



# **Equity Valuation EssilorLuxottica SA**

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## **Abstract**

Through the acquisition of the global eyewear retailer GrandVision, EssilorLuxottica has created an exciting healthcare group differentiating itself from peers by its unique vertical integration strategy. This thesis aims to determine the intrinsic value of this group by performing commercial, financial, and valuation analysis and to subsequently evaluate the attractiveness of an investment in the company for investors. EssilorLuxottica's future growth is heavily linked to the development of the global eyecare market and positively affected by realized synergies and new market entries. It is anticipated that the company will be able to leverage its market-leading position to drive operational improvements and cash optimization. As a result of the analysis performed, this thesis confirms the attractiveness of EssilorLuxottica from an investment perspective with an intrinsic share price estimate of €189.35 trading at an estimated discount of 9-12% at year-end 2022, while providing a further 7% upside potential for 2023. Consequently, a "Buy" recommendation is proposed. Compared to current equity research of UBS, this is a more optimistic view since the bank has recently changed its house view from Buy to Hold based on inflationary pressures and pessimistic views on new market entries.

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**Keywords:** EssilorLuxottica, eyecare, lenses, sunglasses, consumer, company valuation, share price, intrinsic valuation, discounted cash flow, relative valuation

## **Resumo**

Através da aquisição do retalhista mundial de óculos GrandVision, a EssilorLuxottica criou um grupo de cuidados de saúde interessante que se diferencia dos seus pares pela sua estratégia única de integração vertical. Esta tese tem como objectivo determinar o valor intrínseco deste grupo através da realização de análises comerciais, financeiras e de avaliação e, subsequentemente, avaliar a atractividade de um investimento na empresa para os investidores. O crescimento futuro da EssilorLuxottica está fortemente ligado ao desenvolvimento do mercado global de cuidados oculares e é adicionalmente afectado pelas sinergias realizadas e pelas novas entradas no mercado. Prevê-se que a empresa possa tirar partido da sua posição de líder de mercado para promover melhorias operacionais e a optimização da tesouraria. Como resultado da análise realizada, esta tese confirma a atratividade da EssilorLuxottica de uma perspectiva de investimento com uma estimativa de preço intrínseco das ações de € 189,35 negociando com um desconto estimado de 9-12% no final de 2022, enquanto fornece um potencial de alta adicional de 7% para 2023. Consequentemente, é proposta uma recomendação de "Compra". Em comparação com o atual estudo de ações do UBS, esta é uma visão mais otimista, uma vez que o banco alterou recentemente a sua visão da casa para manter com base em pressões inflacionistas e visões pessimistas sobre novas entradas no mercado.

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**Título:** Equity Valuation – EssilorLuxottica

**Palavras-chave:** EssilorLuxottica, eyecare, lentes, óculos escuros, consumidor, avaliação da empresa, cotação das acções, valor intrínseco, fluxo de caixa descontado, valor relativo

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## Abbreviations

APAC	Asia Pacific
APV	Adjusted Present Value
B&M	Brick and Mortar
BoE	Bank of England
BV	Book Value
CAGR	Compound Annual Growth Rate
CapEx	Capital Expenditure
CAPM	Capital Asset Pricing Model
CCA	Comparable Company Analysis
CTA	Comparable Transaction Analysis
D&A	Depreciation & Amortization
DCF	Discounted Cash Flow
D/E	Debt-to-Equity Ratio
DIO	Days Inventory Outstanding
DPO	Days Payables Outstanding
DSO	Days Sales Outstanding
DTC	Direct-to-Consumer
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest, Taxes, Depreciation & Amortization
ECB	European Central Bank
EMEA	Europe, Middle East, Africa
EqV	Equity Value
EV	Enterprise Value
FCFF	Free Cash Flow to the Firm
FCFE	Free Cash Flow to Equity Shareholders
FDA	Food & Drug Administration
FY	Fiscal Year
GDP	Gross Domestic Product
ICR	Interest Coverage Ratio
IMF	International Monetary Fund
JV	Joint Venture
LATAM	Latin America
M&A	Mergers & Acquisitions
MRP	Market Risk Premium
MSCI	Morgan Stanley Capital International

MV	Market Value
NA	North America
OPEX	Operating Expenses
PP&E	Property, Plant & Equipment
R&D	Research & Development
$R_f$	Risk-free Rate
ROC	Return on Capital
ROCE	Return on Capital Employed
ROIC	Return on Invested Capital
US	United States of America
WACC	Weighted Average Cost of Capital
yoy	year-over-year
YTM	Yield-to-Maturity

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## **1 Introduction**

Equity valuation is a fundamental process in finance to determine the fair value of a company's stock helping individuals and firms making profound investment decisions. In an ever-evolving stock market environment, which is still characterized by enormously high valuations today, despite inflationary pressures and the resulting adverse interest rate environment, EssilorLuxottica has managed to create an exciting group within the eyecare-related healthcare space. With its unique vertical integration strategy resulting from the combination of the manufacturers Essilor and Luxottica with the retailer GrandVision, the company's stock provides a commercially attractive investment. This paper aims to assess, whether this assumption is true from a financial perspective in determining an accurate estimate of the company's true share price by i) defining the most appropriate methodologies (chapter 2), ii) evaluating the company's commercial environment (chapter 3 and 4), iii) analyzing its past and future financial performance (chapter 5 and 6), iv) and ultimately performing a valuation of the company's per share price (chapter 7).

## 2 Literature Review

The following sub-chapters will present in detail the most appropriate valuation methodologies suited to derive an accurate per share price of EssilorLuxottica based on existing scientific literature.

### 2.1 Intrinsic Value – DCF Method

One of the most widely adopted methods applied to evaluate the intrinsic or Net Present Value of an asset is the DCF method. The DCF method values all future cash flows of an asset assuming it generates cash to infinity taking into account the risk associated with receiving those cash flows in the future instead of today, by discounting them as if they were received today (*Damodaran, 2012a*). To account for a company as a going concern, the projection of future cash flows is divided into a specific forecast for detailed short-term future cash generation, with the duration depending on the industry and its associated security of cash flow projections, followed by a long-term steady state estimate concluded by the TV, estimating cash generation to infinity.

Applying the DCF approach when valuing a company requires distinguishing between whether to derive EV or EqV, which essentially differs in the type of cash flow and, as a result, the type of discount rate to be applied. For instance, the FCFE technique estimates the EV directly by utilizing the company's cost of total capital to discount the gross cash flow that belongs to equity and debt holders. This method derives EqV indirectly by further applying an equity bridge to the resulting EV, consisting of the subtraction of the company's net debt. By contrast, the FCFE technique determines the EqV directly by discounting the net cash flow that only belongs to equity holders with the company's cost of equity (*Goedhart, Koller and Wessels 2005*). More details on the FCFE can be found in *Appendix 8.13*.

$$PV \text{ of Future Cash Flows} = \sum_{t=1}^n \frac{Cash \ Flow_t}{(1 + r_{k \ (post-tax)})^t} + \frac{Terminal \ Value}{(1 + r_{k \ (post-tax)})^t} \quad (1)$$

### 2.1.1 Free Cash Flow to the Firm

FCFF is a measure of a company's ability to generate cash from its operations that are available to all stakeholders, including equity investors and debtholders, after considering all CapEx required to maintain or expand its asset base (*Pinto, et al. 2015*). According to the availability of FCFF to both debt and equity holders, the discount rate to be applied is the company's total cost of capital, the WACC. Given that the FCFF is an unlevered cash flow and does not include cash outflows to debtholders or any associated financing tax advantages thereof, the after-tax WACC has to be applied as a discount rate (*Schill 2017*).

$$FCFF_t = EBIT_t * (1 - T) - NCAPEX_t - \Delta NWC_t \quad (2)$$

### 2.2 Adjusted Present Value

The APV method was originally proposed by (*Myers 1974*). Myers argued that the traditional DCF method, which assumes a constant cost of capital, was not appropriate for valuing investments that were financed with debt. Instead, he proposed the APV method as an alternative approach that could better capture the tax benefits and costs of financial distress associated with debt financing.

This technique has since been further developed and refined by other researchers and practitioners and has become a widely academically used valuation method. The APV method represents an indirect alternative to determine a company's EV without factoring in tax benefits of debt financing into cash flows or discount rates. Instead, it involves calculating company value based on future cash flows considered to be unlevered and therefore discounting them with the unlevered cost of equity, adding the present value of the interest tax shield, and subtracting expected financial distress costs.

$$\sum_{t=1}^n \frac{FCFF_t}{(1 + r_{ke(U)})^t} + \frac{TV}{(1 + r_{ke(U)})^t} + PV(\text{interest tax shield}) - E(\text{distress cost}) \quad (3)$$

$$PV(\text{interest tax shield}) = \sum_{t=1}^n \frac{\text{interest tax shield}_t}{(1 + r_{kd})^t} + \frac{TV}{(1 + r_{kd})^t} \quad (4)$$

$$E(\text{distressed cost}) = EV(U) * PD * E(\text{bankruptcy cost}) \quad (5)$$

While being a useful alternative to the DCF, a significant shortcoming of the APV method is the lack of accuracy in estimating the default probability as well as associated bankruptcy costs of a company. Discussions on proxies for bankruptcy costs include contemplating legal and administrative costs with damaged brand perception, customer, supplier, and employee losses, and forgone investment opportunities without real consensus achieved so far (*Altman, Cooke and Kishore 1999, Shapiro and Titman 1985*).

### 2.3 Terminal Value

The TV can be estimated either through the application of an exit multiple in the ultimate planning period or by assuming a company will grow indefinitely as a going concern according to a perpetual growth rate (*Damodaran, 2012b*). A third method of computing terminal value is by assuming the liquidation of the company's assets in the ultimate planning period. Both liquidation and exit multiple method are not applied in this work given a lack of adoption in practice and inconsistency with intrinsic valuation respectively.

$$TV = \frac{\text{Cash Flow}_{t+1}}{(r - g)} \quad (6)$$

The perpetuity approach epitomizes the going concern assumptions in a DCF estimating continuously reinvested cash flows in perpetuity while increasing at a constant growth rate. The perpetual growth rate is a sensitive component in a DCF and is thus subject to several constraints. On the one hand, a company is not able to outgrow its underlying economy forever, which constrains the top end of the perpetual growth rate to nominal GDP growth of a company's underlying economy. On the other hand, the inflation rate of a company's underlying economy or geography represents the floor as a growth rate below inflation would lead to bankruptcy of the company, which is inconsistent with the going concern assumption.

## 2.4 Discount Factor

Using a valuation method based on projected cash flows requires taking into consideration the riskiness of receiving cash flows at some point in time in the future, instead of today or at the valuation date. Based on the principle that companies require capital to fund investments in assets to generate cash, the discount factor should reflect the risk for investors, to allocate capital to a company for it to invest into cash generating assets. Consequently, the most widely adopted proxy of risk in conjunction with projected cash flows, is a company's MV weighted cost of capital.

$$WACC(post\ tax) = \frac{E}{D + E} * k_{e(L)} + \frac{D}{D + E} * k_d * (1 - T) \quad (7)$$

### 2.4.1 Market Value of Equity and Debt

For public companies, the MV of equity is given by the company's corresponding market capitalization, which is represented by the number of outstanding shares in a stock multiplied with its current share price. For private companies, a similar estimate of the MV of equity can be derived by applying profitability multiples to compute the company's EV and apply a corresponding equity bridge by subtracting the MV of debt. This approach is equally applicable for weighting a company's MV of equity using forward multiples in case an individual WACC is allocated for each year over the course of the planning period.

For the MV of debt, similar principles apply, with outstanding bonds corresponding to the MV of debt. Alternatively, another proxy for the MV of debt is to apply the Damodaran bond pricing formula with a weighted average maturity of the outstanding long-term debt with interest expenses representing coupon payments.

$$MV \text{ longterm Debt} = C * \left( \frac{1 - \frac{1}{(1 + k_d)^t}}{k_d} \right) + \frac{\text{Face Value}}{(1 + k_d)^t} \quad (8)$$

### 2.4.2 Cost of Debt

There are two ways to determine a company's cost of debt: firstly, by applying the weighted YTM of its outstanding bonds, or secondly, by subtracting the  $R_f$  from a company's implied probability of default based on the public credit rating. This rating can alternatively be derived by applying industry averages based on accounting ratios concerning leverage and liquidity.

### 2.4.3 Cost of Equity

The cost of equity represents the required return of equity investors to compensate them for allocating equity capital to a company. Since equity investors have no claim on a fixed return compared to debtholders, the cost of equity is considered to represent the opportunity cost for equity investors to compensate them for any forgone returns had they allocated capital to any other company. The most widely applied method to estimate a company's cost of equity is the CAPM (*Sharpe 1964, Lintner 1965, Black 1972*).

$$k_{e(L)} = r_f + \beta_i * (E(R_M) - r_f) \quad (9)$$

The CAPM consists of two components combined as a proxy for the opportunity cost of equity holders. The first component is the minimum required return for any investor, the  $R_f$ . The second component is a risk premium of equity capital, which represents compensation to investors for the specific risk associated with the company in question relative to the underlying market itself. The latter can be differentiated into two separate sub-components, which are the i) MRP representing the expected excess return of holding a risky market portfolio, and ii) the Beta, representing the specific risk associated with the company. There are potential other CAPM factors (*Fama and French 1992*) highlighted in *Appendix 8.15*, which are not applied in this work.

#### **2.4.3.1 Risk Free Rate**

According to *Damodaran (2012b)*, a risk-free return is given in any case where an investor is certain about the return of an investment in the future, which in consequence implies that an investment is risk-free whenever the actual return is equal to the expected return. Thus, for a risk-free investment there can be no default risk and no reinvestment risk. Incidentally, this suggests that an adequate estimate of a purely  $R_f$  is given by the expected return on a long-term zero-coupon bond of a default-free government. Since default-free governments do not exist, there are alternative proxies applied as a  $R_f$ , including the long-term YTM of securely perceived sovereign issuers with currency factored in when deciding upon such issuers as a reference.

A potential shortcoming of using the aforementioned proxy is the fact that it incorporates the underlying assumption of a constant  $R_f$  over time, which practically is non-existent. To mitigate the  $R_f$  being a snapshot of the current interest rate environment and to factor in shifting YTMs over time, the Svensson model has been developed in 1994 (*Svensson 1994*) as an extension of the Nelson-Siegel model (*Nelson and Siegel 1987*) using non-linear optimization to estimate the  $R_f$  over time.

#### **2.4.3.2 Market Risk Premium**

The MRP is the expected excess return on a portfolio of risky assets representing the underlying market. It is computed by subtracting the  $R_f$  from the expected return of the market portfolio. It is practically common to either derive the estimate of the MRP by calculating the excess return on specific stock indices representing the geographical operating footprint of the company in question (i.e. EuroStoxx, S&P 500, MSCI indices) or to utilize official databases to retrieve an adequate estimate (*FAUB 2019, Damodaran 2023e, Fernandez, García and Acín 2022*).

### 2.4.3.3 Beta

As previously stated, the Beta is a factor representing company specific risk which in the CAPM formula functions as an amplifier aiming to account for the company's inherent risk relative to the market. According to *Damodaran (2012b)* there are three distinct methods to derive the Beta as a proxy for company specific risk, which consist of i) regression estimates based on historical stock price data, ii) fundamental Beta using comparable company information and forward looking operational and capital structure related characteristics such as operating and financial leverage, and iii) accounting Beta based on variation in profitability items rather than stock price data. Since the latter two options are practical when estimating Betas of private companies given the lack of available stock price data, using historical stock prices is the most common method to derive a Beta for publicly listed companies.

$$\beta_i(L) = \frac{Cov(R_i, R_M)}{Var(R_M)} \quad (10)$$

Depending on the type of cash flow discounted, the Beta has to be adjusted since Betas derived from market data reflect the individual capital structure of a company at the point in time of a stock price retrieved. For instance, the APV method takes the risk of debt capital into account by incorporating the ITS and expected bankruptcy costs and otherwise assumes the company is fully financed with equity, requiring the discount rate to be a capital structure neutral cost of equity. Consequently, the derived Beta has to be unlevered.

$$\beta_i(U) = \frac{\beta_i(L)}{1 + (1 - T) * \frac{D}{E}} \quad (11)$$

For a standard DCF, however, the underlying cash flow should reflect the valued asset's capital structure going forward, which requires the discount rate to be levered with the assumed capital structure and subsequently the Beta to be levered accordingly.

## 2.5 Relative Valuation

Contrary to the principle of intrinsic valuation, relative valuation consists of the underlying concept that a company is valued relative to the value of similar companies in the market based on standardized metrics or multiples. According to *Damodaran (2012a)*, these can be divided into i) earnings, ii) revenue, or iii) BV. In individual cases when other metrics are driving the market, it should also be considered to include business-specific multiples.

Applying multiples for the purpose of company valuation has both advantages and disadvantages. Valuation estimates based on multiples are simple to compute and thus require less time and resources compared to an intrinsic valuation method. However, shortcomings should particularly be taken into consideration when applying multiple analysis. For instance, while BV multiples are prone to regionally diverging accounting principles and policies, earnings multiples are subject to one-off events and are affected by individual capital structures (*Fernandez 2007, Goedhart, Koller and Wessels 2005*). Industry multiples on the other hand are difficult to set in relation to a company's fundamental performance and therefore hard to justify (*Damodaran, 2012a*). Even the timing of multiples can be decisive in estimating accurately, since forward looking multiples should be more accurate in price prediction compared to trailing or current multiples (*Liu, Nissim and Thomas 2002*). Consequently, it is common to pair multiple analysis with intrinsic valuation methods aiming at the most accurate estimate possible.

### 2.5.1 Comparable Company Analysis

A CCA utilizes public data of listed companies to derive a multiple to apply to the corresponding metric of the company to be valued. Consequently, to derive a sustainable valuation estimate, listed companies used must be comparable to the company in question. Subsequently, it is required to define a comparable peer group of publicly listed companies that should be narrowed down accordingly. Typical criteria should include similarity in terms of business model, risk profile, and other financial characteristics such as growth, profitability, and size (*Damodaran 2010, DVFA 2012*). The CTA as a second method is discussed in *Appendix 8.16*.

## 2.6 Conclusion

Based on analyzing the current state in academic literature, the methods deemed most appropriate to value EssilorLuxottica are selected. The most appropriate method appears to be an indirect DCF method based on FCFF given the fact that the company inherits a market-leading position in a predominantly non-discretionary consumer product segment. Subsequently, considering EL as a going concern generating cash indefinitely can be an appropriate assumption while this method, although largely assumption-based, can arguably still be considered the most complete and widely adopted method. A recent accumulation of debt favors the FCFF approach over FCFE. Further, the APV method will be applied as a comparison to the DCF to accommodate apparent (de-)leveraging effects. An approach based on projected dividends will be excluded based on its potential misrepresentation as a signal for investor sentiment without reflecting the true underlying value of the company (*Bhattacharya 1979*). The dividend discount method is explained in *Appendix 8.14*. Lastly, the CCA approach will be used as a relative comparison over the CTA method, based on the implied control premiums that are likely to be derived in market data of past transactions.

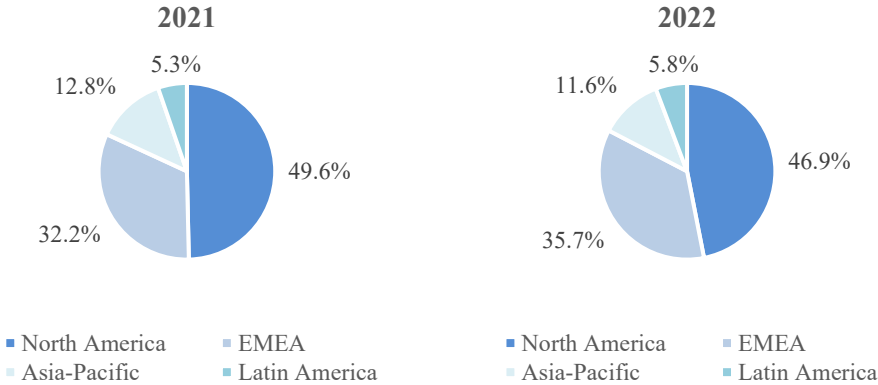
### 3 Company Analysis

The following chapter is designed to give a brief overview of the company EssilorLuxottica SA. Focus is intentionally put on providing an understanding of the company's business model and strategy going forward to put context on the forecast for the valuation. All data displayed in this chapter is retrieved from the annual reports of EssilorLuxottica between FY18 and FY22.

#### 3.1 Company Description

EssilorLuxottica created through the merger of Essilor International S.A. and Luxottica S.p.A. in October 2018, is a globally operating eyewear conglomerate which designs, manufactures, and distributes ophthalmic lenses, frames, and sunglasses. Both currently operate as separate entities with Essilor focused on the manufacturing and distribution of ophthalmic lenses and instruments as well as sunglasses and readers. Luxottica on the other hand produces and distributes frames for sun and prescription eyewear, and through the recent acquisition of GrandVision B.V. has increased its retail network of physical B&M stores. Currently, the group can be regarded as predominantly eyecare-focused with approximately 75% of total revenue allocated towards optical revenue whereas the remaining 25% are mostly attributable to sunglasses, which can be regarded as luxury retail (*Tibaldi, Ousz and Doyle 2023*). The combined group is a vertically integrated global player covering the entire value chain from R&D to manufacturing and distribution of predominantly frames and lenses as well as other medical equipment. While the company has a large operating footprint in the US, key European geographies consist of France, Germany, Italy, Ireland, Spain, and the UK. An overview of other key information as well as proprietary brands and technologies can be found in *Appendix 8.25 and 8.26*.

Figure 1 – Geographic Revenue Split 2021 vs. 2022



### 3.2 Research & Development

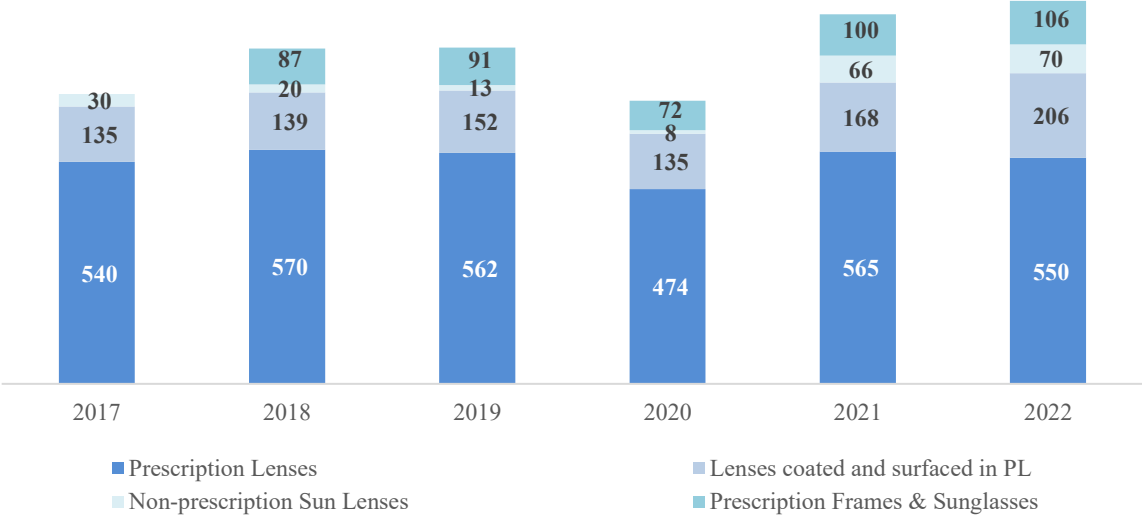
The company has a substantial track record of creating novel solutions for eyewear products which lean back on its innovation capabilities supported by its role as an enhancer for scientific, industrial, and academic research on eye diseases and technological solutions. EssilorLuxottica’s R&D activities are mainly focused on the management of rapidly growing vision impairment disease myopia, and the technological innovation of building a gateway to augmented or virtual reality.

### 3.3 Manufacturing

EssilorLuxottica’s manufacturing plants produce finished, semi-finished, or plano lenses and processes various sourced materials such as aluminum, wood, die casting, metal, or plastic to produce eyewear products such as readers and frames. Finished lenses are manufactured for basic vision corrections such as myopia, hyperopia, and astigmatism. Semi-finished lenses are intended for more complex vision corrections such as presbyopia, whereas plano lenses are without corrective power typically applied in spectacles. The manufacturing of eyewear products, however, consists of core component production through molding processes, which are then welded together and treated with various coatings to be fitted for corresponding lenses. Additionally, EssilorLuxottica develops a range of optical instruments and equipment which are predominantly designed for lens edging and mounting as well as optometry instruments for professional use.

Finished goods and components are then sent to EssilorLuxottica’s large network of distribution centers worldwide to be shipped either to EssilorLuxottica-owned entities such as distributions subsidiaries, laboratories, edging-mounting facilities or to third parties such as distribution partners, retailers, and optical brands. Additional information about the manufacturing output can be found in *Appendix 8.28-8.30*.

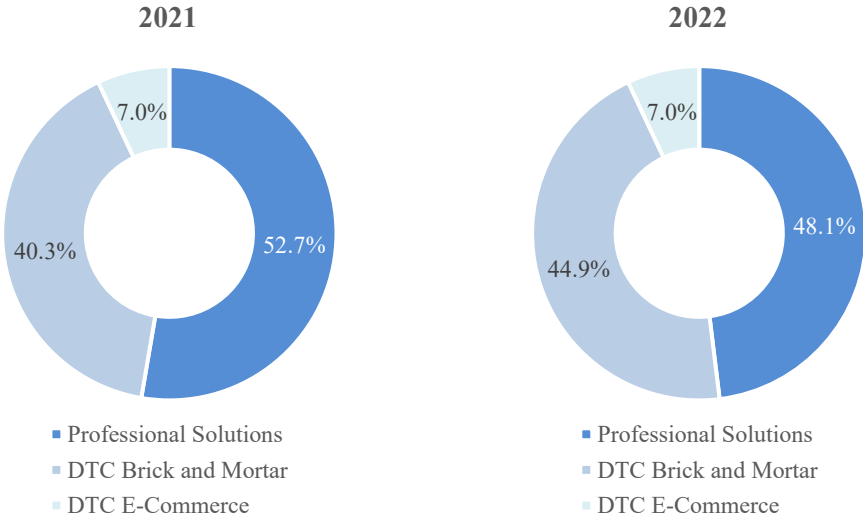
Figure 2 – EssilorLuxottica Annual Manufacturing Output in million units



### 3.4 Go-to-Market Strategy

EssilorLuxottica has recently re-organized its operational reporting and created a new business segment structure primarily reflecting the company’s go-to-market strategy and its customers, differing in wholesale vs. retail.

Figure 3 – Segment Revenue Split



**3.4.1 Professional Solutions**

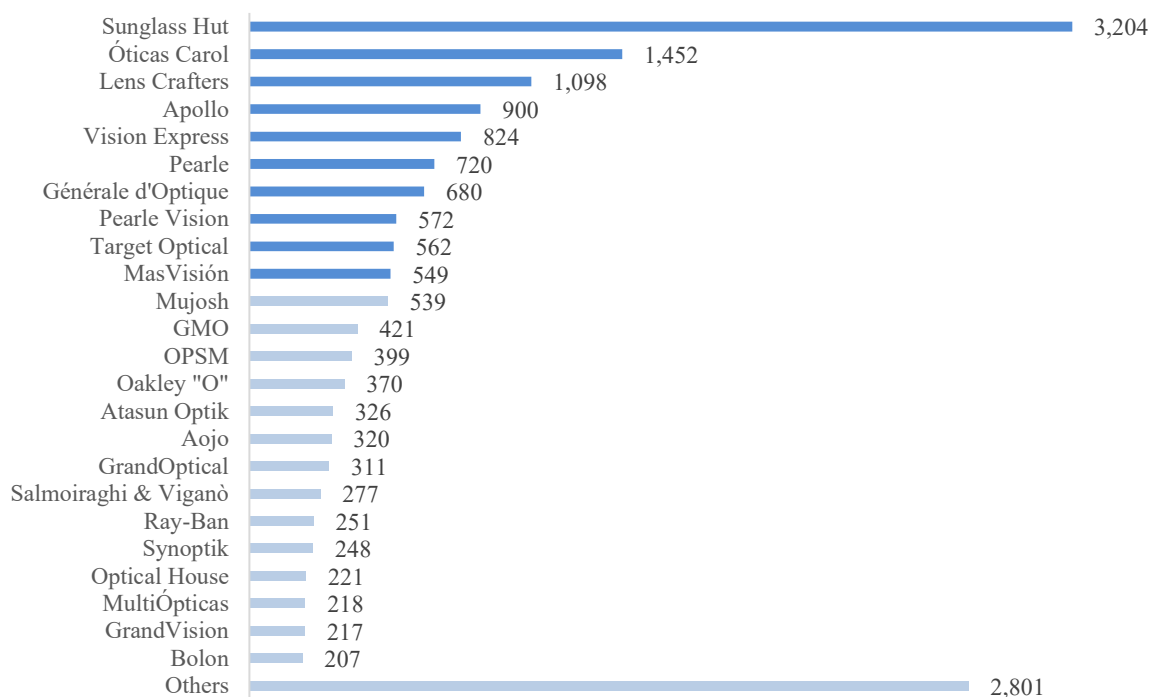
The “Professional Solutions” segment accounts for 48% of FY22 total revenue and consists of EssilorLuxottica’s engagement with over 300,000 third-party professionals such as opticians, third-party e-commerce platforms, optical retail banners, sun retailers, sports channels, department stores and duty-free shops. In addition to supply professional customers with frames, lenses, instruments, and digital solutions, the company engages in strong interactive partnerships with its customers via i.e. the EssilorLuxottica 360 program designed to optimize the operational setup of independent eyecare professionals, or via Leonardo, EssilorLuxottica’s education platform to accelerate industry growth and spread knowledge about current issues and vision diseases. The company pursues an aggressive digitization strategy having launched various digital initiatives such as a digital B2B sales channel to deliver a round-the-clock access to EssilorLuxottica’s supply chain and business services and other digital fitting and customization tools.

### 3.4.2 Direct to Consumer

Accounting for EssilorLuxottica's B&M as well as e-commerce activities is the business segment "Direct-to-Consumer" accounting for 52% of FY22 total revenue operating a large network of physical stores and online shops distributing both in-house manufactured as well as third-party products. Flagship brands and physical stores in the company's retail segment include Ray-Ban, Sunglass Hut, or MultiÓpticas. Simultaneously, fueled by a Covid-related digital shift, EssilorLuxottica's e-commerce presence is strengthening with several flagship B&M brands expanding online focusing on implementing an innovative digital customer experience. This includes the use of artificial intelligence and augmented reality to improve the experience of online tools such as the Frame Advisor, Virtual Try-On and Lens Configurator. The online store portfolio includes online channels of traditional B&M retailers as well as pure online brands such as Brille24, Contactsdirect, or Readers.com.

Similarly, to the Professional Solutions segment, the Direct-to-Consumer segment pursues a strategy aiming towards an increasing share of digitization and convenience tools especially for B&M retail which includes Online-Pick-Up-To-Store as well as same-day-delivery concepts via Ship-From-Store initiatives. Further, the company incorporates various other services to reach customers at an earlier point in time of the decision-making process including online-appointment booking options or the integration of external eye exams.

Figure 4 – Number of Physical Stores Overview as of 31/12/2022



### 3.5 Growth Strategy

As a global leader controlling the value chain in eyewear and eyecare industries worldwide, the group's future strategic focus continuously lies on the expansion of its physical and online retail network in adjacent geographies, which is underlined by the recent acquisition of GrandVision. This will likely consist of in-organic initiatives since this has been part of the company strategy in recent years and could also extend to the wholesale division by driving consolidation in a still fragmented wholesale segment in the eyecare market. However, the most significant growth factor could be organic. The company has identified the treatment of myopia vision disorder to be one of the top priority focus areas and successfully developed a new lense hindering the progress of myopia as part of its cooperation in a JV with Stellest. The product recently achieved FDA approval which will especially open significant growth opportunities in Asia given that approximately 130 million teens are currently affected in China alone. This should represent the long-awaited expansion of the company's market position in Asia, the most attractive eyecare market which is currently underserved by EssilorLuxottica. Additionally, acquisitions and digitization initiatives could realize market share gains in the DTC e-commerce distribution in line with the company's omnichannel sales approach. (Dadhania, Lafioniatis and Chamberlain 2023, Baudouin and Puget 2022)

## 4 Market Analysis

To determine which market growth factors affect the company's business plan going forward, it is first necessary to analyze the industry EssilorLuxottica is operating in. There seems to be a debate whether EssilorLuxottica is active in the cyclical luxury consumer goods sector or in the more eyecare-related and thus non-discretionary, non-cyclical eyewear industry, which is fueled by the previously mentioned decision of the management to reorganize its operating segments and a subsequent lack of transparency about EssilorLuxottica's product mix. However, as previously mentioned according to *(Tibaldi, Ousz and Doyle 2023)*, 75% of its business is directly related to optical care with nearly 50% accounted for as a supplier to wholesale customers, predominantly opticians. Therefore, the following chapter will consider EssilorLuxottica to be active in the global eyewear market.

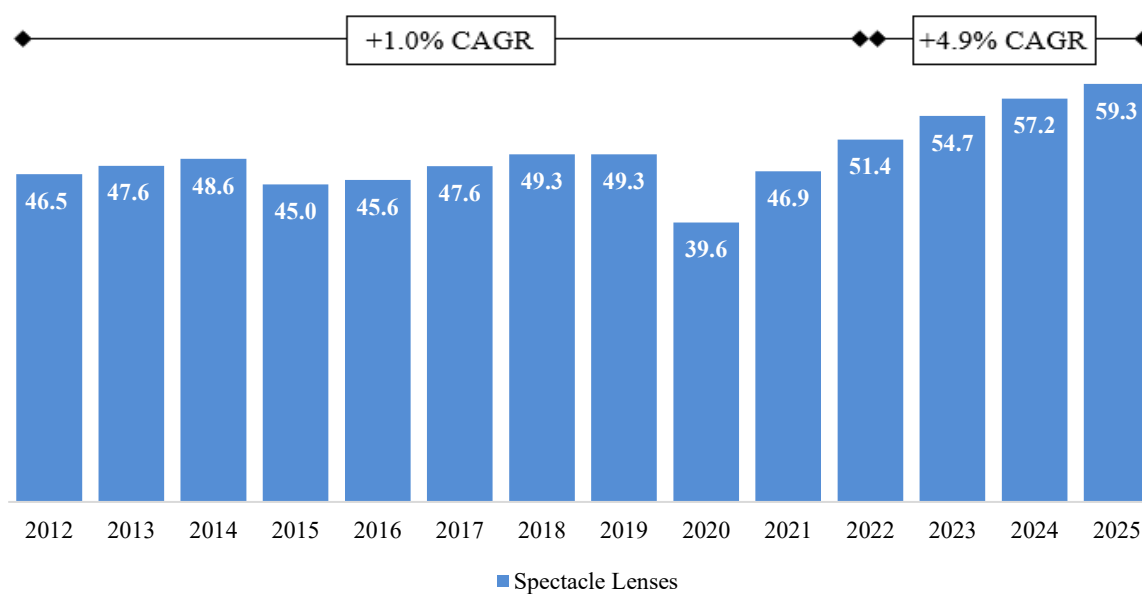
## 4.1 Total Market and Segmentation

The global eyecare and eyewear market is currently valued at over ~€100bn with different total volume estimated ranging between €103bn (*Battistini et al. 2023b*) and €123bn (*Lüdemann 2021*). The market is segmented into four main product groups consisting of i) spectacle lenses accounting for 41-42% of total volume, ii) eyewear and reader frames accounting for 28-30%, iii) sunglasses accounting for 14-17%, and iv) contact lenses accounting for 13-15%. Matured in NA and in EMEA, the largest regions in terms of retail value with a 93% and 85% respective share of people with vision correction as a percentage of people in need of vision correction, the APAC region is widely viewed as the most attractive end market with various vision disorders rapidly spreading. Similar to the LATAM region (63%), APAC countries post an overall rather low percentage (47%) of people served with vision correction that require it. In all geographic regions, the traditional combination of spectacle lenses paired with frames accounts for over 50% of total market within the product mix, although contact lenses are increasingly gaining in popularity especially in NA and the APAC regions accounting for 16% and 21% respectively. Key sales channel globally with a 54% share remain independent eyecare practitioners such as opticians, with B&M retail and e-commerce accounting for 38% and 8% respectively. The market is characterized by end customers making out-of-pocket predominantly non-discretionary and thus health-related payments with products typically having a repurchase cycle, which can potentially be postponed although not put off indefinitely resulting in non-cyclicality. Key market drivers include favorable demographics such as ageing population, wealth effects in emerging markets, and changing lifestyles, but also consists of increasing health awareness and rising vision impairments due to rapidly accelerating screen exposure to i.e. smartphones. More on market drivers can be found in *Appendix 8.3. (Battistini et al. 2023b)*

### 4.1.1 Spectacle Lenses

The spectacle lenses segment refers to the physical glass lenses which are assembled within frames into complete physical spectacles. Key raw materials besides glass includes polymerizable thermoset resins and injectable thermoplastic resins produced by chemical processing companies. The spectacle lenses segment is the largest segment in the eyecare market accounting for 42% of total market volume. The most significant geographic markets for spectacle lenses are the US, China, and Germany with overall rather mature markets in Northern as well as LATAM and Europe whereas growth in the Asian and African market is expected to accelerate until 2025. Spectacle lenses increasingly face substitution through alternative solutions such as contact lenses, although it is not uncommon consumer behavior to opt for a combination of both. (Lüdemann 2020c)

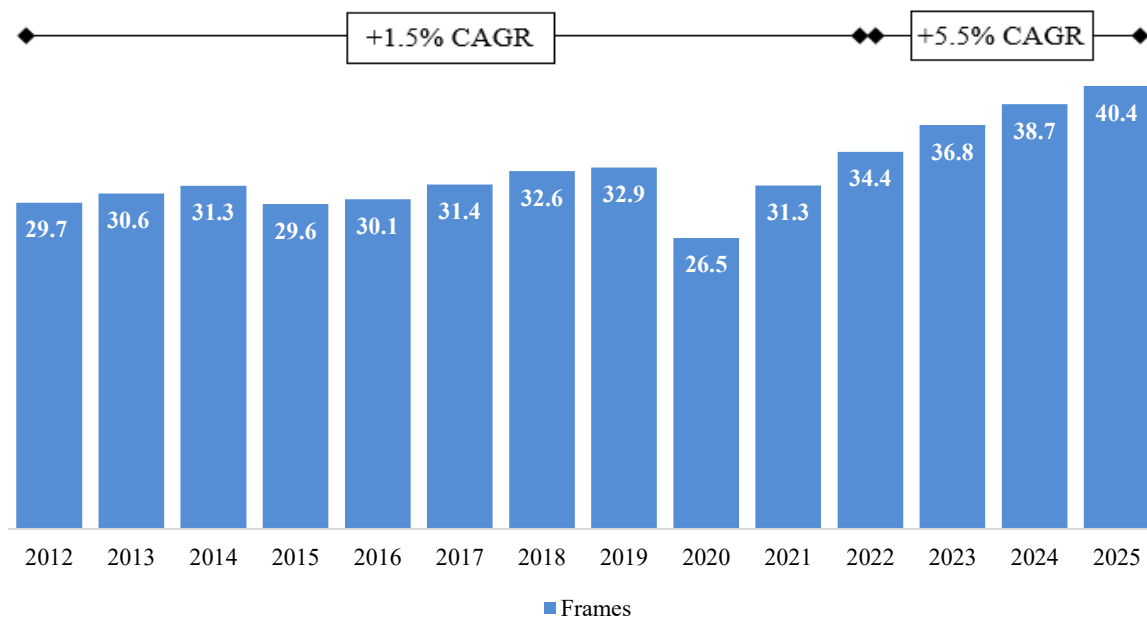
Figure 5 – Spectacle Lenses Market Volume in €bn



### 4.1.2 Frames

The corresponding eyewear frames are manufactured by using raw materials such as metals or plastic. Eyewear frames with 28% make up the second largest share of the total market volume. Key geographic areas are NA and LATAM accounting for 37%, with significant market share in the US, Brazil, Mexico, and Argentina while other key geographies include China, France, and Germany. Given substantial interdependencies between the spectacle lenses and eyewear frames, the market growth outlook is nearly identical. Traditional materials are continuously improved and substituted with more sustainable and, in terms of weight, durability, and affordability, more efficient materials such as bioplastics or wood. Increasingly, eyewear frames emerge as a fashionable accessory offsetting the switching effect to contact lenses. (Lüdemann 2020b)

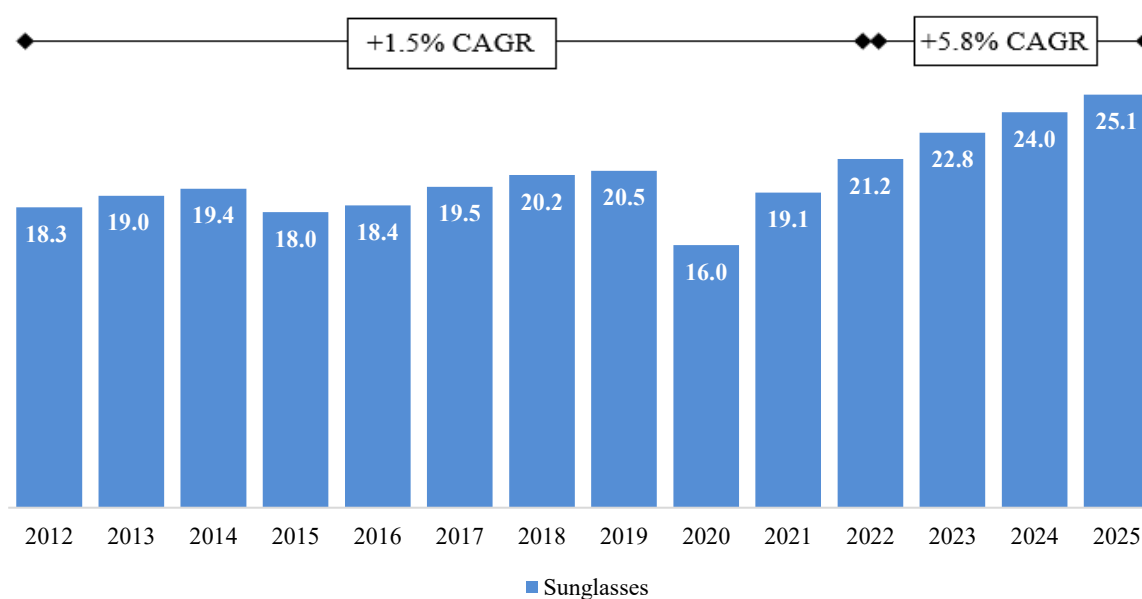
Figure 6 – Eyewear Frames Market Volume in €bn



### 4.1.3 Sunglasses

The sunglasses segment is comprised of specific sun plano lenses made of plastic or glass that are assembled within frames into complete sunglasses. The sunglasses segment currently accounts for approximately 17.2% of the entire market volume. Within the total eyewear and eyecare market, the sunglasses segment can be considered discretionary by nature, despite growing awareness of the health requirement to protect eyesight against ultra-violet radiation. The development in geographic end markets resembles the growth trajectory of the spectacle lenses and frames segments. Key geographies include Germany, Russia, France, and Italy, as well as the US, Brazil, India, and China. In recent years, social media marketing has emerged as a key marketing strategy in an effort to influence purchase decisions. (Lüdemann 2020d)

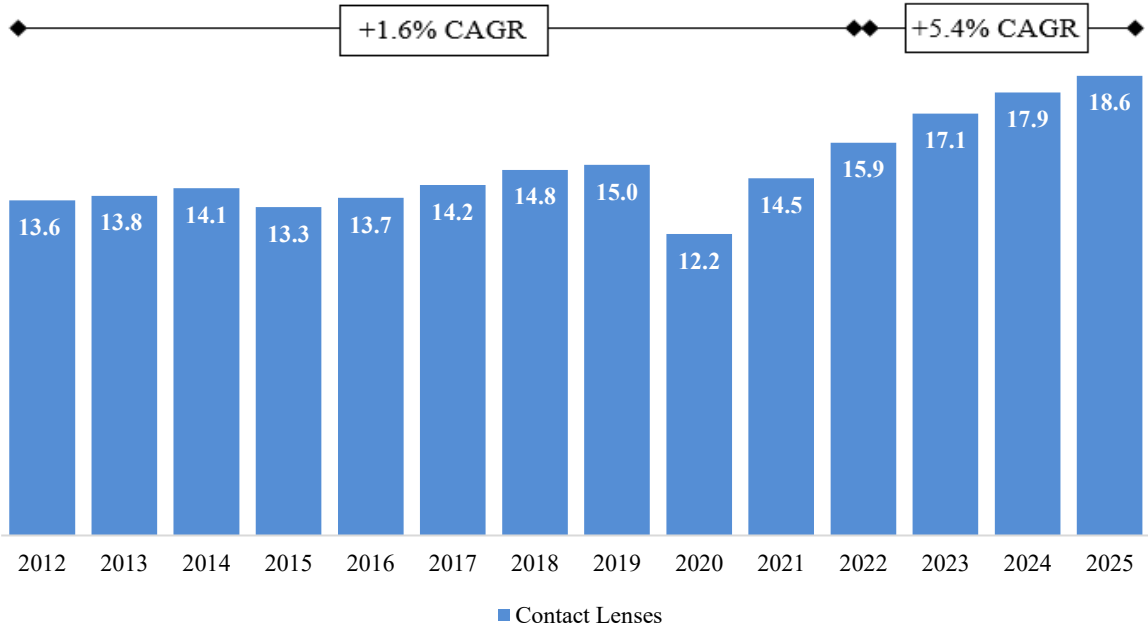
Figure 7 – Sunglasses Market Volume in €bn



### 4.1.4 Contact Lenses

The contact lenses segment represents the main alternative to corrective glasses and currently accounts for 13% of total volume. Maturity is reached in Europe as a geographic end market, while growth is accelerating in the Americas, Asia, and Africa with adoption in the latter two outpacing the rest of the world. Key geographies include the UK, US, Japan, and China. Products have a frequent replacement cycle ranging from daily to monthly frequencies. Demand for contact lenses is driven by younger generations of customers based on aesthetic appeal over glasses, while a combination of both is increasingly common in more mature regions. (Lüdemann 2020a)

Figure 8 – Contact Lenses Market Volume in €bn



### 4.2 Competitive Landscape

Within the competitive landscape, EssilorLuxottica is defined as the clear market leader with an accumulated market share of ~20% in FY22, representing a market share expansion of approximately 5pp from ~15% in market share in FY19.

Key competitors should be viewed based on product categories within the eyecare industry, given a lack of sizeable as well as vertically integrated competition covering the entire product mix in the market. For lenses, key competitors with a similar geographic revenue focus on NA and Europe include Alcon Inc., Cooper Vision, and Bausch & Lomb with the latter two having a similar focus on prescription and contact lenses. Prospective competition arises from Hoya Corporation and Carl Zeiss Meditec in the fight for market share in the APAC region and other currently underserved geographies. Within the frames segment, Safilo, Marcolin, and DeRigo are emerging as core competitors with a similar geographic exposure to NA and Europe. As far as optical retailers, the competitive environment is limited to local players such as Fielmann (Germany), National Vision or Warby Parker (both US). For comparison, the largest competitor in terms of financial performance out of the previously mentioned is Alcon, with total revenue in FY22 relating to 25% of EssilorLuxottica's total revenue and a similar ratio regarding EBIT emphasizing the company's market leadership position. (*Battistini et al. 2023a, Battistini et al. 2023b*)

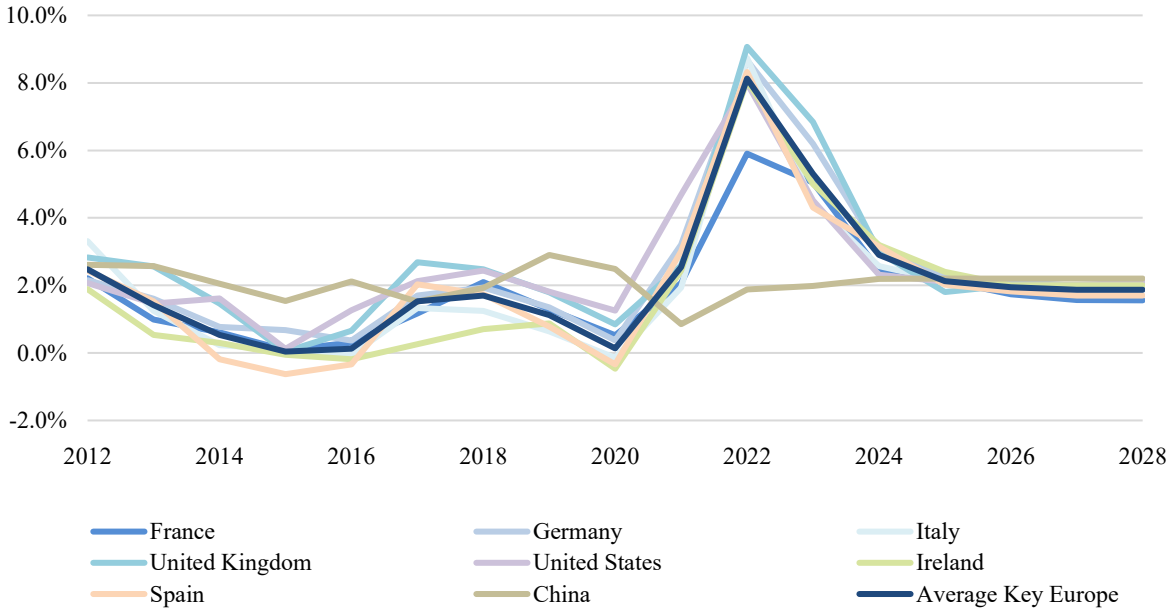
### **4.3 Macroeconomic Environment**

While it can be stated that the effects of the Covid-pandemic are in the past and will not significantly affect the eyecare and eyewear market going forward, the repercussions of past monetary policy and supply chain shocks are creating macroeconomic pressure on global markets. Consequently, the following paragraphs are designed to provide insight into current macroeconomic events and an economic forecast to better understand the environment of EssilorLuxottica going forward.

#### **4.3.1 Inflation & Interest Rate Environment**

Following supply chain shocks and loose monetary policy in recent years, global inflation as well as inflation in the company's key geographies is currently at its highest level since well over 20 years. According to the IMF, inflationary pressures should continue and reach normalized levels in 2025 suggesting margin pressures predominantly on OPEX levels. The company's key geographies have reported changes in consumer price indices of over 8% with the expectation of swifter recovery in the US compared to its European counterparts. (*IMF 2023*)

Figure 9 – Inflation as % change in respective consumer price indices



This in turn has caused central banks globally to pursue aggressive interest rate hikes with several upwards adjustments in reference rates since the beginning of 2022 with the Federal Reserve in the US pursuing the most aggressive approach compared to the BoE or the ECB, implementing 9 rate hikes reaching the current federal funds rate of 4.75% to 5.00% (US-Fed 2023). Similarly, the BoE has implemented 10 rate hikes in its bank rate currently at 4.25% whereas the ECB has acted more restrained compared to its counterparts, raising interest rates only 6 times since the beginning of 2022 with a current deposit rate of 3% (BoE 2023, ECB 2023). Economic data suggests this lag in response time to counter inflation could potentially lead to a longer recovery term since US inflation is forecasted to reach near-target levels in 2024 compared to 2025 for most of the European key geographies.



While the overall economic indicator of GDP growth suggests contracting economic development, it is worthwhile mentioning that other productivity indicators show asymmetrical development. For instance, unemployment rates in all key geographies are continuously declining from their previous level showing a confirmatory trend in the long run, while total investment ratios show a decreasing trend relative to GDP, indicating less investment in gross fixed capital formation, inventory, and net acquisitions. Data suggests that this development continues until 2024 with signs of increasing investment activity from 2025 onwards. The same ratio on the other hand underlines the attractiveness of the Asian market indicated by China’s investment forecast set at 44% relative to GDP compared to 22% and 27% respectively for key geography and global averages. (IMF 2023)

Figure 11 – Total Investment as % of respective GDP

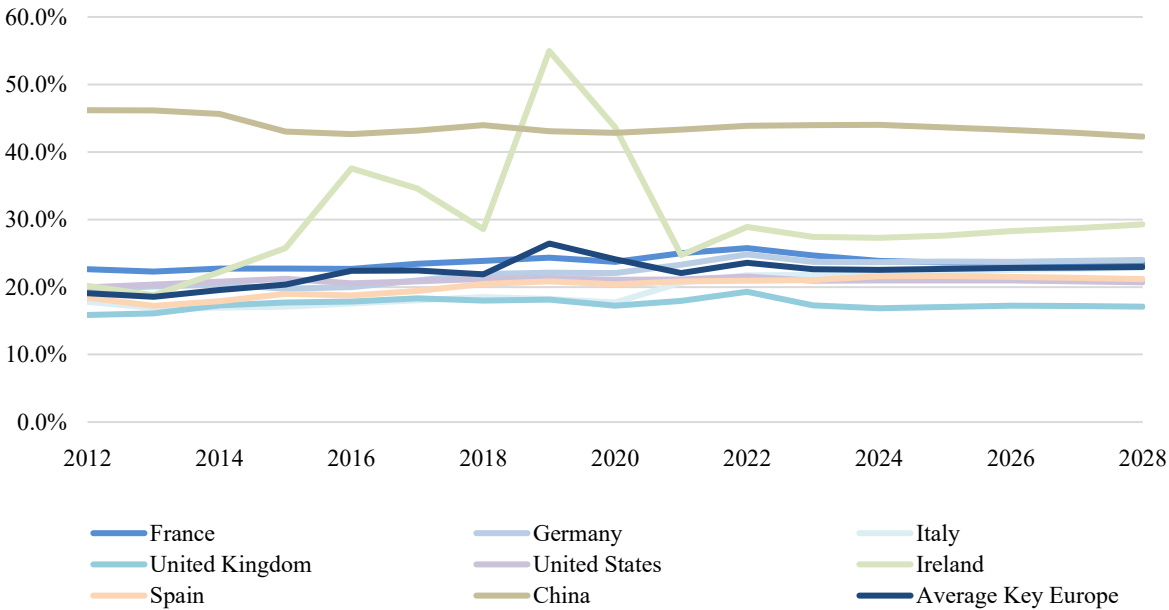
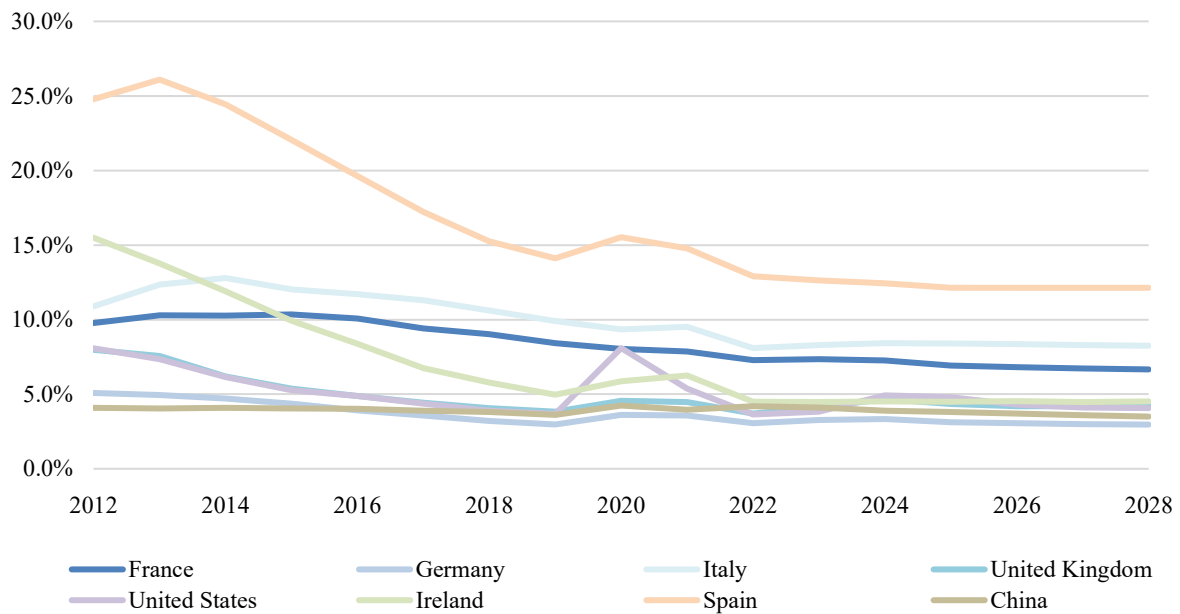
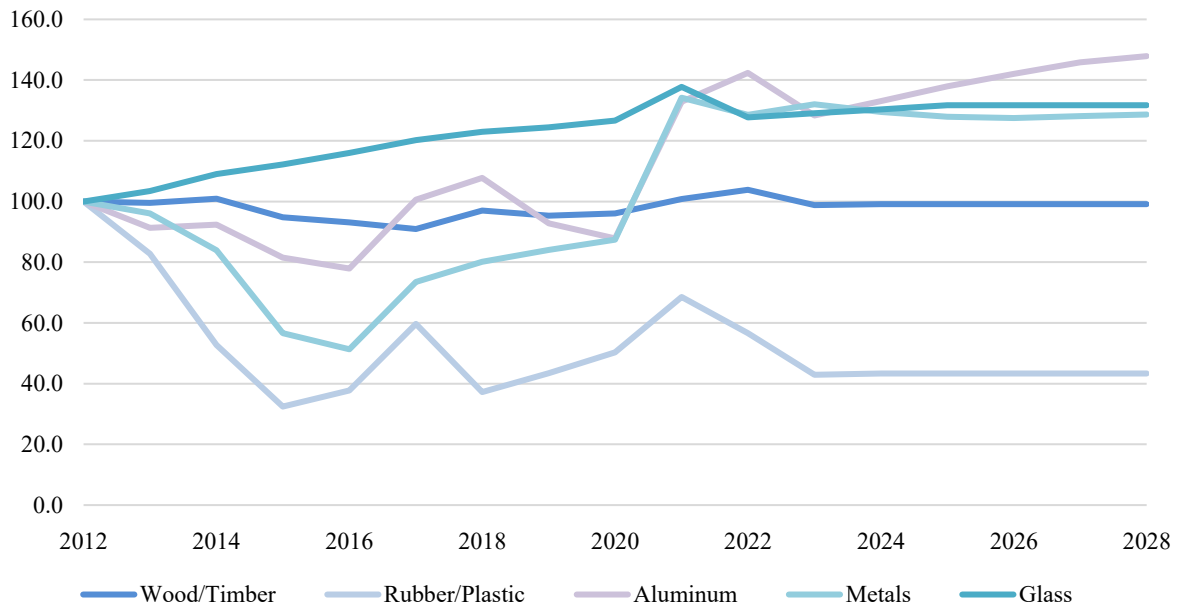


Figure 12 – Unemployment as % of respective population



### 4.3.3 Russia/Ukraine War

Within the eyecare and eyewear industry, the Russia/Ukraine war acts as an amplifier for the inflationary pressure on the industry's cost profile with increased energy costs for retailers and wage increases based on inflation. Raw material prices, especially metals and aluminum are expected to pressurize margins in the medium term, with a short-term -14.1% price relieve anticipated in 2023 due to rebounding aluminum prices coming from a +45.1% 2021 and +9.5% 2022 year-on-year price increase. Over the long term, aluminum is expected to be a price driver increasing between 2-5% per annum which should affect frames production. Manufactured glass prices are expected to moderate after having experienced a sharp increase in 2021 with the forecast indicating a reversion to past average annual growth rates of approximately 1%. This effect will be slightly offset by other metal prices decreasing over the medium-term between 1-3% each year until moderating from 2026 onwards. Alternative materials such as wood and plastic present a cheaper alternative, with price decreases of 5.0% and 13.8% respectively expected from 2023 onwards and stagnation thereafter. (IMF 2023, Nasdaq 2023)

*Figure 13 – Price development of key raw materials for the eyewear supply chain*

While this general development should pressurize the industry's margins, the vertically integrated supply chain of EssilorLuxottica has proven resilient, specifically between 2021 and 2022, a period characterized by rapidly rising raw material and energy prices, during which the company has been able to increase the contribution margin substantially, which the following chapter will show.

## 5 Financial Analysis

The following chapter will provide a detailed overview of EssilorLuxottica's historical financial performance going into revenue and cost trends as well as highlighting the company's investment and financing behavior between FY19 and FY22.

### 5.1 Income Statement

In this sub-chapter, the historical income statements are analyzed between FY19 and FY22. Based on the previously mentioned operating reporting change by the company and to ensure comparability, the historical revenue segment analysis excludes FY19 while all other analyses include the whole timeframe from FY19 until FY22. More details for the reasoning can be found in *Appendix 8.1*.

#### 5.1.1 Common Size Analysis

*Table 1* provides an overview of the historical income statement for EssilorLuxottica showing all items as a percentage of total revenue. What can be observed is a general trend towards the retail segment, with revenue shares from professional solutions declining to less than 50% of total revenue. Major driver is among others, the increasing focus on consumer sales which is underlined by the company's acquisition of GrandVision in FY21 adding over 7,000 retail stores especially in Europe while an increasing adoption of online concepts contributes as well. Similarly to other industries, EssilorLuxottica saw a decline in revenues over the course of FY20 as a result of Covid-related closures of B&M retail stores. However, when considering FY20 as an extraordinary year based on severe business disruptions during the pandemic, operating and profitability margins show a steady growth trajectory as cost of sales and operating expense levels decrease underlining the company's vertical integration strategy and synergies coming to fruition.

Table 1 – Historical Income Statement as % of Total Revenue (Source: Company data, own analysis)

Income Statement (% of revenue)	2019	2020	2021	2022
Professional Solutions	-	59.0%	52.7%	48.1%
Brick & Mortar	-	41.0%	40.3%	44.9%
E-Commerce	-	-	7.0%	7.0%
<b>Total revenue</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Cost of Sales	37.8%	43.3%	38.3%	36.4%
<b>Gross Profit Margin</b>	<b>62.2%</b>	<b>56.7%</b>	<b>61.7%</b>	<b>63.6%</b>
Total OPEX	40.4%	38.7%	37.6%	38.6%
<b>EBITDA</b>	<b>21.8%</b>	<b>18.1%</b>	<b>24.2%</b>	<b>25.0%</b>
D&A	12.2%	14.9%	12.5%	12.1%
<b>EBIT</b>	<b>9.6%</b>	<b>3.1%</b>	<b>11.6%</b>	<b>12.9%</b>
Cost of Net Debt	0.8%	1.0%	0.6%	0.5%
<b>EBT</b>	<b>8.8%</b>	<b>2.2%</b>	<b>11.0%</b>	<b>12.4%</b>
Taxes	2.0%	1.1%	2.9%	3.1%
<b>Net Income</b>	<b>6.8%</b>	<b>1.0%</b>	<b>8.1%</b>	<b>9.3%</b>

### 5.1.2 Revenue

Taking a deep dive into the geographic revenue split in *Table 2*, a shift towards an increasing revenue share of the combined Main European (consisting of France, Italy, Germany, the UK, Ireland, Germany, and Spain) and Other EMEA region is observable. As previously mentioned, one of the key drivers for this development are strategic acquisitions such as GrandVision in FY21 focused on retail network expansion in Europe. While business activities are still highly concentrated on the US market, a decline in the APAC region underlines the company's historically low exposure to the highly attractive Asian and especially the Chinese eyecare market (*for details see Chapter 4*).

Table 2 – Geographic Revenue as % of Total Revenue (Source: Company data, own analysis)

Geographic Revenue Split	2019	2020	2021	2022
United States	50.2%	51.1%	46.3%	43.8%
Main Europe	12.9%	13.0%	15.3%	16.2%
Other EMEA	11.4%	10.9%	16.9%	19.5%
Asia Pacific	16.6%	16.4%	12.8%	11.6%
Latin America	6.4%	5.0%	5.3%	5.8%
Other North America	2.5%	3.6%	3.3%	3.1%
<b>Total revenue</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

However, as the trend analysis in *Table 3* indicates, instead of stagnating business activities in the US, the shift towards the combined EMEA region reflects growth in those regions significantly outpacing growth within the US. Subsequently, the US remains a key market for EssilorLuxottica, although strategic emphasis will likely be on entering the Asian market in the near future.

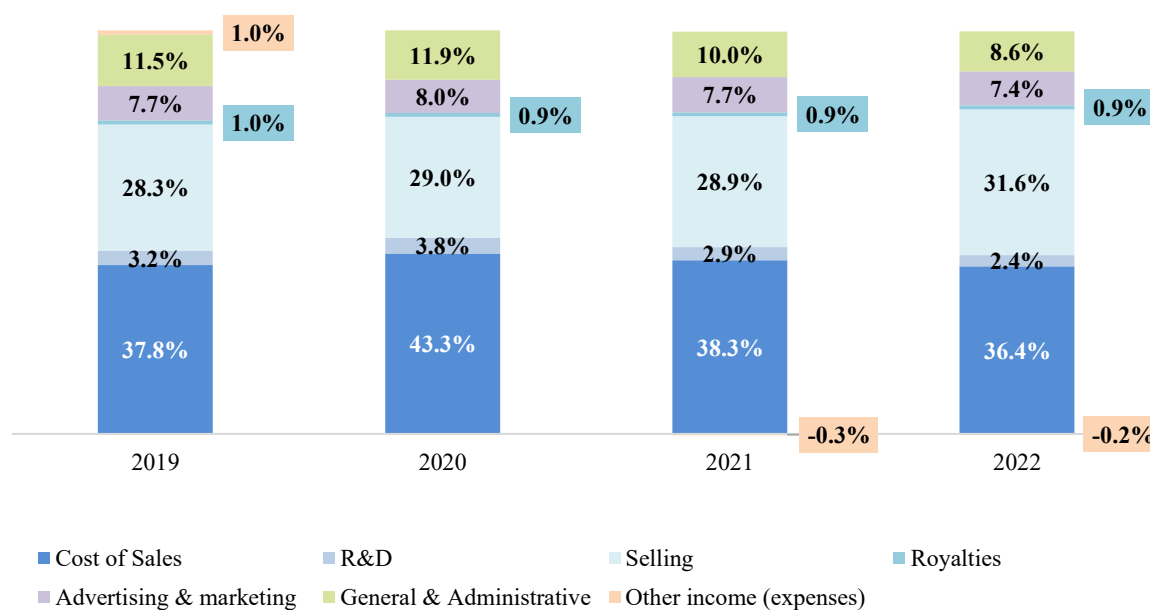
Table 3 – Trend Analysis of Geographic Revenue Segments (Source: Company data, own analysis)

Geographic Revenue Trend	2019	2020	2021	2022
United States	100.0	84.6	105.2	123.1
Main Europe	100.0	83.6	135.0	176.4
Other EMEA	100.0	79.0	168.7	240.8
Asia Pacific	100.0	81.7	87.9	98.3
Latin America	100.0	64.5	95.5	127.3
Other North America	100.0	120.8	152.1	174.5
<b>Total revenue</b>	<b>100.0</b>	<b>83.0</b>	<b>114.0</b>	<b>140.9</b>

### 5.1.3 Cost Analysis

Looking at the costs side, the effects during Covid become clearly visible when considering the jump in cost of sales as a percentage of revenue between FY19 and FY20 in *Figure 14*. This is in part due to a declining top line while absolute cost of sales remained relatively constant but is also attributable to price shocks and supply chain disruptions for raw materials including aluminum, manufactured glass, and for services such as logistics. The following normalization in FY21 and the following decrease in the cost margins underlines the company's agile supply chain management based on a successful vertical integration strategy. Decreases in the levels of R&D and general and administrative costs as well as in advertising and marketing additionally provide confidence on the company's ability to create synergies from its M&A activity with numerous acquisitions completed between FY19 and FY22. Simultaneously, the development in selling costs reflects the company's M&A retail expansion strategy, since it should be more difficult to reduce redundancies regarding i.e. wages of retail store employees.

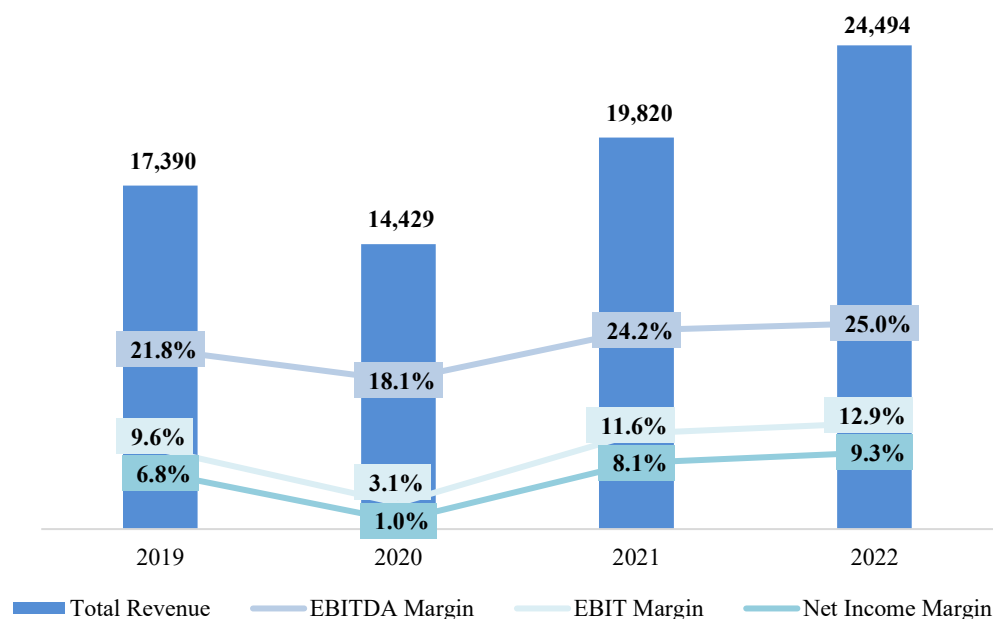
Figure 14 – Non-Financial Cost Items as % of Revenue (Source: Company data, own analysis)



#### 5.1.4 Profit

As previously mentioned, considering FY20 as an outlier due to Covid-related business disruptions, profitability for EssilorLuxottica shows steady improvement since FY19 as indicated by *Figure 15* below. Driven by substantial top line growth and improvements in relative terms on the costs side, EBITDA margins improved from 21.8% in FY19 to 25.0% in FY22 while EBIT margins improved from 9.6% to 12.9% over the same period. With relatively constant interest and tax levels during the global zero-interest-rate environment, net income followed a similar path increasing by 2.5pp from 6.8% to 9.3%.

Figure 15 – Profitability Margins as % of Total Revenue (Source: Company data, own analysis)



While in relative comparison to industry peers, the company reports below average margins with weighted industry averages from the luxury retail and the eyecare market being at 29.7% and 23.4% for EBITDA and EBIT respectively, this comparison lacks full merit given EssilorLuxottica's implemented vertical integration strategy, with which the company stands alone in its sector and has yet to develop the full operational potential.

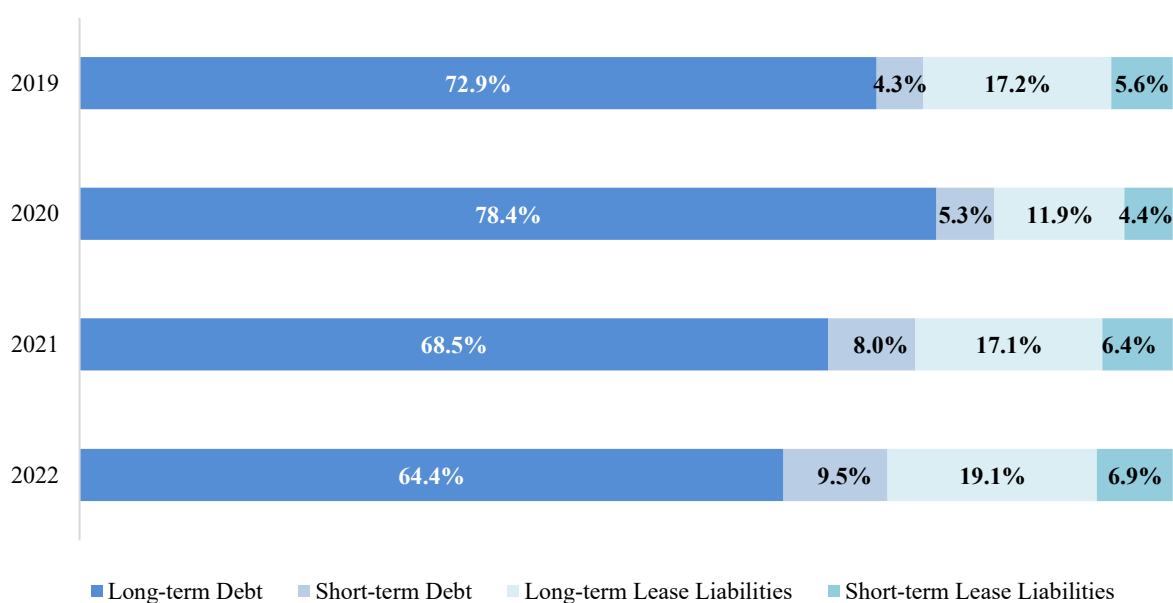
## 5.2 Balance Sheet

The following sub-chapter will evaluate EssilorLuxottica's historical balance sheet and go into deep dive about the company's asset investment and financing strategy as well as general profitability and liquidity ratios.

### 5.2.1 Leverage

Based on the company's relatively aggressive acquisition strategy, substantial debt was accumulated in recent history predominantly to fund acquisitions. For instance, this included the issuance of €3,000m in three different bonds in May FY20 to provide sufficient funding for the transaction to acquire GrandVision. Although long-term debt is decreasing relatively to total debt and debt-like items, this is only partly due to repayments but is additionally affected by reclassifications of long-term debt to short-term debt, evidenced by a sharp relative increase of short-term debt as a result with both combined accounting for over 75% of debt financing between FY19 and FY22 (see Figure 16).

Figure 16 – Financing instruments as a % of Total Debt and Debt-like Items (Source: Company data, own analysis)



The trend analysis in *Table 4* below additionally highlights the growing reliance of the company on leasing with close to a 1.5x increase both for long-term and short-term leasing liabilities. This trend becomes especially evident when considering the development of the corresponding Right-of-Use assets on the investment side, which is discussed in *chapter 5.2.2*.

Table 4 – Trend Analysis of Gross Financial Debt in €m (Source: Company data, own analysis)

Gross Financial Debt	2019	2020	2021	2022
Long-term Debt	6,864.0	9,324.0	8,913.0	7,858.0
<i>Trend</i>	<i>100.0</i>	<i>135.8</i>	<i>129.9</i>	<i>114.5</i>
Long-term Lease Liabilities	1,619.0	1,411.0	2,230.0	2,336.0
<i>Trend</i>	<i>100.0</i>	<i>87.2</i>	<i>137.7</i>	<i>144.3</i>
Short-term Debt	403.0	633.0	1,036.0	1,164.0
<i>Trend</i>	<i>100.0</i>	<i>157.1</i>	<i>257.1</i>	<i>288.8</i>
Short-term Lease Liabilities	529.0	527.0	837.0	846.0
<i>Trend</i>	<i>100.0</i>	<i>99.6</i>	<i>158.2</i>	<i>159.9</i>
<b>Total Gross Financial Debt</b>	<b>9,415.0</b>	<b>11,895.0</b>	<b>13,016.0</b>	<b>12,204.0</b>
<i>Trend</i>	<i>100.0</i>	<i>126.3</i>	<i>138.2</i>	<i>129.6</i>
D/E Ratio	0.13x	0.10x	0.27x	0.27x

Despite an accumulating debt balance, the company maintained steadily low leverage levels based on solid operating performance and stable cash accumulation. As can be seen in *Table 5*, leverage levels remain below 0.30x over the historical horizon which is consistently below the weighted average of industry peers, which stands at ~0.40x. The reduction in cash and equivalents can be attributed to cash allocation in M&A transactions since in FY21 and FY22 the main components for the GrandVision acquisition were due.

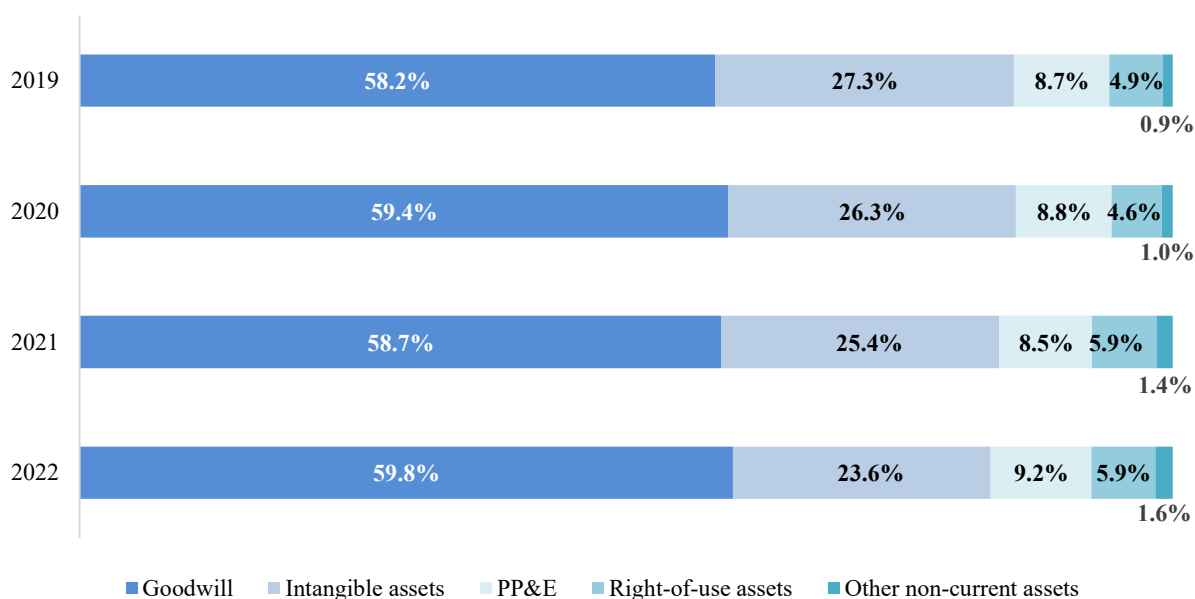
Table 5 – Financial Leverage Ratios (Source: Company data, own analysis)

Financial Leverage	2019	2020	2021	2022
Group Equity	35,333.0	32,798.0	35,876.0	38,148.0
Gross Financial Debt	9,415.0	11,895.0	13,016.0	12,204.0
Cash & Cash Equivalents	(4,836.0)	(8,683.0)	(3,293.0)	(1,960.0)
Net Debt	4,579.0	3,212.0	9,723.0	10,244.0
Leverage Ratio	0.13x	0.10x	0.27x	0.27x
Coverage Ratio	1.21x	1.23x	2.03x	1.67x
Interest Coverage Ratio	19.07x	6.55x	32.96x	36.72x
Debt Service Coverage Ratio	14.96x	6.94x	27.39x	3.59x

## 5.2.2 Investments

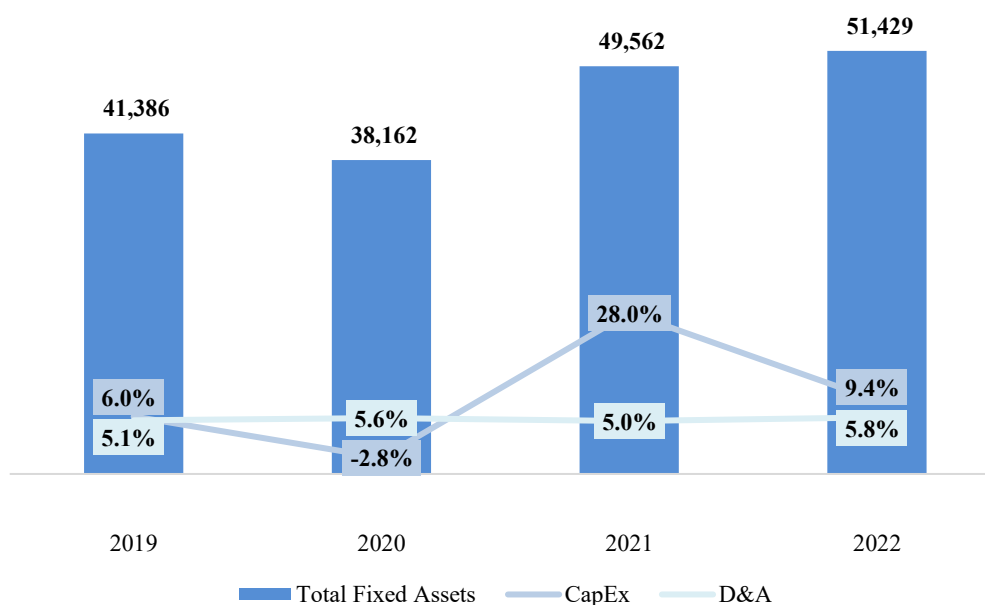
The historical split of fixed assets underlines the previously mentioned acquisition strategy as well as a recent shift towards leasing but also highlights the company's innovation capabilities with intangible assets representing the second largest fixed asset type relative to total fixed assets, as can be seen in *Figure 17*.

Figure 17 – Fixed Assets as % of Total Fixed Assets (Source: Company data, own analysis)



The substantial amount of goodwill is attributable to the company's M&A strategy and has increased moderately in relative terms although more substantially in absolute terms reaching €30,733m in FY22 up from €24,074m in FY19. This is largely due to the M&A activity of EssilorLuxottica during this period, predominantly caused by a €5,404m goodwill increase originating from the GrandVision acquisition in FY21. Increased utility of leasing is evidenced by a 1.0pp increase in Right-of-Use assets between FY19 and FY22, a point previously highlighted in *chapter 5.2.1*. The investment behavior can be observed in *Figure 18* below, which highlights the CapEx the company made to expand its fixed asset base.

Figure 18 – Fixed Assets &amp; CapEx and D&amp;A as % of Fixed Assets (Source: Company data, own analysis)



As previously already touched upon, the acquisition of GrandVision is the main driver behind the CapEx jump to 28.0% of total fixed assets in FY21, which if adjusted would stand at ~15.0% following a Covid-related divestment period in FY20. Remaining CapEx is mostly attributable to an expansion of PP&E which is driven by investments into the company's manufacturing landscape as well as taking on real estate from takeover targets.

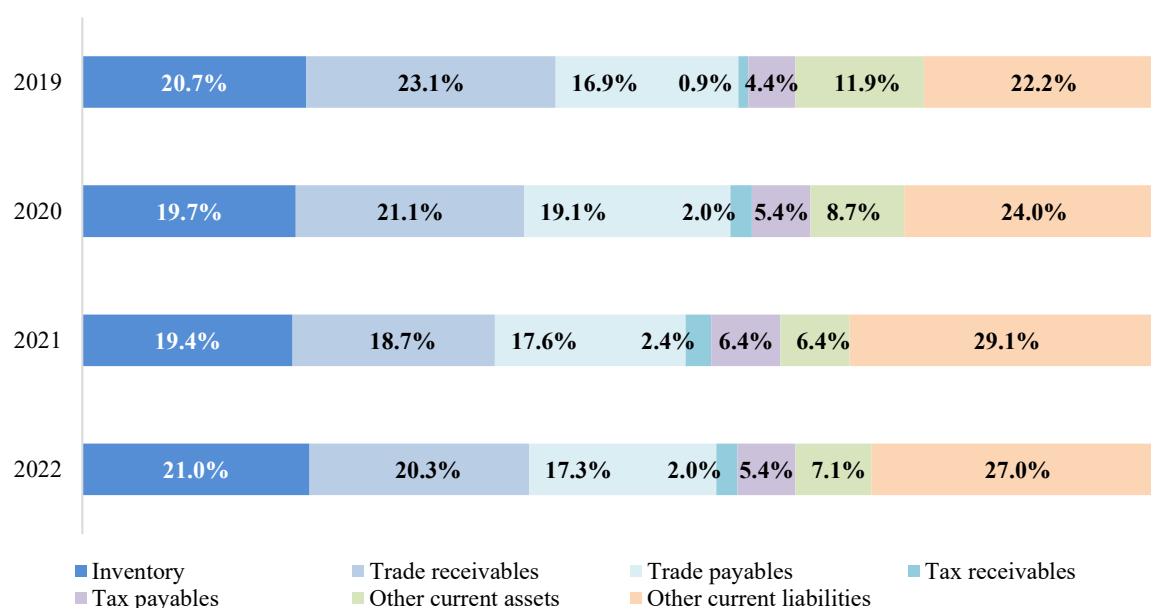
Taking into consideration EssilorLuxottica's investments in trade working capital in *Table 6*, the company's market leadership position becomes clearly visible with cash conversion returning to pre-merger levels below zero, with FY21 and FY22 cash conversion at -17.2 and -15.8 respectively (note that FY18 cash conversion stood at -13.2) following restructuring measures in FY19 and Covid in FY20.

Table 6 – TWC Trend Analysis and Cash Conversion Cycle (Source: Company data, own analysis)

Cash Conversion Cycle	2019	2020	2021	2022
Inventory	100.0	89.1	112.9	128.8
DIO	44.1	51.8	40.3	39.0
Trade receivables	100.0	85.7	97.7	111.9
DSO	49.9	56.6	40.7	37.6
Trade payables	100.0	105.3	125.3	129.8
DPO	97.6	106.2	98.2	92.5
<b>Cash Conversion Cycle</b>	<b>-3.6</b>	<b>2.2</b>	<b>-17.2</b>	<b>-15.8</b>

Historically, the company has been able to leverage favorable payment terms with suppliers and efficient inventory management to optimize its cash conversion cycle and simultaneously benefits from the previously mentioned shift towards retail revenue within its business mix, which is associated with shorter invoicing periods compared to wholesale revenue. This is further made clear looking at the increasing share of trade working capital returning to pre-restructuring and pre-Covid levels accounting for 58.6% of total working capital in FY22. The company's dominant position in the market is further underlined by a growing share of other current liabilities, which among others accounts for €515m of payables with extended payment terms not classified as trade receivables, a position that increased 57.0% yoy underlining a strong negotiation position with suppliers. Noteworthy is that other current liabilities also consist of personnel-related expenses as well as premiums and discounts, while other current assets mainly account for sales tax receivables, prepaid expenses, and advances to suppliers.

Figure 19 – Trade and Other Working Capital as % of Total Working Capital (Source: Company data, own analysis)



### 5.2.3 Profitability

Following an extraordinary FY20 due to Covid, EssilorLuxottica has continuously improved asset utilization with identical ROCE and ROIC, both exceeding pre-covid levels of 3.2% in FY19 to 4.9% in FY22. Worth mentioning is the clear disruption, due to Covid in FY20, of what would have been substantial improvement and successful synergy realization post-merger in the company's asset turnover already reaching pre-covid levels in FY21 and continuing its growth path to 50.3% thereafter in FY22.

Table 7 – Profitability Analysis (Source: Company data, own analysis)

Profitability	2019	2020	2021	2022
Effective operating tax rate	22.8%	52.6%	26.7%	24.8%
EBIT Margin	9.6%	3.1%	11.6%	12.9%
Asset turnover	43.0%	39.6%	43.1%	50.3%
<b>ROCE</b>	<b>3.2%</b>	<b>0.6%</b>	<b>3.7%</b>	<b>4.9%</b>
Effective operating tax rate	22.8%	52.6%	26.7%	24.8%
EBIT	1,678.0	452.0	2,307.0	3,158.0
Invested Capital	39,912.0	36,010.0	45,599.0	48,392.0
<b>ROIC</b>	<b>3.2%</b>	<b>0.6%</b>	<b>3.7%</b>	<b>4.9%</b>

### 5.2.4 Liquidity

Table 8 shows the two applied methods of assessing the company's liquidity, the current ratio, and the quick ratio. As the current ratio is around 1.0x in FY22, this indicates the ability to more or less pay off all short-term liabilities with the company's current assets suggesting a healthy liquidity. The current ratio decreased historically from 1.9x in FY19 to the current level, which is largely attributable to the previously stated reclassifications of bonds close to maturity and the subsequent increase in current borrowings. When disregarding inventory due to potential illiquidity, the quick ratio provides a different picture with the quick ratio in FY22 being below zero at 0.7x. However, based on the reclassification of debt and the company's efficient management of assets, this can be disregarded as minor liquidity risk.

Table 8 – Liquidity Tests (Source: Company data, own analysis)

Liquidity Tests	2019	2020	2021	2022
Total current assets	10,750.0	13,721.0	9,193.0	8,641.0
Total current liabilities	5,616.0	6,171.0	8,924.0	8,888.0
<b>Current Ratio</b>	<b>1.9x</b>	<b>2.2x</b>	<b>1.0x</b>	<b>1.0x</b>
Total current assets	10,750.0	13,721.0	9,193.0	8,641.0
Inventory	2,166.0	1,930.0	2,445.0	2,789.0
Total current liabilities	5,616.0	6,171.0	8,924.0	8,888.0
<b>Quick Ratio/ Acid Test</b>	<b>1.5x</b>	<b>1.9x</b>	<b>0.8x</b>	<b>0.7x</b>

## 6 Forecast

As an introduction to the valuation of EssilorLuxottica, the following chapter explains the financial statement forecast for the company. The forecast is divided into an explicit period from FY23 until FY25 followed by two transitional years to move the company into a steady state reaching the ultimate year of the planning horizon in FY28.

### 6.1 Income Statement

This sub-chapter will highlight assumptions made for forecasting the income statement reflecting on the traditional top-down approach that was chosen. Detailed information about the income statement forecast can be found in *Appendix 8.2*.

#### 6.1.1 Top Line Forecast

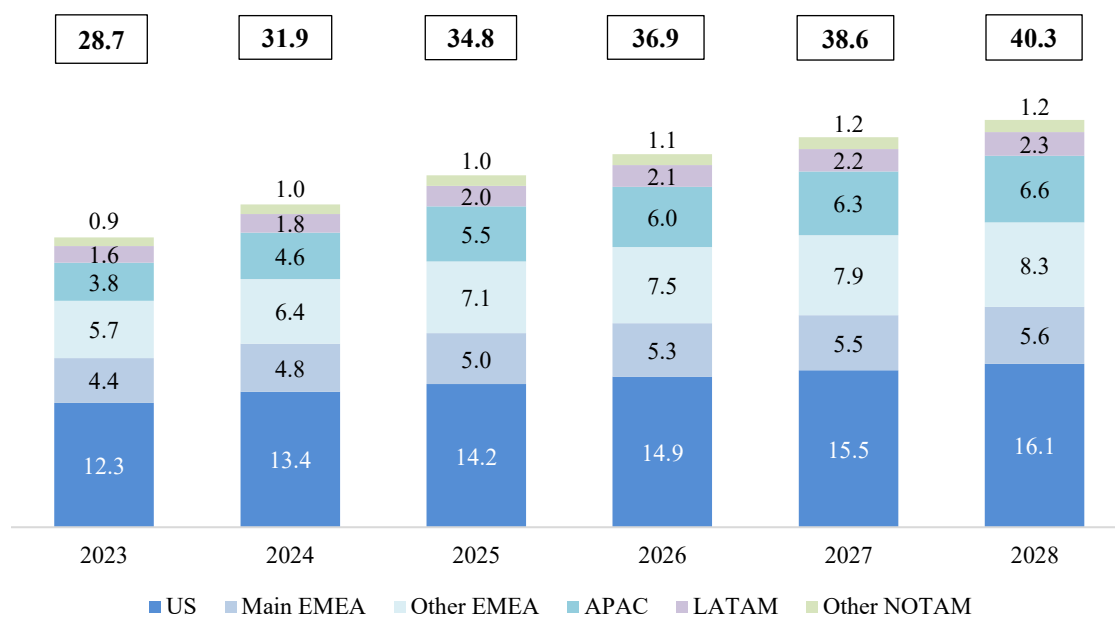
Given the dominant market position with approximately 20% market share in FY22, revenue of EssilorLuxottica is expected to develop according to market growth in the corresponding geographic regions, as can be seen in *Table 9*, adjusted for expected inflation and specific company characteristics.

*Table 9 – Revenue Growth Rates for Geographic Regions of EssilorLuxottica (Source: Statista, IMF, own analysis)*

Revenue Growth	2023	2024	2025	2026	2027	2028
US	15.2%	8.0%	5.2%	5.0%	4.1%	4.2%
Main EMEA	13.4%	7.4%	5.9%	5.0%	3.6%	3.5%
Other EMEA	17.5%	12.3%	10.9%	6.2%	5.2%	5.2%
APAC	32.3%	22.4%	18.8%	9.3%	5.2%	5.2%
LATAM	15.9%	11.5%	10.5%	5.7%	4.6%	4.6%
Other NOTAM	14.8%	9.9%	8.6%	5.7%	4.7%	4.8%
APAC JV Premium	15.0%	10.0%	8.0%	3.0%	0.0%	0.0%
E-Commerce Premium	3.0%	2.0%	2.0%	1.0%	0.0%	0.0%
EUR Inflation	6.4%	3.3%	2.5%	2.2%	2.0%	2.0%
USD Inflation	4.5%	2.3%	2.1%	2.0%	2.0%	2.1%

This includes anticipated effects originating from the JV with Stellest, which recently received regulatory approval to enter the Asian market with its product treating myopia. Consequently, a growth premium for the APAC market is applied for the explicit forecast period and for the first steady state year to provide a well-balanced steady state growth transition. Additionally, a growth premium is applied accounting for the company's developing but currently under-penetrating E-Commerce segment since an estimated 24% of market volume is generated through online sales compared to the company's E-Commerce revenue share of 7%. Driven by recent acquisitions and a corresponding addition of online platforms, the company is expected to achieve an E-Commerce growth premium balanced over the explicit forecast period and the first year of the steady state transition. Since the company reports all revenue in EUR, weighted expected Euro-denominated inflation rates are applied to every geographic segment except for the US and NA (see *Appendix 8.8 and 8.9*). Against the backdrop of a significant exposure to the US market and corresponding foreign exchange rate risks, as indicated by the management of EssilorLuxottica, growth rates for revenue generated in NA have been applied to USD values and are converted into EUR using a slightly appreciating USD/EUR exchange rate for the future to account for faster anticipated inflation recovery in the US compared to the Euro area, which in theory should have an adverse effect on the Euro against the US Dollar. More details about the US and NA revenue forecast can be found in *Appendix 8.10*. The resulting revenue forecast can be seen below in *Figure 20*.

Figure 20 – Geographic Revenue Development in €bn (Source: Statista, IMF, own analysis)

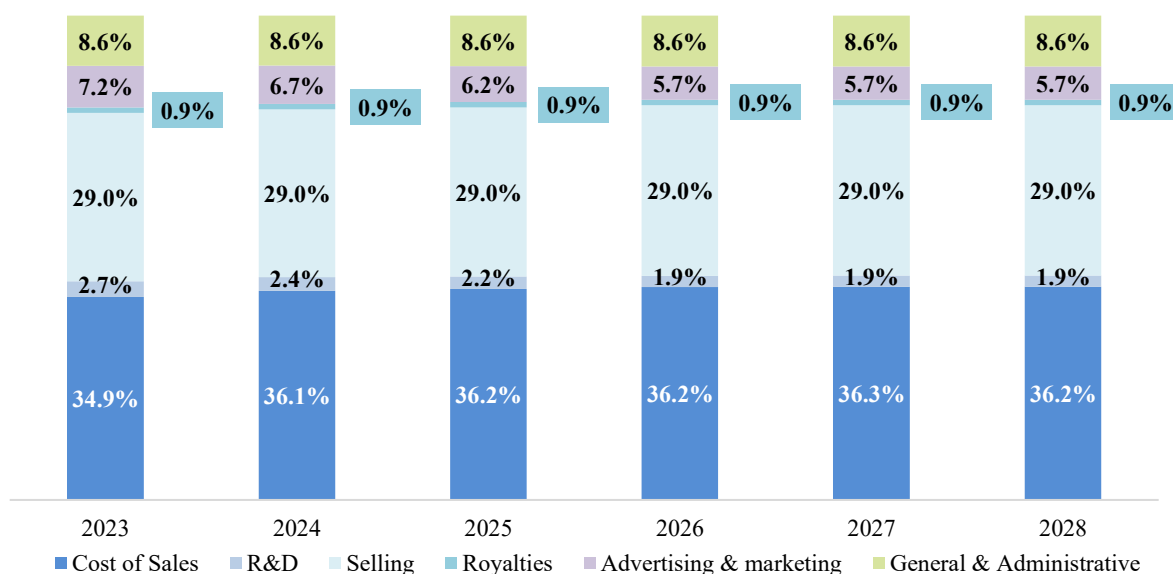


## 6.1.2 Cost Base

The forecasted cost base is split between a specific forecast for cost of sales, OPEX, and costs of financing. Cost of sales has been assumed to be affected by fluctuations in key raw materials used for manufacturing eyecare products. Proxies used were indices replicating the movement in prices of metals including aluminum, rubber and plastic, wood, and manufactured glass products. For an overview of the price development for the previously stated raw material proxies, see *Figure 13 in Chapter 4*. To forecast cost of sales, the assumption was made that the item would develop according to its latest historical percentage of total revenue with either a cost increase or decrease added as a raw material effect based on the corresponding average price development. To account for the company's supply chain control as a vertically integrated company, a 0.5% vertical integration cost reduction premium is assumed for the entire planning horizon.

OPEX are anticipated to develop according to their historical percentage of total revenue, although the line items for R&D and Advertising & Marketing costs are expected to benefit from yet to materialize synergy effects, since both items should not increase linearly following recent acquisitions. Correspondingly, cost reduction premiums of 0.3pp and 0.5pp respectively have been applied over the course of the explicit forecast period for both line items while other OPEX develop according to a constant historical percentage of revenue.

*Figure 21 – Forecast of Non-Financial Cost Items as % of Revenue (Source: IMF, own analysis)*

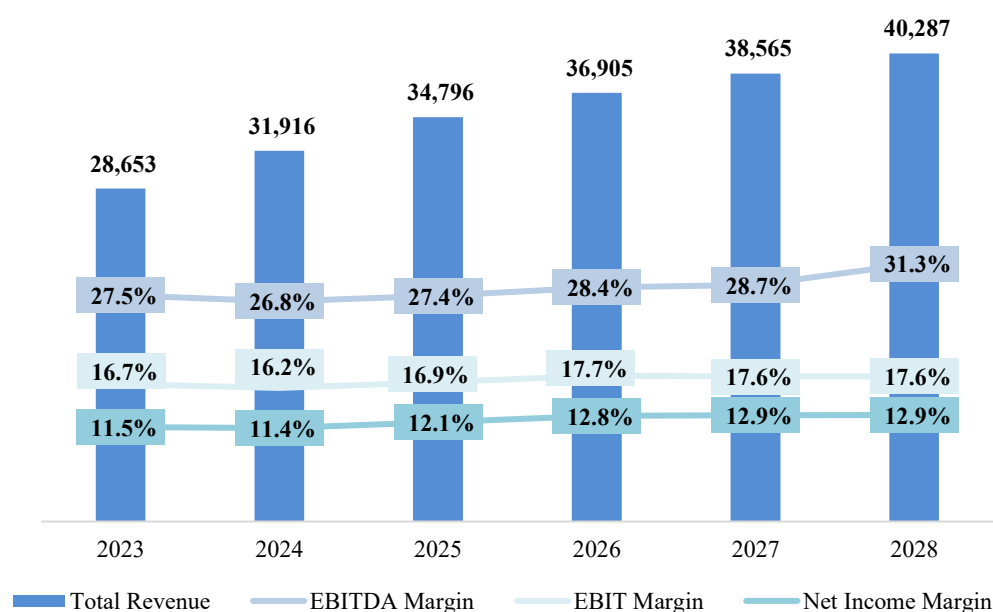


Accounting for the currently evolving environment of rising interest rates, costs of debt financing are adjusted for rate hikes implemented by the ECB which are assumed to remain for the explicit forecast period while reverting towards historical levels over the steady state period.

### 6.1.3 Profit

As a result of the aforementioned top line and cost assumptions, margins are overall anticipated to improve. While consensus exists between EssilorLuxottica and most analysts covering the company regarding an envisaged operating margin improvement to 19-20% by FY26, derived margins are expected to increase yet not to the extent anticipated by the market. As can be seen in *Figure 22*, for FY23 the operating margin will jump driven by favorable raw material price developments and realized cost synergies in OPEX resulting in a 1.5pp increase of the gross profit margin to 65.1% and a 3.8pp improvement of the EBIT margin to 16.7%.

*Figure 22 – Profitability Margins as % of Total Revenue (Source: own analysis)*



Over the course of the planning horizon, material price effects will push gross profit margins back towards FY22 levels of close to 64% while operating margins are expected to improve continuously over the explicit forecast period reaching 17.7% in FY26 and remaining constant transitioning into steady state. The effect of operating improvements on post-interest margins is dampened by the increase in costs of debt financing, although margins will behave similarly to operating margins improving over the explicit forecast period and stabilizing thereafter. While the EBITDA margin remains relatively stable it accelerates in the ultimate year of the planning horizon to 31.3%. The main reason for this is that D&A in FY28 is set equal to CapEx to account for a constant asset base going forward in perpetuity. As the assumption is made that as the company matures, it will have to invest more to maintain growth, CapEx in the ultimate year is the highest over the forecast period, which acts as the main driver of the EBITDA margin expansion.

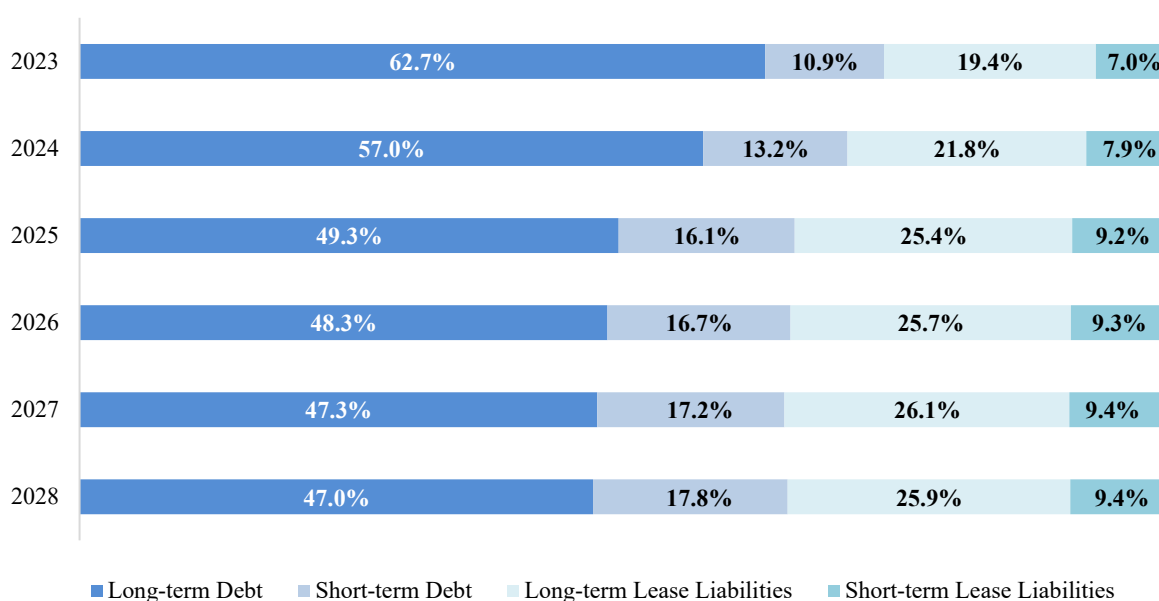
## 6.2 Balance Sheet

In the sub-chapters below, assumptions are presented about the company's financing and investment behavior going forward including the resulting cash generation relevant for the applied intrinsic valuation methods. More details are displayed in *Appendix 8.4-8.7*.

### 6.2.1 Leverage

Following the company's recent debt accumulation, going forward a repayment period is expected for the explicit forecast according to the maturing outstanding debt as of FY22. Since the increased use of debt funding was mainly to provide acquisition financing of recent large transactions such as GrandVision, the assumption was made that such large transactions will not occur on a regular basis, especially against the backdrop of highly probable regulatory barriers when expanding in-organically as well as substantial uncertainties when forecasting M&A activity. Consequently, long-term debt is expected to decrease over the explicit forecast period and remains constant thereafter, as can be seen in *Figure 23*. Although not considered in net debt, the company has a defined benefit obligation plan in place for retiring employees, of which a portion is currently unfunded (approximately €431m as of 31 December 2022). Over the forecast period, this amount is expected to remain constant and, concurring with the company's definition, is excluded from the BV of net debt. However, when estimating the EqV at MVs, this unfunded pension obligation will be treated as a debt-like item and subsequently excluded from equity.

Figure 23 – Forecast of Financing Instruments as % of Total Debt and Debt-like Items (Source: own analysis)



Current borrowings are assumed to be refinanced and provide sufficient funding for the company's operations and are therefore linked to total revenue. Continuing EssilorLuxottica's increasing reliance on leasing, primarily for real estate for the DTC segment, lease liabilities are expected to grow in positive correlation to top line development at the same ratio to the corresponding right-of-use assets (*see chapter 6.2.2*). Through the deleveraging envisioned for the business plan until FY28, the company's book leverage ratios are expected to decrease from the current level of 0.23x in FY22 to 0.04x in FY28 with equity being the main source of financing.

Table 10 – Forecast of the Gross Financial Debt BV in €m (Source: own analysis)

Gross Financial Debt	2023	2024	2025	2026	2027	2028
Long-term Debt	7,858.0	6,558.0	5,058.0	5,058.0	5,058.0	5,058.0
Trend	100.0	83.5	64.5	64.5	64.5	64.5
Long-term Lease Liabilities	2,428.6	2,511.2	2,602.9	2,689.6	2,784.5	2,784.5
Trend	100.0	103.5	107.5	111.2	115.3	115.3
Short-term Debt	1,361.6	1,516.7	1,653.6	1,753.8	1,832.7	1,914.5
Trend	100.0	111.7	122.1	129.5	135.3	141.3
Short-term Lease Liabilities	879.5	909.5	942.7	974.0	1,008.4	1,008.4
Trend	100.0	103.5	107.5	111.2	115.3	115.3
<b>Total Gross Financial Debt</b>	<b>12,527.8</b>	<b>11,495.4</b>	<b>10,257.2</b>	<b>10,475.4</b>	<b>10,683.6</b>	<b>10,765.4</b>
Trend	100.0	91.8	81.9	83.6	85.3	85.9
D/E Ratio	0.23x	0.16x	0.08x	0.07x	0.06x	0.04x

## 6.2.2 Investments

On the asset side, fixed assets are viewed separately for the forecast period. As previously mentioned, predicting the company's acquisition activity in the future incorporates a variety of uncertainties. Therefore, goodwill is assumed to remain constant over the entire planning period, since there is a lack of basis for reasonable assumptions to be made regarding the size of future takeover targets and the premium paid over the value of its assets. PP&E, intangible assets, and right of use assets mainly refer to key operating activities of the company, which is why an assumption was made to link CapEx in these assets to their historical share relative to total revenue. In the steady state period, however, it is assumed that as a then mature company EssilorLuxottica has to increase its CapEx level relative to total revenue by 0.5pp each year to maintain growth. Fixed assets are depreciated over the planning horizon at an average weighted useful life of approximately 15 years according to estimates weighted by their individual share of fixed assets. *Table 11* shows the complete investment schedule for fixed assets. Further details can be found in *Appendix 8.11*.

*Table 11 – Investment Schedule Forecast for CapEx and D&A (Source: Company data, own analysis)*

Investment Schedule	in €m	in % of Revenu	2023	2024	2025	2026	2027	2028
End-of-Period Asset Base	19,879.0		(2,970.0)	(2,970.0)	(2,970.0)	(2,970.0)	(2,970.0)	-
CapEx FY23	<b>3,636.9</b>	12.7%	(124.1)	(248.2)	(248.2)	(248.2)	(248.2)	-
CapEx FY24	<b>4,051.0</b>	12.7%	-	(138.3)	(276.5)	(276.5)	(276.5)	-
CapEx FY25	<b>4,416.6</b>	12.7%	-	-	(150.7)	(301.5)	(301.5)	-
CapEx FY26	<b>4,684.4</b>	12.7%	-	-	-	(159.9)	(319.7)	-
CapEx FY27	<b>5,087.9</b>	13.2%	-	-	-	-	(173.6)	-
CapEx FY28	<b>5,516.5</b>	13.7%	-	-	-	-	-	-
<b>Total Depreciation &amp; Amortization</b>			<b>(3,094.1)</b>	<b>(3,356.5)</b>	<b>(3,645.5)</b>	<b>(3,956.1)</b>	<b>(4,289.6)</b>	<b>(5,516.5)</b>
<b>Weighted Ø Useful Life</b>	<b>14.7</b>							

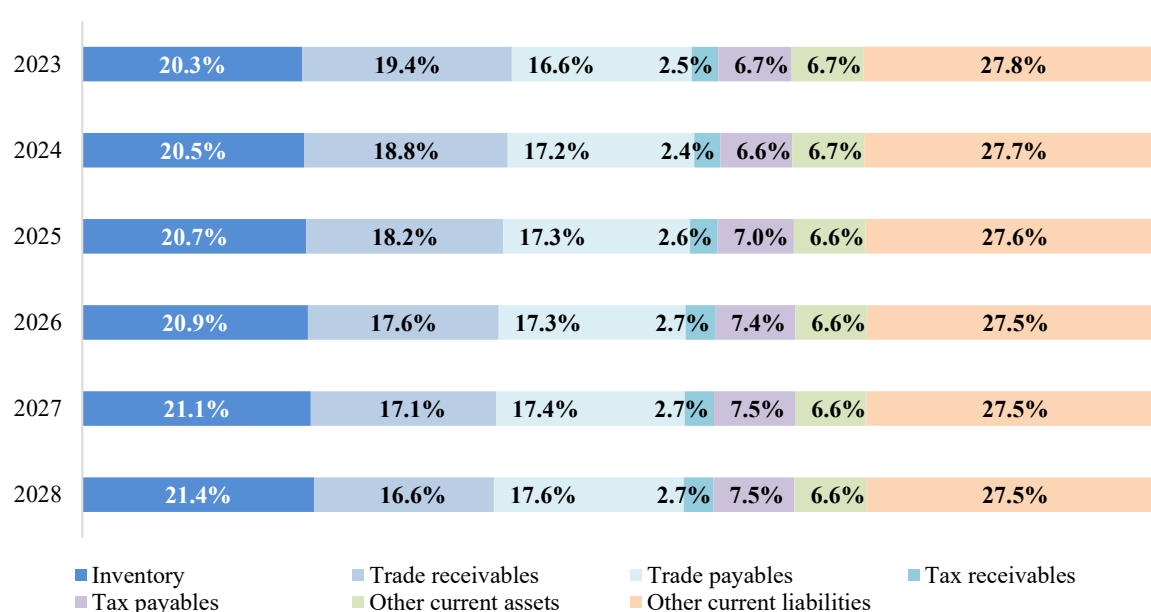
Forecasted values for key working capital items in *Figure 24* are derived from their respective historical days, which can be seen in *Table 12*, while accounting for the company's market leading position going forward. Consequently, it is assumed that customers will pay sooner, reflecting the shift in total revenue mix towards consumer sales.

*Table 12 – TWC Trend Forecast and Cash Conversion Cycle (Source: own analysis)*

Cash Conversion Cycle	2023	2024	2025	2026	2027	2028
Inventory	100.0	112.8	124.5	133.7	141.4	149.5
DIO	39.5	40.0	40.5	41.0	41.5	42.0
Trade receivables	100.0	108.4	115.0	118.5	120.3	121.9
DSO	37.6	36.6	35.6	34.6	33.6	32.6
Trade payables	100.0	115.9	127.2	135.5	142.8	149.8
DPO	92.5	93.0	93.5	94.0	94.5	95.0
<b>Cash Conversion Cycle</b>	<b>-15.3</b>	<b>-16.3</b>	<b>-17.3</b>	<b>-18.3</b>	<b>-19.3</b>	<b>-20.3</b>

Simultaneously, an assumption was made that terms with suppliers will improve enabling the company to pay suppliers later than the current level reflecting EssilorLuxottica's vertical integration strategy and powerful position in the market. Contrary to the optimization on the receivables and payables side, inventory is expected to remain in stock longer over the planning horizon given a likely fast sell-off following Covid-19 and a subsequent rapid reduction in DIO. Therefore, a reversion in DIO towards the historical median is assumed. In total, the company continues the historical development of a cash conversion value below zero reflecting efficient operating management and the company's position as global market leader.

Figure 24 – Trade and Other Working Capital as % of Total Working Capital (Source: own analysis)



### 6.2.3 Equity & Cash

Based on the substantial share of funding through equity already at the beginning of the forecast period in FY22, it is not assumed that additional equity is issued. Since EssilorLuxottica has historically paid annual cash dividends and has chosen to continue this policy during Covid-19, a variable payout ratio based on the historical payout behavior of the company is assumed. Since there is evidence for the company capping dividends historically when deleveraging, the payout ratio is capped in FY24 and FY25 when the previously mentioned repayments of outstanding debt are made. For the remaining years, dividend payout relative to net income is set at 85%. Since the company has implemented a policy that excludes the issuance of new shares to meet granted stock options and requires all grants to be met using treasury shares, a repurchasing plan is implemented altering the amount of treasury shares over the planning horizon. Further, as the company is a frequent acquirer of minority stakes with currently over 30 minority investments held, this position is expected to grow according to the accumulated share of profit not attributable to owners of the parent, which historically on average amounted to approximately 91% of net income.

Table 13 – Equity and Cash Flow Forecast (Source: own analysis)

Equity & Cash Flow	2023	2024	2025	2026	2027	2028
Group Equity	38,543.9	41,168.9	44,372.0	45,091.7	45,588.6	46,096.7
Non-Controlling Interest	987.1	1,311.9	1,688.7	2,113.2	2,559.3	3,026.7
Opening Cash Balance	1,960.0	3,525.0	4,898.3	6,590.5	7,338.2	7,764.9
(+) Operating Cash Flow	7,131.1	7,444.1	8,249.2	9,041.0	9,527.7	10,982.9
<b>o/w Free Cash Flow to the Firm</b>	<b>3,494.2</b>	<b>3,393.0</b>	<b>3,832.5</b>	<b>4,356.7</b>	<b>4,439.8</b>	<b>5,466.4</b>
(-) Investment Cash Flow	(3,636.9)	(4,051.0)	(4,416.6)	(4,684.4)	(5,087.9)	(5,516.5)
(-) Financing Cash Flow	(1,929.2)	(2,019.7)	(2,140.4)	(3,609.0)	(4,013.1)	(4,344.9)
Total Cash Flow	1,565.0	1,373.3	1,692.2	747.7	426.8	1,121.5
Closing Cash Balance	3,525.0	4,898.3	6,590.5	7,338.2	7,764.9	8,886.4
Gross Financial Debt	12,527.8	11,495.4	10,257.2	10,475.4	10,683.6	10,765.4
Net Debt	9,002.8	6,597.1	3,666.7	3,137.3	2,918.7	1,879.1
Leverage Ratio	0.23x	0.16x	0.08x	0.07x	0.06x	0.04x
Coverage Ratio	1.14x	0.77x	0.38x	0.30x	0.26x	0.15x
Interest Coverage Ratio	13.09x	16.19x	22.17x	32.39x	50.19x	51.89x

The previously stated forecast assumptions lead to stable cash generation over the course of the forecast period, which can be seen in *Table 13*. With working capital acting as a source of funds, margin improvements are the main driver of cash generation slightly offset by net CapEx. Cash accumulation over the forecast period is estimated to put the company on a cash balance level corresponding to the pre-covid historical level as well as a level closer to the cash balance prior to the substantial cash effect by the GrandVision acquisition. Further information can be found in *Appendix 8.12*.

## 7 Valuation Analysis

The following chapter will analyze EssilorLuxottica from a valuation perspective based on the derived suitable methods mentioned in *chapter 2*, including explanations about all assumptions applied for deriving estimates of the true per share price of the company at the valuation date of 31 December 2022.

### 7.1 DCF Valuation

After previously touching upon the forecasted cash flow generation, *Table 14* provides a detailed overview of the FCFF generated over the course of the planning horizon. FCFF is mainly driven by operating performance improvements and working capital optimization acting as a source of funds. In the ultimate planning year FY28, the going concern assumption is accounted for by setting D&A equal to CapEx to reflect a long-term stable asset base which has an additional boosting effect on FCFF.

*Table 14 - FCFF Overview for Market Base Case (in €m; Source: own analysis)*

Free Cash Flow to the Firm	2023	2024	2025	2026	2027	2028
<b>Revenue</b>	<b>28,653.0</b>	<b>31,915.8</b>	<b>34,796.1</b>	<b>36,905.3</b>	<b>38,565.5</b>	<b>40,287.3</b>
EBITDA	7,880.2	8,538.2	9,543.1	10,496.6	11,083.1	12,622.9
D&A	(3,094.1)	(3,356.5)	(3,645.5)	(3,956.1)	(4,289.6)	(5,516.5)
<b>EBIT</b>	<b>4,786.1</b>	<b>5,181.7</b>	<b>5,897.6</b>	<b>6,540.5</b>	<b>6,793.5</b>	<b>7,106.4</b>
(-) Operational Taxes	(1,185.5)	(1,283.5)	(1,460.8)	(1,620.0)	(1,682.7)	(1,760.2)
<b>NOPAT</b>	<b>3,600.6</b>	<b>3,898.2</b>	<b>4,436.8</b>	<b>4,920.5</b>	<b>5,110.8</b>	<b>5,346.2</b>
(+) D&A	3,094.1	3,356.5	3,645.5	3,956.1	4,289.6	5,516.5
(-) CapEx	(3,636.9)	(4,051.0)	(4,416.6)	(4,684.4)	(5,087.9)	(5,516.5)
(-) Increase in working capital	436.4	189.4	166.8	164.5	127.3	120.2
<b>Free Cash Flow to the Firm</b>	<b>3,494.2</b>	<b>3,393.0</b>	<b>3,832.5</b>	<b>4,356.7</b>	<b>4,439.8</b>	<b>5,466.4</b>

### 7.1.1 WACC

The weights for debt and equity were estimated by deriving MVs for each using an implied EV-Equity bridge. The implied EV was computed using current and forward-looking consensus EV/EBITDA multiples extracted from Refinitiv Eikon. For the MV of debt in FY22, BV of non-current borrowings which is not part of the bonds portion was converted into MV by applying the bond pricing formula by *Damodaran (2023a)*, whereas the publicly available MV was used for the bonds portion (*see Appendix 8.17 and 8.18*). Over the course of the planning horizon, the forecasted BV of debt was likewise converted into MV using the bond pricing formula, since MV of bonds is only available for FY22, while refinancing is assumed for all bonds maturing thereafter in the steady state period. Since lease liabilities should reflect the fair value of all future payment obligations and current borrowings are due within 1 year, both are considered to be equal to MV. Additionally, as it is market standard, unfunded pension obligations were derived from the employment benefits section in the balance sheet and added as a debt-like item according to their already discounted book-value.

As the last bridge items, minority interest and investment in associates were converted into MV using an industry average P/BV multiple, for which a peer group equal to the relative valuation model was chosen. The MV of equity is represented by the difference between the implied EV, net debt based on the MV of debt and the MV of minority interest, adding investment in associates.

Table 15 – MV of Debt &amp; Equity (Source: Damodaran, Refinitiv Eikon, company data, own analysis)

Market Implied EV/Equity Bridge	2022	2023	2024	2025	2026	2027	2028
EBITDA	6,128.0	7,880.2	8,538.2	9,543.1	10,496.6	11,083.1	12,622.9
Market Consensus EV Multiple	15.4x	14.4x	13.2x	12.4x	12.4x	12.4x	12.4x
<b>EV</b>	<b>94,432.5</b>	<b>113,238.7</b>	<b>112,959.7</b>	<b>117,952.9</b>	<b>129,737.6</b>	<b>136,987.0</b>	<b>156,018.6</b>
MV of Public Long-Term Debt	7,012.0	8,119.4	6,769.5	5,237.7	5,071.7	4,899.4	4,903.6
MV of Private Long-Term Debt	109.0	126.2	105.2	81.4	78.8	76.2	76.2
MV of Current Debt	1,164.0	1,361.6	1,516.7	1,653.6	1,753.8	1,832.7	1,914.5
MV of Lease Liabilities	3,182.0	3,308.2	3,420.7	3,545.6	3,663.6	3,792.9	3,792.9
<b>MV of Total Debt</b>	<b>11,467.0</b>	<b>12,915.5</b>	<b>11,812.2</b>	<b>10,518.4</b>	<b>10,568.0</b>	<b>10,601.2</b>	<b>10,687.2</b>
<b>Cash</b>	<b>1,960.0</b>	<b>3,525.0</b>	<b>4,898.3</b>	<b>6,590.5</b>	<b>7,338.2</b>	<b>7,764.9</b>	<b>8,886.4</b>
MV of Unfunded Pension Obligations	431.0	431.0	431.0	431.0	431.0	431.0	431.0
MV of Minorities	2,406.2	3,432.3	4,561.8	5,871.9	7,348.0	8,899.1	10,524.2
MV of Investment in Associates	288.6	411.7	547.2	704.3	881.3	1,067.4	1,262.3
<b>MV of Equity</b>	<b>82,376.9</b>	<b>100,396.6</b>	<b>101,600.2</b>	<b>108,426.4</b>	<b>119,610.1</b>	<b>125,888.0</b>	<b>144,524.9</b>
MV D/E	0.14	0.13	0.12	0.10	0.09	0.08	0.07
MV D/D+E	0.12	0.11	0.10	0.09	0.08	0.08	0.07
MV E/D+E	0.88	0.89	0.90	0.91	0.92	0.92	0.93

### 7.1.1.1 Cost of Capital

As EssilorLuxottica is debt-funded by both public and private placements, the cost of debt is derived using a weighted average of the publicly available information on YTM for the corresponding maturities of bonds outstanding taking into account planned repayments of maturing bonds in FY24 and FY25, and a synthetic rating approach by *Damodaran (2023c)* estimating the cost of debt for private placements with the corresponding default spread according to the company's ICR plus the  $R_f$ . Further details are in *Appendix 8.19*.

Table 16 – Synthetic Rating Approach for Cost of Private Debt (Source: Damodaran, own analysis)

Synthetic Rating	2022	2023	2024	2025	2026	2027	2028
ICR	36.7x	13.1x	16.2x	22.2x	32.4x	50.2x	51.9x
Implied Synthetic Rating	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Default Spread	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
Risk-free Rate	1.6%	2.9%	2.5%	2.3%	2.4%	2.5%	2.6%
<b>Implied Cost of Private Debt</b>	<b>2.2%</b>	<b>3.5%</b>	<b>3.2%</b>	<b>3.0%</b>	<b>3.1%</b>	<b>3.2%</b>	<b>3.2%</b>

Since a substantial jump of the interest rate on debt is assumed in relation to the ECB reference rate increase, the ICR of the company is decreasing in the near term although returns to historically high levels and beyond resulting in a constant AAA-rating driven by an assumed normalization of interest rates as well as operating performance improvements.

Table 17 – Weighted Cost of Debt (Source: Company data, own analysis)

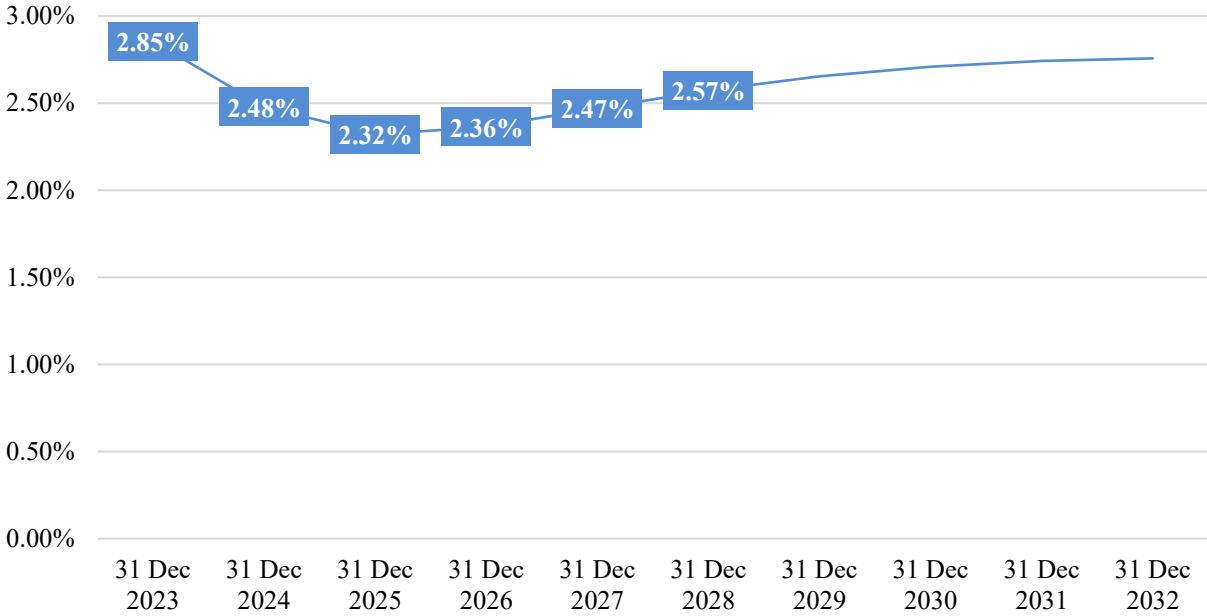
Weighted Cost of Debt	2022	2023	2024	2025	2026	2027	2028
Total Public Debt	7,012.0	8,119.4	6,769.5	5,237.7	5,071.7	4,899.4	4,903.6
Weight	61.1%	62.9%	57.3%	49.8%	48.0%	46.2%	45.9%
Weighted YTM of Public Debt	3.2%	3.2%	3.2%	3.3%	3.3%	3.3%	3.3%
Total Private Debt	4,455.0	4,796.1	5,042.6	5,280.6	5,496.3	5,701.8	5,783.7
Weight	38.9%	37.1%	42.7%	50.2%	52.0%	53.8%	54.1%
Synthetic Cost of Private Debt	2.2%	3.5%	3.2%	3.0%	3.1%	3.2%	3.2%
<b>Weighted Cost of Debt</b>	<b>2.8%</b>	<b>3.3%</b>	<b>3.2%</b>	<b>3.2%</b>	<b>3.2%</b>	<b>3.2%</b>	<b>3.2%</b>

The cost of equity is estimated using the traditional CAPM.

**7.1.1.1.1 Risk Free Rate**

For an estimation of the R<sub>f</sub>, the Svensson model was applied. Since the valuation date is defined at FY22 year-end, parameters for the last available date in 2022 were retrieved from the *ECB (2022)*. *Figure 25* below depicts the yield curve represented by the correlation between interest rates and maturities of all AAA-rated European denominated zero-coupon bonds with maturities ranging from 1 month up to 30 years. The assumption was made that the R<sub>f</sub> applied for each year must equal a risk-free investment maturing over the course of each forecasted period. Consequently, the R<sub>f</sub> applied in FY23 equals the yield curve corresponding to a zero-coupon bond invested in on 31 December 2022 maturing on 31 December 2023, while the same applies for the R<sub>f</sub> applied in FY28 represented by the expected yield on a bond invested in on 31 December 2022 maturing on 31 December 2028. The full 30-year yield curve can be found in *Appendix 8.23*.

*Figure 25 – Risk-free Rate according to AAA-rated Euro denominated bonds as of 31 December 2022*



### 7.1.1.1.2 Market Risk Premium

Since the company operates in a variety of locations but is concentrated on selected key regions, the MRP was derived from country-specific values published by *Fernández, García and Acín (2022)* weighted according to the corresponding revenue exposure of EssilorLuxottica, which can be seen in *Table 18*. Since no other indication could be retrieved, the MRP is expected to remain constant over the planning horizon.

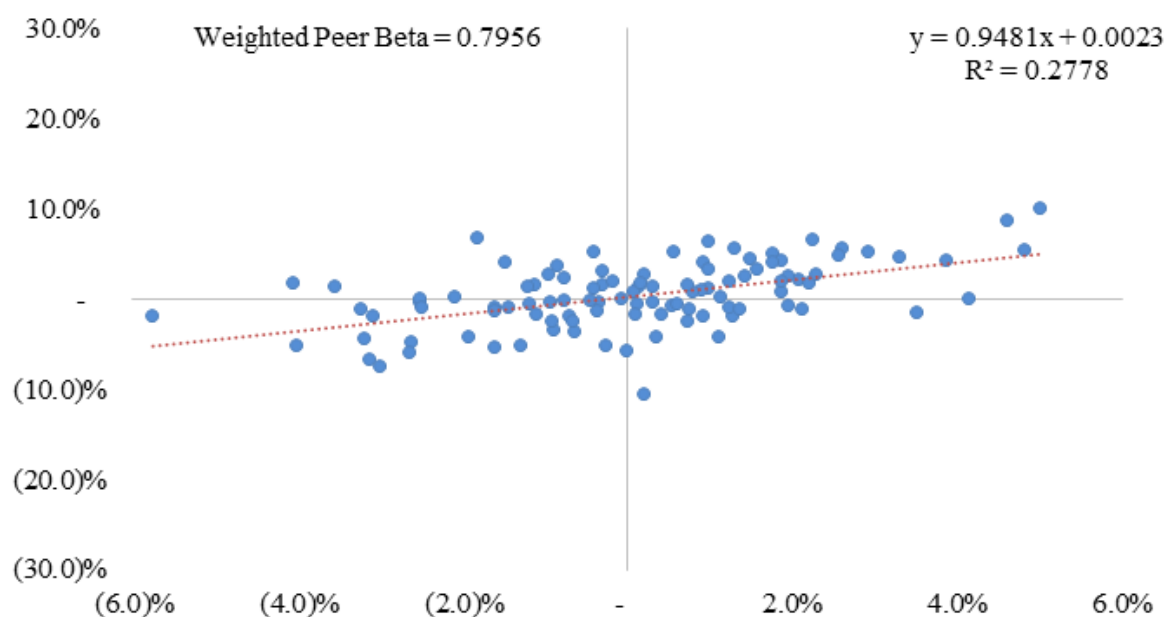
*Table 18 – Weighted MRP (Source: own analysis)*

Market Risk Premium	Weight	MRP
US	43.8%	5.6%
France	2.7%	6.3%
Germany	2.7%	5.7%
Ireland	2.7%	5.8%
Italy	2.7%	6.0%
Spain	2.7%	6.7%
UK	2.7%	6.1%
Remaining EMEA	19.5%	6.6%
Remaining NA	3.1%	9.1%
LATAM	5.8%	8.8%
APAC	11.6%	6.7%
<b>Weighted average MRP</b>		<b>6.3%</b>

### 7.1.1.1.3 Beta

The beta as a measure of company specific risk has been derived from conducting a linear regression of EssilorLuxottica's holding period returns against the returns of a market portfolio using weekly intervals. Given the company's global operating footprint, the MSCI world index was chosen as a proxy for the market portfolio.

Figure 26 – Regression EssilorLuxottica vs MSCI World Weekly Intervals (Source: Refinitiv Eikon, own analysis)



The resulting beta of 0.95 was compared to industry weighted betas of the company's peers, which are represented by the peer group applied for the relative valuation model. Since the divergence between the Essilor raw beta and the derived peer group beta was substantial, which is displayed in *Figure 26* above, the raw beta was chosen to be more adequate based on the assumption that a global vertically integrated company with a diversified business and geography mix should experience less deviations from market movements compared to luxury retail and eyecare peers (*see Appendix 8.22*). Based on the empirical evidence of the company's positive return correlation to the market portfolio, which can be found in *Appendix 8.20 and 8.21*, the derived beta was adjusted over the entire forecast period using the Blume formula (*Blume 1971*) to reflect a reversion towards a beta of 1.0.

The resulting WACC based on the parameters stated previously can be viewed in *Table 19* below.

Table 19 – Weighted Average Cost of Capital (Source: own analysis)

CAPM Parameters	2022	2023	2024	2025	2026	2027	2028
Risk-free Rate	-	2.9%	2.5%	2.3%	2.4%	2.5%	2.6%
Market Risk Premium	-	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%
Blume-adjusted Levered Beta	-	0.95	0.97	0.98	0.98	0.99	0.99
Levered Cost of Equity	9,034.0	8.8%	8.5%	8.5%	8.6%	8.7%	8.8%
Cost of Debt	78.8%	3.3%	3.2%	3.2%	3.2%	3.2%	3.2%
MV D/E+D		0.11	0.10	0.09	0.08	0.08	0.07
MV E/E+D		0.89	0.90	0.91	0.92	0.92	0.93
Tax Rate		24.8%	24.8%	24.8%	24.8%	24.8%	24.8%
<b>Weighted Average Cost of Capital</b>	-	<b>8.1%</b>	<b>7.9%</b>	<b>7.9%</b>	<b>8.1%</b>	<b>8.2%</b>	<b>8.4%</b>

### 7.1.2 Terminal Value

As one of the key assumptions in a DCF valuation, the perpetual growth rate for the cash flows generated after the end of the planning horizon was estimated comparing several methods. While analyst estimates were not considered given uncertainties regarding the consistency between assumptions made, the fundamental growth rate as a function of the company's long-term reinvestment rate and ROC was deemed as the most appropriate estimation. However, the historical reinvestment rate of the company, calculated as the division of the company's investments by its operating income, fluctuated between -2,003% and 611% which does not appear sustainable and is driven by CapEx related to the acquisition of GrandVision.

As an alternative, the *Damodaran (2023b)* database was used to derive an industry weighted reinvestment rate providing the closest operating profile compared to EssilorLuxottica, which consisted of the reinvestment rate for Healthcare Product and General Retail companies. The derived weighted industry reinvestment rate of 89% retrieved does not provide a sustainable reinvestment level for a perpetual growth rate estimation but rather a near-term estimation to forecast operating income.

Since neither the historical data nor the industry average resulted in a sustainable estimate of reinvestment, a third approach was chosen consisting of applying the total corporate investment of companies in specific geographic regions relative to GDP weighted according to the company's geographic operating exposure. The assumption for this method is that it provides a macroeconomic reinvestment rate proxy with GDP in the long-term acting as an equivalent to cumulated corporate operating income. On the other side, total investment defined as the total value of fixed capital formation, changes in inventories, and acquisitions less disposals within a sector is an adequate indicator for corporate investment behavior. The derived weighted reinvestment rate of 22% appears more sustainable and thus more suitable for estimating long-term growth.

While EssilorLuxottica is expected to increase return on invested capital substantially over the course of the forecast period due to anticipated deleveraging and operating improvements without the requirement of substantial capital increases, indicated by generating excess returns from FY25 onwards, this is not a perpetually sustainable state. Therefore, the return on capital is assumed to converge towards 7.3%, the weighted industry average WACC derived from *Damodaran (2023d)* database, consisting of sector weighted cost of capital from Healthcare, E-Commerce, and Retail companies. The product of the previously mentioned reinvestment rate and the assumed long-term return on capital adjusted for the ECB long-term target inflation rate of 2.0% provides the applied perpetual growth rate of 3.6%.

Table 20 – Assumed Perpetual Growth Rate (Source: Damodaran, ECB, IMF, own analysis)

Perpetual Growth Rate	Weight	Reinvestment
Key EMEA	14.0%	23.0%
Remaining EMEA	20.7%	23.4%
US	40.1%	20.7%
NOTAM	3.0%	22.0%
APAC	16.4%	24.8%
LATAM	5.8%	19.1%
<b>Weighted Reinvestment Rate</b>		<b>22.2%</b>
<b>Weighted Industry WACC</b>		<b>7.3%</b>
Fundamental Growth Rate		1.6%
Expected Inflation		2.0%
<b>Perpetual Growth Rate</b>		<b>3.6%</b>

This rate is in line with back-tests against the macroeconomic ceiling of the perpetual growth rate, which can be set at 4.5% consisting of GDP weighted according to the company's key operating geographies adjusted for expected inflation.

Table 21 – Market Base Case DCF Model (in €m; Source: own analysis)

Discounted Cash Flow Valuation	2023	2024	2025	2026	2027	2028	TV
Free Cash Flow	3,494.2	3,393.0	3,832.5	4,356.7	4,439.8	5,466.4	119,505.9
Discount Period	0.5	1.5	2.5	3.5	4.5	5.5	6.0
Discount Rate (WACC)	8.1%	7.9%	7.9%	8.1%	8.2%	8.4%	8.4%
Discount Factor	0.96	0.89	0.83	0.76	0.70	0.64	0.62
<b>Present Value of Free Cash Flow</b>	<b>3,360.9</b>	<b>3,027.0</b>	<b>3,167.6</b>	<b>3,322.5</b>	<b>3,114.0</b>	<b>3,512.8</b>	<b>73,770.2</b>
<b>Enterprise Value</b>	<b>93,275.0</b>						

### 7.1.3 EV/Equity Bridge

In order to derive the true per share price of the company from the estimated EVs, the following bridge from EV to per share EqV displayed in *Table 22* was applied. First the MV of net debt as of 31 December 2022 is deducted. Since the company has a defined benefit obligation plan in place, the unfunded portion of this plan (“employee benefits” position in the balance sheet) is subtracted from the EV at FY22 BV, since this already reflects the remaining fair value of the obligation. Further, minority investments are deducted according to their MV derived by multiplication with the industry average P/BV multiple, while simultaneously the same method was applied to estimate the MV of EssilorLuxottica’s investment in associates, which is subsequently added as a portion of equity.

To estimate the final per share price, the resulting EqV is divided by the true total number of shares outstanding. This was estimated applying the treasury stock method, which was applied to all employee stock options granted prior to FY18, since all options granted afterwards are served with treasury stock according to company policy. Consequently, the derived EqV is divided by the true outstanding €447.71m shares outstanding to arrive at a final per share price estimation. For the traditional DCF based on the Market Base Case this share price is at €181.41.

*Table 22 – EV/Equity Bridge of DCF Market Base Case Model (Source: own analysis)*

FY22 EV/Equity Bridge	EV	Net Debt	Pensions	Minorities	Equity Inv.	Equity Value	# Shares
	93,275.0	(9,507.0)	(431.0)	(2,406.2)	288.6	81,219.5	447.7
						<b>Share Price</b>	<b>181.41</b>

### 7.1.4 Adjusted Present Value

Applying the APV method, EssilorLuxottica is valued by discounting the unlevered free cash flow with the unlevered cost of equity taking into account the present value of future interest tax shields and the expected costs of distress. Since the company deleverages over the planning period resulting in a fast decline of net debt, the APV method provides a valuable comparison to the traditional DCF valuation.

The ITS is derived from the multiplication of the average BV of debt outstanding by the cost of debt each year and the company's effective tax rate. Since the debt balance is assumed to be reduced over time, the perpetual growth rate of the ITS is estimated to be lower than the growth rate of equity and is set at one third of the perpetual growth rate derived in *chapter 7.1.2*. While the probability of default is defined as the default spread according to the company's synthetic credit rating derived from Damodaran, the expected cost of bankruptcy are assumed to be approximately 25% of the unlevered firm value. This is in line with views in literature (*Shapiro and Titman 1985*) estimating the costs of bankruptcy as a portion of unlevered EV. No adjustments were assumed since the company is heavily influenced by brand perception in the retail sector but offsets this exposure by its revenue portion attributable to wholesale customers. The resulting per share price according to the Market Base Case and applying the same EV/Equity bridge described in *chapter 7.1.3* is €174.37.

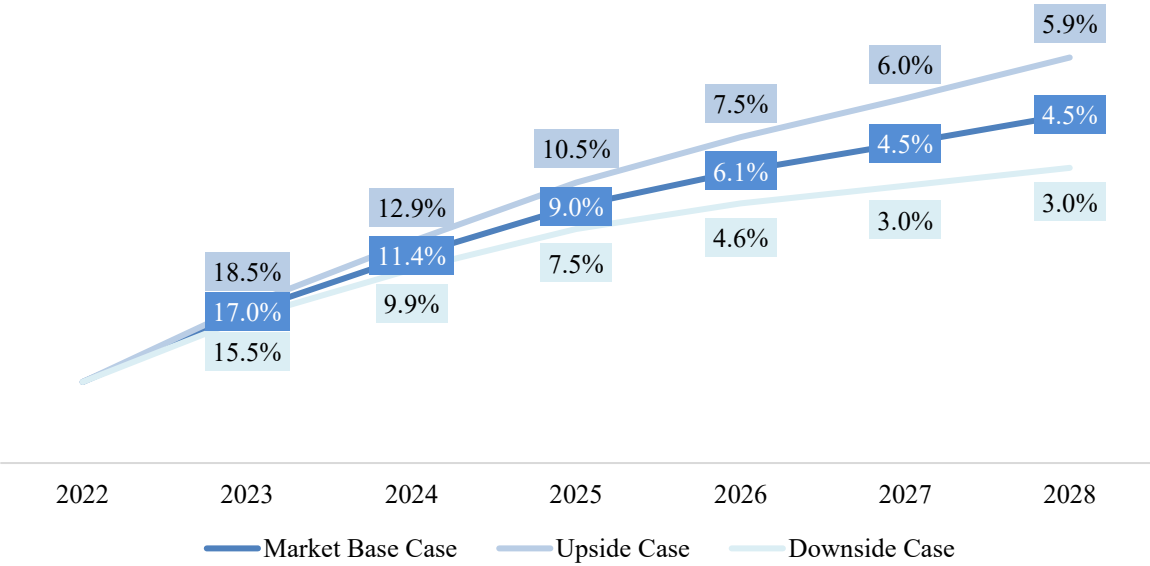
Table 23 – Market Base Case APV Model (in €m; Source: own analysis)

Adjusted Present Value	2023	2024	2025	2026	2027	2028	TV
Free Cash Flow	3,494.2	3,393.0	3,832.5	4,356.7	4,439.8	5,466.4	110,951.2
Discount Period	0.5	1.5	2.5	3.5	4.5	5.5	6.0
Discount Rate (Unlevered CoE)	8.2%	8.2%	8.2%	8.4%	8.6%	8.7%	8.7%
Discount Factor	0.96	0.89	0.82	0.75	0.69	0.63	0.60
<b>Present Value of Free Cash Flow</b>	<b>3,358.4</b>	<b>3,016.1</b>	<b>3,146.6</b>	<b>3,286.9</b>	<b>3,065.9</b>	<b>3,448.4</b>	<b>67,119.8</b>
<b>Unlevered Enterprise Value</b>	<b>86,442.0</b>						
Probability of default	1.4%						
Bankruptcy costs (% of UEV)	25.0%						
<b>Total Value of Bankruptcy Costs</b>	<b>306.9</b>						
Average Debt	12,365.9	12,011.6	10,876.3	10,366.3	10,579.5	10,724.5	
Cost of debt	3.3%	3.2%	3.2%	3.2%	3.2%	3.2%	
Tax rate	24.8%	24.8%	24.8%	24.8%	24.8%	24.8%	
Interest Tax Shield	101.0	96.9	89.4	83.4	83.6	85.0	4,226.4
Discount factor	0.98	0.95	0.93	0.90	0.87	0.84	0.83
<b>PV of interest tax shields</b>	<b>99.4</b>	<b>92.5</b>	<b>82.7</b>	<b>74.8</b>	<b>72.5</b>	<b>71.4</b>	<b>3,494.1</b>
<b>Total Value of ITS</b>	<b>3,987.3</b>						
<b>Levered Enterprise Value</b>	<b>90,122.4</b>						

### 7.1.5 Scenario Analysis

To provide a balanced view on any operating assumptions affecting the valuation output, a scenario analysis was conducted using the forecast explained previously in *chapter 6* as a base case. From this base case 2 deviations, an upside and a downside case, were assumed and tested for their respective valuation result. The main deviation lies within the top line development, consisting of a +1.5pp increase in the upside case and a -1.5pp decrease for the downside case, as can be seen in *Figure 27* below.

Figure 27 – Top Line Revenue Growth Scenario Analysis (Source: own analysis)



For the upside case, all operating margins were assumed to stay consistent with the market base case whereas in the downside case the vertical integration premium on cost of sales was eliminated while otherwise reflecting the company’s FY22 margin profile. All other assumptions regarding cash-flow were assumed to stay consistent with the market base case.

**7.1.6 Sensitivity Analysis**

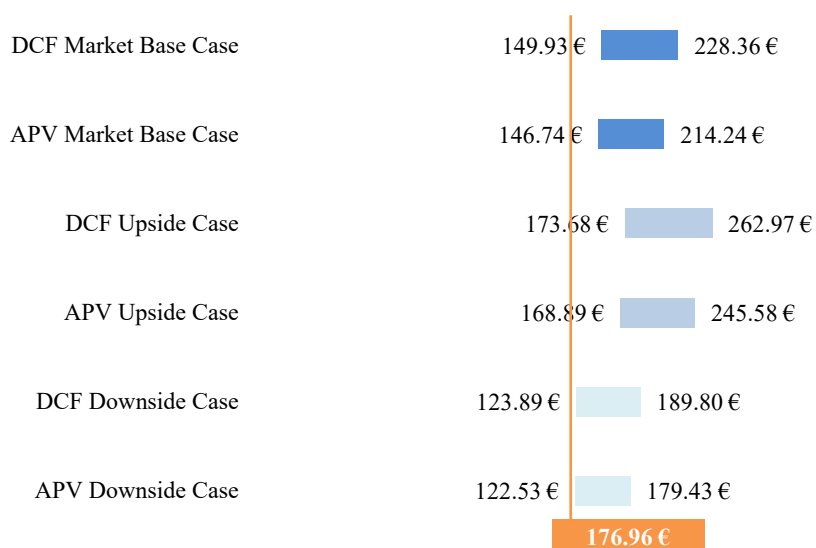
Sensitivity analysis of the derived results have been conducted testing variations regarding the applied WACC and long-term growth rates. For this, the maximum applicable growth rate was fixed at the previously mentioned perpetual growth cap consisting of long-term GDP adjusted for inflation.

Table 24 – Sensitivity Analysis of DCF and APV for Market Base Case (in €m; Source: own analysis)

		Perpetual Growth Rate					
		2.78%	3.20%	3.63%	4.06%	4.49%	
<b>DCF</b>							
	<b>WACC</b>	9.37%	127.77	135.98	145.41	156.36	169.23
		8.87%	140.24	150.12	161.63	175.18	191.37
		8.37%	155.05	167.14	181.41	198.51	219.39
		7.87%	172.91	187.95	206.02	228.16	255.89
7.37%		194.80	213.92	237.41	266.97	305.31	
		Perpetual Growth Rate					
		2.78%	3.20%	3.63%	4.06%	4.49%	
<b>APV</b>							
	<b>Cost of Equity</b>	9.74%	126.48	134.13	142.85	152.89	164.56
		9.24%	137.70	146.74	157.16	169.29	183.60
		8.74%	150.89	161.73	174.37	189.31	207.24
		8.24%	166.58	179.79	195.43	214.24	237.31
7.74%		185.55	201.95	221.74	246.10	276.81	

Figure 28 provides a detailed overview in the form of a football field analysis showing the minimum and maximum ranges as well as the total midpoint price per share derived from each sensitivity test applying the previously stated EV/Equity bridge.

Figure 28 – Football Field Analysis of DCF Share Price Sensitivity Results (Source: own analysis)



## 7.2 Relative Valuation

For the relative valuation, the most critical step is the definition of the peer group. Since the market lacks vertically integrated companies such as EssilorLuxottica, peers were defined and weighted according to the company's revenue mix which consists of 75% optical healthcare related revenue and 25% luxury retail revenue predominantly attributable to the sale of sunglasses. Consequently, the peer group is represented by luxury retailers such as Hugo Boss, Prada, Ralph Lauren, or Richemont and eyecare-related health care companies such as CarlZeiss MediTech, Alcon, Fielmann, or National Vision. A more thorough selection process was conducted based on key criteria consisting of i) P/BV multiple as a proxy for size, ii) EBITDA margins as a proxy for profitability, and iii) expected FY22-FY25 revenue CAGR as a proxy for growth. Since EssilorLuxottica's real revenue growth rate in this period is estimated at 8.5%, peers with a growth rate lower than 4% and higher than 10% were excluded. Additionally, peers with EBITDA margins above 35% were excluded due to the company's corresponding margin level of 25%. Further, companies with a P/BV multiple of above 6.0x compared to EssilorLuxottica's 2.2x were not considered to be comparable either. Among subsequently excluded companies are luxury retailer competitors such as Kering, Hermes, LVMH, and Brunello Cucinelli as well as Hoya, Warby Parker, and Cooper Companies for eyecare companies.

As equity multiples are largely affected by leverage and specific accounting measures, the relative valuation model focuses on EV multiples only, consisting of EV/Revenue, EV/EBITDA, and EV/EBIT multiples. Statistical outliers are eliminated by excluding derived multiples outside of the 10<sup>th</sup> and 90<sup>th</sup> percentile. A detailed multiple overview can be seen in *Table 25* below.

Table 25 – CCA (Source: Refinitiv Eikon, own analysis)

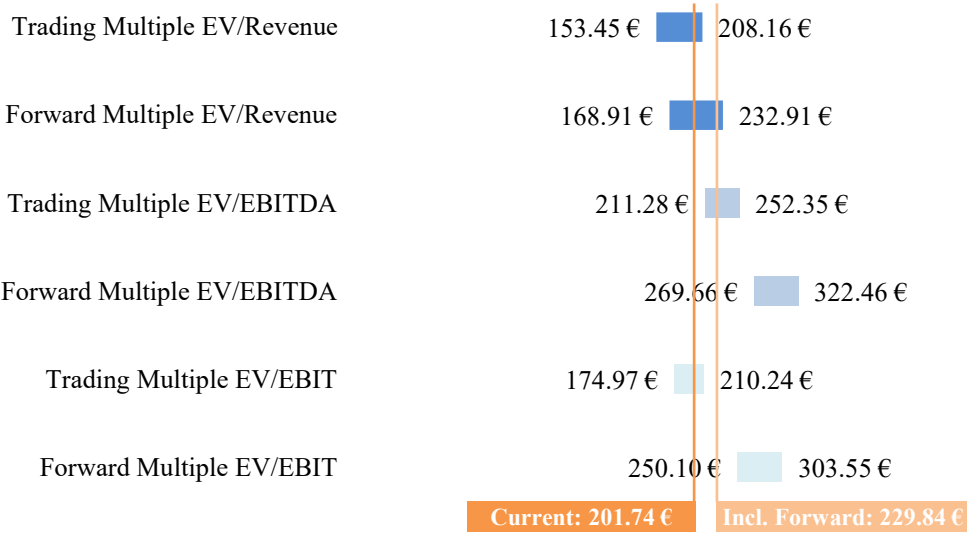
Company	Country	MCap in €m	EV in €m	EV/Sales		EV/EBITDA		EV/EBIT	
				2022E	2023E	2022E	2023E	2022E	2023E
			Lower Bound	2.0x	1.9x	11.3x	11.3x	18.9x	18.4x
			Upper Bound	6.0x	5.6x	20.3x	17.8x	34.3x	40.1x
Prada	ITA	17,027.9	25,330.5	6.0x	5.5x	17.6x	15.6x	32.6x	26.2x
Richemont	SUI	77,802.6	113,812.6	5.9x	5.8x	23.0x	18.5x	33.6x	23.8x
Hugo Boss	GER	4,802.7	7,924.9	2.2x	2.0x	11.7x	10.8x	23.7x	21.2x
Ralph Lauren	US	7,076.9	11,139.6	1.9x	1.8x	11.0x	11.9x	14.1x	15.6x
Burberry	UK	11,243.7	15,605.9	4.7x	4.3x	15.9x	14.4x	25.4x	21.3x
Ferragamo	ITA	2,619.6	4,484.6	3.6x	3.4x	15.0x	17.1x	35.0x	54.0x
<b>Median</b>				<b>4.1x</b>	<b>3.8x</b>	<b>15.4x</b>	<b>15.0x</b>	<b>29.0x</b>	<b>22.6x</b>
<b>Average</b>				<b>4.1x</b>	<b>3.8x</b>	<b>15.0x</b>	<b>14.8x</b>	<b>28.8x</b>	<b>23.1x</b>
			Lower Bound	1.4x	1.4x	15.1x	14.0x	26.9x	26.2x
			Upper Bound	6.1x	5.6x	27.0x	23.2x	36.8x	45.2x
Carl Zeiss	GER	10,893.9	11,754.6	6.2x	5.6x	25.2x	24.8x	29.6x	29.1x
Alcon	SUI	33,850.5	49,401.0	6.0x	5.6x	28.9x	21.5x	33.1x	30.9x
B&L	US	5,712.9	13,740.3	3.8x	3.7x	20.1x	19.8x	29.1x	30.5x
Safilo	ITA	539.9	1,328.4	1.2x	1.2x	13.2x	12.5x	24.6x	23.3x
Fielmann	GER	3,944.6	5,798.7	3.3x	3.1x	17.1x	15.4x	35.8x	30.2x
National Vision	US	1,536.1	3,165.7	1.7x	1.6x	18.5x	21.5x	37.8x	59.4x
<b>Median</b>				<b>3.6x</b>	<b>3.4x</b>	<b>19.3x</b>	<b>20.6x</b>	<b>31.3x</b>	<b>30.3x</b>
<b>Average</b>				<b>3.7x</b>	<b>3.5x</b>	<b>20.2x</b>	<b>19.5x</b>	<b>31.9x</b>	<b>30.2x</b>
<b>Industry-Weighted Average</b>				<b>3.8x</b>	<b>3.6x</b>	<b>18.9x</b>	<b>18.4x</b>	<b>31.1x</b>	<b>28.4x</b>

EssilorLuxottica						
<b>EV</b>	<b>93,003</b>	<b>102,006</b>	<b>115,842</b>	<b>144,604</b>	<b>98,288</b>	<b>135,995</b>
Net Debt	9,507	9,507	9,507	9,507	9,507	9,507
Investments in Associates	289	289	289	289	289	289
Minorities	2,406	2,406	2,406	2,406	2,406	2,406
Unfunded Pensions	431	431	431	431	431	431
<b>Equity</b>	<b>80,948</b>	<b>89,950</b>	<b>103,786</b>	<b>132,548</b>	<b>86,232</b>	<b>123,939</b>

The per share prices resulting from the EV/Equity bridge are metric sensitive given extraordinarily high market valuations indicated by i.e. an industry-weighted FY22 EV/Revenue multiple of 3.8x (18.9x FY22 EV/EBITDA, 31.1x EV/EBIT) and subsequently fluctuate substantially depending on which operating metric is applied. While in the midpoint, per share trading prices derived range between €180.80 (EV/Revenue) and €231.81 (EV/EBITDA) whereas the EV/EBIT multiple is set at €192.61, FY23 forward valuations are estimated substantially higher at €200.91 EV/Revenue, whereas EV/EBITDA and EV/EBIT are anticipated at €296.06 and €276.83 respectively.

Figure 29 – Football Field Analysis of Relative Valuation Share Price Model (Source: own analysis)



### 7.3 Comparison to Market Estimates

Applying an average on the current midpoints for both DCF and relative valuation models and following the steps stated in *chapter 7.1.3*, the final resulting share price of the valuation analysis at 31 December 2022 is €189.35. Compared to the year-end share price of EssilorLuxottica, which stood at €169.20, this represents an upside potential of 11.91%. To counter the notion of the year-end share price representing a snapshot in time, the resulting share price estimation is compared to a 6-week rolling weekly share price average between November and December 2022. This results in a price of €176.96 and implies that the market is undervaluing the company with still a substantial upside potential of 8.51%.

This final result is compared with *Tibaldi, Ousz and Doyle (2023)*. The authors on behalf of UBS issued a change in its house view following the publication of the FY22 financial statements from a Buy to a Hold recommendation with a target price of €183.00, 3.35% downside compared to the valuation analysis in this chapter. For more details, see *Table 26*. The majority of assumptions made by the analysts are in consensus with the assumptions made for the valuation analysis in this chapter. Gross profit and EBIT margin are roughly in line with 64.2% and 17.4% in FY23 for UBS versus 65.1% and 16.7% in the valuation analysis. The APAC region is expected to be the fastest growing segment for the company while OPEX synergies are assumed to accelerate expanding operating margins, similarly to the assumptions made for the forecast in *chapter 6*. A similar deleveraging process is assumed indicated by substantial cash accumulation over the business plan leading to the cash balance exceeding debt. Main driver for the slightly lower share price estimate of UBS is top line growth which is anticipated at a 5.1% CAGR between FY22 and FY27 versus a 9.7% CAGR assumed for this analysis over the same period. This effect is slightly offset by lower CapEx assumptions made at c. 5% of revenue by UBS versus 13-14%.

*Table 26 – Model Assumptions UBS vs. Own Analysis (Source: UBS Equity Research, own analysis)*

Model Assumptions	UBS	Own analysis
Revenue Growth (FY22-FY27)	5.1%	9.7%
Gross Profit Margin (FY23/FY27)	64.2%/65.3%	65.1%/63.7%
EBIT Margin (FY23/FY27)	17.4%/20.1%	16.7%/17.6%
CapEx as % of Revenue	5.0%	12.7 - 13.7%
FY27 Net Debt (Cash)	(4,006.0)	2,919.1
WACC	8.5%	7.9-8.4%
Perpetual Growth Rate	3.0%	3.6%

The final recommendation for investors based on this work is ultimately set for Buy going against the recommendation of UBS. Pricing in forward valuations derived from the multiple analysis results in a further upside potential of 7.42% with an estimated share price of €203.45. As the stock has since reached current FY23 levels of around €185.00 per share, it can be assumed that the market is moving towards valuing the company according to the true underlying value derived from the valuation analysis. Of course, a difference in the valuation date must be considered.

## 8 Appendix

### Appendix 8.1 – Historical Income Statement FY19-FY22 (in €m)

	2019	2020	2021	2022
<b>Statement of Profit &amp; Loss</b>				
<b>Total Revenue</b>	17,390.0	14,429.0	19,820.0	24,494.0
<i>Growth in %</i>	60.5%	(17.0)%	37.4%	23.6%
Revenue	17,390.0	-	-	-
Professional services	-	8,512.0	10,443.0	11,770.0
<i>% of total revenue</i>		59.0%	52.7%	48.1%
Brick and Mortar DTC	-	5,917.0	7,989.6	11,009.4
<i>% of total revenue</i>		41.0%	40.3%	44.9%
E-Commerce DTC	-	-	1,387.4	1,714.6
<i>% of total revenue</i>		-	7.0%	7.0%
Cost of Sales	(6,573.0)	(6,242.0)	(7,589.0)	(8,910.0)
<b>Total Cost of Sales</b>	(6,573.0)	(6,242.0)	(7,589.0)	(8,910.0)
<i>as % of Revenue</i>	(37.8)%	(43.3)%	(38.3)%	(36.4)%
<b>Gross Profit</b>	<b>10,817.0</b>	<b>8,187.0</b>	<b>12,231.0</b>	<b>15,584.0</b>
<i>as % of Revenue</i>	62.2%	56.7%	61.7%	63.6%
OPEX	(9,139.0)	(7,735.0)	(9,924.0)	(12,426.0)
R&D	(548.0)	(552.0)	(579.0)	(600.0)
Selling	(4,918.0)	(4,182.0)	(5,719.0)	(7,741.0)
Royalties	(168.0)	(134.0)	(174.0)	(219.0)
Advertising & marketing	(1,331.0)	(1,156.0)	(1,534.0)	(1,811.0)
General & Administrative	(2,000.0)	(1,711.0)	(1,982.0)	(2,116.0)
Other income (expenses)	(174.0)	-	64.0	61.0
<b>EBIT</b>	<b>1,678.0</b>	<b>452.0</b>	<b>2,307.0</b>	<b>3,158.0</b>
<i>as % of Revenue</i>	9.6%	3.1%	11.6%	12.9%
D&A	(2,121.0)	(2,155.0)	(2,480.0)	(2,970.0)
<b>EBITDA</b>	<b>3,799.0</b>	<b>2,607.0</b>	<b>4,787.0</b>	<b>6,128.0</b>
<i>as % of Revenue</i>	21.8%	18.1%	24.2%	25.0%
Interest on debt & borrowings	(113.0)	(91.0)	(89.0)	(87.0)
Interest on lease liabilities	(58.0)	(50.0)	(52.0)	(69.0)
Interest income	53.0	22.0	30.0	25.0
Other financial income (expenses)	(25.0)	(22.0)	(19.0)	(1.0)
Share of profits of associates	(2.0)	1.0	3.0	6.0
<b>EBT</b>	<b>1,533.0</b>	<b>312.0</b>	<b>2,180.0</b>	<b>3,032.0</b>
<i>as % of Revenue</i>	8.8%	2.2%	11.0%	12.4%
Income tax	(350.0)	(164.0)	(582.0)	(751.0)
<i>Effective tax rate</i>	22.8%	52.6%	26.7%	24.8%
<b>Net Income</b>	<b>1,183.0</b>	<b>148.0</b>	<b>1,598.0</b>	<b>2,281.0</b>
<i>as % of Revenue</i>	6.8%	1.0%	8.1%	9.3%

Since the relieve from any executive responsibilities of Leonardo Del Vecchio and Hubert Sagnières during 2020, the company undertook an operational segment reporting change starting retrospectively in FY20. This includes the implementation of new reporting segments reflecting the go-to-market strategy of EssilorLuxottica dividing reported revenue in “Professional Solutions” and two retail segments titled “Direct to Consumer – B&M” as well as “Direct to Consumer – E-Commerce” (for which first revenues reported in FY21).

Appendix 8.2 – Forecasted Income Statement FY22-FY28 (in €m)

	2023	2024	2025	2026	2027	2028
<b>Statement of Profit &amp; Loss</b>						
<b>Total Revenue</b>	28,653.0	31,915.8	34,796.1	36,905.3	38,565.5	40,287.3
<i>Growth in %</i>	17.0%	11.4%	9.0%	6.1%	4.5%	4.5%
Revenue						
Professional services	13,180.4	13,723.8	14,266.4	14,762.1	15,040.5	15,309.2
<i>% of total revenue</i>	46.0%	43.0%	41.0%	40.0%	39.0%	38.0%
Brick and Mortar DTC	12,893.9	14,362.1	16,006.2	16,607.4	16,968.8	17,323.6
<i>% of total revenue</i>	45.0%	45.0%	46.0%	45.0%	44.0%	43.0%
E-Commerce DTC	2,578.8	3,829.9	4,523.5	5,535.8	6,556.1	7,654.6
<i>% of total revenue</i>	9.0%	12.0%	13.0%	15.0%	17.0%	19.0%
Cost of Sales	(10,005.8)	(11,534.0)	(12,587.5)	(13,341.9)	(13,983.3)	(14,598.1)
<b>Total Cost of Sales</b>	(10,005.8)	(11,534.0)	(12,587.5)	(13,341.9)	(13,983.3)	(14,598.1)
<i>as % of Revenue</i>	(34.9)%	(36.1)%	(36.2)%	(36.2)%	(36.3)%	(36.2)%
<b>Gross Profit</b>	<b>18,647.3</b>	<b>20,381.9</b>	<b>22,208.7</b>	<b>23,563.4</b>	<b>24,582.2</b>	<b>25,689.3</b>
<i>as % of Revenue</i>	65.1%	63.9%	63.8%	63.8%	63.7%	63.8%
OPEX	(13,861.2)	(15,200.2)	(16,311.0)	(17,022.9)	(17,788.7)	(18,582.9)
R&D	(765.4)	(772.8)	(755.5)	(709.1)	(741.0)	(774.0)
Selling	(8,304.6)	(9,250.3)	(10,085.1)	(10,696.4)	(11,177.5)	(11,676.6)
Royalties	(266.1)	(296.4)	(323.1)	(342.7)	(358.2)	(374.1)
Advertising & marketing	(2,049.8)	(2,123.6)	(2,141.3)	(2,086.6)	(2,180.4)	(2,277.8)
General & Administrative	(2,475.3)	(2,757.2)	(3,006.0)	(3,188.2)	(3,331.6)	(3,480.4)
Other income (expenses)	-	-	-	-	-	-
<b>EBIT</b>	<b>4,786.1</b>	<b>5,181.7</b>	<b>5,897.6</b>	<b>6,540.5</b>	<b>6,793.5</b>	<b>7,106.4</b>
<i>as % of Revenue</i>	16.7%	16.2%	16.9%	17.7%	17.6%	17.6%
D&A	(3,094.1)	(3,356.5)	(3,645.5)	(3,956.1)	(4,289.6)	(5,516.5)
<b>EBITDA</b>	<b>7,880.2</b>	<b>8,538.2</b>	<b>9,543.1</b>	<b>10,496.6</b>	<b>11,083.1</b>	<b>12,622.9</b>
<i>as % of Revenue</i>	27.5%	26.8%	27.4%	28.4%	28.7%	31.3%
Interest on debt & borrowings	(365.5)	(320.1)	(266.1)	(201.9)	(135.4)	(137.0)
Interest on lease liabilities	(76.4)	(78.9)	(81.8)	(84.6)	(87.5)	(87.5)
Interest income	25.0	25.0	25.0	25.0	25.0	25.0
Other financial income (expenses)	-	-	-	-	-	-
Share of profits of associates	8.6	11.4	14.6	18.3	22.2	26.2
<b>EBT</b>	<b>4,377.8</b>	<b>4,819.0</b>	<b>5,589.4</b>	<b>6,297.3</b>	<b>6,617.8</b>	<b>6,933.1</b>
<i>as % of Revenue</i>	15.3%	15.1%	16.1%	17.1%	17.2%	17.2%
Income tax	(1,084.3)	(1,193.6)	(1,384.4)	(1,559.8)	(1,639.2)	(1,717.3)
<i>Effective tax rate</i>	24.8%	24.8%	24.8%	24.8%	24.8%	24.8%
<b>Net Income</b>	<b>3,293.5</b>	<b>3,625.4</b>	<b>4,204.9</b>	<b>4,737.5</b>	<b>4,978.6</b>	<b>5,215.8</b>
<i>as % of Revenue</i>	11.5%	11.4%	12.1%	12.8%	12.9%	12.9%

*Appendix 8.3 – Market Drivers*

The eyecare industry is driven by several fundamental long-term drivers that should continue to support the sector over time. This includes favorable demographics based on an ageing and growing population, wealth effects in emerging markets, and changing lifestyle trends with more time spent in front of digital devices continue to support the increasing need for corrective eyewear. The market is further driven by an increasing health awareness as vision impairment remains one of the world's most untreated and undiagnosed disabilities, with around 2.7 billion people suffering from uncorrected refractive errors, of which approximately 90% live in developing economies. In this context, improving income levels, along with increased availability of affordable vision care options owing to technological advancements, and growing awareness around vision health will continue to be important drivers. In addition, new technologies, such as coatings for lenses, have increased the value per lens over time, while penetration rates remain generally quite low, although variable depending on the geographies. Moreover, an increasing evolvement of eyewear as a fashion accessory as well as digitization and enhanced service quality along the customer journey resulting in increased convenience, should translate into increased market penetration and shorter replacement cycles, which are currently estimated between 2 and 5 years. (*JP Morgan Equity Research, 2023*)

## Appendix 8.4 – Historical Balance Sheet FY19-FY22 (in €m)

	2019	2020	2021	2022
<b>Balance Sheet</b>				
Inventories	2,166.0	1,930.0	2,445.0	2,789.0
Trade receivables	2,411.0	2,066.0	2,355.0	2,697.0
Tax receivables	94.0	195.0	296.0	259.0
Other current assets	1,243.0	847.0	804.0	936.0
Deferred tax assets	429.0	418.0	487.0	408.0
Non-current provisions	(265.0)	(170.0)	(243.0)	(302.0)
Other non-current liabilities	(193.0)	(73.0)	(143.0)	(221.0)
Deferred tax liabilities	(2,137.0)	(1,887.0)	(2,536.0)	(2,377.0)
Trade payables	(1,770.0)	(1,864.0)	(2,218.0)	(2,297.0)
Tax payables	(455.0)	(530.0)	(805.0)	(711.0)
Current provisions	(139.0)	(271.0)	(373.0)	(283.0)
Other current liabilities	(2,320.0)	(2,346.0)	(3,655.0)	(3,587.0)
<b>Non-cash working capital</b>	<b>(936.0)</b>	<b>(1,685.0)</b>	<b>(3,586.0)</b>	<b>(2,689.0)</b>
Goodwill	24,074.0	22,656.0	29,104.0	30,733.0
Intangible assets	11,300.0	10,031.0	12,599.0	12,122.0
PP&E	3,620.0	3,348.0	4,211.0	4,747.0
Right-of-use assets	2,014.0	1,753.0	2,930.0	3,010.0
Other non-current assets	378.0	374.0	718.0	817.0
<b>Fixed assets</b>	<b>41,386.0</b>	<b>38,162.0</b>	<b>49,562.0</b>	<b>51,429.0</b>
<b>Core capital employed</b>	<b>40,450.0</b>	<b>36,477.0</b>	<b>45,976.0</b>	<b>48,740.0</b>
Assets held for sale	-	-	82.0	-
Liabilities held for sale	-	-	(13.0)	-
Investments in associates	18.0	17.0	91.0	83.0
Employee benefits	(556.0)	(484.0)	(537.0)	(431.0)
<b>Surplus assets</b>	<b>(538.0)</b>	<b>(467.0)</b>	<b>(377.0)</b>	<b>(348.0)</b>
<b>Net capital employed</b>	<b>39,912.0</b>	<b>36,010.0</b>	<b>45,599.0</b>	<b>48,392.0</b>
Non-current borrowings	6,864.0	9,324.0	8,913.0	7,858.0
Non-current lease liabilities	1,619.0	1,411.0	2,230.0	2,336.0
Current borrowings	403.0	633.0	1,036.0	1,164.0
Current lease liabilities	529.0	527.0	837.0	846.0
<b>Gross financial debt</b>	<b>9,415.0</b>	<b>11,895.0</b>	<b>13,016.0</b>	<b>12,204.0</b>
Cash and cash equivalents	(4,836.0)	(8,683.0)	(3,293.0)	(1,960.0)
<b>Net debt</b>	<b>4,579.0</b>	<b>3,212.0</b>	<b>9,723.0</b>	<b>10,244.0</b>
Share capital	79.0	79.0	80.0	81.0
Share premium reserve	21,979.0	22,012.0	22,381.0	23,066.0
Treasury shares reserve	(68.0)	(201.0)	(231.0)	(360.0)
Other reserves	11,730.0	10,293.0	11,387.0	12,517.0
Net profit attributable to owners of tl	1,077.0	85.0	1,448.0	2,152.0
<b>Group equity</b>	<b>34,797.0</b>	<b>32,268.0</b>	<b>35,065.0</b>	<b>37,456.0</b>
Equity attributable to non-controlling	536.0	530.0	811.0	692.0
<b>Total equity</b>	<b>35,333.0</b>	<b>32,798.0</b>	<b>35,876.0</b>	<b>38,148.0</b>
<b>Total funds invested</b>	<b>39,912.0</b>	<b>36,010.0</b>	<b>45,599.0</b>	<b>48,392.0</b>

## Appendix 8.5 – Forecasted Balance Sheet FY22-FY28 (in €m)

	2023	2024	2025	2026	2027	2028
<b>Balance Sheet</b>						
Inventories	3,100.6	3,497.4	3,860.7	4,145.3	4,384.6	4,635.5
Trade receivables	2,954.9	3,204.0	3,397.8	3,502.6	3,554.5	3,602.8
Tax receivables	374.0	411.6	477.5	537.9	565.3	592.2
Other current assets	1,017.7	1,133.6	1,235.9	1,310.8	1,369.8	1,431.0
Deferred tax assets	408.0	408.0	408.0	408.0	408.0	408.0
Non-current provisions	(302.0)	(302.0)	(302.0)	(302.0)	(302.0)	(302.0)
Other non-current liabilities	(221.0)	(221.0)	(221.0)	(221.0)	(221.0)	(221.0)
Deferred tax liabilities	(2,377.0)	(2,377.0)	(2,377.0)	(2,377.0)	(2,377.0)	(2,377.0)
Trade payables	(2,535.1)	(2,938.1)	(3,223.7)	(3,435.2)	(3,619.5)	(3,798.7)
Tax payables	(1,026.6)	(1,130.0)	(1,310.7)	(1,476.7)	(1,551.9)	(1,625.8)
Current provisions	(283.0)	(283.0)	(283.0)	(283.0)	(283.0)	(283.0)
Other current liabilities	(4,235.8)	(4,718.2)	(5,144.0)	(5,455.8)	(5,701.2)	(5,955.8)
<b>Non-cash working capital</b>	<b>(3,125.4)</b>	<b>(3,314.7)</b>	<b>(3,481.6)</b>	<b>(3,646.1)</b>	<b>(3,773.4)</b>	<b>(3,893.6)</b>
Goodwill	30,733.0	30,733.0	30,733.0	30,733.0	30,733.0	30,733.0
Intangible assets	12,453.0	12,876.5	13,346.8	13,790.8	14,277.7	14,277.7
PP&E	4,876.6	5,042.5	5,226.6	5,400.5	5,591.2	5,591.2
Right-of-use assets	3,092.2	3,197.4	3,314.1	3,424.4	3,545.3	3,545.3
Other non-current assets	817.0	817.0	817.0	817.0	817.0	817.0
<b>Fixed assets</b>	<b>51,971.8</b>	<b>52,666.3</b>	<b>53,437.5</b>	<b>54,165.8</b>	<b>54,964.1</b>	<b>54,964.1</b>
<b>Core capital employed</b>	<b>48,846.4</b>	<b>49,351.6</b>	<b>49,955.9</b>	<b>50,519.7</b>	<b>51,190.7</b>	<b>51,070.4</b>
Assets held for sale	-	-	-	-	-	-
Liabilities held for sale	-	-	-	-	-	-
Investments in associates	118.4	157.4	202.5	253.5	307.0	363.0
Employee benefits	(431.0)	(431.0)	(431.0)	(431.0)	(431.0)	(431.0)
<b>Surplus assets</b>	<b>(312.6)</b>	<b>(273.6)</b>	<b>(228.5)</b>	<b>(177.5)</b>	<b>(124.0)</b>	<b>(68.0)</b>
<b>Net capital employed</b>	<b>48,533.8</b>	<b>49,078.0</b>	<b>49,727.5</b>	<b>50,342.2</b>	<b>51,066.7</b>	<b>51,002.5</b>
Non-current borrowings	7,858.0	6,558.0	5,058.0	5,058.0	5,058.0	5,058.0
Non-current lease liabilities	2,428.6	2,511.2	2,602.9	2,689.6	2,784.5	2,784.5
Current borrowings	1,361.6	1,516.7	1,653.6	1,753.8	1,832.7	1,914.5
Current lease liabilities	879.5	909.5	942.7	974.0	1,008.4	1,008.4
<b>Gross financial debt</b>	<b>12,527.8</b>	<b>11,495.4</b>	<b>10,257.2</b>	<b>10,475.4</b>	<b>10,683.6</b>	<b>10,765.4</b>
Cash and cash equivalents	(3,525.0)	(4,898.3)	(6,590.5)	(7,338.2)	(7,764.9)	(8,886.4)
<b>Net debt</b>	<b>9,002.8</b>	<b>6,597.1</b>	<b>3,666.7</b>	<b>3,137.3</b>	<b>2,918.7</b>	<b>1,879.1</b>
Share capital	81.0	81.0	81.0	81.0	81.0	81.0
Share premium reserve	23,066.0	23,066.0	23,066.0	23,066.0	23,066.0	23,066.0
Treasury shares reserve	(317.4)	(349.4)	(405.2)	(456.6)	(479.8)	(502.7)
Other reserves	12,715.9	15,070.8	17,802.1	18,088.2	18,388.9	18,703.9
Net profit attributable to owners of tl	2,998.4	3,300.5	3,828.2	4,313.0	4,532.5	4,748.5
<b>Group equity</b>	<b>38,543.9</b>	<b>41,168.9</b>	<b>44,372.0</b>	<b>45,091.7</b>	<b>45,588.6</b>	<b>46,096.7</b>
Equity attributable to non-controlling	987.1	1,311.9	1,688.7	2,113.2	2,559.3	3,026.7
<b>Total equity</b>	<b>39,531.0</b>	<b>42,480.8</b>	<b>46,060.7</b>	<b>47,204.9</b>	<b>48,147.9</b>	<b>49,123.4</b>
<b>Total funds invested</b>	<b>48,533.8</b>	<b>49,078.0</b>	<b>49,727.5</b>	<b>50,342.2</b>	<b>51,066.7</b>	<b>51,002.5</b>

## Appendix 8.6 – Historical Cash Flow Statement FY19-FY22 (in €m)

	2019	2020	2021	2022
<b>Cash Flow Statement</b>				
EBIT	1,678.0	452.0	2,307.0	3,158.0
- Operational Taxes	(383.1)	(237.6)	(615.9)	(782.2)
+ D&A	2,121.0	2,155.0	2,480.0	2,970.0
+ Delta non-cash working capital	(2,393.0)	749.0	1,901.0	(897.0)
- CAPEX	(2,480.0)	1,069.0	(13,880.0)	(4,837.0)
<b>Free-cash-flow to the firm</b>	<b>(1,457.1)</b>	<b>4,187.4</b>	<b>(7,807.9)</b>	<b>(388.2)</b>
Tax shields	33.1	73.6	33.9	31.2
Net interest expenses/income	(143.0)	(141.0)	(130.0)	(132.0)
Income from associates	(2.0)	1.0	3.0	6.0
Delta gross debt	3,713.0	2,480.0	1,121.0	(812.0)
Delta surplus assets	115.0	(71.0)	(90.0)	(29.0)
<b>Free-cash-flow to equity shareholders</b>	<b>2,259.0</b>	<b>6,530.0</b>	<b>(6,870.0)</b>	<b>(1,324.0)</b>
Dividends	(959.0)	(561.0)	(237.0)	(595.0)
Delta in other equity	1,675.0	(2,116.0)	1,436.0	705.0
Delta minority interest	32.0	(6.0)	281.0	(119.0)
<b>Net change in cash</b>	<b>3,007.0</b>	<b>3,847.0</b>	<b>(5,390.0)</b>	<b>(1,333.0)</b>

## Appendix 8.7 – Forecasted Cash Flow Statement FY22-FY28 (in €m)

	2022	2023	2024	2025	2026	2027	2028
<b>Cash Flow Statement</b>							
EBIT	3,158.0	4,786.1	5,181.7	5,897.6	6,540.5	6,793.5	7,106.4
- Operational Taxes	(782.2)	(1,185.5)	(1,283.5)	(1,460.8)	(1,620.0)	(1,682.7)	(1,760.2)
+ D&A	2,970.0	3,094.1	3,356.5	3,645.5	3,956.1	4,289.6	5,516.5
+ Delta non-cash working capital	(897.0)	436.4	189.4	166.8	164.5	127.3	120.2
- CAPEX	(4,837.0)	(3,636.9)	(4,051.0)	(4,416.6)	(4,684.4)	(5,087.9)	(5,516.5)
<b>Free-cash-flow to the firm</b>	<b>(388.2)</b>	<b>3,494.2</b>	<b>3,393.0</b>	<b>3,832.5</b>	<b>4,356.7</b>	<b>4,439.8</b>	<b>5,466.4</b>
Tax shields	31.2	101.1	89.8	76.4	60.2	43.5	42.9
Net interest expenses/income	(132.0)	(416.8)	(374.1)	(322.9)	(261.5)	(197.9)	(199.5)
Income from associates	6.0	8.6	11.4	14.6	18.3	22.2	26.2
Delta gross debt	(812.0)	323.8	(1,032.4)	(1,238.2)	218.2	208.2	81.8
Delta surplus assets	(29.0)	(35.4)	(39.0)	(45.2)	(50.9)	(53.5)	(56.1)
<b>Free-cash-flow to equity shareholders</b>	<b>(1,324.0)</b>	<b>3,475.5</b>	<b>2,048.8</b>	<b>2,317.2</b>	<b>4,341.1</b>	<b>4,462.3</b>	<b>5,361.9</b>
Dividends	(595.0)	(2,799.4)	(945.7)	(1,096.9)	(4,026.9)	(4,231.8)	(4,433.5)
Delta in other equity	705.0	593.9	(54.7)	95.0	9.1	(249.8)	(274.3)
Delta minority interest	(119.0)	295.1	324.8	376.8	424.5	446.1	467.4
<b>Net change in cash</b>	<b>(1,333.0)</b>	<b>1,565.0</b>	<b>1,373.3</b>	<b>1,692.2</b>	<b>747.7</b>	<b>426.8</b>	<b>1,121.5</b>

## Appendix 8.8 – Total Forecasted Market Growth Rates

Eyecare Market Growth Rates by G	2022	2023	2024	2025	2026	2027	2028
	Statista Market Forecast (+ Applied Premium)			Macroeconomic GDP Forecast			
France	8.1%	6.3%	3.0%	2.9%	2.8%	1.6%	1.5%
Germany	8.5%	7.1%	4.1%	3.9%	2.8%	1.2%	1.1%
Italy	9.3%	6.8%	3.1%	3.0%	2.1%	1.0%	0.9%
Ireland	8.5%	8.6%	5.4%	4.0%	4.0%	3.0%	3.0%
Spain	8.3%	8.1%	4.6%	2.9%	2.7%	1.7%	1.6%
United Kingdom	9.5%	6.9%	4.0%	4.4%	3.0%	1.8%	1.5%
<b>Main EMEA</b>	<b>8.5%</b>	<b>7.0%</b>	<b>4.0%</b>	<b>3.4%</b>	<b>2.8%</b>	<b>1.6%</b>	<b>1.5%</b>
United States (in USD)	11.5%	10.7%	5.7%	3.1%	3.1%	2.1%	2.1%
Asia-Pacific	9.7%	25.9%	19.0%	16.3%	7.1%	3.2%	3.2%
Remaining EMEA	9.6%	11.2%	8.9%	8.4%	4.0%	3.2%	3.2%
Latin America	7.6%	9.6%	8.2%	8.0%	3.6%	2.6%	2.6%
Remaining North America (in USD)	9.1%	10.2%	7.6%	6.5%	3.7%	2.7%	2.7%



*Appendix 8.13 – Free Cash Flow to Equity Shareholders*

In comparison to FCFF, the free cash flow to equity holders (FCFE) incorporates any debt servicing payments to debtholders and subsequently is to be discounted with a company's cost of equity (Koller, Goedhart & Wessels, 2015). There are variants to derive FCFE based on Net Income from the income statement or alternatively by deriving it directly from FCFF.

$$FCFE_t = Net\ income_t - NCAPEX_t - \Delta NWC_t + \Delta Net\ Debt_t$$

$$FCFE_t = FCFF_t - Interest_t * (1 - T) + \Delta Net\ Debt_t$$

*Appendix 8.14 – Dividend Discount Model*

The Dividend Discount Model is a simple tool for evaluating a company's EqV based on dividend payouts to shareholders. The DDM's rationale is founded on the idea that a stock's value is determined by the present value of its projected cash distribution to shareholders. When investors purchase and retain shares, they anticipate two forms of cash flows: dividends throughout the holding period and the selling price at conclusion of the holding period. Nonetheless, this anticipated price depends on future dividend payments. Therefore, the value of a share is equal to the present value of all future dividends, which extend into infinity (Damodaran, 2012). The DDM formula requires two basic inputs: projected dividends per share and a discount rate representing the associated risk of future payments. Future estimated dividends per share are computed using projected net income and the payout ratio of the firm. The resulting cash flows are then discounted using the leveraged cost of equity.

$$PV\ of\ Future\ Dividends = \sum_{t=1}^n \frac{DPS_t}{(1 + k_{e(L)})^t} + \frac{TV}{(1 + k_{e(L)})^t}$$

The presumably most common type of the DDM is the Gordon Growth Model, assuming dividends will grow indefinitely at a constant rate discounted at the cost of equity less the indefinite growth rate.

$$Share\ Price = \frac{DPS}{k_e - g}$$

To incorporate a more sophisticated growth pattern, a variant of the DDM, the Two-Stage Growth Model, assumes two separate growth stages with a short-term and a long-term growth rate where  $T$  is equal to the duration in years for how long the initial high growth stage lasts.

$$\text{Equity Value} = \frac{\text{Dividend} * (1 + g_L) + \text{Dividend} * T * (g_S - g_L)}{k_e - g_L}$$

The shortcomings of the DDM include the expectation of dividend payments to be the only cash flow received by shareholders as well as over- and underpayment of excess cash to shareholders. Despite the fact that a modified version of the DDM harmonizes share repurchases and dividends, it may still yield an erroneous EqV if a corporation returns less or more cash than it could provide shareholders. Therefore, it is essential to analyze the total cash available to shareholders and compare it to the actual cash paid via dividends to determine if a firm is distributing insufficient or excessive dividends. This contrast is captured by the amount of cash returned to shareholders relative to FCFE. The DDM formula is only valid if this ratio fluctuates about one over time. If it is less than one, the corporation is boosting its cash balance or marketable securities by returning less, but if it is greater than one, it is paying dividends with current cash or issuing new securities. Based on the signaling effect of dividends (*Bhattacharya, 1979*), however, dividend payments could potentially not reflect the intrinsic value of the underlying company but rather can be a tool to steer investor sentiment when the true value of a firm could otherwise be questioned. Therefore, it seems questionable, whether dividend payments are an accurate input to derive a company's intrinsic value.

### Appendix 8.15 – Additional CAPM Factors

Other factors than included in the original CAPM formula should be taken into account as well depending on the business profile of the company to be valued. One such factor is the country risk premium, which should be considered in case the company is substantially exposed to specific countries to better reflect macroeconomic risk such as inflation and political instability (Damodaran, 2012). Another potential factor affecting the cost of capital is the size of a company. Fama & French (1992) originally found which was confirmed in various studies thereafter, that smaller companies in relation to their market capitalization are outperforming larger companies leading to investors incurring larger opportunity costs and subsequently requiring a size premium to adjust the cost of equity accordingly.

### Appendix 8.16 – Comparable Transaction Analysis

As opposed to the CCA method, the CTA utilizes multiples relative to purchase prices of past acquisitions in the market as this reflects the value at which an acquirer is willing to buy a comparable company. However, this method can be considered more suitable to derive a purchase price indication to buy control of a company since multiples derived from past transactions almost certainly include a control premium the investor adds to the company's sole value to acquire the majority shares in the company. As the result of this work should be the sole value of a share in the company, the CTA method is neglected.

### Appendix 8.17 – Public Bonds

Public Debt (as at 31/12/2022)	BV	FV	Market Value	Maturity	Weighted Mat.	Market YTM
Eurobond	987.0	1,000.0	790.3	2031	1.15	3.5%
Eurobond	1,243.0	1,250.0	1,077.6	2028	0.96	3.3%
Eurobond	1,489.0	1,500.0	1,309.7	2027	0.96	3.2%
Eurobond	1,246.0	1,250.0	1,151.2	2026	0.64	3.2%
Eurobond	1,494.0	1,500.0	1,399.7	2025	0.58	3.1%
Eurobond	299.0	300.0	298.2	2024	0.08	2.9%
Eurobond	499.0	500.0	499.1	2024	0.13	2.8%
Eurobond	500.0	500.0	486.3	2024	0.13	3.1%
<b>Total</b>	<b>7,757.0</b>	<b>7,800.0</b>	<b>7,012.0</b>		<b>4.62</b>	<b>3.2%</b>

Cost of Public Debt	2023	2024	2025	2026	2027	2028
Weighted Maturity	3.62	3.15	2.79	2.79	2.79	2.79
Weighted YTM	3.19%	3.24%	3.30%	3.30%	3.30%	3.30%

### Appendix 8.18 – Damodaran MV of Debt

Damodaran MV of Debt	2023	2024	2025	2026	2027	2028
Face Value (Book Value)	7,858.0	6,558.0	5,058.0	5,058.0	5,058.0	5,058.0
Interest Expense	(365.5)	(320.1)	(266.1)	(201.9)	(135.4)	(137.0)
Maturity	3.62	3.15	2.79	2.79	2.79	2.79
Cost of Debt	3.19%	3.24%	3.30%	3.30%	3.30%	3.30%
<b>MV of Debt</b>	<b>8,245.7</b>	<b>6,874.8</b>	<b>5,319.2</b>	<b>5,150.6</b>	<b>4,975.6</b>	<b>4,979.8</b>

## Appendix 8.19 – Damodaran Default Spread

Ratings, ICR, Default Spread (non-financial service companies)			
> ICR	<= ICR	Rating	Spread
-10000	0.199999	D2/D	20.0%
0.20	0.649999	C2/C	17.5%
0.65	0.799999	Ca2/CC	15.8%
0.80	1.249999	Caa/CCC	11.6%
1.25	1.499999	B3/B-	7.4%
1.50	1.749999	B2/B	5.3%
1.75	1.999999	B1/B+	4.6%
2.00	2.249999	Ba2/BB	3.1%
2.25	2.499999	Ba1/BB+	2.4%
2.50	2.999999	Baa2/BBB	2.0%
3.00	4.249999	A3/A-	1.6%
4.25	5.499999	A2/A	1.4%
5.50	6.499999	A1/A+	1.2%
6.50	8.499999	Aa2/AA	0.9%
8.50	100000	Aaa/AAA	0.7%

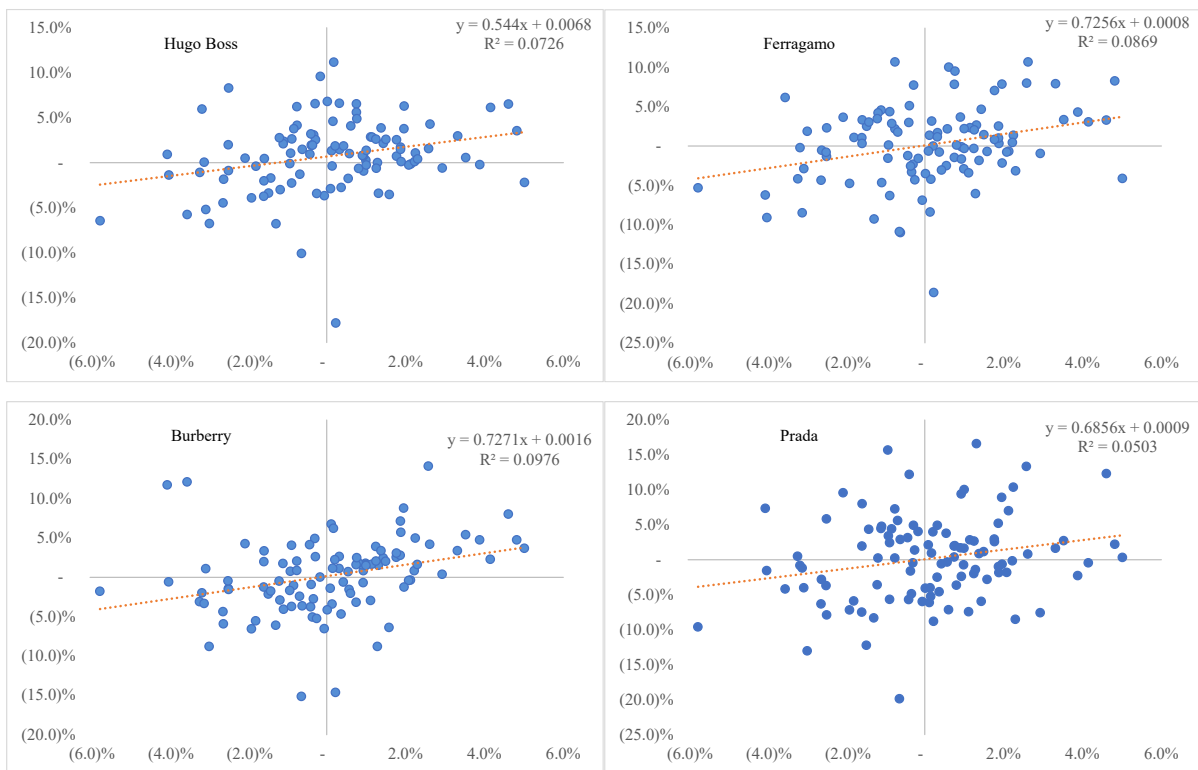
## Appendix 8.20 – EssilorLuxottica Historical Beta Reversion (Monthly Intervals)

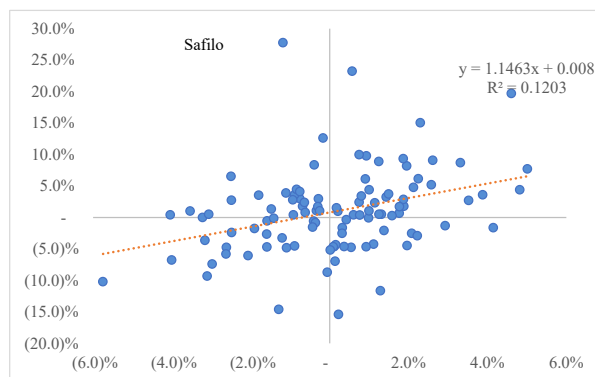
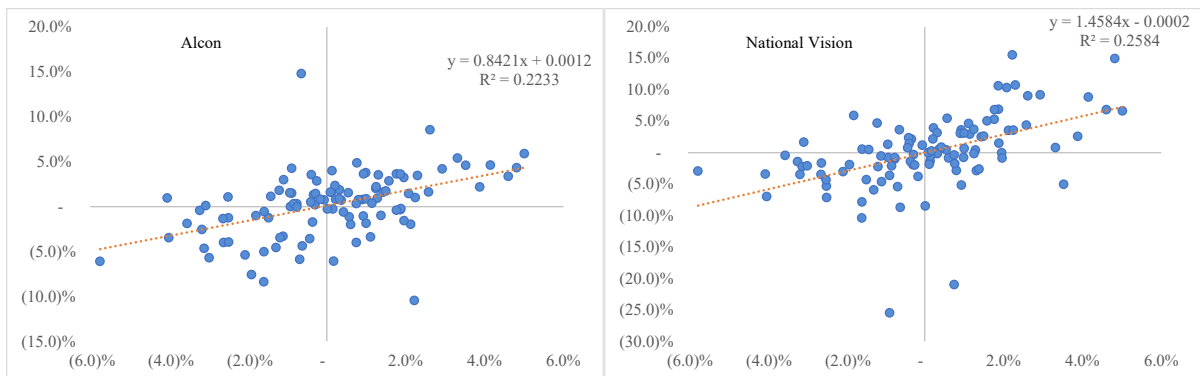
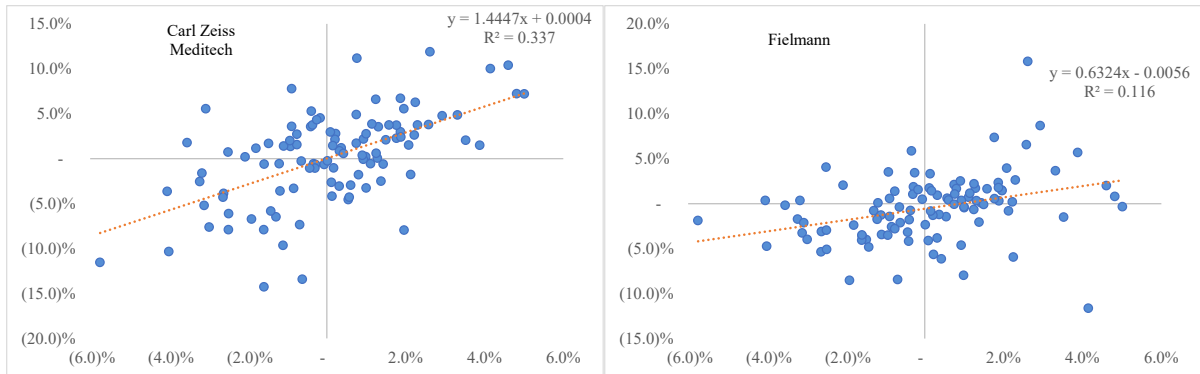
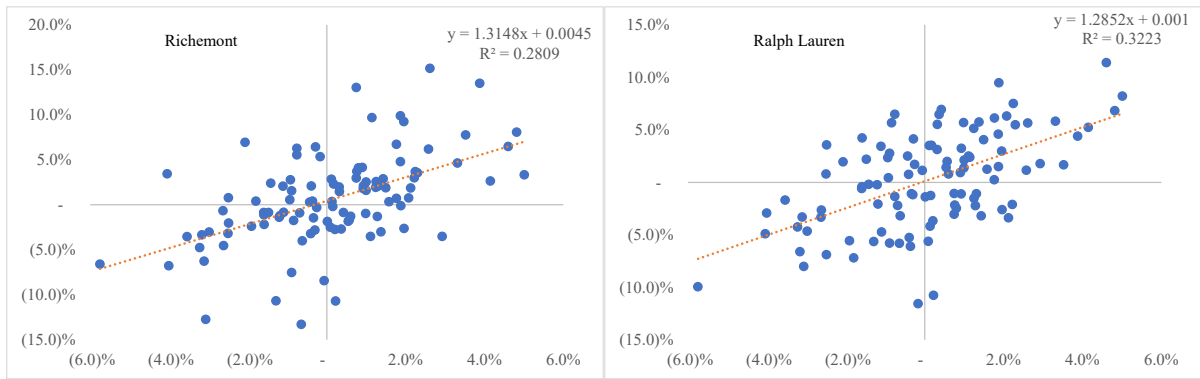


Appendix 8.21 – EssilorLuxottica Historical Beta Reversion (Weekly Intervals)

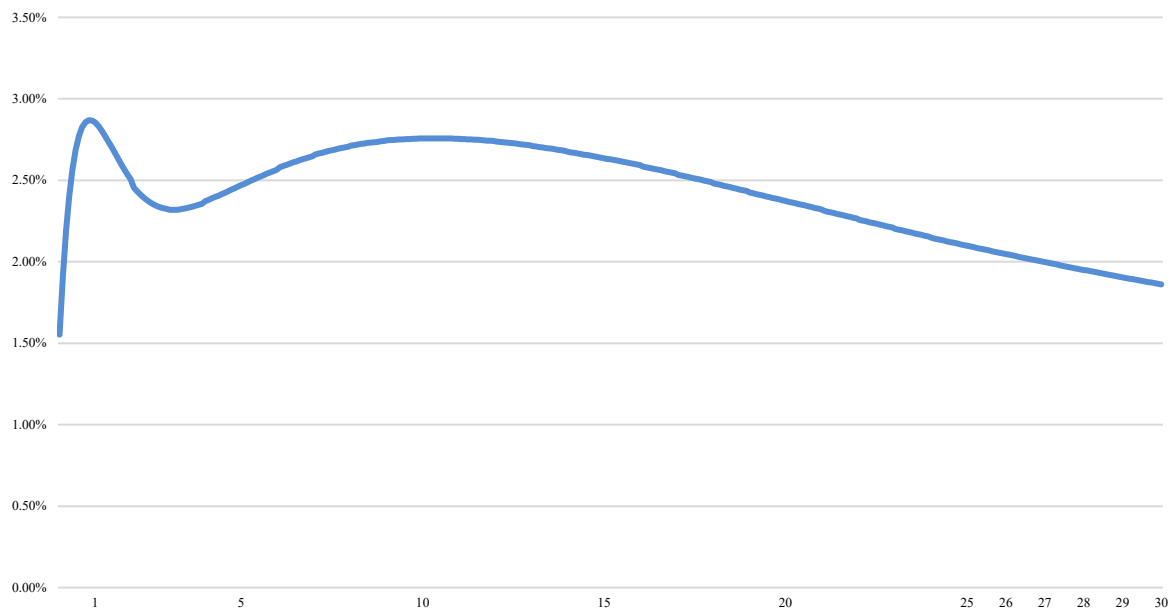


Appendix 8.22 – Peer Beta Comparison





## Appendix 8.23 – 30-year Yield Curve of AAA-rated EUR denominated bonds



## Appendix 8.24 – Sensitivity Analysis

**DCF Market Base Case**

		Perpetual Growth Rate				
		2.78%	3.20%	3.63%	4.06%	4.49%
WACC	9.37%	69,087	72,762	76,984	81,887	87,650
	8.87%	74,754	79,181	84,331	90,397	97,648
	8.37%	81,473	86,886	93,275	100,933	110,279
	7.87%	89,558	96,292	104,384	114,295	126,712
	7.37%	99,455	108,013	118,529	131,764	148,928
		Perpetual Growth Rate				
		2.78%	3.20%	3.63%	4.06%	4.49%
WACC	9.37%	127.77	135.98	145.41	156.36	169.23
	8.87%	140.24	150.12	161.63	175.18	191.37
	8.37%	155.05	167.14	181.41	198.51	219.39
	7.87%	172.91	187.95	206.02	228.16	255.89
	7.37%	194.80	213.92	237.41	266.97	305.31

**APV Market Base Case**

		Perpetual Growth Rate				
		2.78%	3.20%	3.63%	4.06%	4.49%
Cost of Equity	9.74%	68,683	72,107	76,011	80,504	85,731
	9.24%	73,707	77,754	82,418	87,849	94,255
	8.74%	79,611	84,463	90,122	96,811	104,838
	8.24%	86,638	92,549	99,550	107,974	118,304
	7.74%	95,128	102,471	111,332	122,236	135,988

		Perpetual Growth Rate				
		2.78%	3.20%	3.63%	4.06%	4.49%
Cost of Equity	9.74%	126.48	134.13	142.85	152.89	164.56
	9.24%	137.70	146.74	157.16	169.29	183.60
	8.74%	150.89	161.73	174.37	189.31	207.24
	8.24%	166.58	179.79	195.43	214.24	237.31
	7.74%	185.55	201.95	221.74	246.10	276.81

**DCF Upside Case**

		Perpetual Growth Rate				
		2.78%	3.20%	3.63%	4.06%	4.49%
WACC	9.37%	78,322	82,505	87,312	92,894	99,454
	8.87%	84,773	89,813	95,676	102,582	110,837
	8.37%	92,423	98,584	105,858	114,577	125,217
	7.87%	101,627	109,292	118,506	129,788	143,925
	7.37%	112,894	122,636	134,609	149,676	169,217

		Perpetual Growth Rate				
		2.78%	3.20%	3.63%	4.06%	4.49%
WACC	9.37%	148.45	157.79	168.53	181.00	195.65
	8.87%	162.64	173.90	187.00	202.42	220.86
	8.37%	179.51	193.27	209.52	228.99	252.75
	7.87%	199.83	216.96	237.53	262.73	294.31
	7.37%	224.76	246.52	273.27	306.92	350.56

**APV Upside Case**

		Perpetual Growth Rate				
		2.78%	3.20%	3.63%	4.06%	4.49%
Cost of Equity	9.74%	77,370	81,240	85,652	90,731	96,638
	9.24%	83,090	87,669	92,946	99,092	106,342
	8.74%	89,811	95,306	101,717	109,295	118,390
	8.24%	97,810	104,512	112,450	122,003	133,721
	7.74%	107,476	115,808	125,863	138,240	153,853

		Perpetual Growth Rate				
		2.78%	3.20%	3.63%	4.06%	4.49%
Cost of Equity	9.74%	145.88	154.53	164.38	175.73	188.92
	9.24%	158.66	168.89	180.67	194.40	210.60
	8.74%	173.67	185.95	200.27	217.19	237.51
	8.24%	191.54	206.51	224.24	245.58	271.75
	7.74%	213.13	231.74	254.20	281.84	316.71

**DCF Downside Case**

		Perpetual Growth Rate				
		2.78%	3.20%	3.63%	4.06%	4.49%
WACC	9.37%	59,042	62,129	65,678	69,798	74,640
	8.87%	63,803	67,523	71,851	76,949	83,042
	8.37%	69,450	73,998	79,367	85,802	93,656
	7.87%	76,244	81,902	88,702	97,030	107,465
	7.37%	84,560	91,751	100,589	111,710	126,133

		Perpetual Growth Rate				
		2.78%	3.20%	3.63%	4.06%	4.49%
WACC	9.37%	105.27	112.17	120.09	129.30	140.11
	8.87%	115.75	124.06	133.72	145.11	158.72
	8.37%	128.19	138.35	150.35	164.72	182.26
	7.87%	143.20	155.84	171.03	189.63	212.93
	7.37%	161.60	177.66	197.40	222.24	254.46

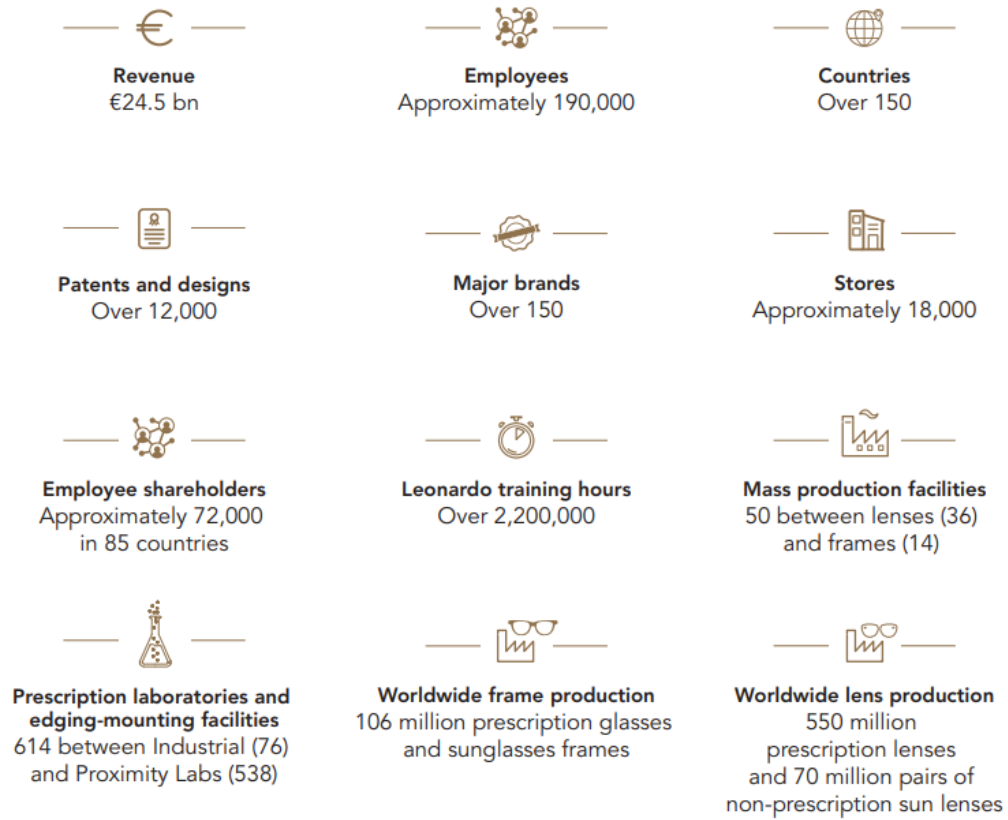
**APV Downside Case**

		Perpetual Growth Rate				
		2.78%	3.20%	3.63%	4.06%	4.49%
Cost of Equity	9.74%	59,260	62,170	65,487	69,306	73,747
	9.24%	63,482	66,915	70,871	75,478	80,911
	8.74%	68,443	72,552	77,346	83,009	89,803
	8.24%	74,348	79,348	85,268	92,389	101,119
	7.74%	81,483	87,685	95,168	104,374	115,979

		Perpetual Growth Rate				
		2.78%	3.20%	3.63%	4.06%	4.49%
Cost of Equity	9.74%	105.44	111.93	119.34	127.87	137.79
	9.24%	114.87	122.53	131.37	141.66	153.79
	8.74%	125.95	135.12	145.83	158.48	173.66
	8.24%	139.13	150.30	163.52	179.43	198.93
	7.74%	155.07	168.93	185.64	206.20	232.12

## Appendix 8.25 – EssilorLuxottica at a Glance

## Key figures



Appendix 8.26 – EssilorLuxottica Brands



Pure Online

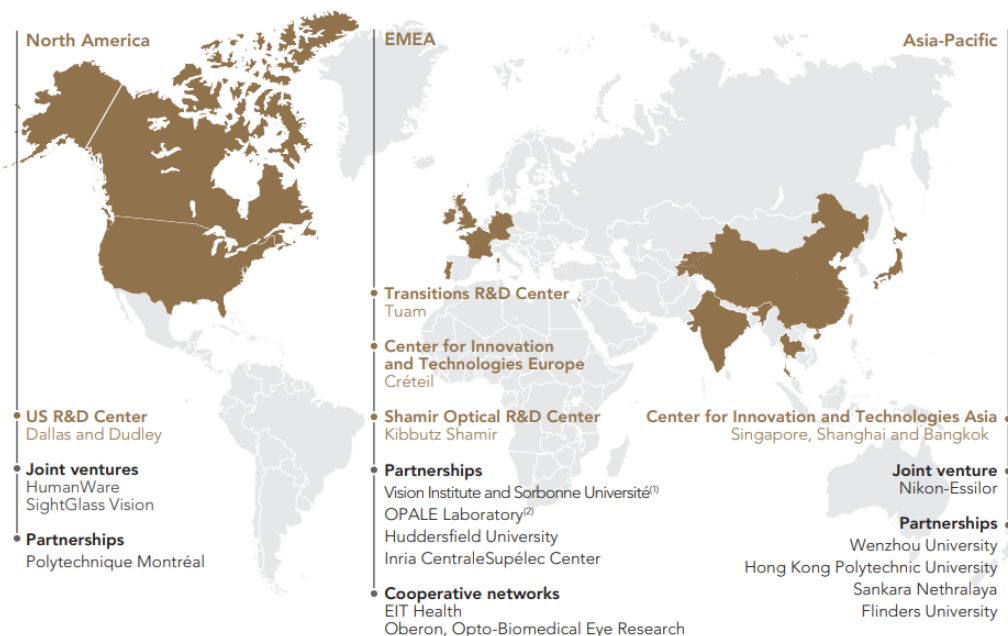


## Appendix 8.27 – R&amp;D

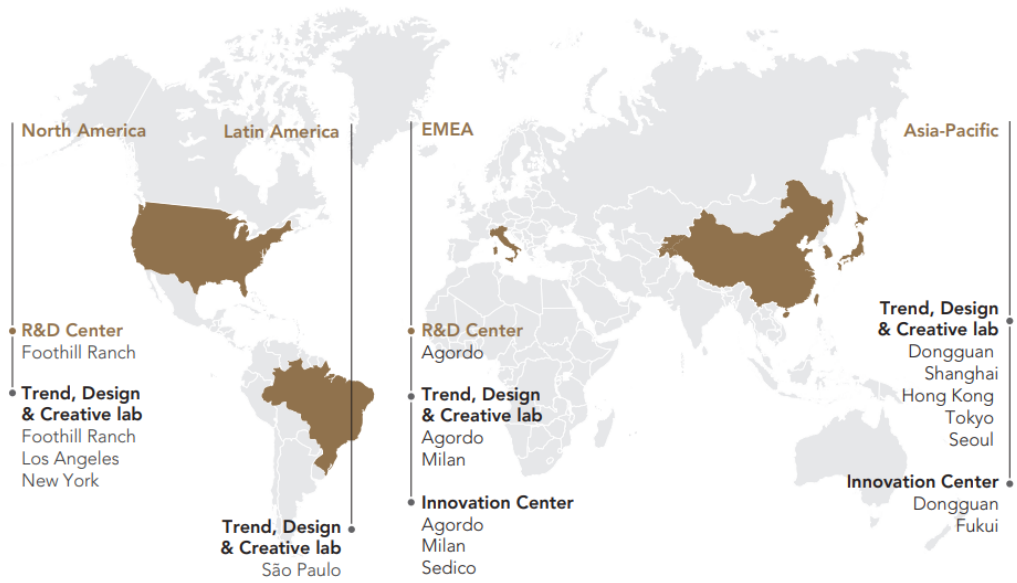
In total, the company owns over 12,000 patent families, over 1,800 design protections, and over 4,000 trademark families in the areas of:

- i. vision care developing new solutions centered around myopia management (advanced single vision), presbyopia (near-vision management), light management, and lens protection,
- ii. eyewear design and technological innovation both focused on innovation of industrial designs and frame technologies,
- iii. smart eyewear to foster innovation in the increasingly growing wearables space which includes eye tracking, e-focus, and in general the harmonization of glasses with virtual realities,
- iv. sun lenses which aim at enhancing the experience for sunglass customers via mirror coating, Prizm contrast enhancement, and printing technologies,
- v. digital transformation focusing on digitizing the traditional customer experience,
- vi. and sustainability to reduce the company's environmental footprint.

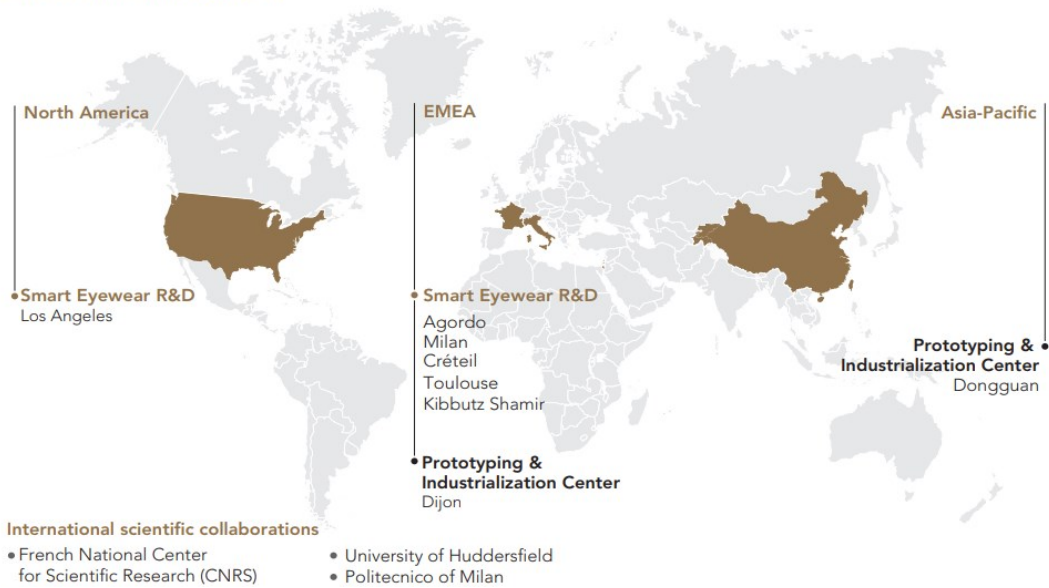
## R&amp;D network: Vision care



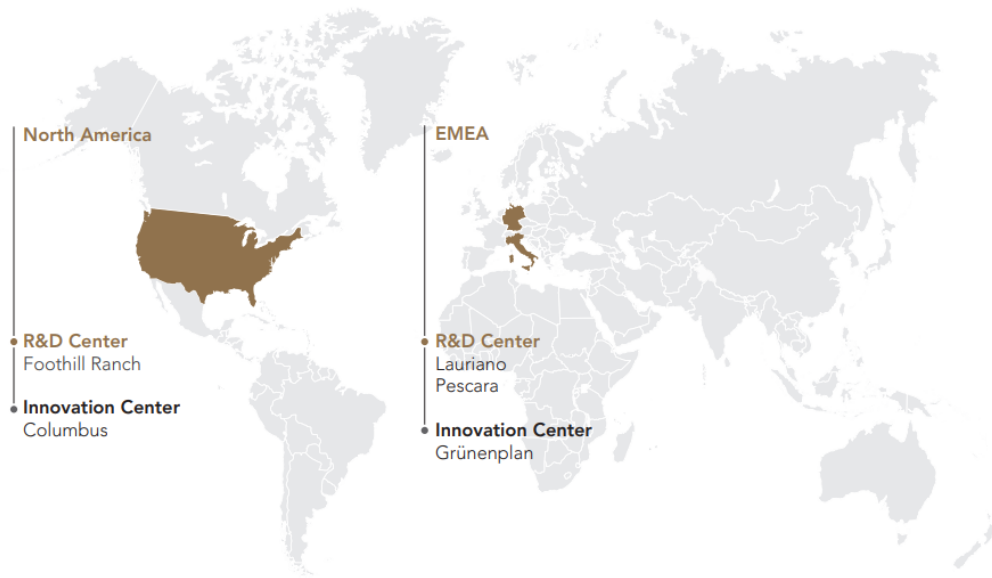
R&D network: Eyewear design and technological innovation



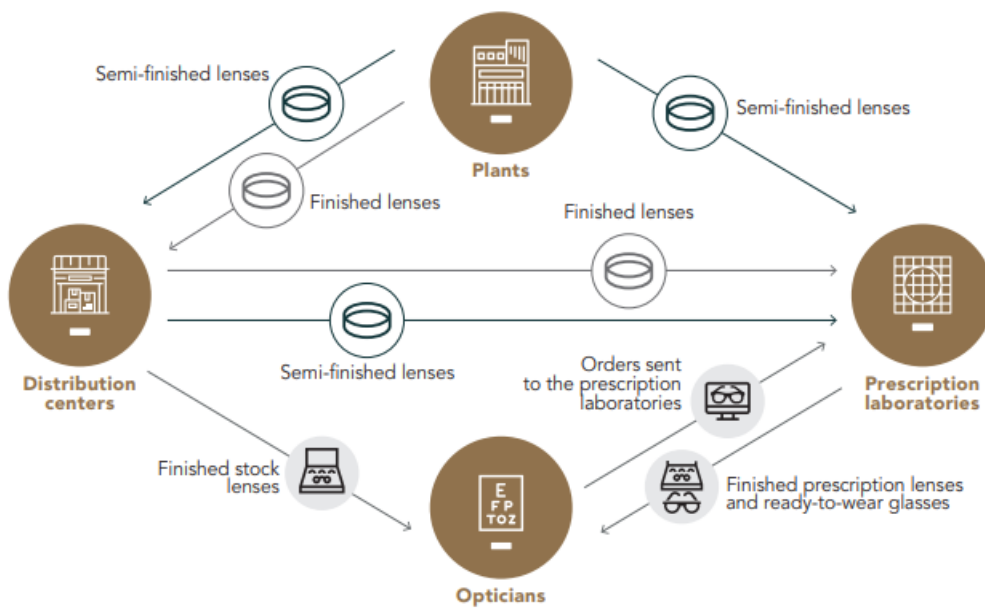
R&D network: Smart eyewear



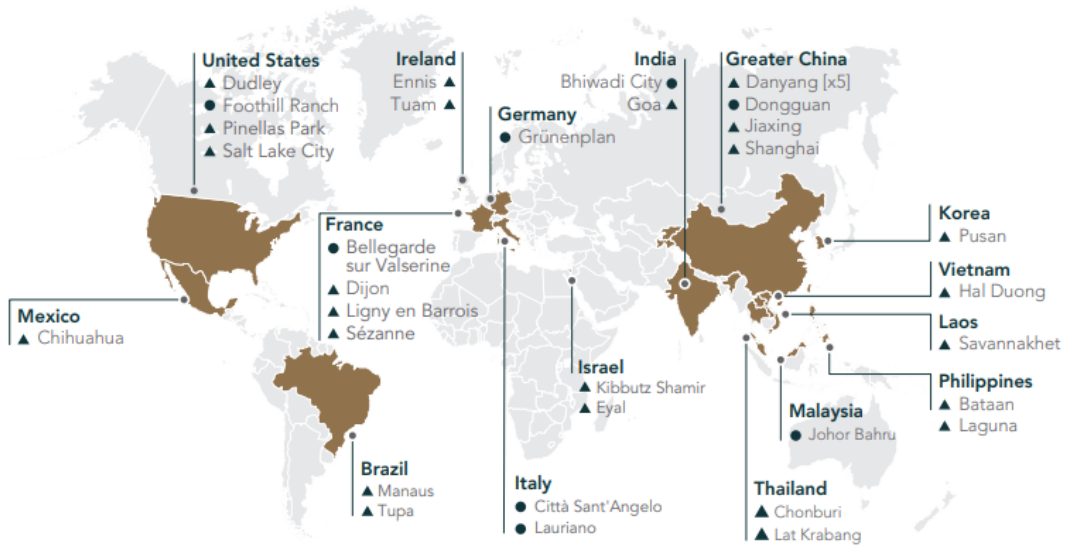
R&D network: Sun lenses



Appendix 8.28 – Value Chain



Appendix 8.29 – Manufacturing Footprint – Eyecare



Appendix 8.30 – Manufacturing Footprint – Eyewear



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