



# **Equity Valuation of Fielmann AG**

Sophie Helene Zeller

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Professor José Tudela Martins

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## **Abstract**

This dissertation provides a commercial, financial and valuation analysis of German eyewear manufacturer and retailer Fielmann Group AG.

The focal point of the dissertation is the valuation of the company for which a Discounted Cash Flow and an Adjusted Present Value valuation as well as a relative valuation analysis are conducted from the standpoint of December 31<sup>st</sup> 2023. The analysis yields a target share price of EUR 49,51 which represents a premium of 6,20% over the November 27<sup>th</sup> share price of Fielmann. The valuation is based on a financial forecast which expects Fielmann to leverage its leading market position to profit from increasing consumer spending after a decline due to recent macroeconomic developments by increasing its prices and thus grow its margins. Additionally, the global eyewear market benefits from several demographic and societal trends which will increase demand for visual aids in the long-term and drive Fielmann's sales.

The analysis is compared with two equity reports from HSBC and AlsterResearch which present significantly higher target prices of EUR 60 and EUR 62 respectively. The higher upside is suspected to be due to the principal-agent conflict between equity researchers and the firms they report on, however, the overall BUY recommendation is confirmed in this dissertation.

The market currently undervalues Fielmann, likely due to it not fully considering the major investments the firm has made into digitization and internationalization, which provide it with a large competitive advantage.

**Author:** Sophie Helene Zeller

**Title:** Equity Valuation of Fielmann AG

**Keywords:** Fielmann, company valuation, discounted cash flow, adjusted present value, relative valuation, eyewear, sunglasses, contact lenses, consumer products

## **Resumo**

Esta dissertação apresenta uma análise comercial, financeira e de avaliação do fabricante e retalhista de óculos, Fielmann Group AG.

O ponto central da dissertação é a avaliação da empresa, através dos métodos dos Fluxos de Caixa Atualizados, do Valor Contabilístico Ajustado e de análise de avaliação relativa, com base no dia 31 de dezembro de 2023. A análise resulta num preço-alvo das ações de EUR 49,51, representando um prémio de 6,20% sobre o preço das ações da Fielmann no dia 27 de novembro. A avaliação fundamenta-se numa previsão financeira que pressupõe que a Fielmann aproveite a sua posição de liderança no mercado para lucrar com o aumento dos gastos dos consumidores, após uma queda no consumo devido à recente evolução macroeconómica, por meio do aumento de preços e, conseqüentemente, das margens de lucro. Além disso, o mercado global de óculos beneficia de várias tendências demográficas e sociais que, a longo prazo, aumentarão a procura de instrumentos de auxílio visual, impulsionando as vendas da Fielmann.

A análise é comparada com dois relatórios de ações do HSBC e do AlsterResearch, que apresentam preços-alvo significativamente mais elevados, de EUR 60 e EUR 62, respectivamente. O aumento substancial suspeita-se que se deve a conflitos de interesse entre os pesquisadores de ações e as empresas sobre as quais elaboram os relatórios, mas a recomendação geral de COMPRA é confirmada nesta dissertação.

Atualmente, o mercado subavalia a Fielmann, provavelmente devido à falta de consideração dos grandes investimentos que lhe proporcionam uma considerável vantagem competitiva.

**Autora:** Sophie Helene Zeller

**Título:** Avaliação da Empresa Fielmann AG

**Palavras-Chave:** Fielmann, avaliação de empresas, fluxo de caixa atualizado, valor atual ajustado, avaliação relativa, óculos, óculos de sol, lentes de contacto, produtos de consumo

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**Abbreviations**

APV	Adjusted Present Value
bn	Billion
CAGR	Compound Annual Growth Rate
CAPEX	Capital Expenditures
CAPM	Capital Asset Pricing Model
CCA	Comparable Companies Analysis
COGS	Cost of Goods Sold
CSR	Corporate Social Responsibility
D&A	Depreciation & Amortization
D/E	Debt to Equity
DCF	Discounted Cash Flow
DDM	Dividend Discount Model
EBIT	Earnings before Interest & Taxes
EBITDA	Earnings before Interest, Taxes, Depreciation & Amortization
EBT	Earnings before Taxes
ECB	European Central Bank
EUR	Euro
EV	Enterprise Value
FCFE	Free Cash Flow to Equity
FCFF	Free Cash Flow to the Firm
FY	Fiscal Year
GDP	Gross Domestic Product
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
ISCC	International Sustainability and Carbon Certification
ITS	Interest Tax Shield
m	Million
M&A	Mergers & Acquisitions
MM	Modigliani Miller
MV	Market Value

NOPAT	Net Operating Profit After Tax
OECD	Organization for Economic Cooperation and Development
OPEX	Operating Expenses
OWC	Operating Working Capital
P/E	Price to Earnings
PD	Probability of Default
PPE	Property, Plant & Equipment
PV	Present Value
ROE	Return on Equity
SARD	Sum of Absolute Rank Differences
SG&A	Selling, General & Administrative Expenses
TV	Terminal Value
US	United States of America
WACC	Weighted Average Cost of Capital
WHO	World Health Organization

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## **1 Introduction**

When looking at the very basics of corporate finance literature from the 60s one might assume that there is no need for intricate models to value public companies, since under the efficient market hypothesis, current stock prices reflect all of the investors' views about the company's current and future earnings potential. However, as Damodaran writes, the very notion of an efficient market does not prohibit stocks from being mispriced but rather proposes that investors find this mispricing and correct it by either buying or selling, thus leading to an efficient market. Thus, even if we assume perfect markets, there is a need for company valuation.

In the ever-changing landscape of financial markets, company valuation is a crucial guide for investors and decision-makers. This thesis takes a deep dive into the subject of equity valuation, with a focus on the eyewear company, Fielmann. Navigating the intricate web of financial metrics, market dynamics, and industry benchmarks, this study seeks not only to understand the intrinsic value of Fielmann but also to comment on existing literature, providing a nuanced understanding of the broader field of company valuation.

## **2 Literature Review**

There exists a plethora of methods which can be used to value companies and therefore, there is no one way to value a firm. It is important to choose the method which fits best with the company's business model and financial setup, however, there is also always a degree of subjectivity and preference from the person doing the valuation. There seems to be a consensus amongst most practitioners, that in most cases, the Discounted Cash Flow (DCF) Method is appropriate (Brotherson et al., 2014), however, the same study also mentions that almost all practitioners use more than one method either to come to a consensus using multiple valuations or to do a sanity check for the main valuation.

It is important to note that equity and firm valuation are not the same, however, most methods calculate the value of equity first in order to obtain the value of the firm in a second step, by adding the value of debt and subtracting cash (equity bridge). This thesis focuses largely on the valuation of a company's equity but also mentions the value of the entire firm in some cases.

The following section will provide a summary of the most relevant methods used in company valuation as well as their components. For the sake of this thesis, it will be focused on public

company valuation of non-financial firms, as the financial figures needed for many of the methods are not readily available for private firms and financial firms have characteristics very dissimilar from non-financials, which makes valuing them fundamentally different. Additionally, it is important to note that the following chapter does not cover all available models for equity or firm valuation but rather a condensed list of the most relevant ones for this thesis.

## **2.1 Present Value Methods**

Using and discounting future earnings as a basis for a valuation is generally viewed as one of the most reliable methods in literature and practice (Brotherson et al., 2014). Whether one uses cash flows, dividends or even residual income depends largely on the company one wants to value, thus the different present value methods and their components as well as when it is appropriate to use them will be covered in the following sections.

### **2.1.1 Discounted Cash Flow Method**

The cash flow discounting methods are generally the most used to value companies and are the only conceptually correct valuation methods (Fernández, 2019). When using such a model, the company is seen as a cash flow generator and thus, each financial item contributing to the cash flow needs to be forecasted individually and discounted using the appropriate rate which reflects a company's risk (Fernández, 2019). The value of the asset is then computed as the present value of the expected future cash flows on it (Damodaran, 2012). While there are different types of cash flows (Debt, Equity, Firm, Capital Cash Flow), this part of the thesis focuses on the classic DCF approach, where the free cash flow to the firm (FCFF) is used.

The outcome of a DCF is the value of the entire firm (enterprise value or EV), seeing as one needs to use the FCFF as well as the cost of capital for the entire firm for its computation. To reach the equity value, excess cash needs to be added and the market value of debt must be subtracted from the enterprise value.

#### **2.1.1.1 Free Cash Flow to the Firm**

The basis for the valuation – the free cash flow of the firm – is computed as follows.

$$FCFF = EBIT * (1 - Tax Rate) + Depreciation \& Amortization + \Delta Provisions - Capital Expenditures - \Delta Operating Working Capital \quad (1)$$

This cash flow and its components are forecasted for each year within the explicit period, meaning the time until the company will reach a “steady” state of constant, perpetual growth.

### 2.1.1.2 Terminal Value (TV)

After the firm has reached the steady state, one assumes that it will either be sold or will grow in perpetuity at a constant rate. The present value of the perpetuity or the value of the asset at sale is called the terminal value and is added to the present value of the cash flows in order to compute the enterprise value.

When assuming the firm will be sold, the terminal value formula is the following; assuming we use an EV/EBITDA multiple:

$$TV = EBITDA * Multiple \quad (2)$$

In case we assume the company will not be sold, we use a perpetual growth equation to estimate the terminal value using a growth rate  $g$ .

$$TV = \frac{FCFF*(1+g)}{WACC-g} \quad (3)$$

No matter the computation method used, the terminal value is only discounted to the last period of the explicit period and thus needs to be discounted to the present value like the cash flows. The appropriate discount rate for this is explained in the following section.

### 2.1.1.3 Weighted Average Cost of Capital

When valuing the firm as a whole, e.g. using FCFF, the discount rate needs to reflect both the risk of equity and debt, thus, a weighted average cost of capital (WACC) can be computed using cost of equity ( $k_e$ ) and cost of debt ( $k_d$ ).

$$WACC = \frac{Equity}{Total\ Capital} * k_e + \frac{Debt}{Total\ Capital} * k_d * (1 - Tax\ Rate) \quad (4)$$

In case of the firm having any sort of mezzanine financing, which is neither considered debt nor equity, this form of financing has to be considered in the WACC calculation as well. Depending on whether the firm has a large cash balance, Net Debt may be used instead of Gross Debt in the calculation of the WACC.

#### 2.1.1.4 Cost of Equity

One important component of the WACC formula is the cost of equity. This figure measures the rate of return required by equity holders appropriate for the firm's riskiness. The general formula for the cost of equity was introduced by William Sharpe in the 1960s and is called the *Capital Asset Pricing Model* or CAPM. It is based on the principle of one price where two investments with the same risk should have the same rate of return.

$$k_e = r_f + \beta * (r_M - r_f) \quad (5)$$

where:  $r_f$  = Risk free rate of return;

and  $r_M$  = Return of the market

The risk-free rate and market return are quite simple to observe from 10 to 15-year government bonds and historical or implied market return respectively, however some researchers like Damodaran argue that a country risk premium should be included in the equity risk premium to account for country specific risk (Damodaran, 2023b). The  $\beta$  (beta) factor, which measures the sensitivity of a stock to changes in the market, needs to be computed from historical returns.

$$\beta_i = \frac{Cov(r_i, r_M)}{Var(r_M)} \quad (6)$$

where:  $r_i$  = Return of company i

This can be done directly by using the company's historical returns or by using a peer group. Whether the company's direct beta is a good approximation for the market risk factor depends on a multitude of factors like whether the shares are regularly traded or if the free float is relatively large or small.

Even though the CAPM is based on strong assumptions, which might not always hold in the real world, it is still the most widely used method to estimate a company's cost of equity for valuation purposes.

#### 2.1.1.5 Cost of Debt

The second component of the WACC is the cost of debt, which "[...] measures the current cost to the firm of borrowing funds [...]" (Damodaran, 2012) and can be calculated a number of ways. For

companies issuing bonds which are frequently traded, the cost of debt can be computed as the average yield to maturity of those bonds.

If the company has bonds which are not traded regularly, the credit rating can be used for the estimation of  $k_d$ . Each rating has a corresponding default spread, which is added to the risk-free rate to compute cost of equity.

The last method to estimate  $k_d$  is used for firms that do not issue debt and are not rated by a credit rating agency. For those companies, the interest coverage ratio can be used to estimate a synthetic rating. Damodaran regularly published updated rating tables which allocate a rating and a default spread to each interest coverage ratio. The cost of debt is again the risk-free rate plus the spread.

### 2.1.2 Adjusted Present Value

Computationally, the Adjusted Present Value (APV) method is quite similar to the classic DCF, however the aim is to value the firm as if it were unlevered. This approach separates the value of the firm from the value of financial side effects caused by debt. This approach is especially useful when the value of debt and equity in a firm is frequently changing, as the benefits and costs of debt are not considered through the cash flows directly. Instead of discounting the free cash flows using the WACC, the cost of equity is used for the APV method.

The biggest benefit of debt is its positive effect on taxes, e.g. the tax shield, which is the product of interest expense and the tax rate. To compute the present value, the tax shield is discounted at the cost of debt.

An important negative aspect of debt are the higher bankruptcy costs which come from the fact that debt makes the equity of a firm riskier, seeing as debt holders receive their share in the company before equity holders in the case of bankruptcy. Thus, the present value of bankruptcy costs needs to be subtracted from the unlevered firm value ( $V_U$ ) in order to reach the value of the levered firm ( $V_L$ ):

$$V_L = V_U + PV(\text{Interest Tax Shield}) - PV(\text{Financial Distress Costs}) \quad (7)$$

### 2.1.3 Dividend Discount Model

The dividend discount model (DDM) follows the same principle as any other cash flow valuation model; the value of any asset is the present value of its cash flows. Dividends are the only actual cash flows to equity holders apart from the cash they receive when selling their position. Thus, if one wants to value a company's equity it is reasonable to assume they should value the firm's dividends (Damodaran, 2012).

$$\text{Value per Share} = \sum_{t=1}^{\infty} \frac{E(DPS_t)}{(1+k_e)^t} \quad (8)$$

where  $E(DPS_t)$  = Expected dividend per share in period  $t$ ;

and  $k_e$  = Cost of equity

When working with this equation, the dividend per share needs to be estimated for each period. Since these projections cannot be made into infinity, alternative models have been developed (Damodaran, 2012).

One alternative is the Gordon growth model, which assumes that dividends grow in perpetuity at a constant rate. For this model, only one dividend per share is needed. However, a constant growth rate needs to be assumed for the dividends, which can be quite complicated and makes the outcome of the model highly sensitive to growth rate assumptions (Damodaran, 2012).

Another variation of the classic DDM is the two-stage DDM. In the first stage first stage, growth is not yet constant, meaning the dividend per share per period needs to be estimated for an explicit period until the firm reaches its steady state of constant growth. This second stage can then be valued using the Gordon growth method for valuing dividends through infinity (Damodaran, 2012).

While the notion behind the dividend discount model is correct, it is thought to be outdated by some practitioners, which believe the DCF is a more accurate way of valuing a firm's equity (Damodaran, 2012). This is due to the fact that if the sum of a company's dividends is not equal to its free cash flow to equity, the DDM assumptions do not hold. Seeing as dividends have a signaling effect, the assumption is quite hard to defend (Berk & De Marzo, 2017). Research has shown that shareholders react to dividend announcements and firms that decrease their dividends are often punished by the market, so there is an aspiration for companies to keep their dividends stable, even

if that does not correspond with their Free Cash Flow to Equity (FCFE) (McNichols & Dravid, 1990).

## **2.2 Relative Valuation Methods**

Valuation using multiples is a widely used technique for several reasons. There is no need for elaborate assumptions unlike for other methods. The valuation is simpler and quicker and thus, much easier to understand.

Some important relative valuation methods include the Price-Earnings or Price-Sales ratio but also multiples using enterprise value like EV/Sales and EV/EBIT(DA), where EBITDA is usually the preferred choice seeing as depreciation schedules can differ between firms.

However, in order to use multiples for valuation purposes, one needs to find peer or comparable companies, which have the same characteristics as the company being valued. This can pose a challenge and thus, there are different approaches to peer selection.

Damodaran proposes that peers should be chosen independently of industry, but rather need to be similar in terms of growth, risk and profitability measures. Other authors, claim that choosing peers from the same industry yields more accurate results (Liu et al., 2002). This divide amongst researches has opened room to explore new ways to select peers and Knudsen et al. propose the SARD measure (sum of absolute rank differences) as a solution. Under this approach, each company is ranked on a set of selection variables (e.g., return on equity and market capitalization) relative to the remaining companies in the sample and the ones with the lowest SARD measures can be chosen as peers (Knudsen et al., 2017).

The peer selection for the valuation part of this thesis will be further elaborated on in a later chapter.

## **2.3 Other Valuation Methods**

While it is appropriate to say that present value and multiple valuation methods are the two most frequently used in practice and thus, the most relevant for this thesis, there are other methods, which will briefly be covered in this next section.

### 2.3.1 Contingent Claim Valuation Methods

As Damodaran describes, the previous valuation methods have assumed that the value of a company cannot exceed the present value of its cash flows. However, in the case that these cash flows are contingent on a certain event, the value of the company can be larger than if one were to ignore these contingencies (Damodaran, 2012).

The basic idea behind the contingent claim valuation method is that cash flows can be treated as options which increase or decrease in value depending on whether a certain event occurs. Thus, one can use option pricing methodology to value the cash flows.

While no other valuation approach incorporates potential contingencies, there are several limitations to this method. The input needed to compute the value of an asset using this approach can only be found for traded firms and otherwise needs to be estimated, potentially leading to mistakes. Additionally, the model assumes constant variance and dividend yields which, while logical for short-term options, unlikely holds when options have long lifetimes (Damodaran, 2012).

### 2.3.2 Balance Sheet Methods

These approaches seek to determine a company's value by estimating the value of its assets using balance sheet items. Since the balance sheet is only a static view of a firm's financial state, these methods do not account for the company's future evolution (Fernández, 2019).

One option is to use a company's book value as its market value. In this case, the shareholder's equity in the balance sheet would be the company's equity value. This method has some serious shortcomings, seeing as accounting criteria are up to a certain amount of subjectivity from the persons creating the statements and are thus almost never result in the same values as the market.

Another possibility is to compute the liquidation value of the firm. This represents the value of the company if all assets were sold and debt were repaid (Fernández, 2019). This represents the company's minimum value in the "worst case", but the method is usually only used if a company is bought with the intention to liquidate it (Fernández, 2019).

Lastly, the substantial value represents the investment that would have to be made to form a company that is identical to the company being valued, e.g. to replace its assets. This value usually

does not include assets that are not used for operations like holdings in other companies or non-operational real estate (Fernández, 2019).

### **2.3.3 Goodwill-based Methods**

Goodwill seeks to represent the value of a company's intangible assets, which are usually not on the balance sheet. Since these assets are not valued by the company, there is no consensus on how to estimate their value. Goodwill-based methods combine the static approach of valuing a company's assets while also incorporating future earnings (Fernández, 2019).

The "classic" goodwill valuation method computes the enterprise value as the value of net assets plus the value of goodwill, which can be calculated as a multiple of net income or a percentage of turnover (Fernández, 2019).

As this valuation method is less relevant for this thesis, further goodwill-based methods will not be elaborated on.

### **2.3.4 Sum of Parts Valuation**

Instead of seeing the company as one cash flow generating entity, the sum of parts valuation separates a company's different segments, values them separately and computes the enterprise value as their sum. This may be useful if the company is a conglomerate or operates in many different industries (Brotherson et al., 2014).

For this thesis it is important to note that the financial data required for a sum of parts valuation is usually difficult to gather since most financial reports only contain figures based on the firm as a whole and do not differentiate between business units. Thus, an investment bank with direct access to the firm or to other non-public information would have a better basis in terms of data for the analysis.

### **3 Company Analysis**

To create a better understanding of Fielmann AG for the purpose of a valuation, the following chapter will provide an overview of the firm's business and revenue models and strategy going forward.

#### **3.1 Overview**

Fielmann Group AG was founded as an eyewear and hearing aid company in 1972 by Guenther Fielmann and is headquartered in Hamburg, Germany. The family business was handed over from Guenther to his son Marc in 2019 and remains in the control of the Fielmann family, who control 72,91% of shares. The company employs over 23.870 people and operates more than 1.000 stores across Europe as of September 2023 (Fielmann, 2022).

Fielmann operates as a designer, manufacturer, wholesaler and optician and is able to cover the entire value chain of the optical industry. The company offers frames, lenses, sunglasses, contact lenses, safety eyewear and accessories as well as hearing aids to approx. 27 million customers at affordable prices. Out of the entire product range, spectacle lenses make up around two thirds of sales and Fielmann produced around 4,3 million lenses in 2022. Seeing as the hearing aid segment only accounts for approx. 5,7% of Fielmann's total revenue, the remaining analysis focuses mostly on the eyewear segment.

With production facilities located in both Europe and China, Fielmann is able to ensure high quality as well as low costs for its customers. An international design team creates products for Fielmann's name brand which is offered to customers at a lower price than most designer pieces. The company's entire product offering ranges from basic to luxury products and includes known manufacturers next to the Fielmann brand, with which the company works closely.

The company's largest production and logistics facility is currently located in Brandenburg. Additionally, Fielmann is building a state-of-the-art logistics center in the Czech Republic which can be used for production, if necessary.

The Central European market is by far the most important for Fielmann, as the company has established itself as a reliable provider of quality eyewear and enjoys a high level of customer

satisfaction and loyalty by offering a large product range at the guaranteed best prices, free services, outstanding quality and expertise of employees.

An important aspect of the business is the cooperation with insurance companies to provide prescription eyewear at low and even zero-cost. As of 2022, approx. 9 million customers have benefitted from Fielmann's partnership with insurance provider Hanse Merkur which offers glasses at zero-cost.

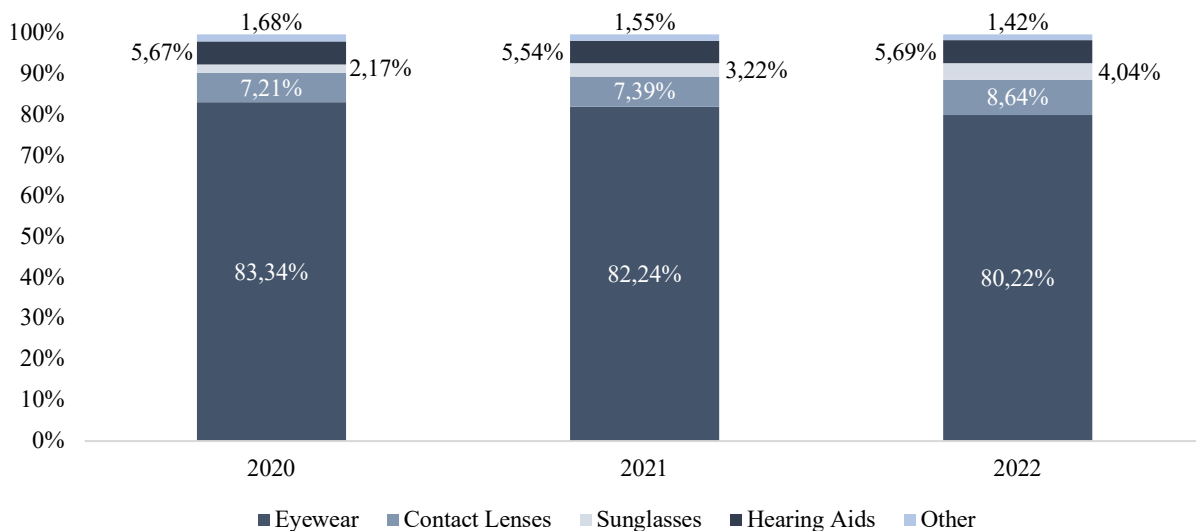


Figure 1 – Revenue by Product Category

### 3.2 Strategy

Due to the aftereffects of the Covid-19 pandemic, as well as rising inflation in Europe in 2022, Fielmann has reacted with anticyclical price reductions in Germany which have attracted new customers and have kept the company's revenue from decreasing significantly (Fielmann, 2021). Despite the economic turmoil, Fielmann has maintained its market shares in most major markets. In 2022, the company further decreased prices and increases salaries, which disproportionately affected profitability (Fielmann, 2022).

From 2023 onwards, Fielmann has focused increasingly on margins again and has introduced a cost reduction program targeting structural costs in non-customer-facing functions in order to sustain price leadership in the long-run. The program includes the automation and consolidation of key administrative and production-related processes. With these measures, Fielmann expects to

reach a target EBT margin of 16% in the coming years, compared to the 9% in 2022 (Fielmann, 2023).

The company's overarching strategy *Vision 2025* is largely focused on digitization and internalization of Fielmann's operations in which there have been large investments made already. The goal is increased customer centricity as well as building a smooth, omnichannel experience for customers. Seeing as the majority of prescription eyewear sales are made in person (Fielmann, 2022), growing online purchases is difficult. Fielmann has developed a virtual try-on technology, which allows customers to try new glasses from the comfort of their own home, while keeping their own glasses on. This technology has been showing success and has been tried out by over 7 million customers. Additionally, Fielmann is striving to further enable online purchasing without having to sacrifice quality of product or service and 2022 sales figures have already confirmed the beginning success of this; ecommerce sales grew by 37% compared to 2021.

In terms of internationalization, Fielmann has been able to achieve double-digit growth in the Czech Republic, Italy, Poland, Slovenia and Spain in 2022 as well as single-digit growth in the remaining Central European markets. International sales accounted for 29% in 2022 at an absolute value of EUR 506m compared to 21% (EUR 455m) in 2021.

This growth is aided by the group's strong performance in Spain resulting from the acquisition of a majority stake in Óptica & Audiología Universitaria in 2020 as well as the complete acquisition of Medical Óptica Audición in December 2022 which make Fielmann the second largest provider in Spain. The company aims to assume market leadership in the coming years and sees a potential for approx. 200 stores in Spain.

In Italy, Poland and the Czech Republic, Fielmann plans to organically expand its market share through its digital sales channels as well as 150 planned stores in the long-term with a revenue potential of approx. EUR 160m.

In an effort to expand the business past Europe, Fielmann acquired 100% of the shares in SVS Vision, headquartered in Detroit, Michigan in June 2023. SVS Vision operates more than 80 stores in nine US states and generated revenues of over USD 100m in 2022. Additionally, Fielmann simultaneously announced the complete acquisition of Eyevious Style, Inc., which operates the ecommerce platform Befitting aspiring to simplify the online eyewear shopping experience. Any

increase in income through the acquisitions will likely be offset in 2023 by the acquisition costs, but will appear in Fielmann's financial statements from 2024.

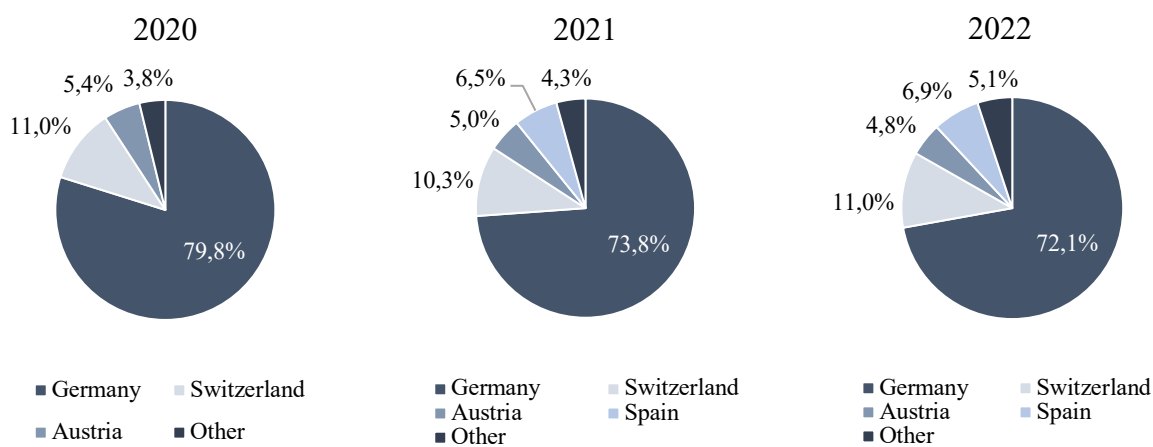


Figure 2 – Geographic Revenue Split 2020 - 2022

### 3.3 Purpose & Corporate Social Responsibility

Fielmann aims to “Help everyone hear and see the beauty in the world” as part of its Corporate Social Responsibility (CSR) activities. The company actively contributes to several UN Sustainable Development Goals, most importantly to make good health and well-being accessible for everyone while also reducing inequalities by means of affordable eyecare and hearing acoustics.

Further, Fielmann is progressing in its goal to make its product assortment more sustainable by receiving the ISCC Plus (International Sustainability and Carbon Certification) certifying the quality of sustainable product development and manufacturing. In 2023 the company plans to introduce numerous new sustainable frames and sunglasses developed by the Fielmann Group and brand suppliers.

## **4 Market Analysis**

In addition to Fielmann's business model and corporate strategy, the market environment it operates in has a large influence on its success and thus on its valuation. The following chapter elaborates on Fielmann's primary markets, the firm's position within them and the macroeconomic factors influencing the business.

### **4.1 Market Description**

As discussed, Fielmann operates four main product categories; Eyewear, Contact Lenses, Sunglasses and Hearing Aids. Due to the Eyewear segment contributing roughly 80% to the group's overall revenue, the focus of this market analysis will mainly be the eyewear market.

#### **4.1.1 Eyewear**

The eyewear market is typically split into the segments Spectacle Lenses, Sunglasses and Contact Lenses of which the Spectacles market is by far the largest. The overall global Eyewear market is projected to reach a value of USD 141,50bn in 2023 and is expected to grow at a CAGR of 4,37% until 2027 (Statista, 2023). The Spectacle Lenses segment contributes a market volume of USD 58.98bn to this. Geographically, the US market is the largest with a volume of USD 33,83bn in 2023 (Statista, 2023). Europe accounts for roughly USD 36,3bn.

The competition in the market can generally be split between lenses and frames manufacturers. For the former, key players in Europe and North America include Alcon Inc., Cooper Vision and Bausch & Lomb, while the latter include firms like Safilo and DeRigo.

In the retail space, the competitive environment includes mostly local players like National Vision and Warby Parker in the US. The clear market leader globally is EssilorLuxottica who are headquartered in France and Italy and had a market share of approx. 17% in 2022.

With a global market share of 1,24%, Fielmann is very much a local player within Central Europe.

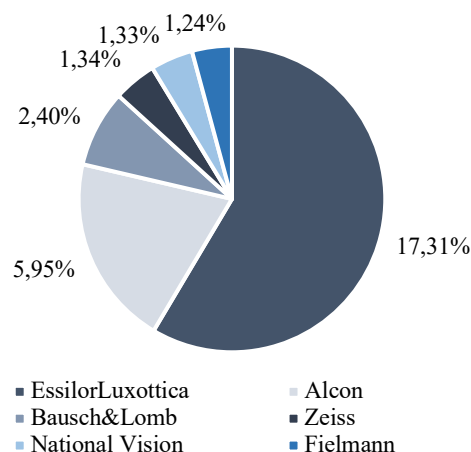


Figure 3 – Eyewear Market Shares (Source: Own analysis)

#### 4.1.2 Hearing Aids

The Hearing Aid market, while much smaller, is also seen as much more stable than the eyewear sector. Globally, more than 1,5bn people suffer from some type of hearing loss and around 430m of these require treatment according to the WHO. By 2050, this number is expected to rise to 700m. In Germany, the number of people suffering from hearing impairments is estimated at 15m which not only includes elderly people but increasingly children, teenagers and young adults.

In 2022, around 1,6m hearing aids were fitted in Germany according to the German Federal Guild for Hearing Healthcare Professionals (BIHA) and revenues for the hearing aid sector amounted to around EUR 1,6bn.

#### 4.2 Fielmann's Position in the Market

Fielmann is the market leader in Central Europe not only due to the sheer number of stores and online presence, but also due to the increased level of turnover compared to competitors. On average, a Fielmann store sells 30 pairs of glasses daily, while traditional opticians sell an average 3 units and rival specialist stores sell 7 to 8.

According to the firm's annual report, Fielmann increased its volume market share from 51% to 53% in Germany in 2022. Seeing as Fielmann generally offers products at a lower cost, the sales market share is lower at 22% in 2022. The company operates 614 stores in Germany which represents 5% of all optical stores in the country.

In terms of customer group, Fielmann generally caters to younger customers than its competitors, which leaves potential for sales growth in the progressive lenses segment as these customers get older. For the Hearing Aid business, growth is expected to come from already existing customers.

### **4.3 Market Trends**

#### **4.3.1 Digitization**

One major driver of the eyewear industry and most industries in general is digitization, which was largely accelerated by the Covid-19 pandemic. Retailers like Fielmann are increasingly building online presences to offer their customers an omnichannel experience. As mentioned in the company analysis of Fielmann, the company has made large investments in its digital strategy and is already seeing some positive results. Due to these early investments, the firm has been able to establish a competitive advantage, especially over the smaller, independent retailers in the market.

While it is unlikely that ecommerce will completely substitute offline retail due to a lack of online measuring technologies, Fielmann anticipates the connection of off- and online sales to become increasingly important, thus an omnichannel model appears to be the most promising.

#### **4.3.2 Consolidation**

The European market is large and highly fragmented, which is why there is a high level of consolidation expected throughout the coming years.

Fielmann's own assessment from 2021 suggests that the European optical market, comprising over 80,000 stores, is seeing a growing influence from major omnichannel retailers such as Fielmann. These larger retailers are projected to hold a substantial 25% share of the overall market. According to Fielmann's estimates, industry consolidation varies across Europe, with Scandinavian countries reaching a high level of 90%, contrasting with Italy's lower consolidation at less than 20%. Notably, Germany stands out with a relatively concentrated market, where the top 3 retailers control about 70% of the industry. Thus, the focus for growth is shifting more towards Southern and Eastern Europe, where Fielmann has already made some important acquisitions to drive inorganic growth.

After EssilorLuxottica's acquisition of GrandVision in late 2021, Fielmann is now the leading publicly listed specialist optical retailer in Europe. Given the competition restrictions in the market, Fielmann stands out as one of the only potential acquirers or consolidators in the industry.

### **4.3.3 Demographic Development & Risk Factors**

While digitization and consolidations are key market trends, the most important factor influencing the sector is the demographic development of the global population.

The number of people requiring visual aids increases with their age and from middle-age onwards, virtually everybody is reliant on some form of visual aid. While some people simply develop deficits later in life, people who already wear glasses usually go on to require two pairs; one for distance vision and one for reading up-close. This trend also leads to an increased demand in progressive lenses which sell at higher prices. Additionally, there is an increased expected demand for prescription sunglasses, which only 45% of glasses wearers currently own (Bähren et al., 2021).

Risk factors for worsening eyesight include prolonged near vision reading, spending long amount of time looking at computers, smartphones or other sources of blue light as well as general shortage of natural light. These factors are especially dangerous for children between the ages of 6 to 18, thus, increasing numbers of children and young adults will need glasses or contact lenses.

According to a study conducted by Kuratorium Gutes Sehen e.V., the number of individuals wearing glasses in the 20 to 29 age bracket has seen a more than twofold increase since 1952. Additionally, in the 30 to 44 age group, the increase is upwards of 55%.

Lastly, Eyewear is also increasingly considered a fashion item so replacements are not only made once the glasses are damaged but also if they go out of style.

## **4.4 Macroeconomic Environment**

As a final factor for the Eyewear market, it is important to mention any effects of the current macroeconomic situation.

While the Covid-19 pandemic had a huge influence on consumer behavior in 2020 and the years following, Fielmann as a provider of healthcare and essential items has been largely able to keep stores open throughout the pandemic. However, the volumes in Central European cities and shopping centers have not reached pre-pandemic levels yet.

The Covid-19 outbreaks in China during 2022, along with associated lockdowns, adversely affected supply chains, causing production shortages across various industries. However,

Fielmann, with ample stockpiles of its core products, experienced minimal disruptions in the supply of supplier goods.

Supply chains and consumer demand were again disrupted in 2022 by geopolitical conflicts, namely the war in Ukraine.

Before the invasion, there was an anticipation of economic recovery after the improvement of the coronavirus pandemic. However, this outlook had to be reconsidered. Western Europe entered a phase of stagflation, marked by a combination of sluggish economic growth and elevated inflation levels. The European Central Bank (ECB) faced the task of addressing inflation by potentially raising interest rates, while being mindful not to slow economic growth.

High energy costs, stemming from supply constraints linked to Russia, the Baltic Sea pipeline attacks, and sanctions on Russian oil imports, impacted consumer spending. In addition to soaring energy prices, substantial increases in food prices contributed to consumer hesitation. In Germany, consumer prices rose by a yearly average of 7,9%, while the consumer confidence index fell to an all-time low (German Federal Statistical Office, 2023).

According to estimates by the International Monetary Fund (IMF), global economic growth amounted to 3,2% in 2022 (2021: 6%), while the eurozone recorded an increase of 3,1% (2021: 5,2%). For 2023, the projected growth is 2,7% globally and 0,5% in the eurozone (International Monetary Fund, 2022). Nonetheless, short-term effects of the Ukraine conflict on German consumption is not expected to last, as the macro outlook is improving amidst slowing inflation and increasing consumer confidence.

## 5 Financial Analysis & Forecast

As a basis for the valuation of Fielmann, the financial statement items contributing to the Free Cash Flow are analyzed and forecasted. The analysis of historical statements is based on the figures between FT18 and FY22. For the valuation, an explicit period of seven years (FY24 – FY30) is assumed, because the company is expected to enter into a steady state after those years. Fielmann already shows some signs of a stable company, one of them being the very low debt level as well as the assumption, that the demand for glasses can be linked to population and GDP as well as population growth. However, due to the firm's omnichannel strategy, which is still being realized, the stable state is not expected for a few years. Financial figures for FY23 are forecasted taking into account the already published Q3 report.

The section first covers relevant income statement items and then moves on to Balance Sheet items.

### 5.1 Income Statement

For the forecast of Fielmann's income statement, a standard top-down approach is chosen. A more detailed overview of the income statement forecast is provided in Appendix 2.

#### 5.1.1 Revenue

Historically, Fielmann has shown quite stable revenue growth between 3% and 6% up until FY20 when the Covid-19 pandemic had a strong negative effect. In 2020, revenue decreased by 6%, due to the reduction in demand by the crisis, however, Fielmann was able to quickly adjust and grow revenues by 17,4% in FY21. The development is shown in Figure 4.

Given Fielmann's position as market leader in the Central European market, the company's revenue growth is expected to be in line with the growth of the market.

Seeing as Fielmann has already published its third quarter report for FY23, the forecast for the current financial year relies largely on Fielmann's own estimations. The company expects sales to grow by 13% this year to approx. EUR 2bn, and the results presented thus far are in line with this estimation. Thus, group revenue for FY23 is forecasted using the 13% growth rate and amounts to a value of EUR 1,99bn.

While this growth is quite steep, it is to be expected, due to the negative impact of Covid-19 as well as of the conflict in Ukraine on FY22 sales. For the years following FY23, growth is forecasted

to be initially slightly above market growth, due to Fielmann's early investments in its omnichannel strategy as well as the acquisitions the company has made, which will show first contributions to sales in FY24. Following a period of higher growth, revenue growth is forecasted to become more stable at approx. 5% after FY26 and slow down to 3% after FY28, as the firm approaches a steady state. The CAGR for Fielmann's forecasted revenue (FY23-FY30) amounts to 5,34% which is largely in line with the global market's CAGR of 4,37% (FY23-FY27).

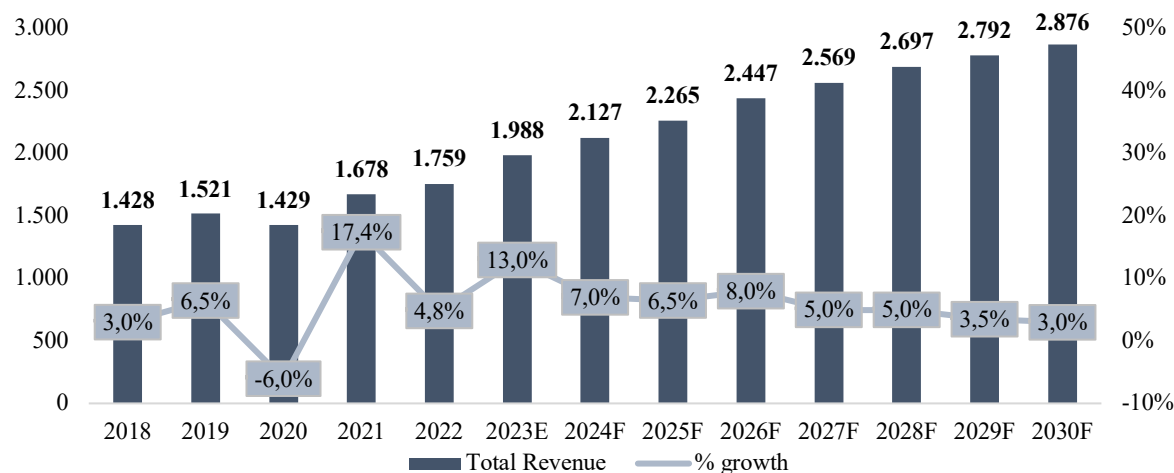


Figure 4 – Historical and Forecasted Revenues

The revenue forecast is neither split into geographical revenue nor into revenue by product due to the overwhelming revenue contribution of German and the Eyewear segment. Thus, forecasting regions or product groups separately, would change little about the final estimated figures.

### 5.1.2 Cost Base

The cost forecast is split into cost of revenue (COGS) and operating expenses (OPEX). Cost of revenue is forecasted in relation to the number of stores. The growth of the number of stores has fluctuated quite a bit in recent years, however, Fielmann has had a stable cost per store (Cost of Revenue/Number of Stores) of approx. EUR 400.000 each year. For 2023, the company has already published the new total number of stores, which equals 1.075, in the third quarter report and this number is not expected to rise in the last quarter, seeing as it already represents an 11% increase. To forecast the number of stores, a rolling average of five years of historical growth is applied. Towards the end of the explicit period, store growth is decreased manually towards the level of revenue growth, as the company will slow down its expansion once it becomes more mature. The

cost per store is calculated using the same rolling average approach, without the intervention towards the end of the forecast. The total cost of revenue then equals the total number of stores in each period multiplied with the average cost per store.

Fielmann already operates at a very low cost of revenue and is not expected to further decrease this. The firm's strategic focus is increasingly on operating expenses in non-customer-facing areas, which is why the forecast for those expenses is adjusted from the historical figures.

Total operating expenses relative to revenue of Fielmann have increased by 8pp between FY18 and FY22, which is largely due to increases in cost of revenue, depreciation and amortization (D&A) and other unusual expenses. The company has been able to keep SG&A at a stable level throughout the pandemic, which has helped its bottom line, however, in FY22, likely due to the war in Ukraine, SG&A increased by 10,7% while revenues only grew by 4,8%.

For the future, SG&A are expected to decrease slightly due to the aforementioned cost cutting program under the Fielmann's strategy – *Vision 2025*. D&A are forecasted as a percentage of PP&E, seeing as it refers to a company's asset base. For this, a rolling average of five years is used. The same method is applied for interest expense (net, operating), unusual expense and other operating expense, only that these are forecasted as a percentage of revenue again.

The result is a total operating expense decreasing by approx. 3pp as a percentage of revenue throughout the explicit period. The three most significant costs included in OPEX are shown in Figure 5 relative to total revenue.

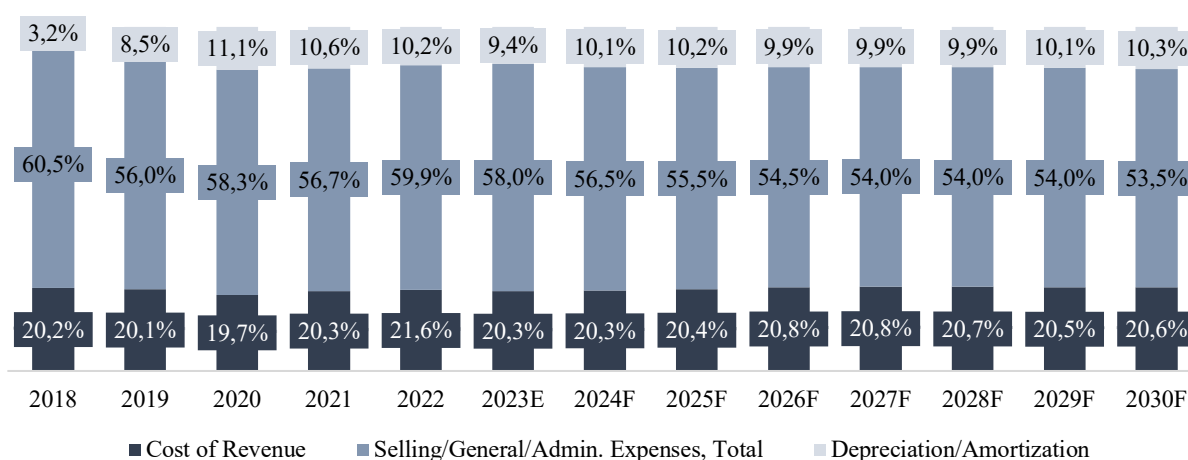


Figure 5 – Selected Historical and Forecasted Costs

For the tax rate, the effective rate is chosen at 30%, because Fielmann has paid a relatively stable rate of 30% over the last 10 years.

### 5.1.3 Profit

After putting a large focus on lowering the cost of its products as a consequence of the Covid-19 pandemic and the war in Ukraine, Fielmann's margins significantly decreased between FY19 and FY22. Before FY20, margins were stable and at healthy level (Figure 6), which Fielmann aspires to come back to within the coming years. The company's new focus on profitability will facilitate this improvement, as the economy recovers from recent struggles.

In its *Vision 2025* strategy, the company outlines an EBIT margin target of 16% for FY25. The assumed numbers approximately meet this target with a forecasted EBIT margin of 15% in FY25 and 15,7% in FY26. Additionally, an EBITDA margin improvement of 8pp between FY22 and FY30 can be observed. Net income also improves by approx. 7,5pp in the forecast. The improvements are largely due to the company's current cost cutting program, as well as the program scheduled to be announced in early 2024, which will significantly cut costs in non-customer-facing operations.

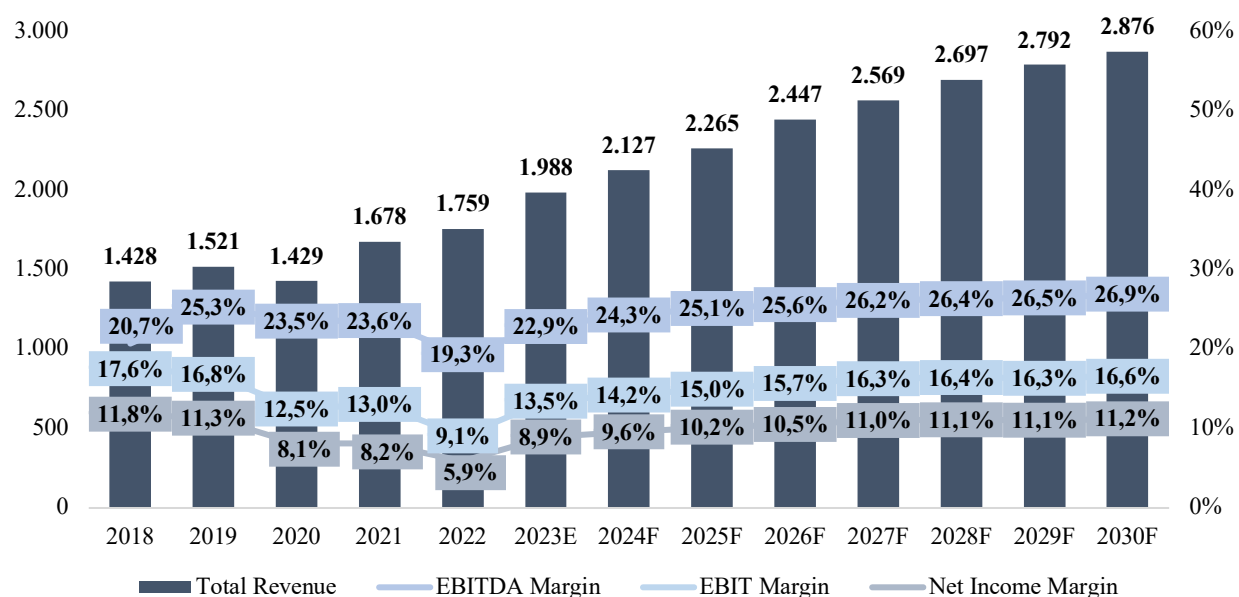


Figure 6 - Historical and Forecasted Profit Margins

<b>Condensed Income Statement</b> <b>€ in millions, rounded</b>	<b>2023E</b>	<b>2024F</b>	<b>2025F</b>	<b>2026F</b>	<b>2027F</b>	<b>2028F</b>	<b>2029F</b>	<b>2030F</b>
<b>Total Revenue</b>	<b>1 988</b>	<b>2 127</b>	<b>2 265</b>	<b>2 447</b>	<b>2 569</b>	<b>2 697</b>	<b>2 792</b>	<b>2 876</b>
% growth	13%	7%	6%	8%	5%	5%	3%	3%
Cost of Revenue	403	431	462	509	535	557	573	591
Gross Profit	1 585	1 696	1 803	1 938	2 034	2 140	2 218	2 285
Total Operating Expense	1 720	1 824	1 926	2 063	2 150	2 254	2 336	2 398
Operating Income (EBIT)	268	303	339	384	419	443	456	477
Interest Inc. (Exp.)	(3)	0	2	(3)	(1)	(1)	(0)	(1)
Net Income Before Taxes (EBT)	264	303	341	381	418	442	456	477
Income Taxes	79	91	102	114	125	133	137	143
Net Income After Taxes	185	212	239	267	292	310	319	334
Minority Interest	(7)	(8)	(8)	(9)	(9)	(10)	(10)	(11)
<b>Net Income</b>	<b>178</b>	<b>204</b>	<b>231</b>	<b>258</b>	<b>283</b>	<b>300</b>	<b>309</b>	<b>323</b>
% growth	71%	15%	13%	12%	10%	6%	3%	5%

Table 1 - Condensed Forecasted Income Statement

## 5.2 Balance Sheet

The following section provides an analysis of all balance sheet items which are relevant for the calculation of the free cash flow to the firm, after which the assumptions to forecast them are explained.

### 5.2.1 Capital Expenditures

CAPEX as a function of PPE, Intangibles and D&A has been quite volatile between FY18 and FY22, as Fielmann has made large investments in its internationalization and omnichannel strategies.

In FY19, the net PPE position increased by 152%, due to the first application of IFRS 16, which recognizes the rights of usufruct from leases for the first time. Fielmann uses operational leases for rental purposes which will be explained in the next section. The switch to IFRS 16 had a large effect on the balance sheet due to this.

Due to the acquisitions of other companies, the goodwill and the intangibles items increased dramatically in FY20 by over 200% each.

CAPEX is forecasted by estimating its individual components. The overarching assumption, is that Fielmann will slightly increase its CAPEX in the near future, but will stabilize it to a maintenance CAPEX level towards the end of the explicit period, as the company enters a mature state.

D&A has already been discussed in the previous section on Fielmann's income statement items.

The change in net PPE is calculated by forecasting each item separately. Net PPE growth is expected to decrease to a more stable level of around 6% by FY27. Almost all components of net PPE, which are detailed in Appendix 4, are expected to grow less rapidly and eventually come to a stable level throughout the explicit period. This assumption is made due to Fielmann having recently invested in a brand-new production facility and thus unlikely needing elaborate additional capacities in the future. Any future investments in production or logistics facilities are assumed to affect net PPE only slightly.

Net intangibles as well as goodwill are expected to follow a similar trend of stabilization and decrease in growth towards the end of the explicit period. No significant goodwill impairments are expected.

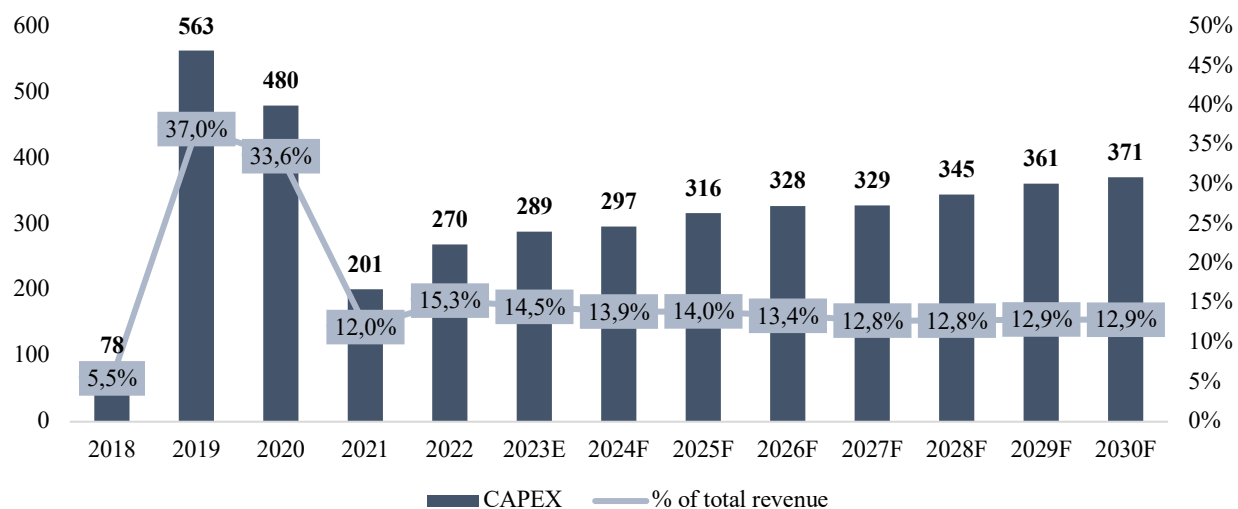


Figure 7 - Historical and Forecasted Capital Expenditures

## 5.2.2 Net Debt

Fielmann's debt position consists almost entirely of operational leases, which are associated with rented properties. The company primarily leases properties for its physical stores. Typically, the lease agreements have a duration of ten years, with two optional renewals of five years each. A duration of ten years is assumed because the renegotiation of an agreements is sought after ten years in the majority of cases. In FY19, total debt increased massively by 1.541%, however, this is due to the first application of IFRS 16 in that year and not to an actual change in the value of operational leases.

The forecast of total debt relies on the assumption that the position will stay relatively constant and is thus computed using a rolling average of 3 years of the absolute value of historical total debt. The growth of the cash position is negatively related to CAPEX growth, seeing as an increase in CAPEX is funded using cash and a decrease increases the cash position. This yields in average net debt growth of 1,4% throughout the explicit period.

Condensed Balance Sheet € in Millions, rounded	2023F	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Total Debt	455	465	467	462	464	464	464	464
Cash & Short Term Investments	167	163	152	146	146	139	132	129
<b>Net Debt</b>	<b>288</b>	<b>302</b>	<b>315</b>	<b>316</b>	<b>318</b>	<b>326</b>	<b>331</b>	<b>335</b>
% growth	-4%	5%	4%	0%	1%	2%	2%	1%

Table 2 - Forecasted Net Debt

## 5.2.3 Operating Working Capital

For of the items contributing to working capital, the forecast is again based on their historical growth. Overall, the items have been quite stable in recent years relative to revenue. The fluctuation between FY19 and FY22 is explained by the Covid-19 pandemic as well as the following period of inflation.

All items are forecasted using a rolling average of the previous four years. Additionally, minor adjustments are made when historical numbers contain extreme values which do not reflect a normal state of Fielmann. Figure 8 shows the development of the components of operating working capital as percentages of total revenue.

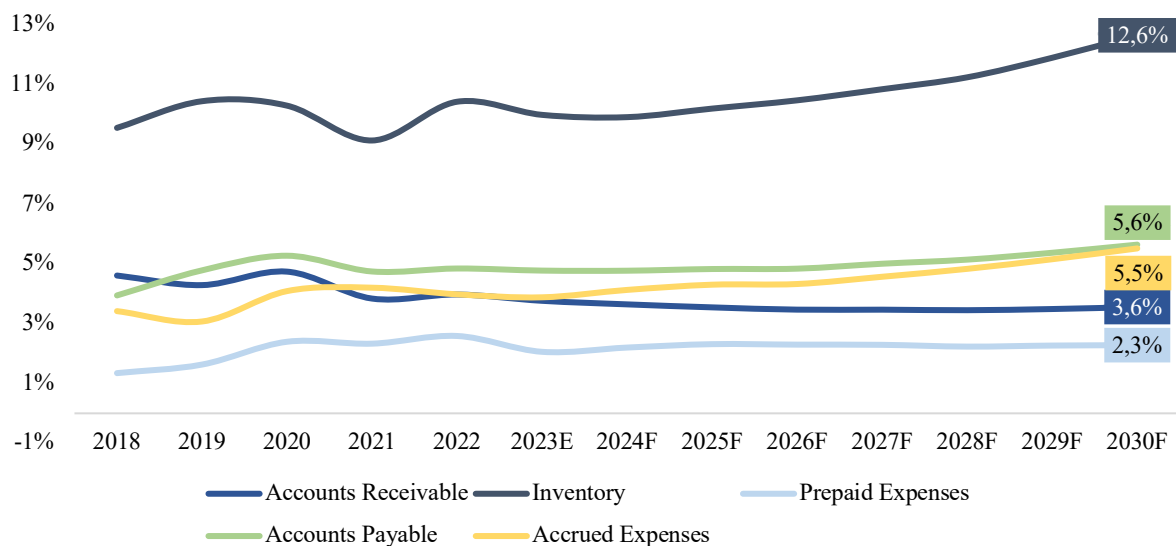


Figure 8 - Operating Working Capital Components as Percentages of Revenue

Any other non-current operational items, namely deferred income tax assets and liabilities are recognized similarly to working capital in the FCFF calculation and are thus also forecasted using a simple average growth rate of 13%. These items do not make a large contribution to the FCFF but are included for completeness.

## 6 Valuation of Fielmann

The primary model used for the valuation of Fielmann is the Discounted Cash Flow model. This is largely because the company has predictable cash flows and is not expected to have large changes in capital structure throughout the explicit period. Additionally, the APV method as well as the Comparable Companies method are used as comparisons for the main DCF model.

The valuation is done from the standpoint of December 31<sup>st</sup> 2023, seeing as that is the end of the financial year for Fielmann.

Besides the above mentioned, other valuation methods have been considered but were eventually deemed inappropriate for the case of Fielmann. Namely, the Dividend Discount Model was considered, seeing as it can be a valuable method. It was not chosen due to the fact that in recent years, Fielmann's dividend payments did not match the company's Free Cash Flow to Equity but were much smaller. Using the DDM would thus lead to an underestimation of Fielmann's equity value.

The following sub-chapters will first focus on the DCF valuation along with its components and then move on to the APV method and a relative valuation.

### 6.1 DCF Valuation

#### 6.1.1 WACC

The cost of equity of Fielmann is computed using the CAPM, as described in section 2.1.1.4 of this thesis.

To begin, the beta for Fielmann needs to be estimated. For this, a peer group of companies in the eyewear sector is assembled. The peers are selected based on their similarity to Fielmann in terms of revenue growth, operating profit margin, ROE and debt to total capital ratio, as these criteria reflect a company's liquidity and risk, which, seeing as beta measures a company's systematic risk, need to match between Fielmann and the chosen peers. The peer beta is chosen over the direct calculation of Fielmann's beta because it leads to a more normalized result. A company's stock returns can be influenced by factors unique to them, which may not reflect the actual market risk, thus, in order to better measure the actual market risk, multiple companies within the industry are

analyzed. Additionally, Fielmann only has a free float of around 27% so the market risk may be understated by the direct calculation of the beta.

The peer's betas are then calculated using five years of weekly stock returns from Refinitiv as well as market returns for the same period. For European peers, the market index used is the Euro Stoxx 600 index, while peers from the US are compared to the S&P 500 composite index. The resulting peer betas are then unlevered using the firms' respective debt to equity ratios (market values) as well as their country specific tax rates (OECD, 2023). This results in the following betas.

	Peer Betas			
	Beta	D/E (Market)	Tax Rate	Unlevered Beta
EssilorLuxxotica SA	1,07	0,17	25%	0,94
National Vision Holdings Inc	1,59	0,49	31%	1,18
Safilo Group SPA	1,55	0,13	30%	1,43
Cooper Companies Inc	0,96	0,17	19%	0,84
Alcon	0,84	0,15	20%	0,75

*Table 3 - Beta Calculation using Peers*

To reach the beta of Fielmann, the average of the unlevered peer betas is then re-levered using Fielmann's debt to equity ratio (using market capitalization as of 27.11.23 and forecasted total debt for 2023) and tax rate, which results in a final beta of 1,11. To confirm this value is appropriate, the Damodaran industry beta database is used. The industry beta for Healthcare Products is 1,16 (Damodaran, 2023a), thus the above calculation is deemed applicable.

For the risk-free rate, the 15-year German bond yield is used, which corresponds to 2,93%. Since Fielmann mainly operates in Germany, the German bond is chosen. The 15-year maturity is selected, because the risk-free investment represents an alternative to investing in the stock market. Since stocks are typically a long-term investment, a short-term bond would not adequately represent an alternative.

Lastly, the market risk premium is computed using annualized historical daily returns from the last five years of the SDAX index, which Fielmann is a constituent of. This calculation yields a market return of 7,09% and thus a market risk premium of 4,16%. Since the country risk premium for Germany according to Damodaran is 0%, no additional adjustments are made.

Using the CAPM formula, the resulting cost of equity for Fielmann is 7,57%.

Since Fielmann does not have any public debt and a calculation using the historical cost of debt does not yield sensible results, the cost of debt is computed using the company's credit rating, which is an approach introduced by Damodaran. While Fielmann is not rated by the big rating agencies; S&P, Moody's and Fitch; Refinitiv provides a rating based on a risk model created by them. The model combines information from the equity market, analyst estimates and financials, and from analysis of the language in important textual documents into one final estimate of corporate credit risk. The model uses a logistic regression framework and calculates the probability that a company could default within 12 months.

The Refinitiv rating for Fielmann is BBB. Following the Damodaran approach, this corresponds to a spread of 2,25% which is added to the risk-free rate (Damodaran, 2023c). This results in a cost of debt of 5,18%.

The last step before calculating the WACC for Fielmann, is estimating the market values of debt and equity for the company. The market value of equity is assumed equal to the current market cap (as of 27.11.2023), which equals roughly EUR 3,9bn. The market value of debt calculation can be more complex, however, since Fielmann's debt consists of entirely operational leases, which are related to rented properties, it can be assumed that the book value of the leases is equal to their market value, since they are "valued with the present value of the remaining lease payments and discounted under application of an incremental borrowing rate that is derived from the returns of corporate bonds from western countries" (Fielmann, 2022).

For the calculation of the financing split, net debt is used instead of total debt, because in 2023, the cash position is estimated to be approx. 37% of total debt and thus, if used to reduce debt, would significantly change the firm's debt to equity ratio. Fielmann has historically not used its balance sheet cash to pay out dividends but rather used earnings from each given year to pay its shareholders. The estimated cash position for 2023 has a value of EUR 167m, bringing net debt to approx. EUR 288m. The final net debt to equity ratio is at 7,34%.

Using the previously calculated costs of equity and debt, as well as the net debt to equity ratio and marginal tax rate of Fielmann, the resulting WACC equals 7,3%.

WACC Calculation	
Net Debt/Total Assets	6,84%
Equity/Total Assets	93,16%
Tax Rate	27,00%
Cost of Equity	7,57%
Cost of Debt	5,18%
<b>WACC</b>	<b>7,30%</b>

Table 4 - Weighted Average Cost of Capital Calculation

Since the company's leverage is not expected to change significantly in the near future, the WACC is not computed for each period with a changing debt-to-equity ratio. Fielmann's debt consists almost entirely of leases related to rent, it seems unlikely that the firm will decrease or increase those leases due to its dependence on the rented properties.

### 6.1.2 Free Cash Flow

The free cash flow calculation is based upon the forecasted items covered in section 4.1. To begin, the after-tax EBIT, or NOPAT, is calculated. This is the basis for the FCFE calculation. From this, the change in operating working capital, CAPEX and change in other non-current operational items ("Other items") are deducted. Depreciation and Amortization are added, seeing as they have been subtracted through the CAPEX but should have no effect on cash flows. The resulting cash flows are then discounted using the previously calculated WACC.

Consolidated Free Cash Flow € in millions	2024F	2025F	2026F	2027F	2028F	2029F	2030F	TV
Total Revenue	2 127,2	2 265,4	2 446,7	2 569,0	2 697,5	2 791,9	2 875,6	
EBIT	302,7	339,2	383,9	418,5	443,4	456,2	477,3	
EBIT x (1 – Tax Rate)	211,9	237,4	268,7	293,0	310,4	319,4	334,1	
(-) Δ OWC	3,7	11,0	16,2	7,5	6,9	11,5	11,6	
(-) CAPEX	296,6	316,3	327,9	328,8	345,2	361,3	371,1	
(-) Δ Other items	(2,7)	(3,1)	(3,5)	(3,9)	(4,4)	(5,0)	(5,6)	
(+) D&A	214,6	230,3	243,1	253,4	268,1	282,8	297,6	
<b>FCFF</b>	<b>128,9</b>	<b>143,4</b>	<b>171,1</b>	<b>213,9</b>	<b>230,8</b>	<b>234,4</b>	<b>254,5</b>	<b>5 626,0</b>
% change		11,2%	19,3%	25,0%	7,9%	1,6%	8,6%	
<b>PV (FCFF)</b>	<b>120,2</b>	<b>124,6</b>	<b>138,5</b>	<b>161,4</b>	<b>162,3</b>	<b>153,6</b>	<b>155,4</b>	<b>3 436,1</b>

Table 5 – DCF: Free Cash Flow Calculation

### 6.1.3 Terminal Value

For the terminal value computation in the DCF model, two methods are used. First, the terminal value is computed using the perpetual growth method. For this, a terminal growth rate needs to be assumed which is the growth rate at which the company will grow in perpetuity. The growth rate is estimated at 2,65%.

To estimate this figure, population growth assumptions from the German Institute for Statistics (Statistisches Bundesamt) are used. The institute forecasts population numbers for the next 49 years until 2070 using five different models (German Federal Statistical Office, 2022). These forecasted numbers are used to compute the respective growth rates from 2021. The average of these growth rates is 0,65% which is assumed to be the average long-term population growth rate for Germany and is used for the terminal growth rate of Fielmann. The focus on the German population is chosen because Fielmann makes 76% (2022) of all sales in Germany.

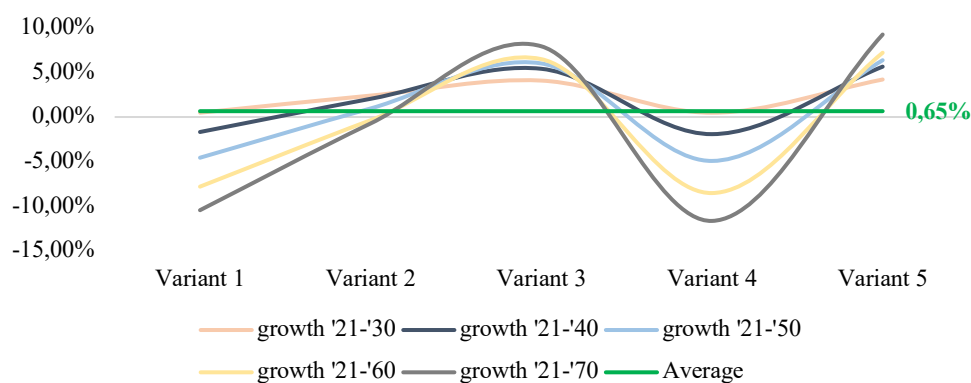


Figure 9 - Estimated Population Growth by Model Variant (Source: Statistisches Bundesamt)

The second component of the terminal growth rate is the ECB's long-term inflation target, which is 2% (European Central Bank, 2023).

The sum of these two figures, 2,65%, is used as the terminal growth rate for Fielmann.

The Perpetual Growth method results in a terminal value of EUR 5,63bn, which is discounted using the WACC and added to the sum of discounted cash flows. The enterprise value resulting from the perpetual growth approach equals EUR 4,45bn.

The second approach is the exit multiple method. This method assumes that the company will be sold at the end of the explicit period and thus, a multiple can better capture the strategic value of the company in the case of its sale. The multiple used for Fielmann is an EBITDA multiple and is derived from one company's peer groups, namely the *Vision & Eyewear* peer group, which will be introduced in section 6.3 (Relative Valuation). The EBITDA multiple is slightly adjusted downwards to 9x which results in a terminal value of EUR 6,97bn. As expected, this value is larger than when computing the terminal value with the perpetual growth method. This is due to the premia included in trading multiples which may exceed the assumed growth rate. It is appropriate to include some premia here, because in the event of an acquisition, the acquiring firm is likely to pay a strategic premium as well. The final enterprise value using the exit multiple method is EUR 5,28bn.

#### **6.1.4 Implied Share Price**

Finally, after computing the Enterprise Values using the DCF method, the Equity values and thus, implied share prices can be calculated.

To get from enterprise to equity value, net debt needs to be deducted (Total Debt – Cash). The computation and forecast of the market value of debt are described in the financial forecast chapter of this thesis. Additionally, Fielmann has some underfunded pensions, which are treated as debt-like items and need to be subtracted as well. For this, the average value of pensions from 2012 through 2022 is computed which equals EUR 7,49m. Minority interests are deducted at exit values, which are computed using a simple P/E value from the peer group used in the relative valuation. This yields a value for minority interests of EUR 122,49m. Investments in associates are disregarded, seeing as earnings from shares in associates are reported as regular income and are thus already considered.

Enterprise Value to Equity Value Calculation	
Total Enterprise Value (Exit Multiple)	5 275,17
Total Enterprise Value (Perpetual Growth)	4 452,10
(-) MV Debt (2023)	454,70
(-) Underfunded Pensions	7,49
(+) Excess Cash (2023)	167,12
(-) Minority Interests (Exit)	122,49
Equity Value (Exit Multiple)	4 857,61
Equity Value (Perpetual Growth)	4 034,54

Table 6 – DCF: Equity Bridge Calculation

This calculation yields in an equity value for the exit multiple approach of EUR 4,86bn and EUR 4,03bn for the perpetual growth method. Of Fielmann's 84m outstanding shares, approx. 1,42k are treasury shares and thus, need to be deducted. Dividing the equity values by the final number of shares results in share prices of EUR 57,83 and EUR 48,03 for the exit multiple and perpetual growth methods respectively. This represents an upside over the current share price (as of 27.11.2023) of 24,0% for the exit multiple approach and 3,0% for the perpetual growth method.

## 6.2 APV Valuation

For the adjusted present value method, the same inputs are used as for the regular DCF model. The free cash flows are discounted using Fielmann's cost of equity of 7,57% and the terminal growth rate is still assumed at 2,65%.

Consolidated Free Cash Flow € in millions	2024F	2025F	2026F	2027F	2028F	2029F	2030F	TV
FCFF	128,9	143,4	171,1	213,9	230,8	234,4	254,5	5 317,4
% change		11,2%	19,3%	25,0%	7,9%	1,6%	8,6%	
Cost of Equity	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%
<b>PV (FCFF)</b>	<b>119,9</b>	<b>123,9</b>	<b>137,5</b>	<b>159,8</b>	<b>160,3</b>	<b>151,3</b>	<b>152,7</b>	<b>3 191,1</b>

Table 7 - APV: Free Cash Flow Calculation

For the APV, the terminal value was calculated using only the perpetual growth method and not the exit multiple method for simplicity reasons, seeing as the DCF is the main model of this valuation.

In addition to the unlevered cash flows, the interest tax shield and its present value need to be computed. For this, the forecasted debt values are multiplied with the effective tax rate of 30% as

well as the cost of debt of 5,18% for each period until 2030. For the terminal value of the interest tax shield, a similar, but slightly lower growth rate than for the perpetual growth of the company of 2% is assumed, which corresponds to the ECB's inflation target without the addition of population growth. This is because the company's debt level is expected to stay relatively constant throughout the explicit period and is not expected to change greatly after that.

The calculation results in a present value of the interest tax shield of EUR 203,69m.

Interest Tax Shield € in millions	2024F	2025F	2026F	2027F	2028F	2029F	2030F	TV
Total Debt (Average $t$ & $t_{-1}$ )	459,6	465,6	464,3	463,2	464,4	464,0	463,8	
Marginal Tax Rate	27%	27%	27%	27%	27%	27%	27%	
Cost of Debt	5,2%	5,2%	5,2%	5,2%	5,2%	5,2%	5,2%	5,2%
Interest Tax Shield	6,4	6,5	6,5	6,5	6,5	6,5	6,5	208,0
<b>PV(ITS)</b>	<b>6,1</b>	<b>5,9</b>	<b>5,6</b>	<b>5,3</b>	<b>5,0</b>	<b>4,8</b>	<b>4,6</b>	<b>146,0</b>

Table 8 - Interest Tax Shield Calculation

In addition to the tax benefit of debt, the APV considers bankruptcy costs as explained in section 2.1.2. For this, the probability of default (PD) needs to be estimated. One approach for this is using Damodaran's database, which allocates a default probability according to a company's rating. For Fielmann's BBB rating, this implies a PD of 2%. The probability of default needs to be multiplied with the bankruptcy costs which are much harder to estimate, seeing as they do not only include expenses for advisors or lawyers, but also the cost of customers switching to competitors or damaged brand perception. Thus, one approach to estimate bankruptcy costs is to assume them as a share of the unlevered firm value. For this valuation, the cost of bankruptcy is expected to be approx. 25% of the unlevered value of Fielmann. This is in line with previous research from Shapiro and Titman (1985). Multiplying the cost of bankruptcy of 25% with the unlevered firm value of EUR 4,20bn and the PD of 2%, the total bankruptcy cost is EUR 20,98m.

The result is a levered enterprise value of EUR 4,38bn. Using the same items as for the DCF, the EV to equity value bridge results in an equity value of EUR 3,96bn, which implies a share price of EUR 47,16, representing a slight upside of approx. 1,2% (as of 27.11.2023).

<b>APV Enterprise Value Calculation</b>	
Unlevered Enterprise Value	4 196,51
(+) PV(Interest Tax Shield)	203,69
(-) Bankruptcy Costs	20,98
<b>Levered Enterprise Value</b>	<b>4 379,21</b>
(-) MV Debt (2023)	454,70
(-) Underfunded Pensions	7,49
(+) Excess Cash (2023)	167,12
(-) Minority Interests (Exit)	122,49
<b>Equity Value</b>	<b>3 961,65</b>

Table 9 - APV: Equity Bridge Calculation

### 6.3 Relative Valuation

In addition to the present value methods used to value Fielmann, a comparable company analysis, or relative valuation, is done. Due to the multiples being derived from trading prices, they may incorporate information about the market or economy which are not reflected in Fielmann's financial statements. Because of this, relative valuations usually yield higher results than a DCF or APV valuation.

For the relative valuation of Fielmann, three different peer groups are assembled. All peers are compared to Fielmann in terms of Total Assets, Revenue CAGR (5 year), Operating Profit Margin, ROE and Debt to Total Capital ratio. This is done because of the underlying logic of Damodaran, who argues that industry alone is not a good reason for a company to be a peer if they do not face similar risks as the company being valued. Additionally, there appears to be no twin company to Fielmann, meaning that none of the peers from the same industry display exactly the same characteristics in terms of size, market penetration and risk. This is to be expected, seeing as Fielmann has managed to become the market leader in Central Europe while the overall European and global markets are dominated by larger players.

Thus, after starting with a group of industry peers and comparing the above-mentioned metric with Fielmann, some differences become apparent. This peer group includes the leading firms in the European and global eyewear market with either a focus on retail, spectacle lenses or frames, seeing as Fielmann's operations include all of the previous.

The constituents of this peer group are already discussed in the market analysis in chapter 4.1.1, seeing as they are Fielmann's major competitors.

23/10/2023	EV / 12M FWD Sales	EV / 12M FWD EBITDA	P/E
Alcon Inc.	4,04	15,76	n.a.
Cooper Companies	4,86	16,67	59,60
EssilorLuxottica	3,18	12,03	31,00
National Vision Holdings	0,79	9,71	39,10
Safilo Group	0,42	4,20	24,40
<b>Median</b>	<b>3,18</b>	<b>12,03</b>	<b>35,05</b>

Table 10 - Vision & Eyewear Peer Group

To solve potentially arising valuation errors from using only this peer group, two more groups are assembled.

The second peer group consists of companies from Refinitiv's Consumer Discretionary constituents list. Out of this group, companies with similar metrics to Fielmann are selected as the peer group. Thus, the focus is still on retail and consumer products in general, but not on eyewear specifically.

23/10/2023	EV / 12M FWD Sales	EV / 12M FWD EBITDA	P/E
Asics	1,61	12,88	27,30
Harvey Norman Holdings	1,58	6,99	8,20
Hugo Boss	1,06	5,47	16,70
Hyatt Hotels	1,79	10,78	24,70
Inditex	2,61	9,78	21,50
Nifco	0,84	5,39	16,30
<b>Median</b>	<b>1,59</b>	<b>8,38</b>	<b>19,10</b>

Table 11 - Consumer Discretionary Peer Group

Lastly, to make the selection even broader, companies in the same index as Fielmann, the SDAX, with similar risk metrics are chosen to be in the third peer group. This group is purely based on the Damodaran approach detailed above.

23/10/2023	EV / 12M FWD Sales	EV / 12M FWD EBITDA	P/E
Cewe Stiftung	0,76	4,32	11,50
Eckert & Ziegler	2,54	11,68	26,70
SGL Carbon	0,76	4,93	10,70
Stratec	1,71	8,59	23,60
Suedzucker	0,62	5,28	4,70
Wacker Neuson	0,59	4,34	5,90
<b>Median</b>	<b>0,76</b>	<b>5,10</b>	<b>11,10</b>

Table 12 - SDAX Peer Group

For each peer group, three multiples are computed: EV/Revenue, EV/EBITDA and Price-Earnings Ratio. The enterprise value based multiples are 12-month forward looking, as they use projected revenue and EBITDA.

Seeing as neither of the three peer groups include a company that is equal or close to equal to Fielmann, they are weighted by relevance in order to compute the final multiples used in the valuation, which can be seen in Table 10. For this, the Vision & Eyewear peers are believed to be the most relevant, seeing as they have very similar operations to Fielmann, while the Consumer Discretionary and SDAX peers are factored in with lower weights, due to a lack of operational and strategic similarities. The forecasted 2023 figures of Fielmann are used to calculate the final share prices.

Weighted Peer Group Multiple				
Peer Group	Weight	EV/ Revenue	EV/ EBITDA	P/ E
Vision & Eyewear	70%	3,18	12,03	35,05
Consumer Discretionary	20%	1,59	8,38	19,10
SDAX	10%	0,76	5,10	11,10
Final Multiple (weighted)		2,62	10,61	29,47
Implied Enterprise Value		5 210,27	4 821,72	6 099,13
Implied Equity Value		4 926,18	4 537,63	5 473,83
<b>Implied Share Price</b>		<b>58,65</b>	<b>54,02</b>	<b>65,17</b>

Table 13 - Weighted Peer Group Multiples and Share Price Calculation

The final outcome of the relative valuation using the three weighted multiples is a range in share price between EUR 54,02 and EUR 65,17, which is significantly larger than the results obtained from the DCF and APV valuations.

While the companies in the peer groups are believed to have some similar underlying risks and market conditions to Fielmann, the trading multiples are quite different and none of the peers makes for a satisfactory twin company. Thus, while the results of the relative valuation may be used to compare and check the APV and DCF results for sensibility, the final price recommendation is not based upon the peers.

#### 6.4 Sensitivity Analysis and Valuation Summary

To conclude the valuation and to find a final share price target for Fielmann as of 31.12.2023, a sensitivity analysis is done to see which inputs have the most influence on the final price.

For the DCF valuation, perpetual growth rate and exit multiple respectively are tested together with the WACC. The outcome of the analysis, is displayed in Tables 11 and 12. The share prices for the perpetual growth method indicated by the sensitivity analysis range from EUR 40,80 to EUR 58,24. For the exit multiple method, the prices range from EUR 50,85 to EUR 65,15.

Because of the large premium indicated by the exit multiple method, it is particularly important to look at potential lower EBITDA multiples than implied by the peer group. With an exit EBITDA multiple of 8x and the same WACC as in the original analysis, the share price decreases to EUR 52,20 which is much more similar to the results obtained through the perpetual growth and APV methods.

		WACC				
		7,70%	7,50%	7,30%	7,10%	6,90%
Perpetual Growth	2,25%	40,80	42,65	44,64	46,80	49,14
	2,45%	42,16	44,13	46,27	48,58	51,11
	2,65%	43,63	45,74	<b>48,03</b>	50,53	53,26
	2,85%	45,22	47,49	49,96	52,66	55,63
	3,05%	46,95	49,39	52,06	55,00	58,24
		WACC				
		7,70%	7,50%	7,30%	7,10%	6,90%
Exit EBITDA Multiple	8,00 x	50,85	51,52	52,20	52,88	53,58
	8,50 x	53,59	54,30	55,01	55,74	56,47
	9,00 x	56,34	57,08	<b>57,83</b>	58,59	59,36
	9,50 x	59,08	59,86	60,65	61,45	62,26
	10,00 x	61,83	62,64	63,46	64,30	65,15

Table 14 - DCF: Sensitivity Analysis

The same sensitivity analysis is done for the APV method, however, since only the perpetual growth method was used to compute the terminal value, the exit multiple is not analyzed. Instead, the growth rate of the interest tax shield is used as an input alongside the Cost of Equity.

Overall, the share prices range from EUR 41,74 to EUR 54,69, which is a smaller range than for either of the DCF methods used above.

		Cost of Equity				
		7,97%	7,77%	7,57%	7,37%	7,17%
Perpetual Growth	2,25%	41,74	42,92	44,18	45,54	47,02
	2,45%	42,98	44,25	45,61	47,09	48,69
	2,65%	44,32	45,68	<b>47,16</b>	48,77	50,51
	2,85%	45,76	47,24	48,84	50,59	52,51
	3,05%	47,31	48,92	50,67	52,59	54,69
		Cost of Equity				
		7,97%	7,77%	7,57%	7,37%	7,17%
ITS Perpetual Growth	1,60%	44,10	45,46	46,94	48,54	50,29
	1,80%	44,20	45,57	47,05	48,65	50,40
	2,00%	44,32	45,68	<b>47,16</b>	48,77	50,51
	2,20%	44,45	45,82	47,30	48,90	50,65
	2,40%	44,60	45,97	47,45	49,05	50,80

Table 15 - APV: Sensitivity Analysis

The final share price for Fielmann resulting from this analysis is computed as the average between the APV implied share price and the median of the prices implied by the DCF valuations. The result is a share price of EUR 50,05 which represents a premium of 7,35% over the current (as of 27.11.2023) share price of Fielmann. To account for the notion that the current price only reflects a snapshot in time, the average of daily prices from the last three months (27.09.2023 – 27.11.2023) is computed and compared to the analysis. Using the three-month average historical share price of EUR 42,44, the upside implied by the valuation analysis is significantly larger at 17,93%.

Between September and November 2023, Fielmann's share price has seen a steady increase, which may indicate that the market is recognizing the undervaluation of the company and adjusting it.

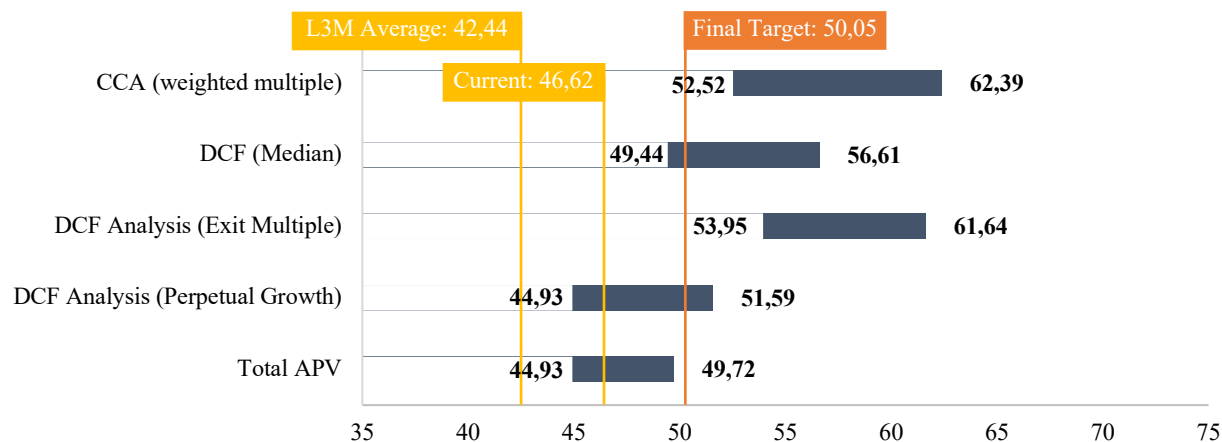


Figure 10 - Football Field Analysis of DCF, APV and Relative Valuation Methods

## 7 Comparison of the Valuation to Market Estimates

To validate the results of the valuation analysis one last time, they are compared with an equity report by HSBC from July 14<sup>th</sup> 2023 (Rossington & Kapur, 2023) as well as a report from AlsterResearch from September 1<sup>st</sup> 2023 (Wissler, 2023). Both valuations result in significantly higher target prices than this analysis provided in this thesis. HSBC lands on a target price of EUR 60 (as of 12.07.23) while AlsterResearch concludes Fielmann should trade at EUR 62 (as of 01.09.23).

	HSBC	AlsterResearch	Own Analysis
Valuation Date	12.07.23	01.09.23	31.12.23
<b>Target Price</b>	<b>60,00</b>	<b>62,00</b>	<b>50,05</b>
Explicit period (years)	3,00	7,30	7,00
Risk-free Rate	3,50%	2,00%	2,93%
Equity Risk Premium	5,00%	6,00%	4,16%
Beta	0,84	1,21	1,11
Cost of Equity	7,70%	9,3%	7,57%
Cost of Debt	n.a.	5,00%	5,18%
Tax Rate	31%	25%	30%
<b>WACC</b>	<b>7,70%</b>	<b>7,40%</b>	<b>7,30%</b>
Terminal Growth	3,00%	2,00%	2,65%

Table 16 - Comparison of Valuation Inputs

Both reports use cashflow discounting methods, HSBC uses an APV and AlsterResearch a DCF model, which is in line with the methods used in this thesis. To calculate the terminal value, only

the perpetual growth method is chosen in the equity reports. The inputs for these models are shown as a comparison in Table 13.

While AlsterResearch assumes an explicit period of 7,3 years which is similar to the 7 years used in this valuation analysis, HSBC only forecasts until 2025, which can be a cause for differences in the valuation.

In terms of discount rate, both equity reports state quite similar figures to the own analysis. HSBC, who use the APV method, state a cost of equity of 7,7%, while the own analysis uses a rate of 7,57%. AlsterResearch uses a WACC of 7,4% for their DCF model, which is close to the 7,3% used in this analysis.

The terminal growth rates of the three valuations are all quite similar, ranging from 2-3%. For the own analysis, the change in price implied by a change in terminal growth rate in either direction is presented in the sensitivity analysis.

Seeing as the discount and terminal growth rates for the valuation models do not significantly differ from each other, the difference in target price must be caused by other input variables. The financial basis for the valuation is analyzed and presented in Table 14.

Forecast (Averages)	HSBC	AlsterResearch	Own Analysis
Revenue Growth FY23	13,00%	13,80%	13,00%
Revenue Growth (FY23-FY25)	7,69%	8,17%	8,80%
Gross Profit Margin (FY23-FY25)	n.a.	78,71%	79,70%
EBIT Margin (FY23-FY27)	12,33%	11,63%	14,20%
CAPEX as % of Revenue (FY23-FY25)	4,85%	6,99%	14,10%

Table 17 - Comparison of Financial Forecasts

The forecasts are compared only from FY23-FY25, because of the shorter explicit period in the HSBC report. When looking at the revenue forecast, both the FY23 growth as well as the average growth from FY23-FY25 are quite similar across all three analyses. While HSBC does not present a gross margin forecast, the figures by AlsterResearch correspond to those from the analysis in this thesis. The EBIT margin projections are again quite similar across all three valuations, although neither of the equity reports adhere to Fielmann's target EBT margin of 16% by 2025.

While the income statement figures are not exactly the same across the three analyses, they do not explain the large discrepancy in target price between the two equity reports and the own analysis.

However, there is a significant difference in CAPEX relative to revenue in the three analyses. Both the equity reports forecast a much smaller CAPEX in % of revenue than the own analysis, which in turn leads to a higher FCF and thus, a larger target price.

HSBC does not state any explanation for its CAPEX projections, but forecasts it to stay at EUR 100m from FY23 onwards, while AlsterResearch projects a slightly growing CAPEX which equals EUR 122m in FY25. For this analysis, CAPEX is projected to keep growing at an average rate of approx. 14% between FY23 and FY25. Due to the high fluctuation of CAPEX in the past years and a growth of 34,1% in FY22, it seems unlikely that the figure stabilizes this quickly, especially when considering Fielmann's growth strategy across Europe which is likely to include further acquisitions and would thus require CAPEX. In the own analysis, CAPEX growth is expected to stabilize more towards the end of the explicit period.

This difference in CAPEX, which is a large driver of FCF is likely the cause for the different target prices. Seeing as there is a principal-agent conflict between investment banks and other institutions who offer equity research and their customers, which are the firms they value, it is to be expected that these reports yield higher target prices than independent valuations. If companies consistently got recommendations below "Buy", they may be inclined to stop purchasing the service of the equity researchers.

In conclusion, while the analyses are at their core very similar, the large upsides estimated in both equity reports seem quite extreme and may be in part due to the principal-agent conflict mentioned above. The analysis presented in this thesis seems quite reasonable after comparing it to the reports and an upside of up to 18% seems much more realistic than one of 43%.

## 8 Appendix

### Appendix 1 - Historical Income Statement FY18-FY22 (in €m)

Statement of Profit & Loss	2018	2019	2020	2021	2022
<b>Total Revenue</b>	<b>1 428,0</b>	<b>1 520,7</b>	<b>1 428,9</b>	<b>1 678,2</b>	<b>1 759,3</b>
<i>% growth</i>	3,0%	6,5%	-6,0%	17,4%	4,8%
Cost of Revenue	288,1	305,7	282,2	340,6	379,5
<i>% of total revenue</i>	20,2%	20,1%	19,7%	20,3%	21,6%
Number of Stores	736	776	870	913	968
Cost per store	0,39	0,39	0,32	0,37	0,39
<b>Gross Profit</b>	<b>1 139,9</b>	<b>1 215,0</b>	<b>1 146,7</b>	<b>1 337,6</b>	<b>1 379,8</b>
<i>% of total revenue</i>	79,8%	79,9%	80,3%	79,7%	78,4%
Selling/General/Admin. Expenses, Total	864,2	851,0	832,7	951,4	1 053,2
Depreciation/Amortization	45,1	128,9	158,2	177,3	180,0
Interest Exp.(Inc.),Net-Operating, Total	(0,8)	(1,9)	1,6	0,4	2,3
Unusual Expense (Income)	0,0	0,0	0,9	5,6	0,0
Other Operating Expenses, Total	(19,3)	(19,0)	(24,9)	(16,1)	(15,5)
Total Operating Expense	1 177,3	1 264,7	1 250,7	1 459,2	1 599,5
<b>Operating Income (EBIT)</b>	<b>250,7</b>	<b>256,0</b>	<b>178,2</b>	<b>219,0</b>	<b>159,8</b>
<i>% of total revenue</i>	17,6%	16,8%	12,5%	13,0%	9,1%
Interest Inc.(Exp.),Net-Non-Op., Total	0,1	(2,3)	(2,9)	(9,2)	0,8
<b>Net Income Before Taxes (EBT)</b>	<b>250,8</b>	<b>253,7</b>	<b>175,3</b>	<b>209,8</b>	<b>160,6</b>
<i>% of total revenue</i>	17,6%	16,7%	12,3%	12,5%	9,1%
Income Taxes	77,3	76,5	54,7	65,2	50,7
<b>Net Income After Taxes</b>	<b>173,5</b>	<b>177,2</b>	<b>120,6</b>	<b>144,6</b>	<b>109,9</b>
<i>% of total revenue</i>	12,1%	11,7%	8,4%	8,6%	6,2%
Minority Interest	(4,7)	(5,1)	(4,4)	(7,7)	(6,1)
<b>Net Income Before Extra. Items</b>	<b>168,8</b>	<b>172,1</b>	<b>116,2</b>	<b>136,9</b>	<b>103,8</b>
<i>% of total revenue</i>	11,8%	11,3%	8,1%	8,2%	5,9%

## Appendix 2 - Forecasted Income Statement FY23-FY30

Statement of Profit & Loss	2023E	2024F	2025F	2026F	2027F	2028F	2029F	2030F
<b>Total Revenue</b>	<b>1 988,0</b>	<b>2 127,2</b>	<b>2 265,4</b>	<b>2 446,7</b>	<b>2 569,0</b>	<b>2 697,5</b>	<b>2 791,9</b>	<b>2 875,6</b>
<i>% growth</i>	13,0%	7,0%	6,5%	8,0%	5,0%	5,0%	3,5%	3,0%
Cost of Revenue	403,09	431,14	461,97	508,83	535,16	557,19	573,44	590,96
<i>% of total revenue</i>	20,3%	20,3%	20,4%	20,8%	20,8%	20,7%	20,5%	20,6%
Number of Stores	1 075	1 160	1 258	1 354	1 422	1 493	1 538	1 584
Cost per store	0,37	0,37	0,37	0,38	0,38	0,37	0,37	0,37
<b>Gross Profit</b>	<b>1 584,9</b>	<b>1 696,0</b>	<b>1 803,5</b>	<b>1 937,8</b>	<b>2 033,8</b>	<b>2 140,3</b>	<b>2 218,4</b>	<b>2 284,7</b>
<i>% of total revenue</i>	79,7%	79,7%	79,6%	79,2%	79,2%	79,3%	79,5%	79,4%
SG&A	1 153,0	1 201,9	1 257,3	1 333,4	1 387,3	1 456,6	1 507,6	1 538,5
<i>% of total revenue</i>	58,0%	56,5%	55,5%	54,5%	54,0%	54,0%	54,0%	53,5%
D&A	187,0	214,6	230,3	243,1	253,4	268,1	282,8	297,6
<i>% of Gross PPE</i>	9,9%	10,6%	10,6%	10,5%	10,4%	10,4%	10,4%	10,5%
Interest Exp.(Inc.),Net-Op.	0,3	0,7	1,4	1,3	1,5	1,2	1,4	1,6
<i>% of total revenue</i>	0,0%	0,0%	0,1%	0,1%	0,1%	0,0%	0,1%	0,1%
Unusual Expense	1,6	2,0	2,6	3,0	2,1	2,7	2,9	3,0
<i>% of total revenue</i>	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%
Other Operating Expenses	(24,6)	(25,8)	(27,3)	(26,9)	(29,0)	(31,7)	(32,5)	(33,2)
<i>% of total revenue</i>	-1,2%	-1,2%	-1,2%	-1,1%	-1,1%	-1,2%	-1,2%	-1,2%
Total Operating Expense	1 720,5	1 824,5	1 926,3	2 062,8	2 150,5	2 254,1	2 335,6	2 398,4
<i>% of total revenue</i>	86,5%	85,8%	85,0%	84,3%	83,7%	83,6%	83,7%	83,4%
<b>Operating Income (EBIT)</b>	<b>267,5</b>	<b>302,7</b>	<b>339,2</b>	<b>383,9</b>	<b>418,5</b>	<b>443,4</b>	<b>456,2</b>	<b>477,3</b>
<i>% of total revenue</i>	13,5%	14,2%	15,0%	15,7%	16,3%	16,4%	16,3%	16,6%
Interest Inc.(Exp.),Net-Non-Op.	(3,4)	0,0	2,3	(2,8)	(0,7)	(1,1)	(0,5)	(0,6)
<i>% of total revenue</i>	-0,2%	0,0%	0,1%	-0,1%	0,0%	0,0%	0,0%	0,0%
<b>Net Income Before Taxes (EBT)</b>	<b>264,2</b>	<b>302,7</b>	<b>341,4</b>	<b>381,1</b>	<b>417,8</b>	<b>442,2</b>	<b>455,7</b>	<b>476,7</b>
<i>% of total revenue</i>	13,3%	14,2%	15,1%	15,6%	16,3%	16,4%	16,3%	16,6%
Income Taxes	79	91	102	114	125	133	137	143
<i>% of income before taxes</i>	30,0%	30,0%	30,0%	30,0%	30,0%	30,0%	30,0%	30,0%
<b>Net Income After Taxes</b>	<b>184,9</b>	<b>211,9</b>	<b>239,0</b>	<b>266,7</b>	<b>292,5</b>	<b>309,6</b>	<b>319,0</b>	<b>333,7</b>
<i>% growth</i>	68,3%	14,6%	12,8%	11,6%	9,6%	5,8%	3,1%	4,6%
<i>% of total revenue</i>	9,3%	10,0%	10,6%	10,9%	11,4%	11,5%	11,4%	11,6%
Minority Interest	(7)	(8)	(8)	(9)	(9)	(10)	(10)	(11)
<i>% of total revenue</i>	-0,4%	-0,4%	-0,4%	-0,4%	-0,4%	-0,4%	-0,4%	-0,4%
<b>Net Income Before Extra. Items</b>	<b>177,8</b>	<b>204,2</b>	<b>230,7</b>	<b>257,5</b>	<b>283,2</b>	<b>299,7</b>	<b>308,8</b>	<b>323,1</b>
<i>% of total revenue</i>	8,9%	9,6%	10,2%	10,5%	11,0%	11,1%	11,1%	11,2%

## Appendix 3 - Historical Balance Sheet Items (Cash Flow Relevant, in €m)

Condensed Balance Sheet	2018	2019	2020	2021	2022
Total Debt	22,7	372,7	425,3	457,9	480,9
Cash & Short Term Investments	248,4	236,5	252,8	270,8	180,1
<b>Net Debt</b>	<b>(225,7)</b>	<b>136,2</b>	<b>172,5</b>	<b>187,1</b>	<b>300,8</b>
Net PPE	262,2	659,7	731,2	782,9	828,2
Gross PPE	726,3	1 224,4	1 415,0	1 587,7	1 756,6
Buildings - Gross	238,2	260,5	290,6	319,7	342,5
Land/Improvements - Gross	137,0	135,4	138,4	140,9	142,3
Machinery/Equipment - Gross	339,0	365,4	396,2	417,6	439,8
Construction in Progress - Gross	12,1	14,3	10,5	11,7	21,0
Other PPE - Gross	0,0	448,8	579,3	697,8	811,0
Accumulated Depreciation	(464,1)	(564,7)	(683,8)	(804,8)	(928,4)
<b>Δ Net PPE</b>	<b>22,5</b>	<b>397,5</b>	<b>71,5</b>	<b>51,7</b>	<b>45,3</b>
Net Intangibles	34,0	63,7	195,3	164,3	168,3
Goodwill	47,5	54,6	173,4	176,4	216,7
<b>Δ Intangibles + Goodwill</b>	<b>10,7</b>	<b>36,8</b>	<b>250,4</b>	<b>(28,0)</b>	<b>44,3</b>
<b>D&amp;A</b>	<b>45,1</b>	<b>128,9</b>	<b>158,2</b>	<b>177,3</b>	<b>180,0</b>
<b>CAPEX (Δ PPE + Δ Intangibles + D&amp;A)</b>	<b>78,3</b>	<b>563,2</b>	<b>480,1</b>	<b>201,0</b>	<b>269,6</b>
(+) Accounts Receivable	65,8	65,2	67,7	64,4	69,9
(+) Inventory	136,3	158,7	147	153,1	183,3
(+) Prepaid Expenses	19,2	24,8	34,2	39,1	45,5
(-) Accounts Payable	56,3	72,7	75,3	79,6	85,2
(-) Accrued Expenses	48,8	46,7	58,4	70,5	70,0
(-) Deferred Revenue	0,0	0,0	0,0	0,0	0,0
Operating Working Capital	116,2	129,3	115,2	106,5	143,5
<b>Δ OWC</b>	<b>24,2</b>	<b>13,1</b>	<b>-14,1</b>	<b>-8,7</b>	<b>37,0</b>
(+) Deferred Income Tax - Long Term Asset	12,3	10,9	13,6	14,4	19,3
(-) Deferred Income Tax - LT Liability	12,1	17,6	48,1	37,6	37,7
Other non-current operational items	0,2	(6,7)	(34,5)	(23,2)	(18,4)
<b>Δ Other non-current operational items</b>	<b>(3,0)</b>	<b>(6,9)</b>	<b>(27,8)</b>	<b>11,3</b>	<b>4,8</b>

## Appendix 4 - Forecasted Balance Sheet Items (Cash Flow Relevant, in €m)

Condensed Balance Sheet	2023F	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Total Debt	454,7	464,5	466,7	462,0	464,4	464,4	463,6	464,1
Cash & Short Term Investments	167,1	162,7	151,9	146,3	146,0	138,7	132,2	128,6
% growth	-7,21%	-2,62%	-6,65%	-3,67%	-0,26%	-4,99%	-4,65%	-2,73%
<b>Net Debt</b>	<b>287,6</b>	<b>301,8</b>	<b>314,8</b>	<b>315,6</b>	<b>318,4</b>	<b>325,7</b>	<b>331,3</b>	<b>335,5</b>
<b>Net PPE</b>	<b>902,6</b>	<b>964,4</b>	<b>1 033,5</b>	<b>1 102,8</b>	<b>1 164,2</b>	<b>1 229,2</b>	<b>1 295,1</b>	<b>1 355,9</b>
Gross PPE	1 895,3	2 025,0	2 170,2	2 315,7	2 444,7	2 581,1	2 719,6	2 847,1
Buildings - Gross	375,1	408,8	445,3	483,8	527,4	574,3	625,2	680,6
% growth	10%	9%	9%	9%	9%	9%	9%	9%
Land/Improvements	143,7	145,8	147,7	149,5	151,3	153,3	155,3	157,2
% growth	1%	1%	1%	1%	1%	1%	1%	1%
Machinery/Equipment	469,4	499,8	529,7	562,1	590,2	619,7	644,5	663,9
% growth	7%	6%	6%	6%	5%	5%	4%	3%
Construction in Progress	23,1	24,7	26,0	27,3	28,1	28,6	29,2	29,5
% growth	10%	7%	5%	5%	3%	2%	2%	1%
Other PPE	884,0	945,9	1 021,5	1 093,0	1 147,7	1 205,1	1 265,3	1 316,0
% growth	9%	7%	8%	7%	5%	5%	5%	4%
Accumulated Depreciation	(992,7)	(1 060,7)	(1 136,7)	(1 212,9)	(1 280,5)	(1 351,9)	(1 424,4)	(1 491,2)
% of Gross PPE	-52%	-52%	-52%	-52%	-52%	-52%	-52%	-52%
<b>Δ Net PPE</b>	<b>74,4</b>	<b>61,8</b>	<b>69,1</b>	<b>69,3</b>	<b>61,5</b>	<b>64,9</b>	<b>65,9</b>	<b>60,7</b>
Net Intangibles	185,1	196,2	206,0	214,3	220,7	225,1	229,6	234,2
% growth	10%	6%	5%	4%	3%	2%	2%	2%
Goodwill	227,5	236,6	243,7	251,0	258,6	266,3	274,3	282,6
% growth	5%	4%	3%	3%	3%	3%	3%	3%
<b>Δ Intangibles + Goodwill</b>	<b>27,7</b>	<b>20,2</b>	<b>16,9</b>	<b>15,6</b>	<b>14,0</b>	<b>12,2</b>	<b>12,5</b>	<b>12,8</b>
<b>D&amp;A</b>	<b>187,0</b>	<b>214,6</b>	<b>230,3</b>	<b>243,1</b>	<b>253,4</b>	<b>268,1</b>	<b>282,8</b>	<b>297,6</b>
<b>CAPEX</b>	<b>289,0</b>	<b>296,6</b>	<b>316,3</b>	<b>327,9</b>	<b>328,8</b>	<b>345,2</b>	<b>361,3</b>	<b>371,1</b>
(Δ PPE + Δ Intangibles + D&A)								
% of total revenue	14,5%	13,9%	14,0%	13,4%	12,8%	12,8%	12,9%	12,9%
(+) Accounts Receivable	74,8	77,5	80,3	84,8	89,1	93,0	97,4	102,2
% growth	7%	4%	4%	6%	5%	4%	5%	5%
(+) Inventory	198,4	210,7	230,8	256,1	278,4	303,1	331,9	363,5
% growth	8%	6%	10%	11%	9%	9%	10%	10%
(+) Prepaid Expenses	40,9	46,8	52,4	56,2	58,8	60,2	63,3	65,6
% of total revenue	2,1%	2,2%	2,3%	2,3%	2,3%	2,2%	2,3%	2,3%
(-) Accounts Payable	94,9	101,4	109,3	118,4	128,5	138,6	149,9	162,2
% growth	11%	7%	8%	8%	9%	8%	8%	8%
(-) Accrued Expenses	77,1	87,8	97,4	105,8	117,3	130,3	143,9	158,6
% growth	10%	14%	11%	9%	11%	11%	10%	10%
(-) Deferred Revenue	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Operating Working Capital	142,1	145,7	156,7	172,9	180,5	187,3	198,8	210,5
<b>Δ OWC</b>	<b>-1,4</b>	<b>3,7</b>	<b>11,0</b>	<b>16,2</b>	<b>7,5</b>	<b>6,9</b>	<b>11,5</b>	<b>11,6</b>

(+) Deferred Income Tax - Long Term Asset	21,8	24,6	27,8	31,5	35,6	40,2	45,4	51,3
% growth	13%	13%	13%	13%	13%	13%	13%	13%
(-) Deferred Income Tax - LT Liability	42,6	48,1	54,4	61,5	69,5	78,5	88,7	100,2
% growth	13%	13%	13%	13%	13%	13%	13%	13%
Other non-current operational items	(20,8)	(23,5)	(26,5)	(30,0)	(33,9)	(38,3)	(43,3)	(48,9)
<b>Δ Other non-current operational items</b>	<b>(2,4)</b>	<b>(2,7)</b>	<b>(3,1)</b>	<b>(3,5)</b>	<b>(3,9)</b>	<b>(4,4)</b>	<b>(5,0)</b>	<b>(5,6)</b>

Appendix 5 - Peer Group Constituents & KPIs (as of 23/10/2023)

	Total Assets (EURm)	5 yr Revenue Growth	Operating Profit Margin	ROE	Debt/ Total Capital
<b>FIELMANN GROUP</b>	<b>1 746</b>	<b>4,89%</b>	<b>8,33%</b>	<b>12,79%</b>	<b>38,63%</b>
<b>Vision &amp; Eyewear</b>					
Alcon Inc.	26 638	4,52%	8,05%	1,79%	20,48%
Cooper Companies	9 049	9,11%	16,53%	5,47%	27,81%
EssilorLuxottica	60 153	26,74%	16,01%	5,93%	24,24%
National Vision Holdings	2 291	7,84%	3,24%	4,61%	38,64%
Safilo Group	923	0,56%	4,68%	14,70%	30,33%
<b>Consumer Discretionary</b>					
Asies	413 367	3,90%	7,02%	12,53%	44,73%
Harvey Norman Holdings	7 666	5,65%	19,53%	12,41%	32,79%
Hugo Boss	2 975	5,97%	9,08%	20,52%	44,61%
Hyatt Hotels	12 055	3,60%	12,05%	12,53%	45,68%
Iditex	28 780	5,15%	17,16%	25,23%	24,25%
Nifco	358 187	3,47%	10,70%	10,04%	23,98%
<b>SDAX</b>					
Cewe Stiftung	619	4,33%	8,14%	14,62%	12,24%
Eckert & Ziegler	408	9,90%	17,29%	14,66%	18,84%
SGL Carbon	1 436	5,72%	7,32%	26,98%	40,72%
Stratec	393	5,54%	15,42%	13,56%	27,90%
Suedzucker	9 647	6,35%	6,52%	16,81%	45,30%
Wacker Neuson	2 288	7,99%	8,01%	10,64%	20,76%

## Appendix 6 - Valuation Summary

<b>Share Price (as of 27/11/2023)</b>	46,62 €
<b>Share Price (L3M Average)</b>	42,44 €

<b>Implied Share Price</b>			
	<b>Downside Case</b>	<b>Base Case</b>	<b>Upside Case</b>
<b>Adjusted Present Value Analysis</b>			
<b>Total APV</b>	<b>44,93</b>	<b>47,16</b>	<b>49,72</b>
<i>Premium / (Discount) [Price 27/11]</i>	<i>(3,62%)</i>	<i>1,17%</i>	<i>6,64%</i>
<i>Premium / (Discount) [L3M Average]</i>	<i>5,88%</i>	<i>11,14%</i>	<i>17,16%</i>
<b>Discounted Cash Flow Analysis</b>			
DCF Analysis (Perpetual Growth)	44,93	48,03	51,59
<i>Premium / (Discount) [Price 27/11]</i>	<i>(3,62%)</i>	<i>3,03%</i>	<i>10,65%</i>
<i>Premium / (Discount) [L3M Average]</i>	<i>5,88%</i>	<i>13,18%</i>	<i>21,56%</i>
DCF Analysis (Exit Multiple)	53,95	57,83	61,64
<i>Premium / (Discount) [Price 27/11]</i>	<i>15,72%</i>	<i>24,04%</i>	<i>32,21%</i>
<i>Premium / (Discount) [L3M Average]</i>	<i>27,12%</i>	<i>36,27%</i>	<i>45,24%</i>
<b>Total DCF (Median)</b>	<b>49,44</b>	<b>52,93</b>	<b>56,61</b>
<i>Premium / (Discount) [Price 27/11]</i>	<i>6,05%</i>	<i>13,54%</i>	<i>21,43%</i>
<i>Premium / (Discount) [L3M Average]</i>	<i>16,50%</i>	<i>24,73%</i>	<i>33,40%</i>
<b>Comparable Company Analysis</b>			
<b>Total CCA (Weighted Multiple)</b>	<b>52,52</b>	<b>57,35</b>	<b>62,39</b>
<i>Premium / (Discount) [Price 27/11]</i>	<i>12,66%</i>	<i>23,02%</i>	<i>33,82%</i>
<i>Premium / (Discount) [L3M Average]</i>	<i>23,76%</i>	<i>35,14%</i>	<i>47,01%</i>

The above valuation summary provides an overview of the different valuation methods used as well as a comparison to both the November 27<sup>th</sup> share price as well as the average price over the last three months.

There are three scenarios (cases) presented which capture potential over- or undervaluation by the model. The downside case is based on the 25<sup>th</sup> percentile values of the sensitivity tables of the DCF and APV methods, while the upside case contains the 75<sup>th</sup> percentile values.

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