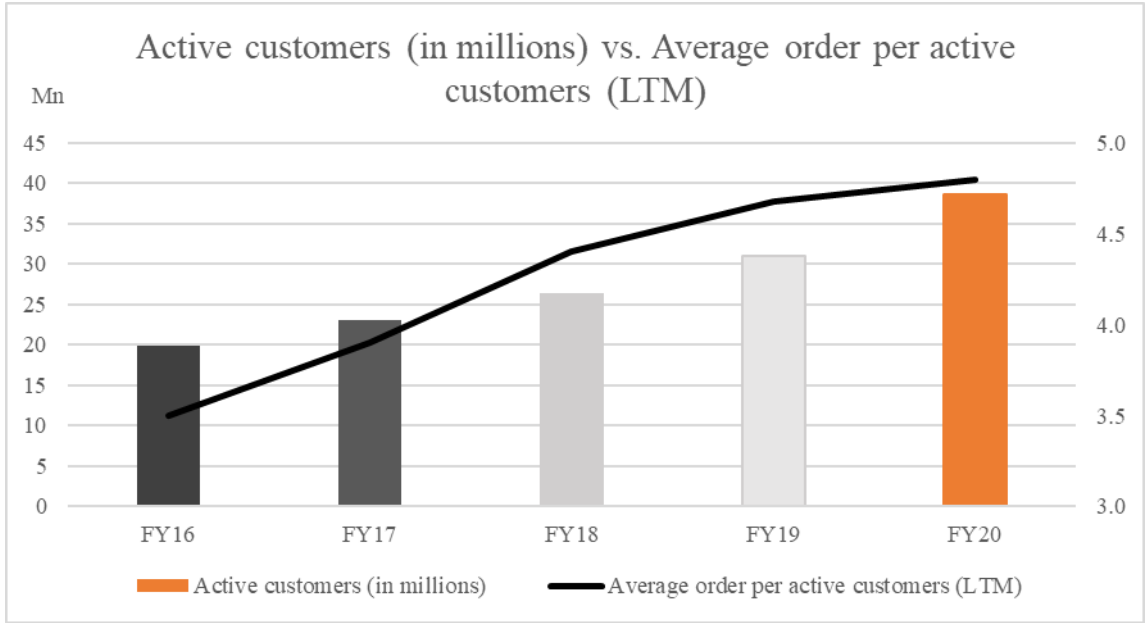
4.3.4 Key non-financials

Figure 13: Site Visits and Mobile Visit Share



Source: Zalando’s annual report (2020) and own analysis

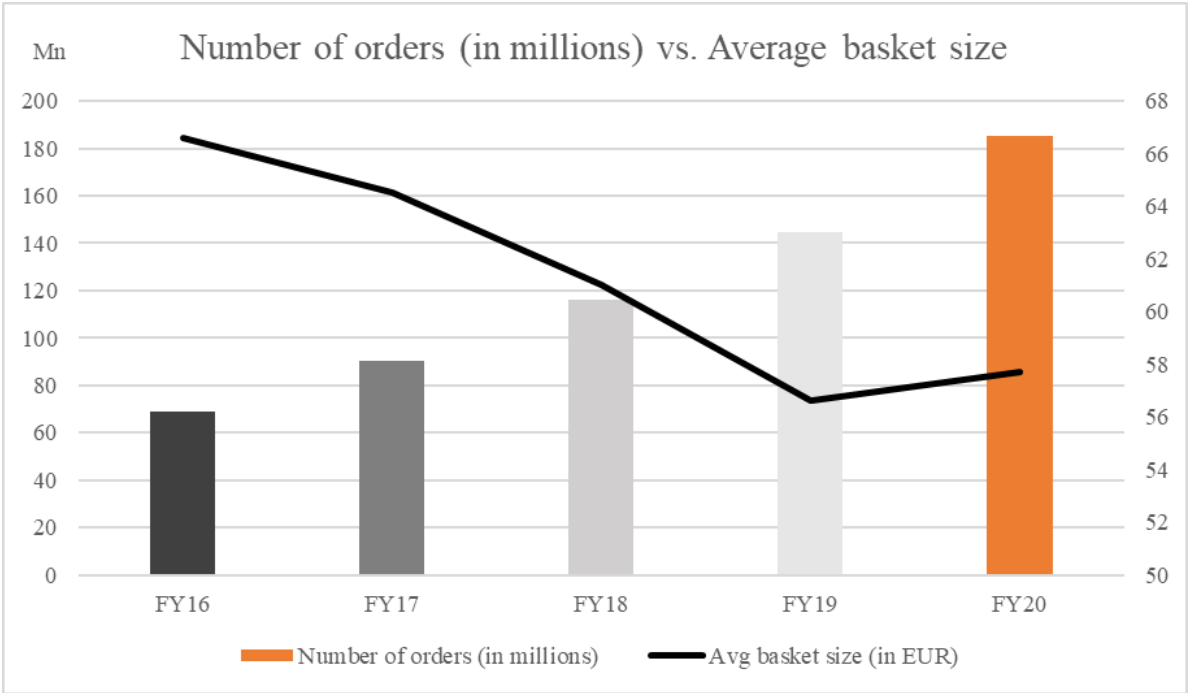
Figure 14: Active customers and Average order per active customers



Source: Zalando’s annual report (2020) and own analysis

In 2020, Zalando reached an all-time high in new customer acquisition. Changes in customer shopping behavior along with improved return rates and a changing category mix adding need-based categories, became apparent. This is accompanied by a 25% growth in active customers and a 29.1% YoY increase in website visits. An increase in this non-financial performance indicator is accompanied by higher order volumes (28% YoY) and higher marketing revenues. In addition, a significant increase in shopping behavior via mobile devices can be observed. The share of mobile website visits in the total number of website visits increased by 2.6 pp. in FY20. To keep up with this trend, the company is constantly updating its mobile websites and apps (Zalando, 2020a).

Figure 15: Number of orders vs. Average basket size



Source: Zalando’s annual report (2020) and own analysis

Next, Figure 15 above shows that Zalando's order volume, which is in addition to revenue a key driver to growth, has increased approximately two and a half times over the last four years, while the average basket size has decreased. One possible reason for this may be the business expansion into other European countries. Compared with the DACH as the original market, order amounts in other regions of Europe are lower, which in total corrects the average of a basket downwards (Zalando, 2020a).

4.3.5 Capital Structure

With the uncertainties in 1Q20, Zalando made use of its revolving credit line to ensure sufficient short-term liquidity. Current borrowings thus increased from EUR 374.9m to EUR 377.7m in FY20. However, Zalando aims to liquidate this credit in time, which is why it is now recognized under current liabilities.

Moreover, the Company issued two tranches of unsubordinated, unsecured convertible bonds on August 6, 2020. The nominal value of each bond was EUR 500.0m, one with a maturity of five years and the other with a maturity of seven years, which resulted in total gross proceeds of EUR 1,004.4m. This issue further diversified the company's sources of financing.

Due to IAS 32, the equity component of the bonds was recognized separately from the financial liability.

As of December 31, 2020, the carrying amount of the Company's debt represented 67% of total assets, compared to 61% in 2019, an increase of 6%. Besides, no other changes to Zalando's capital structure are mentioned (Zalando, 2020a).

5 Valuation Model

In the following, the fair value of Zalando SE as of 6 May 2021 will be assessed. For this purpose, the valuation is based on the DCF model, which is supplemented by a relative valuation based on multiples. The dividend discounting method is not applied in the valuation of Zalando (2.1.1.1; Chapter 2). Finally, a sensitivity analysis is performed to account for the uncertainties of the assumptions made.

5.1 Discounted Cash Flow Valuation

5.1.1 FCFF Projection

Since I assume that Zalando, as a growth-oriented company, will continue to benefit from the structural growth in the direction of online shopping and digitization, a forecast period of ten years is used. After *phase one*, which consists of the first five years (*FY2021-2025*) and includes both the company's guidelines and the general market perception, a period of

growth reversal (*phase two*; FY2026-2030) is assumed, which ends in a steady state, eventually.

5.1.1.1 Revenue Estimation

Zalando's revenues are forecasted based on publicly available company information, the historical development of Zalando in each distribution channel and market, and Statista's (2020) expected growth of the fashion ecommerce industry in Europe.

As presented by David Schröder in the Financial Deep Dive (CMD 2021), Zalando aims to reach around EUR 20 Bn in revenue by 2025 (capturing *phase one*) with a CAGR of around 20%. Following the assumptions made by the CFO, Zalando would continue its historical growth path (CAGR of 21.7%; FY2016-2020) with only a slight reduction and outpacing the industry growth (as outlined in section 3.2, CAGR of 6.23%; FY2020-2025) by 3x. Furthermore, according to Zalando's 1Q21 statement, the revenue growth guidance for FY2021 is set between 26-31%.

Even after factoring in the positive momentum (COVID-19 driven), which seems to continue on the back of easing restrictions and reopening of shops, the company's aforementioned assumptions appear too optimistic. Given the still ongoing pandemic and the associated uncertainty, a more conservative view is adopted with estimated consolidated sales of EUR 10,093 Mn (FY 2021), reflecting the lower end of the growth guidance, and a CAGR of 16.0% for the first phase and a CAGR of 9.9% for the entire forecast period.

The underlying assumptions for Zalando's revenues from each of the distribution channels are as follows:

- (i) Zalando Fashion Store (App and website): Being the company's main customer proposition and revenue driver (accounting for 86% in FY2020), the Fashion Store is a key element in becoming the Starting Point for Fashion. The firm's customer acquisition and development over the past 12 month, supported by increased marketing spend, continues to drive topline momentum with an expected Year-on-Year growth of 25%. As online purchases are expected to continue to play an important role, a CAGR of 9.8% is assumed for the period 2021-2030.

Furthermore, as already noted in section 4.3.1; Chapter 4, Zalando's main sales channel comprises the *DACH region* and the *Rest of Europe*. With regard to the company's strategic expansion plans within Europe and based on the historical development of the two geographical divisions, DACH is projected to grow at a CAGR of 8.8% and Rest of Europe at a CAGR of 10.5% over the entire forecast period. Following this trend, it is assumed that in 2030 Rest of Europe will account for 59% of all Fashion Store revenues, which is almost 50% of total sales at that time.

- (ii) **Offprice:** With the Fashion Store extension "Zalando Lounge", which offers registered members items at reduced prices online, the company is attempting to compensate for times marked by economic downturn and uncertainties. While the performance of this online extension shows stable growth, the growth outlook for Zalando's physical outlet stores, which are affected by lockdown restrictions, is rather mixed. Coupled with the management's announcement to continued investment in both online and offline channels, a more conservative revenue growth of 31% YoY is forecasted for 2021. Nonetheless, a continuous increase of this distribution channel as a percentage of total sales over the forecast period is assumed. The CAGR over the entire 10 years is therefore 10.6%.

- (iii) **All Other Segments:** With the highest year-over-year growth expectations of 56% and a CAGR of 10.1% over the forecasting period, this distribution channel aggregates the revenue from a variety of emerging businesses within the enterprise. Since the outbreak of the pandemic, the demand for online businesses has been accelerated. Zalando's long term strategy of incremental growth, which includes the partner program, the number of connected retail stores and the Europe-wide logistics network, puts the company in a position to successfully exploit the arising opportunities. In particular, the "onboarding" of the previous offline businesses is praised in the forecasts for 2021.

Besides, it is important to note that for the Fashion Store (DACH region) and All Other segments in 2021, the year-on-year sales comparison is a reflection of an exceptionally weak 1Q20 (outbreak COVID-19 in Europe). Also, due to the reorganization of the private label business the All Other segments revenues declined in 2020 when compared to the prior year.

Table 1: Revenue forecast by distribution channel

(EUR m)	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	CAGR
Consolidated Sales	3,639	4,489	5,388	6,483	7,982	10,093	12,129	14,137	16,200	18,295	20,054	21,357	22,334	23,042	23,618	9.9%
% Change YoY		23%	20%	20%	23%	26%	20%	17%	15%	13%	10%	6%	5%	3%	3%	
Fashion Store	0	4,069	4,785	5,684	6,854	8,578	10,306	12,013	13,725	15,412	16,869	17,980	18,805	19,407	19,893	9.8%
% Change YoY			18%	19%	21%	25%	20%	17%	14%	12%	9%	7%	5%	3%	2%	
% Sales		91%	89%	88%	86%	85%	85%	85%	85%	84%	84%	84%	84%	84%	84%	
<i>DACH</i>	<i>0</i>	<i>2,108</i>	<i>2,387</i>	<i>2,757</i>	<i>3,099</i>	<i>3,808</i>	<i>4,520</i>	<i>5,244</i>	<i>5,873</i>	<i>6,460</i>	<i>6,977</i>	<i>7,396</i>	<i>7,692</i>	<i>7,961</i>	<i>8,160</i>	<i>8.8%</i>
% Change YoY			13%	16%	12%	23%	19%	16%	12%	10%	8%	6%	4%	3%	2%	
% Sales		52%	50%	49%	45%	44%	44%	44%	43%	42%	41%	41%	41%	41%	41%	
<i>Rest of Europe</i>	<i>0</i>	<i>1,962</i>	<i>2,398</i>	<i>2,927</i>	<i>3,755</i>	<i>4,770</i>	<i>5,786</i>	<i>6,769</i>	<i>7,852</i>	<i>8,952</i>	<i>9,892</i>	<i>10,584</i>	<i>11,113</i>	<i>11,447</i>	<i>11,733</i>	<i>10.5%</i>
% Change YoY			22%	22%	28%	27%	21%	17%	16%	14%	11%	7%	5%	3%	2%	
% Sales		48%	50%	51%	55%	56%	56%	56%	57%	58%	59%	59%	59%	59%	59%	
Offprice	0	345	498	659	977	1,278	1,548	1,804	2,101	2,448	2,705	2,868	2,997	3,087	3,164	10.6%
% Change YoY			44%	33%	48%	31%	21%	17%	17%	17%	11%	6%	4%	3%	2%	
% Sales		8%	9%	10%	12%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	
All Other segments	0	74	106	139	151	236	275	320	373	435	480	509	532	548	562	10.1%
% Change YoY			43%	31%	9%	56%	17%	17%	17%	17%	11%	6%	4%	3%	2%	
% Sales		2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	

Source: Zalando's annual report (2020) and own analysis

5.1.1.2 COGS Estimation

COGS and S&D were assessed as a rate of sales as they are directly correlated to sales development. With COGS/sales reasonably steady and ongoing lower return rates as well as better cost efficiency through tailored automation, a slight reduction YoY of -0.2% for *phase one* (FY2021-2025), and -0.45% for *phase two* (FY2025-2030), was assumed.

5.1.1.3 S&D Estimation

As displayed in Table 2, at Zalando, S&D includes fulfillment costs, marketing costs and administrative expenses. Based on the (-3Y) average level and management statements, the S&D costs overall increase slightly in *phase one*, representing 37% of the company's sales, after reverting back to 35% with a slight decline YoY.

On a stand-alone basis, fulfillment costs are around 27% in the past. This value will be maintained as the company plans to open 5 further logistics centers by 2023, but at the same time gains in efficiency through process optimization.

For the marketing costs, 8% on average can be assumed on the basis of historical values, with a slight increase (+0.2% YoY) in *phase one*, which is based on increased spending in personalized marketing to attract new customers and drive the favorable development of the existing customers. This is followed by a downward trend (-0.2% YoY) due to brand recognition.

Furthermore, when taking into consideration the (-3Y) average level, a drop in administrative costs of -0.4 pp. for 2021, in proportion to sales, is assumed. This improvement is expected to be the result of Zalando's continued focus on overhead cost efficiency. A decline of smaller increments follows YoY.

Table 2: COGS and S&D forecast

(EUR m)	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Cost of sales	2,030	2,530	3,107	3,724	4,588	5,768	6,908	8,023	9,161	10,309	11,210	11,842	12,283	12,569	12,777
% Change YoY		25%	23%	20%	23%	26%	20%	16%	14%	13%	9%	6%	4%	2%	2%
% Sales	56%	56%	58%	57%	57%	57%	57%	57%	57%	56%	56%	55%	55%	55%	54%
Gross Profit	1,609	1,959	2,281	2,758	3,394	4,324	5,222	6,114	7,039	7,986	8,844	9,514	10,050	10,473	10,841
% margin	44%	44%	42%	43%	43%	43%	43%	43%	43%	44%	44%	45%	45%	45%	46%
S&D	1,224	1,531	1,899	2,295	2,716	3,615	4,428	5,169	5,874	6,579	7,151	7,552	7,830	8,016	8,169
% Change YoY		25%	24%	21%	18%	33%	23%	17%	14%	12%	9%	6%	4%	2%	2%
% Sales	34%	34%	35%	35%	34%	37%	37%	37%	36%	36%	36%	35%	35%	35%	35%
<i>Fulfillment costs</i>	848	1,167	1,493	1,770	2,055	2,734	3,347	3,936	4,494	5,057	5,523	5,860	6,106	6,277	6,422
% Change YoY		38%	28%	19%	16%	33%	22%	18%	14%	13%	9%	6%	4%	3%	2%
% Sales	23%	26%	28%	27%	26%	28%	28%	28%	28%	28%	28%	27%	27%	27%	27%
<i>Marketing costs</i>	375	364	388	519	661	880	1,082	1,233	1,380	1,522	1,628	1,691	1,724	1,740	1,748
% Change YoY		-3%	7%	34%	27%	33%	23%	14%	12%	10%	7%	4%	2%	1%	0%
% Sales	10%	8%	7%	8%	8%	9%	9%	9%	9%	8%	8%	8%	8%	8%	7%
Administrative exp	191	243	269	299	319	367	425	486	551	618	670	692	712	724	732
% Change YoY		27%	11%	11%	7%	15%	16%	15%	13%	12%	8%	3%	3%	2%	1%
% Sales	5%	5%	5%	5%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%

Source: Zalando's annual report (2020) and own analysis

5.1.1.4 D&A and Capex Estimation

Next, for the D&A estimates, the values were calculated as a percentage of gross Intangibles and PP&E. Based on a (-3Y) average, a stable 15% is estimated for the whole period,

As outlined in section 4.3.3; Chapter 4, the company reiterates in its quarterly earnings call presentation that Zalando will continue to invest in its European logistics network and technological infrastructure, reflecting its strategic growth ambitions. In terms of CAPEX to sales ratio, a slight increase to 3.8% is estimated in *phase one*. This is based on a (-3Y) value of 3% of sales, which will be reached again after a subsequent flattening of growth in *phase two*.

Table 3: D&A and CAPEX forecast

(EUR m)	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
D&A															
Intangibles & PP&E	48	59	87	195	215	242	293	341	391	442	484	516	539	556	570
% fixed assets	12%	10%	11%	18%	17%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
CAPEX															
Intangibles and PP&E	95	90	59	307	250	384	455	530	599	659	662	641	625	599	567
% Sales	3%	2%	1.1%	4.7%	3.1%	4%	4%	4%	4%	4%	3%	3%	3%	3%	2%
Net Intangibles & PP&E	344	533	736	901	1,046	1,352	1,553	1,725	1,912	2,086	2,206	2,285	2,323	2,350	2,362
%Sales	9%	12%	14%	14%	13%	13%	13%	12%	12%	11%	11%	11%	10%	10%	10%

Source: Zalando's annual report (2020) and own analysis

5.1.1.5 WC Estimation

With regard to operating working capital, the estimates are based on Zalando's past performance and publicly disclosed information.

As shown in *Table 4*, inventories/sales have remained stable over the 2016-2020 period. The extraordinary inventory write-down mentioned in the annual report, which was based on revised sales expectations that the company assumed at the beginning of the COVID-19 outbreak, has been fully offset. Therefore, inventories are estimated with the (-3Y) average of 16% and kept constant. Nevertheless, when forecasting the trade receivables and payables an overall higher business volume in 2020 must be taken into account. This is accompanied by reverse factoring agreements, which were reported under trade payables in 2020. Therefore, as momentum flattens, an annual decline of 3% is expected in 2021, followed by a slight decline by 2025 in both positions. For other current assets and other current liabilities, the (-3Y) average levels, slightly reduced and then kept stable, are assumed.

Table 4: Working capital forecast

(EUR m)	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Inventories	577	779	820	1,098	1,361	1,653	1,986	2,280	2,596	2,914	3,174	3,359	3,490	3,578	3,661
% of Sales	16%	17%	15%	17%	17%	16%	16%	16%	16%	16%	16%	16%	16%	16%	16%
Trade receivables	216	279	395	462	603	511	614	716	788	853	895	910	907	890	865
% of Sales	6%	6%	7%	7%	8%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%
<i>Other current assets</i>	<i>134</i>	<i>156</i>	<i>205</i>	<i>262</i>	<i>295</i>	<i>305</i>	<i>367</i>	<i>427</i>	<i>490</i>	<i>553</i>	<i>606</i>	<i>645</i>	<i>675</i>	<i>696</i>	<i>714</i>
% of Sales	4%	3%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Trade payables	921	1,120	1,299	1,708	2,051	2,194	2,515	2,790	3,035	3,290	3,607	3,841	4,017	4,144	4,248
% of Sales	25%	25%	24%	26%	26%	22%	21%	20%	19%	18%	18%	18%	18%	18%	18%
<i>Other current liabilities</i>	<i>97</i>	<i>156</i>	<i>180</i>	<i>182</i>	<i>282</i>	<i>256</i>	<i>308</i>	<i>359</i>	<i>411</i>	<i>465</i>	<i>509</i>	<i>542</i>	<i>567</i>	<i>585</i>	<i>600</i>
% of Sales	3%	3%	3%	3%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
<i>Current tax payables</i>	<i>9</i>	<i>6</i>	<i>28</i>	<i>8</i>	<i>10</i>	<i>17</i>	<i>21</i>	<i>24</i>	<i>28</i>	<i>31</i>	<i>34</i>	<i>36</i>	<i>38</i>	<i>39</i>	<i>40</i>
% of Sales	0.2%	0.1%	0.5%	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Operating Working Capital	-99	-70	-87	-75	-84	2	123	250	399	533	524	494	450	395	352
Change in OWC		29	-18	12	-9	85	121	126	150	134	-9	-30	-44	-55	-44

Source: Zalando's annual report (2020) and own analysis

All other items in the IS and the BS remain constant over the projected period, as the necessary information to estimate any of these items is not revealed by Zalando.

5.1.2 Discount Rate Zalando

5.1.2.1 WACC

As one of the key components of the DCF model, the WACC as a discount rate has a significant influence on the price determined later. For its calculation, Equation 15 presented in Chapter 2 was used. In this section, the different inputs will be discussed.

Table 5: WACC Inputs

Cost of Equity	5.70%
E/V	90.11%
Cost of Debt	0.60%
D/V	9.89%
Effective Tax Rate	29.01%
WACC	5.20%

5.1.2.1.1 Cost of Equity

Zalando's cost of equity was calculated using the CAPM, see Equation 12 presented in Chapter 2.

Table 6: Cost of Equity Inputs

Risk Free Rate	-0.23%
<i>Beta</i>	<i>1.18</i>
Beta adj. Blume	1.12
MRP	5.31%
Cost of Equity	5.70%

The 10-year German government bond yield -0.23% was used as a proxy for the risk-free rate. For the company beta, Zalando's 5-year weekly returns were regressed against the MSCI World Index, which was chosen as the market proxy (Appendix 2). Subsequently, the obtained beta value was adjusted with Blume's formula (Equation 14). The market risk premium was calculated as a weighted average of Zalando's main markets taken from the Damodaran database. The applied weights and MRP values can be found in (Appendix 3).

5.1.2.1.2 Market Value of Equity

The market value of equity was calculated by using the closing share price as of 6th May 2021 (EUR 85) times the reported number of shares outstanding (258.81m). This resulted in a market capitalization of EUR 21.99 bn.

5.1.2.1.3 Cost of Debt

A synthetic company rating was used to determine the cost of debt. For this purpose, the interest coverage ratio (6.23) was calculated, resulting in a spread of 1.07% based on Damodaran's data table (Appendix 4). In the following, the risk-free interest rate was added and the German effective tax rate of 29.01% applied, which in total leads to a post cost of debt of 0.60%.

This more simplistic approach was used since the Zalando's convertible bonds are trading at highly exceptional terms. Furthermore, when looking at the industry for a comparable senior unsecured bond, nothing relevant was found.

5.1.2.1.4 Market Value of Debt

For the non-current debt, the market value was calculated by applying the bond pricing formula by Damodaran (Equation 16). According to this formula, the total amount of long-term debt consisting of bonds and loans is treated as a single bond with a coupon. The coupon has been defined to represent the most recent interest expense from the income statement, while the weighted average of all maturities of the debt represents the maturity. As a result, the market value of the company's long-term debt is EUR 1.89 Bn. Additionally, for lease liabilities whose reported value equals the present value of future payments, it was assumed that their fair value corresponds to the carrying amount. Therefore, EUR 516.7 Mn of lease liabilities were added, resulting in a total MVD of EUR 2.415 Bn.

Equation 16: Bond Pricing

$$\text{Debt}_{MV} = \text{Interest} * [(1 - (1/((1+Kd)^t)))/Kd] + [\text{Debt}_{BV}/((1+Kd)^t)]$$

5.1.3 Long-term Growth Rate

The Company's long-term growth rate was determined including several inputs, namely, the OECD forecast for real GDP growth (global), the long-term industry growth expectations, and the average of analysts' growth estimates. All in all, this led to the perpetual growth rate of 2% for Zalando.

5.1.4 Zalando Price Estimation

The objective of this section is to outline how Zalando's fair share price was determined as of May 6th 2021. Therefore, as illustrated in *Table 7*, the company's EV has to be computed first. This is achieved by taking the sum of the present value of the individual FCFFs over the forecast period and adding it to the TV. To obtain the terminal value, the perpetuity growth method was used. Accordingly, the last forecasted FCFF (FY30E) was discounted by using Equation 10 presented in Chapter 2. Furthermore, to determine the correct present value of the TV, the TV must also be discounted by the same time to maturity as the last FCFF. As FY 2021 is already progressing at the time of the valuation, this year has been discounted at 0.5 instead of 1 (FY2022 will follow with 1.5, etc.). Moreover, to derive the value of equity, net debt, consisting of the fair market value of

debt less cash and cash equivalents, is deducted. As the company does not report any operating cash, the total amount of cash is assumed to be excess cash. At last, the equity value is divided by the fully diluted shares to obtain the implied share price. This results in a price per share of EUR 129.

Table 7: Price Estimation

(EUR m)	FY21E	FY22E	FY23E	FY24E	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E
EBIT	434	455	560	729	930	1,178	1,436	1,680	1,911	2,122
%margin	4%	4%	4%	4%	5%	6%	7%	8%	8%	9%
Tax	-109	-127	-155	-195	-250	-320	-368	-447	-508	-564
NOPAT	544	581	715	924	1,180	1,498	1,804	2,127	2,419	2,686
D&A	242	293	341	391	442	484	516	539	556	570
Increase/(Decrease) in WC	85	121	126	150	134	-9	-30	-44	-55	-44
CAPEX	-384	-455	-530	-599	-659	-662	-641	-625	-599	-567
FCFF	269	288	342	475	597	671	912	1,103	1,305	1,517
Discount Factor	0.97	0.93	0.88	0.84	0.80	0.76	0.72	0.68	0.65	0.62
Discounted FCFF	262	267	302	398	475	508	656	754	848	937

Sum of FCFF	5,408
NPV of Terminal Value	29,883
EV	35,290
(-) Net Debt	-423
Equity Value	35,713
Fully Diluted Shares	277
Value per Share	129

5.1.5 Sensitivity Analysis

Due to the non-negligible impact that the assumptions on the WACC and the LT growth rate have on the price, a sensitivity analysis is conducted. The following will demonstrate how even the slightest changes in the assumptions made affect the value of the share. Adjustments in increments of $\pm 0.5\%$ result in a price range between EUR 80 and EUR 340.

Table 8: Sensitivity Analysis

LT Growth Rate	WACC				
	4.20%	4.70%	5.20%	5.70%	6.20%
1.00%	139	118	102	90	80
1.50%	162	134	114	99	87
2.00%	194	155	129	110	95
2.50%	246	187	150	124	106
3.00%	340	236	180	144	120

5.2 Relative Valuation

To gain a further perspective on the company and its market position, a relative valuation was carried out. For this purpose, Zalando is valued using multiples based on a selected peer group.

5.2.1 Peer Group

In order to achieve the best possible comparison, the key business and financial characteristics were taken into account. These core traits include: Industry, Size, Profitability, Growth Perspective and Leverage. Zalando's peer group was then created in a two-step process. First, an initial list of 19 companies was compiled by Refinitiv Eikon. Subsequently, this initial selection was analyzed in more detail, namely for comparable industry characteristics, EBITDA margin, long-term growth as well as expected sales growth, and again narrowed down. Since it is very difficult to find a competitor for the valuation of Zalando that is suitable in terms of its business model and at the same time its size and growth, the narrower peer group was reduced to the four most fitting. For the initial peer group, refer to Appendix 5.

5.2.2 Multiples Valuation

The P/E ratio, EV/Sales and EV/EBITDA are the multiples chosen to perform the valuation at hand. These are most common among industry experts and seem suitable Fernandez (2001a). Furthermore, empirical evidence suggests that forward-looking multiples (NTM) are more promising in terms of accurate valuation estimates than those based on historical data (Rosenbaum & Pearl, 2013). For the final peer group, the multiples were retrieved from Refinitiv Eikon database. In addition, (Damodaran, 2013) claims that the median represents the most typical firm within the chosen comparison group and also removes potential outliers.

While the P/E ratio leads to a fair share price of EUR 19, Zalando's enterprise value, for the other two multiples EV/Sales and EV/EBITDA, after being deducted for net debt, results in EUR 49 and EUR 33, respectively.

Table 9: Multiples Valuation

Company Name	Forward P/E	Forward EV/S	Forward EV/EBITDA
Zalando SE	93.03	2.33	35.76
ASOS PLC	29.90	1.09	13.59
Boohoo Group PLC	26.82	1.52	16.33
Marks and Spencer Group PLC	11.26	0.63	5.83
Next PLC	16.22	2.71	11.74
Mean	21.05	1.49	11.87
Median	21.52	1.30	12.66
Min.	11.26	0.63	5.83
Max.	29.90	2.71	16.33
EV	-	13,168	8,736
(-) Net Debt	-	-423	-423
Equity Value	-	13,590	9,159
Fully Diluted Shares	-	277	277
Value per Share	19	49	33

5.3 Target Price

Given that Zalando does not pay dividends to its shareholders, the DDM is not applied. In addition, due to the uniqueness of the online fashion retailer, it is very difficult to value the company using market multiples with an insufficient peer group. Due to the significantly lower share price results compared to the WACC-based estimate, it was decided not to use a weighted average and to exclusively account for the DCF method.

Accordingly, a price of EUR 129 is reached, reflecting an upside potential of 51.9% and implying a buy recommendation.

Table 10: Target Price

	Estimated Price (EUR)
DCF Model (100%)	129
Relative valuation (0%)	-
Target Price	129
Zalando's Price as of 06.05.2021	85

6 Comparison with Investment Bank

The aim of this chapter is to compare the assumptions made in this dissertation and the resulting target price with the estimates provided by the Bank of America. Therefore, the bank's equity report published on May 6th 2021 is considered, which sets an estimate of the Zalando SE share price at EUR 119 and issues a buy recommendation.

Moreover, the renowned investment bank bases its valuation approach exclusively on the DCF method and uses a forecasting horizon of 10 years (2021-2030), whereas this paper also takes the relative valuation method into account, even if it is ultimately disregarded.

In addition, the BoA analyst estimates revenue growth of 29% (vs. 26%) for FY2021, reflecting the upper end of management's guidance as Zalando's platform business model seems positive momentum. This is accompanied by an assumed CAGR of 13.2% (vs. 9.9%) over the forecast period. It appears that the Bank is not incorporating the prevailing COVID-19 downside risks. Whether the positive upward trend for Zalando can be maintained over the coming years remains an open question. Further, the report does not contain any information on the IBs' D&A assumptions; nevertheless, the EBIT margin is estimated to decrease by 1 pp., hinting at an EBIT margin of 4.2% (vs. 4.3%) in 2021 and 10.4% (vs. 9.0%) in the final forecast period (FY2030). As for CAPEX, according to BoA, 3.9% (vs. 3.8%) of sales are expected in 2021, ending at 3% (vs. 2.4%) in FY2030.

Furthermore, as shown in *Table 11* below, in order for BoA to determine its estimated share price, the bank defines a WACC of 7.90% with a cost of equity of 7.90% and with no information on the cost of debt. In contrast, the dissertation uses a WACC of 5.20% with a cost of equity of 5.70% and an after-tax cost of debt of 0.60%. The difference in the discount factor is one reason for the discrepancy in estimated share prices and is mainly caused by the risk-free interest rate of 1.00% (vs. -0.23%) assumed by BoA. In addition, the bank assigns a long-term growth rate of 4.00% without further justification, whereas in this dissertation, following the analysts' average, 2.00% is assumed. Lastly, other differences include the ERP of 6.90% (vs. 5.31%) and a Beta of 1.00 (vs. 1.12). Due to this limited information, it is difficult to draw conclusions about the assumptions made.

Table 11: Comparison of key inputs

Estimates	BofA Dissertation	
Risk Free Rate	1.00%	-0.23%
Beta	1.00	1.12
ERP	6.90%	5.31%
Ke	7.90%	5.70%
WACC	7.90%	5.20%
Terminal Growth	4.00%	2.00%

In sum, both analyses assume that the share price is undervalued and therefore issue a buy recommendation. As already mentioned, the price difference is mainly due to the higher risk-free interest rate, which affects the cost of equity and thus also the WACC. Additionally, the IB provided no information regarding the debt to capital ratio of Zalando, which also influences the WACC significantly.

7 Conclusion

This paper's main objective was to assess the fair value of Zalando SE and to give an investment recommendation. Following a comprehensive economic, sector, and company analysis, a target price of EUR 129 has been set. Derived solely from the DCF method, the estimated price offers an upside potential of 51.9%, which is in line with the BoA Equity Research and implies a buy recommendation.

However, it should be noted that the valuation performed estimates a higher share price than the estimates of BoA and other analysts. This can be explained by the fact that this work uses up-to-date market data to calculate the discount rates. By accounting for the economic environment, a lower discount rate is obtained when compared to the one commonly applied by analysts.

Even under the great uncertainties of the COVID-19 pandemic, Europe's leading online platform for fashion and lifestyle delivered strong results in 2020 and expanded its market position by becoming part of an industry solution. The strong need for digitalisation accelerated Zalando's platform business model.

The assumptions underlying the valuation have been tested through a sensitivity analysis to highlight and assess the potential impact on the implied share price under different expectations regarding industry development and the firm.

Finally, as it becomes apparent that the model is highly dependent on the underlying assumptions and minor changes lead to significant deviations in the implied share price, it is important to note that this recommendation is only intended to be one factor when making an investment decision.

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9 Appendix

Appendix 1 - SWOT Analysis

Strengths

Customer Base

The already existing broad customer base and the high brand awareness of the company are the drivers for even more customer acquisition and an increase in order volumes.

Operational Network

Zalando's leading position in European fashion retail combined with its highly efficient logistics network enables the company to serve its large customer base.

Financial Performance

Through profitability and increased sales growth generated across different sales channels, Zalando is able to respond to different economic conditions and attract further investment.

Weaknesses

Debt Position

In addition to the lower basket sizes in the Eastern European markets, the lower profitability due to expansion costs, the higher debt level with increased interest rates in the future also poses a certain operational risk.

Opportunities

Expansion Initiatives

With further exposure to a growing European apparel market, the company could benefit from changing lifestyles and the growing number of middle-class consumers.

COVID-19 Impact

With the pandemic accelerating the adoption of online and mobile commerce, Zalando's platform strategy is poised to enhance margins.

Threats

Increasing competition

As the barrier to entry is low, Zalando competes not only with new entrants but also with already established companies that have a longer operating history, higher brand recognition, customer and supplier relationships and greater financial resources.

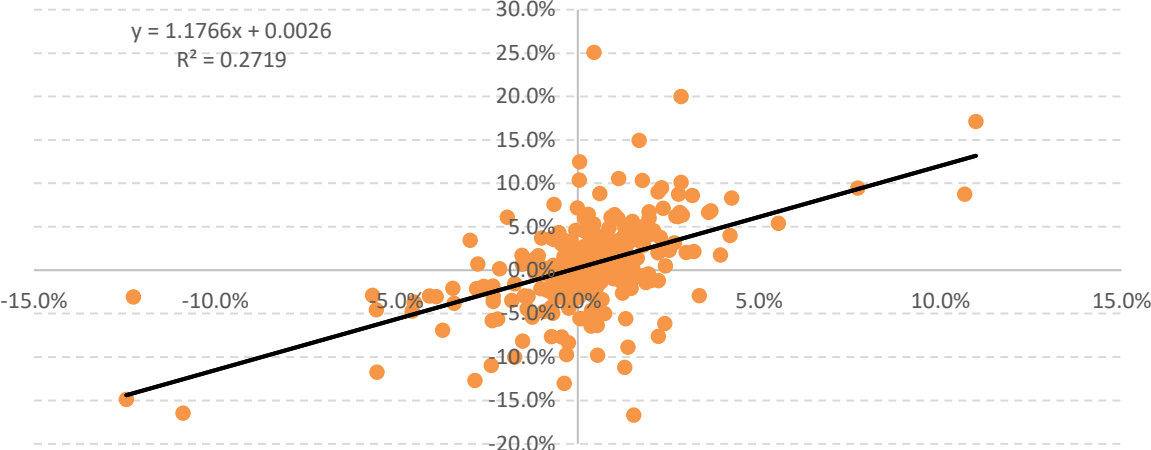
Fast-paced Market

Due to the limited shelf life of fashion and constantly changing trends, Zalando is exposed to the risk that customers may not like its products.

Internet Fraud

Counterfeit products weaken customers' trust in online shopping.

Appendix 2 - Beta Regression



Source: Refinitiv Eikon (2021) and own analysis

Appendix 3 – MRP Calculation

	Country	Equity Risk Premium
REST OF EUROPE	Croatia	7.14%
	Czech Republic	5.31%
	Estonia	5.40%
	Latvia	5.88%
	Lithuania	5.88%
	Poland	5.54%
	Slovakia	5.54%
	Slovenia	5.88%
	Belgium	5.31%
	Denmark	4.72%
	Finland	5.10%
	France	5.20%
	Ireland	5.54%
	Italy	6.85%
	Luxembourg	4.72%
	Netherlands	4.72%
	Norway	4.72%
	Spain	6.27%
Sweden	4.72%	
United Kingdom	5.31%	
Average ERP		5.49%
DACH	Austria	5.10%
	Germany	4.72%
	Switzerland	4.72%
Average ERP		4.85%
Total Weighted ERP		5.23%

Source: Damodaran (2021) and own analysis

Appendix 4 – Damodaran synthetic rating

For large non-financial service firms, mkt cap > \$5 billion

<i>If interest coverage ratio is</i>			
<i>></i>	<i>≤ to</i>	<i>Rating is</i>	<i>Spread is</i>
8.50	100000	Aaa/AAA	0.69%
6.5	8.499999	Aa2/AA	0.85%
5.5	6.499999	A1/A+	1.07%
4.25	5.499999	A2/A	1.18%
3	4.249999	A3/A-	1.33%
2.5	2.999999	Baa2/BBB	1.71%
2.25	2.499999	Ba1/BB+	2.31%
2	2.2499999	Ba2/BB	2.77%
1.75	1.999999	B1/B+	4.05%
1.5	1.749999	B2/B	4.86%
1.25	1.499999	B3/B-	5.94%
0.8	1.249999	Caa/CCC	9.46%
0.65	0.799999	Ca2/CC	9.97%
0.2	0.649999	C2/C	13.09%
-100000	0.199999	D2/D	17.44%

Source: Damodaran (2021)

Appendix 5 – Initial Peer Group

Company Name	Industry		Size		Profitability		Growth		Leverage		
	GICS Industry Name	Country of Headquarters	Company Market Cap	Revenue (LTM)	EBITDA Margin	Return On Invested Capital - Mean (FY1)	Long Term Growth - Mean	Revenue - SmartEstimate Growth (NTM/TTM)	Net Debt (FY0, EUR)	Net Debt To EBITDA Series Ratio	Total Debt Percentage of Total Equity (LTM)
ABOUT YOU Holding SE	Internet & Direct Marketing Retail	Germany							-12,900,000		
Adidas AG	Textiles, Apparel & Luxury Goods	Germany	50,483,096,328	25,632,694,549	15.2%	16.4%	79.2%	9.39	1,495,000,000	0.71	80.4%
Amazon.com Inc	Internet & Direct Marketing Retail	United States of America	1,382,191,568,779	457,965,000,000	14.8%	25.5%	38.4%	17.88	-27,319,262,000		54.3%
AO World PLC	Internet & Direct Marketing Retail	United Kingdom	1,346,237,671		1.8%	21.3%		5.78	111,693,622	0.45	110.8%
ASOS PLC	Internet & Direct Marketing Retail	United Kingdom	5,754,538,794	5,343,619,655	8.3%	47.3%	21.3%	13.50	-105,733,048	0.68	56.1%
boohoo group plc	Internet & Direct Marketing Retail	United Kingdom	4,693,266,104		7.5%	80.2%	32.8%	23.70	-297,358,306		12.8%
Ceconomy AG	Specialty Retail	Germany	1,732,105,017	24,774,079,727			13.0%	0.74	786,000,000		
eBay Inc	Internet & Direct Marketing Retail	United States of America	33,215,923,554	11,060,000,000	36.0%	21.0%	14.1%	5.21	3,340,704,000	0.95	139.3%
Farfetch Ltd	Internet & Direct Marketing Retail	United Kingdom	13,144,844,955	2,131,062,000	-13.8%	-6.7%		26.99	-611,464,283		
H & M Hennes & Mauritz AB	Specialty Retail	Sweden	30,263,750,564	22,648,281,457	17.9%	18.8%	66.8%	11.57	6,212,518,985	2.41	129.6%
Hermes International SCA	Textiles, Apparel & Luxury Goods	France	111,767,898,402	9,754,371,576	46.5%	50.2%	19.8%	13.83	-3,046,700,000		21.9%
Industria de Diseno Textil SA	Specialty Retail	Spain	96,998,786,142	29,168,642,010	28.4%	57.2%	31.5%	11.19	-1,418,000,000		43.7%
J Sainsbury PLC	Food & Staples Retailing	United Kingdom	6,339,923,964	40,887,949,986	6.6%	5.2%	4.4%	1.12	6,124,354,967	2.37	104.1%
LVMH Moet Hennessy Louis Vuitton SE	Textiles, Apparel & Luxury Goods	France	315,086,095,640	65,751,478,312	35.0%	15.0%	27.3%	12.33	16,767,000,000	1.26	96.8%
Marks and Spencer Group PLC	Multiline Retail	United Kingdom	3,523,010,700	13,976,268,169	10.1%	2.4%	-2.0%	6.78	4,263,102,287	3.70	168.9%
N Brown Group PLC	Internet & Direct Marketing Retail	United Kingdom	352,973,670	1,000,003,065	27.6%	12.8%		3.57	586,058,382	1.73	83.8%
Next PLC	Multiline Retail	United Kingdom	12,660,642,775	5,948,624,385	27.4%	35.3%	28.3%	11.43	2,070,757,254	2.13	309.5%
SRP Groupe SA	Internet & Direct Marketing Retail	France	417,148,483	901,247,771	8.2%			4.55	-10,951,000		54.3%
Tesco PLC	Food & Staples Retailing	United Kingdom	20,102,308,178	81,494,072,086	7.7%	7.4%	1.9%	1.72	13,813,256,795	2.32	121.8%
Zalando SE	Internet & Direct Marketing Retail	Germany	21,999,157,275	11,639,754,753	6.4%	22.3%	22.3%	19.16	-907,900,000		73.7%

Source: Refinitiv Eikon (2021)

Appendix 6 – Forecasted BS (Assets)

Dec YE, EUR Mn	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Property, plant and equipment (net)	243.0	350.5	546.4	1,234.0	1,289.9	1,498.5	1,526.8	1,661.8	1,813.7	1,932.1	2,059.4	2,126.7	2,140.2	2,165.1	2,194.6
Intangible assets (net)	100.9	182.3	189.1	192.9	236.0	304.4	395.4	494.4	607.8	717.5	837.9	955.3	1,078.2	1,193.4	1,311.5
LT investments	14.8	5.9	5.0	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Financial assets	29.2	25.9	13.7	10.1	11.9	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
Deferred income taxes	1.6	1.4	2.3	9.2	15.4	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Non- financial assets	3.0	3.5	3.8	7.3	5.1	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Non-current assets	392.5	569.5	760.3	1,455.1	1,560.0	1,846.3	1,965.6	2,199.6	2,464.9	2,693.0	2,940.6	3,125.4	3,261.7	3,401.8	3,549.5
Cash and short term investments	1,218.4	1,197.7	1,054.3	1,019.3	2,676.0	2,160.3	2,132.4	2,037.5	1,989.4	2,111.4	2,506.8	3,172.9	4,058.7	5,098.2	6,249.8
Trade receivables	216.0	278.7	395.1	462.3	602.5	517.9	614.0	715.6	787.6	852.8	894.8	910.1	907.1	889.8	864.8
Inventories	576.9	778.9	819.5	1,098.3	1,361.2	1,675.6	1,986.3	2,279.8	2,596.2	2,913.6	3,173.8	3,358.5	3,489.8	3,577.5	3,660.8
Prepayments	1.1	2.6	13.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other non-financial assets	133.1	152.9	191.4	262.2	295.1	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0
Assets held for sale	0.0	0.0	0.0	35.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current assets	2,145.5	2,410.8	2,473.5	2,878.1	4,934.8	4,658.8	5,037.7	5,337.9	5,678.2	6,182.9	6,880.4	7,746.6	8,760.6	9,870.5	11,080.4
TOTAL ASSETS	2,538.0	2,980.3	3,233.8	4,333.2	6,494.8	6,505.1	7,003.2	7,537.4	8,143.1	8,875.9	9,821.1	10,872.0	12,022.3	13,272.3	14,629.9

Source: Zalando's annual report (2020) and own analysis

Appendix 7 – Forecasted BS (Liabilities + Equity)

Dec YE, EUR Mn	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Common stock	247.2	247.2	247.9	248.7	253.1	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2
Retained earnings (Accumulated Deficit)	1,163.5	1,283.1	1,306.3	1,450.9	1,905.5	1,975.9	2,271.3	2,632.8	3,110.9	3,588.4	4,217.1	5,033.8	6,008.4	7,131.0	8,385.0
Other reserves	-3.3	8.7	-4.9	-15.6	-7.3	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
Minority interest	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Equity	1,407.4	1,538.9	1,549.2	1,683.8	2,151.1	2,249.4	2,544.8	2,906.3	3,384.3	3,861.9	4,490.6	5,307.3	6,281.9	7,404.4	8,658.4
LT debt	11.2	8.4	5.6	484.1	1,316.7	1,429.1	1,340.2	1,238.0	1,120.5	1,120.5	1,120.5	1,120.5	1,120.5	1,120.5	1,120.5
Deferred income tax	3.1	35.4	23.5	10.7	19.1	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
Other liabilities	18.2	28.2	41.9	47.8	68.4	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9
Non-current liabilities	32.5	72.0	71.0	542.6	1,404.2	1,524.6	1,435.7	1,333.5	1,216.0	1,216.0	1,216.0	1,216.0	1,216.0	1,216.0	1,216.0
Trade payables	920.5	1,120.0	1,298.9	1,708.3	2,050.5	2,223.9	2,515.1	2,790.0	3,035.1	3,290.4	3,606.9	3,841.1	4,016.8	4,144.2	4,247.8
Accrued expenses	86.7	123.9	143.5	153.5	234.8	209.5	209.5	209.5	209.5	209.5	209.5	209.5	209.5	209.5	209.5
Current port. LT debt/capital leases	3.2	2.8	2.8	70.8	451.4	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
Other current liabilities	87.7	122.7	168.4	174.2	202.8	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7
Current liabilities	1,098.1	1,369.4	1,613.6	2,106.8	2,939.5	2,731.1	3,022.3	3,297.2	3,542.3	3,797.6	4,114.1	4,348.3	4,524.0	4,651.4	4,755.0
TOTAL LIABILITIES	1,130.6	1,441.4	1,684.6	2,649.4	4,343.7	4,255.7	4,458.0	4,630.8	4,758.3	5,013.6	5,330.1	5,564.3	5,740.0	5,867.4	5,971.0
TOTAL EQUITY + LIABILITIES	2,538.0	2,980.3	3,233.8	4,333.2	6,494.8	6,505.1	7,002.8	7,537.0	8,142.7	8,875.5	9,820.6	10,871.6	12,021.9	13,271.8	14,629.5

Source: Zalando's annual report (2020) and own analysis

Appendix 8 – Forecasted P&L

Dec YE, EUR Mn	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue	3,639.0	4,489.0	5,388.1	6,482.5	7,982.0	10,092.7	12,129.5	14,137.1	16,200.0	18,294.9	20,054.4	21,356.5	22,333.5	23,042.0	23,618.0
COGS	(2,030)	(2,530)	(3,107)	(3,724)	(4,588)	(5,768)	(6,908)	(8,023)	(9,161)	(10,309)	(11,210)	(11,842)	(12,283)	(12,569)	(12,777)
Gross Profit	1,609.4	1,959.4	2,281.1	2,758.2	3,394.2	4,324.2	5,221.7	6,114.3	7,038.9	7,985.7	8,844.0	9,514.3	10,050.1	10,472.6	10,840.7
Selling & Distribution	(1,224)	(1,531)	(1,899)	(2,295)	(2,716)	(3,615)	(4,428)	(5,169)	(5,874)	(6,579)	(7,151)	(7,552)	(7,830)	(8,016)	(8,169)
Administrative expenses	(191)	(243)	(269)	(299)	(319)	(367)	(425)	(486)	(551)	(618)	(670)	(692)	(712)	(724)	(732)
Other operating income/(expenses)	12.6	1.9	6.4	1.6	8.0	21.2	25.5	29.7	34.0	50.0	54.8	58.4	61.1	63.0	64.6
Reported EBIT	207.0	187.6	119.4	165.8	367.0	363.4	394.2	489.1	648.0	838.5	1,077.5	1,328.9	1,568.6	1,795.8	2,003.6
<i>Share based payments & other</i>	<i>9.3</i>	<i>27.4</i>	<i>53.9</i>	<i>58.9</i>	<i>53.8</i>	<i>70.9</i>	<i>60.6</i>	<i>70.7</i>	<i>81.0</i>	<i>91.5</i>	<i>100.3</i>	<i>106.8</i>	<i>111.7</i>	<i>115.2</i>	<i>118.1</i>
<i>Adjusted EBIT</i>	<i>216.3</i>	<i>215.0</i>	<i>173.3</i>	<i>224.7</i>	<i>420.8</i>	<i>434.3</i>	<i>454.8</i>	<i>559.8</i>	<i>729.0</i>	<i>930.0</i>	<i>1,177.8</i>	<i>1,435.7</i>	<i>1,680.2</i>	<i>1,911.0</i>	<i>2,121.7</i>
Finance Income	2.1	3.9	5.7	10.4	16.1	29.5	42.0	41.4	39.5	38.6	41.0	48.9	62.2	80.0	100.8
Finance Expense	(11.8)	(14.5)	(15.4)	(29.4)	(58.1)	(25.3)	(14.1)	(14.1)	(14.1)	(14.1)	(14.1)	(14.1)	(14.1)	(14.1)	(14.1)
Other financial result	(4.3)	(1.9)	(3.9)	(1.9)	(6.5)	(13.3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBT	193.0	175.1	105.8	144.9	318.5	354.2	422.0	516.4	673.4	862.9	1,104.4	1,363.7	1,616.7	1,861.6	2,090.2
<i>Adjusted EBT</i>	<i>202.3</i>	<i>202.5</i>	<i>159.7</i>	<i>203.8</i>	<i>372.3</i>	<i>425.2</i>	<i>482.7</i>	<i>587.1</i>	<i>754.4</i>	<i>954.4</i>	<i>1,204.7</i>	<i>1,470.4</i>	<i>1,728.3</i>	<i>1,976.8</i>	<i>2,208.3</i>
Tax	-72.5	-73.6	-54.4	-45.2	-92.4	-109.3	-126.6	-154.9	-195.3	-250.2	-320.3	-368.2	-436.5	-502.6	-564.4
Net Income	120.5	101.5	51.4	99.7	226.1	245.0	295.4	361.5	478.1	612.7	784.1	995.5	1,180.2	1,359.0	1,525.9
<i>Adjusted Net Income</i>	<i>129.8</i>	<i>128.9</i>	<i>105.3</i>	<i>158.6</i>	<i>279.9</i>	<i>315.9</i>	<i>356.1</i>	<i>432.2</i>	<i>559.1</i>	<i>704.1</i>	<i>884.4</i>	<i>1,102.3</i>	<i>1,291.8</i>	<i>1,474.2</i>	<i>1,644.0</i>
Non controlling interests	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Attributable to shareholders	120.5	103.1	51.4	99.7	226.1	315.9	356.1	432.2	559.1	704.1	884.4	1,102.3	1,291.8	1,474.2	1,644.0
Shares Outstanding - Basic	247.2	247.3	247.3	247.6	250.5	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0
Shares Outstanding - Diluted	256.3	259.5	258.1	256.3	261.5	277.0	277.0	277.0	277.0	277.0	277.0	277.0	277.0	277.0	277.0
EPS - Basic	0.49	0.41	0.21	0.40	0.90	0.96	1.16	1.42	1.87	2.40	3.08	3.90	4.63	5.33	5.98
EPS - Diluted	0.47	0.39	0.20	0.39	0.86	0.88	1.07	1.31	1.73	2.21	2.83	3.59	4.26	4.91	5.51
Adjusted EPS	0.51	0.50	0.41	0.62	1.07	1.14	1.29	1.56	2.02	2.54	3.19	3.98	4.66	5.32	5.93

Source: Zalando's annual report (2020) and own analysis