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TITLE: Equity Valuation: LVMH case study

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Abstract

This thesis dives into the complexities of business equity valuation through a comprehensive case study of LVMH Moët Hennessy Louis Vuitton SE (LVMH), a global leader in luxury goods.

The study begins with a walk through theoretical aspects of valuation methodology, out of which I choose to use the Discounted Cash Flow methodology with a sum-of-the-parts approach where a period between 2024 and 2033 is explicitly forecasted.

The model's assumptions are backed by industry, macroeconomic and company research which has been done previously. Additionally, the results are supported by Relative Valuation methodology.

Keywords: LVMH, Luxury Industry, Equity Valuation Methods, Value Firms, Investor Perspective

JEL codes: G12, G17

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1. INTRODUCTION

In the fast-paced world of finance, equity valuation emerges as a fundamental practice, providing investors with insights into the intrinsic value of a company. Often considered as an *art* rather than a science, equity valuation is essential for investors seeking to make informed decisions in the financial markets.

After completing university courses such as Finance and Capital Markets, where I gained a comprehensive understanding of security valuations and explored diverse perspectives on market dynamics, I found myself eager to expand my knowledge in this field. Inspired by the fundamental concepts I learned and the multifaceted approaches to analyzing markets, I felt compelled to delve deeper into the intricacies of equity valuation.

This thesis immerses itself in this *art* focusing on a prominent player in the luxury goods industry: LVMH Moët Hennessy Louis Vuitton SE (LVMH). Through a meticulous examination of LVMH's financial performance, market positioning, and industry dynamics, this study aims to offer a comprehensive analysis of the company's valuation drivers and potential investment opportunities.

LVMH represents a convincing case study due to its unmatched presence in the luxury sector, under the umbrella of a diversified portfolio of prestigious brands across fashion, wines and spirits, perfumes and cosmetics, watches and jewelry, and selective retailing. As the world's leading luxury conglomerate, LVMH has demonstrated resilience and innovation amidst evolving consumer preferences and economic fluctuations.

This research will employ a series of valuation methodologies complementing each other and considering various scenarios aiming to provide a meticulous understanding of LVMH's valuation dynamics.

2. THEORETICAL FRAMEWORK

2.1 Value vs growth

The Present Value of Growth Opportunities (PVGO) *(Corporate Finance Institute* (CFI), 2024) model allows us to break down the value of a stock into two different categories: the value of the fundamentals of the company in the present on one hand and the present value of growth opportunities on the other. Based on that we can formulate the following equation:

$$Value\ of\ stock = Value\ of\ fundamentals + PVGO \tag{1}$$

Which can then be restated as:

$$PVGO = Value\ of\ stock - Value\ of\ fundamentals \tag{2}$$

The value of fundamentals can be calculated as:

$$Value\ of\ fundamentals = \frac{Earnings\ Per\ Share}{Required\ Return\ on\ Equity} \tag{3}$$

The Required Return on Equity (R_e) can be calculated mainly in two different ways (CFI, 2024a): one based on the Capital Asset Pricing Model (CAPM) and the other one based on the Dividend Capitalization Model. The latter can only be applied to companies that pay dividend and we have to assume that they will grow at a constant rate. The formulas for each model are respectively:

$$R_e = r_f + \beta_i(E(R_M) - r_f) \tag{4}$$

Where:

R_e = Required Return on Equity

r_f = Risk Free Rate

β_i = Beta of stock i

$E(R_M)$ = Expected market return

And, for the Dividend Capitalization Model:

$$R_e = \frac{D_1}{P_0} + g \quad (5)$$

Where:

R_e = required Return on Equity

D_1 = dividends per share next year

P_0 = current share price

g = dividend growth rate

After we calculate the PVGO of a certain stock, we can assess which percentage of the price of the share is implicitly given by the growth opportunities by dividing PVGO over the Share Price. A high percentage, typically over 50%, will mean that we can consider the stock to be a *growth* one rather than a *value* one. This differentiation has important implications for the (over)valuation of a given stock.

In a study conducted by Estrada (2022), the hypothesis that a high PVGO/P ratio would deliver low long-term market returns, meaning that the stocks were overpriced in nature, was tested. The results show that for the S&P 500 between 1872 and 2021, the average 10-year forward annualized nominal return of stocks with a PVGO/P below 40% was 14.5%, while for stocks with PVGO/P over 40% the returns were less than half, at 7.1%. Furthermore, it was found that the correlation between PVGO/P and nominal returns was a negative 0.44.

The results obtained by the author validate its initial hypothesis that *growth* stocks tend to perform worse in the long run than *value* stocks.

2.2 Approaches to company's valuation methods

When assessing a company's value there are different methods available to be used that can yield different values. Since valuation is not an exact science and many different assumptions and inputs can be used, there is no method that works the best for all cases. Models can be complex and have an infinite number of variations, however, according to Damodaran (2006), there are three main approaches: discounted cash flow (DCF) valuation, relative valuation and contingent claim valuation. In this valuation thesis I have opted to use the two first approaches mentioned, DCF valuation and relative valuation, for several reasons.

DCF valuation is probably the most widely spread valuation method and is central to valuation approaches used by other authors (Allman, 2010; Koller et al., 2015). It requires the analyst to have a good understanding of the business and assess the sustainability of the operations. DCF approaches are contrarian in nature (Damodaran, 2006) since they look for stocks whose prices are below their fundamental value, typically going against market perceptions. As mentioned in 1.1, this *contrarian* strategy has been proven to deliver better results historically than the strategy of investing in *growth* stocks (Estrada, 2022). Additionally, the DCF method is especially useful when it is applied to a multi-business company, since the value of the company can be approached by the sum of its parts (Koller et al., 2015). This is the case of the LVMH group, and I will use the DCF method as the main valuation tool in this thesis.

Furthermore, I have also chosen to employ the relative valuation method. It will be applied as a secondary approach in this thesis. Thanks to its simplicity, I will take advantage of that and use it as a control method to assess if the valuation derived from the DCF method is within an acceptable range in its market segment.

2.3 Discounted Cash Flows method

Following the framework provided by Koller et al. (2015), I will use what he calls an "enterprise discounted cash flow".

Before getting into details about calculating the DCF, we must first understand the logic behind the model. The main idea here is that the value of the company is the net present value of all the future cash flows it will generate, so we are essentially valuing an asset the following way (Damodaran, 1994):

$$Value\ of\ asset = \frac{E(CF_1)}{(1+r)} + \frac{E(CF_2)}{(1+r)^2} + \frac{E(CF_3)}{(1+r)^3} + \cdots + \frac{E(CF_n)}{(1+r)^n} \quad (6)$$

Where:

n = life if the asset

$E(CF_t)$ = expected cashflow in period t

r = discount rate

When applying this valuation we face basically two challenges: correctly estimating the future cash flows and choosing a discount rate.

As per the discount factor to use, we must keep in mind that in the enterprise DCF the free cash flows are available to all investors, both equity holders and lenders of capital. Therefore, we must use a discount factor that weighs in the risk faced by all individuals.

The risk faced is accounted by the required rate of return that investors in the company demand, either debt or equity investors. The Weighted Average Cost of Capital (WACC) provides a unique discount rate that takes into account all investors (Koller et al., 2015). It is calculated as follows:

$$WACC = \frac{D}{D+E} k_d (1 - T_m) + \frac{E}{D+E} R_e \quad (7)$$

Where:

D = debt

E = equity

k_d = cost of debt

R_e = cost of equity (obtained from equation 4)

T_m = marginal tax rate

To estimate the cost of debt for an investment-grade company (BBB or above according to Standard &Poor's), it is generally accepted to use the yield to maturity of long-term bonds (Koller et al., 2015). The reason to use this measure and not just the interests paid over total debt is that we are considering the cost the company would have to raise debt at the current market rate. In addition, it is considered that companies with investment-grade ratings have a marginal probability of not being able to pay back its debts that it is considered irrelevant.

However, even though applying the WACC as the discount factor is simple and relatively straightforward, it has some disadvantages. The main one being that it provides us a static *picture* of the company, thus we are implicitly assuming that the debt to equity structure of the company will not change during the DCF period, which may not be fully accurate. Therefore, WACC-based models will work best when a company maintains a stable debt to equity ratio (Koller et al., 2015).

Regarding the estimation of cash flows we face the inherent uncertainty about future cash flows. This is tackled by (i) Dividing the future into a forecast period and a terminal period (see figure 1 below) and (ii) Doing a set of assumptions (inputs) that will help us with estimating the future cash flows.

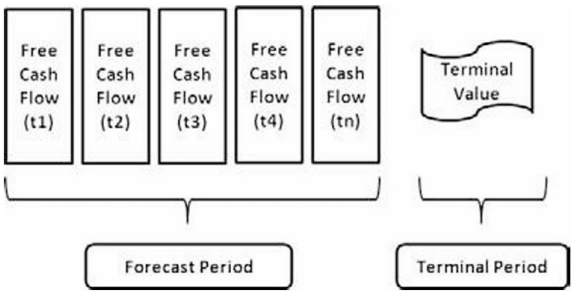

Figure 1. Forecasting future cash flows. Source: Keith Allman: Corporate Valuation Modeling: A Step-by-Step Guide.

The forecast period is typically 3-5 years (CFI, 2024b), since beyond that period (for most businesses) the predictions become a *guessing game*. That is where using the Terminal Value (TV) of the business comes handy. The formula to calculate the Terminal Value is as follows (CFI, 2024b):

$$Termial\ Value = \frac{E(CF_n)(1+g)}{(WACC - g)} \quad (8)$$

Where:

$E(CF_n)$ = expected cash flow in year 1 of Terminal Period

g = perpetual growth rate of FCF

WACC = weighted average cost of capital

The cash flow measure we are going to use in this valuation, since we are trying to determine the enterprise DCF, is known as Free Cash Flow to the Firm (FCFF). It takes into account the cash available to all firm investors, both equity and debt investors. To arrive to the FCFF value, we are going to follow the method used by Koller et al. (2020).

The first step is to calculate the Normalized Operating Profits After Taxes (NOPAT). The simplest way to calculate it is to start from the net income and add back the interest expense to then subtract the interest tax shield (that is, the amount of taxes we save by interest payments being tax deductible).

Once we have calculated the NOPAT, we can work our way down to FCFF by doing several adjustments. First of all, we have to add back depreciation and Amortization (D&A), which was subtracted when calculating net income, since it is a non-cash expenditure. Then, we add (subtract) the decrease (increase) in operating or net working capital (NWC). Finally, we have to subtract the CapEx net of disposals to arrive to the FCFF.

Now, we can reshape the net present value formula used at the beginning of the section in order to arrive to the formula for the enterprise discounted cash flow valuation method:

$$Enterprise\ Value = \frac{E(CF_1)}{(1+WACC)} + \frac{E(CF_2)}{(1+WACC)^2} + \frac{E(CF_3)}{(1+WACC)^3} + \cdots + \frac{TV}{(1+WACC)^n} \quad (9)$$

Notice that this formula provides us with the enterprise value of the company, which gives us the estimated value of the entire company. To arrive at the equity value per share, which is the goal of this thesis, we must first follow the following formula (CFI, 2024c):

Equity Value = Enterprise Value – Debt and Debt Equivalents – Non-Controlling Interests – Preferred Stock + Cash and Cash Equivalents (10)

Then, we divide the equity value by the outstanding number of shares to get the value per share.

2.4 Relative valuation method

As mentioned, for the second part of the analysis I will use the so-called relative valuation method. Far from being as sophisticated and flexible as a DCF approach, this method can yield substantial benefits thanks to its simplicity. Additionally, relative valuation also considers the market momentum, something that is not taken into account when performing a DCF and will be useful to gain some insight on it. However, it could also lead to erroneous conclusions if we do not use it properly and in a superficial way.

The basic idea behind using multiples for valuation is that similar assets should sell for similar prices, whether they are houses or shares of stock (Koller et al., 2015).

There are two components to relative valuation (Damodaran, 2006). The first idea is that to value assets on a relative basis, we must have standardized prices. In order to do so, we usually use multiples of some common variable. These multiples are categorized into four different groups according to Damodaran (2006): earnings firms generate, book value, revenues or sector-specific measures. The most commonly used variety are earning multiples (Koller et al., 2015). The second component is to find similar assets, which is not an easy task since there are no identical assets. Typically, there will be many fundamental differences across firms (i.e. growth), meaning that we should try to adjust multiples to account for these differences, or at least be aware that they will distort the multiples we get.

In this valuation thesis I have opted to use three different multiples: Price to Earnings Ratio (PER), Enterprise Value to EBITDA (EV/EBITDA) and Price to Earnings to Growth (PEG). The formulas to calculate them are as follows:

$$PER = \frac{Share\ Price}{Earnings\ per\ Share} \tag{11}$$

$$EV/EBITDA = \frac{Enterprise\ Value}{EBITDA} \tag{12}$$

$$PEG = \frac{PER}{Growth\ of\ earnings\ in\ next\ few\ years} \tag{13}$$

The rationale behind my choices was made following the paper by Fernández (2002). The author exposes the most applied valuation methods by Morgan Stanley Dean Witter's analysts for valuing European companies. PER and EV/EBITDA multiples rank first and second respectively as the most used ones. Additionally, I have chosen them both as I believe they complement each other well since PER values equity with respect to net income while EV/EBITDA takes into account the whole capital structure with respect to operational performance. Furthermore, PEG was chosen as it is one of the most used multiples when valuing luxury goods firms (Fernández, 2002) and it adjusts for growth, something not regarded in with PER and EV/EBITDA.

3. INDUSTRY ANALYSIS

3.1 Luxury fashion industry

Before getting into the details and characteristics of the luxury fashion industry, where we could classify LVMH into, we must first address a key issue which does not have a clear response from previous literature: what is luxury?

If we asked people to name luxury fashion brands we would most likely get responses such as Gucci, Chanel, Dior, Louis Vuitton or Prada; or at least these five brands are the ones with most consumer awareness in the US according to a Statista survey as of November 2023. However, if we asked them to define what luxury is, the answers would be quite diverse, since luxury has an important individual and subjective component, meaning that its perception depends on factors that vary according to levels of economic development, cultures, and personal perspective (Donzé, 2023).

In an attempt to provide a new usable definition of what a luxury brand is by reviewing and summarizing previous literature, Ko et al. (2019) propose the following definition:

> "*A luxury brand is a branded product or service that consumers perceive to: 1) be high quality; 2) offer authentic value via desired benefits, whether functional or emotional; 3) have a prestigious image within the market built on qualities such as artisanship, craftsmanship, or service quality; 4) be worthy of commanding a premium price; and 5) be capable of inspiring a deep connection, or resonance, with the consumer.*"

Another important drawback identified by Donzé (2023) when trying to establish the boundaries of the luxury sector, is that unlike other industries where the categorization is defined by their products (automotive, beverages, etc.), services (finance, consulting, etc.) or manufacturing processes (chemicals), luxury is defined by a market segment, in this case the highest one.

In an attempt to try and classify brands within the industry for a more comprehensive and visual approach, I have made the following segmentation which ranges from mass-market goods to supreme luxury, going through premium and luxury segments. See Figure 2 below:

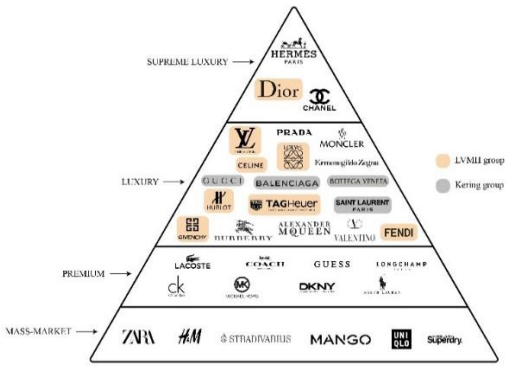

Figure 2. Fashion brands segmentation. Source: Own design.

As we can see, LVMH positions within the high end of the luxury segment. However, we must also note that the firm, and particularly in the US, has an important number of sales coming from the "aspirational consumer". That would indicate a positioning of the group which is not in the supreme luxury segment overall.

In line with previous discussions, the reputation of a firm being a luxury one is something which has a big base on the consumer perception. Maintaining that feeling of luxury is one of the biggest competitive advantages of LVMH and something that is always a top priority for the firm. One way to achieve that is their pricing policy, where they will never sell items on discount, even if it would make sense economically, so they maintain their perceived exclusivity. Other exceptional qualities of LVMH, mentioned in the luxury definition by Ko et al. (2019), is its artisanship and maintenance of tradition; and an outstanding customer service.

Based on firm characteristics and market positioning, the main competitor of LVMH is the French conglomerate Kering, with brands such as Gucci or Balenciaga.

An important consideration when analysing the luxury market are the microeconomic characteristics of the luxury items. In a typical market we would have a downward slopping demand curve, such that the quantity demanded of a certain good will decrease as price increases. This is not the case in the luxury industry. In our case, we have the so-called *Veblen goods*, whose demand increases as the price does so. They are high-quality, luxury items that people purchase to inflate their self-esteem (Chen, 2023). The main rationale behind the behaviour in *Veblen goods*' markets is that the high price offers a sense of exclusivity to its buyers who are typically affluent individuals. If its price was to be reduced, it would diminish its appeal by reducing the sense of exclusivity or high-quality while still being too expensive for the mass market consumer.

When assessing geographical segmentation, the industry, as one could expect, has special relevance when it comes to revenue generated in developed countries. We also must note a significant presence in the market by Asian consumers, in particular Chinese and Japanese ones. See figure 3 below:

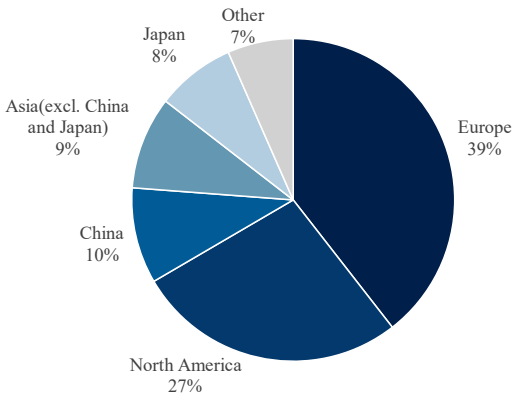

Figure 3. Luxury fashion revenue by geography 2023. Source: Own work, Statista Market Insights.

This presence by Asian consumers is even more notable in the case of LVMH, where 38% of total revenue in 2023 came from Asia. Moreover, we must keep in mind the importance in the sector, as noted by KPMG (2022) report, of the Chinese traveller who often looks for tax relief by spending abroad. That means that the actual percentage coming from Chinese population is probably higher and Chinese economy has a big impact in the industry.

Looking ahead, the market is positioned for a solid growth. According to various estimates from Statista, McKinsey and Mordor Intelligence, the fashion luxury market is expected to grow at a CAGR between 4-6% over the next five years.

McKinsey mentions in its report that in normal conditions, they would expect growths of between 5-7%. At the time these reports were written, the economic uncertainty was bigger. That doesn't seem to be the case anymore, with equity markets near all-time highs. Potential catalysts identified in their report are the ability to raise prices above inflation and reduced cost pressures.

3.2 Macroeconomic Environment

Luxury brands biggest competitive advantage is consumer brand perception, and it is not likely to go away in the short term. I have identified two main factors which could be relevant headwinds for the industry: inflation and GDP growth.

Firstly, inflation has been on the rise since 2021, hurting consumer purchasing power. However, thanks to the characteristics of the industry and its target consumer, this has not been a huge concern for luxury firms who have been able to increase their prices without affecting demand. For instance, in 2022 LVMH handbags prices grew by more than 20%, with consumers continuing to demand the product. Even if this effect is bearable in the short term, in the long term this strong standing might be challenged (KPMG, 2022). One of the main factors contributing to consumers' resilience during the high inflation period is the excess saving that were generated during the Covid-19 lockdown.

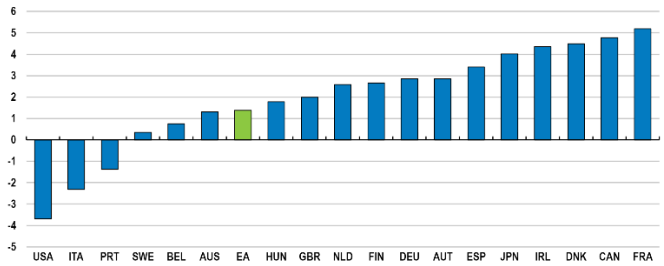

Figure 4. Change in excess savings over the two years to 2023Q3, in percentage points of disposable income. Source: OECD, Quarterly National Accounts database, OECD Interim Economic Outlook and OECD calculations.

As we can see in figure 4, USA has been the country with the greatest depletion of excess savings, while it has remained positive in many other countries. This effect has had an impact on the luxury goods expenditure, as noted by LVMH's CFO Jean-Jacques Guiony in the Q2 2023 earnings call where he mentioned that the aspirational customer in the US was suffering a bit.

Apparently, and according to OECD (2024) inflation forecast, we have left behind the worst inflation data and should be coming back down to central banks' targeted levels by 2025. See figure 5 below:

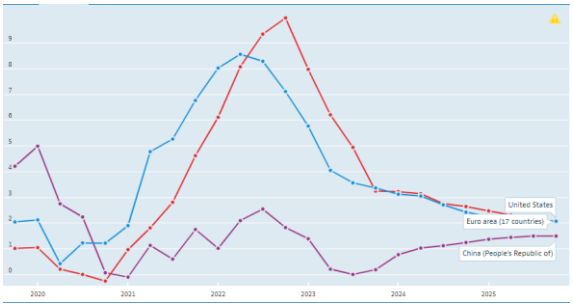

Figure 5. Historic and forecasted inflation. Source: OECD Data.

With the fast-rising inflation, ECB started increasing interest rates in July 2022 to ensure its primary objective: to maintain price stability. With numerous hikes between July 2022 and September 2023, interest rates in the Euro area returned to the positive after more than a decade. The speed at which interest rates have increased is unprecedented, and as we have seen in the US with some banks going bankrupt, it put financial markets into a lot of stress. Not only financial institutions and companies were affected by higher borrowing costs, but consumers also suffered the consequences too. However, after more than a year full of uncertainty, it seems that the centrals banks are close to their objective of achieving a *soft-landing* with the possibility of interest rates cuts going into H2 2024.

Another potential risk for the industry would be a deceleration of the GDP growth, causing consumer to cut spending on non-essential items. This has been an ongoing concern recently due to the restrictive monetary and fiscal policies adopted by central banks in an effort to fight the rising inflation. The reality in 2023 has been that global growth has proved resilient, with strong growth in the US and inflation declining quicker than anticipated. Annual GDP growth in the United States is projected to remain supported by household spending and strong labour market conditions, but moderate to 2,1% in 2024 and 1,7% in 2025. Euro area GDP growth is projected to be 0,6% in 2024 and 1,3% in 2025, with activity held back by tight credit conditions in the near term before picking up as real incomes strengthen (OECD, 2024b).

On the other hand, the evolution of the Chinese economy may be the biggest risk for the luxury industry since it represents an important percentage of its revenues. Chinese

GDP grew 5,2% in 2023, an increase with respect to the 3% of 2023. However, it has gone off track when compared to the 6% before the pandemic. Outlook is not great either, with IMF consensus for 2024 being at 4,6%. The main risks surrounding Chinese economy are the real estate market, local government debt and supply chain relocations, with the main one being real estate instability (BBVA Research, 2024). That being said, the author believes that no systemic financial risks exist in China given the prudent monetary policy (which is expansionary).

Geopolitical tensions in the Middle East are a significant near-term risk since they could disrupt the energy market which would in turn produce an unexpected increase in inflation rates (OECD, 2024b).

To conclude, macroeconomic conditions seem to be favourable looking ahead, with inflation being under control and on path to central banks' intended levels. Growth in US and Europe seems to be picking up again with positive expectations of the coming years, following a sustainable growth path. However, we must look out for slower than expected growth in China or geopolitical factors.

4. COMPANY ANALYSIS

4.1 LVMH overview

LVMH Moët Hennessy Louis Vuitton SE, commonly referred to as LVMH, is a multinational luxury goods conglomerate headquartered in Paris. LVMH itself was established in 1987 after the merger of Louis Vuitton and Moët Hennesy, hence the nowadays company's name. However, the brand history goes way back than 1987. Louis Vuitton was founded in 1854 as a custom design boxes and trunks artisanal maker, fulfilling its clients' needs of transporting individual objects in a comfortable and safe way. Moët Hennesy itself was also established in a merger in 1971, between Moët & Chandon (the champagne producer founded in 1743) and Hennessy (the cognac producer founded in 1765).

The nature of the LVMH merger in 1987 was not to benefit from synergies or realize economies of scale, rather it was a defensive merger to be less vulnerable to a hostile acquisition by activist investors since both companies, Louis Vuitton and Moët Hennessy, were publicly traded companies because the families did an IPO on minority stakes to monetize its ownership of the company.

A few months after the foundation, the nowadays LVMH CEO and key person in its history comes into play: Bernard Arnault. He was at that moment the owner of the fashion brand Christian Dior. After a brilliantly played *chess game* involving thoughtfully designed financial engineering involving the LVMH owner families, the Irish company Guiness and the investment bank Lazard, Bernard Arnault manages to acquire enough holdings in LVMH to gain control of the company in 1989. This history, perfectly explained by Forestier et al. (1992), is a very interesting case but beyond the scope of this thesis.

Since its foundation in 1987 the group has grown into the worlds' leader in the luxury industry with a comprehensive portfolio of brands across various sectors. The historic relevance of its brands give the French conglomerate a unique position in the industry. As of April 2024 LVMH is the 19th largest company in the world and the 2nd one in Europe, just behind Novo Nordisk, by market capitalization (*CompaniesMarketCap.Com*).

LVMH operates under five main different segments: wines & spirits, fashion & leather goods, perfumes & cosmetics, watches & jewellery, and selective retailing. In addition to that, they also report an "other activities segments" which includes brands such as *Le Parisien* in the press sector or *Cheval Blanc* in the hotels sectors.

Overall, the group develops its activity through 75 different brands, or *maisons* as they call them. Some of the most iconic brands include Moët & Hennesy, Dom Perignon or Ardbeg in the wines & spirits segment; Louis Vuitton, Christian Dior or Loewe in the fashion & leather goods segment; Guerlain, Givenchy or parfums Dior in the perfumes & cosmetics segment; Tiffany, Bulgari or TAG Heuer in the watches & jewellery segment; and Sephora or Duty Free Shoppers in the selective retailing segment.

The company has a diversified geographic presence all over the world. The main geographical segment for the company is Asia (excluding Japan), which represents 31% of the total revenue in 2023. It is closely followed by United States and Europe, accounting for 25% each. Then, Japan and other markets represent 7% and 12% of the total sales respectively. This distribution of sales has remained relatively stable during the last decade.

Following the industry segmentation done in section 3.1, we can clearly see that LVMH is positioned in the luxury segment with the vast majority of its *maisons*. Through their carefully thought marketing and product development, LVMH tries to maintain their brand exclusivity and craftmanship. People buy their products as a sign of a certain social status and are willing to pay a premium to achieve that. That is one of the reasons why we will never see LVMH products sold at a discount, and they even prefer to destroy the unsold products.

Now we will jump into a more quantitative analysis of LVMH, analysing the key financial figures and metrics of the group. In 2023 the group generated more than 86bn€ in revenue, an increase of 13% YoY. Since 2019 the CAGR achieved in terms of revenue has been 12,56%, which is especially significant taking into account that Covid-19 occurred in the middle of this period. More importantly, they manage to have a high operating margin on the revenue they generate. In 2023 this margin was 26,5%, and it has been relatively stable during recent years, showing the competitive advantage and the pricing power LVMH has. Regarding capital structure, they have a solid and healthy debt position, with a net financial debt to EBITDA ratio of 1,1x.

During the last four decades LVMH has grown both organically and inorganically, with M&A being one of its key pillars to value creation. See its most notable acquisitions in figure 6 below:

Figure 6. LVMH most notable M&A and revenue growth. Source: Quartr.

Even though they have this impressive record of acquisitions, its CFO Jean-Jacques Guiony mentioned during the Q3 2022 earnings call that they have a wide enough

portfolio, and their M&A strategy is purely opportunistic since they do not have any relevant gap in a certain segment. This is something that they are certainly capable of due to their solid financial position.

One acquisition which is relevant to mention is the Tiffany & Co acquisition in 2020. The deal closed at 15.8bn$ after a series of back and forth between LVMH and Tiffany's shareholders. After just 2 years from the acquisition, Tiffany managed to exceed 1bn€ in profit, nearly double what it was making in 2020. That is a clear example of the opportunistic nature of LVMH acquisitions. The operation has delivered significant shareholder value since we could say that a multiple arbitrage was performed, with LVMH trading on average at a 25x P/E ratio while acquiring Tiffany at a year 2 after-acquisition P/E multiple of 15x.

To sum up, as a global powerhouse in the luxury goods sector, LVMH stands poised for continued success and value creation. With its unrivalled portfolio of prestigious brands, extensive global reach, and commitment to excellence, LVMH remains well-positioned to capitalize on evolving consumer trends and drive sustainable growth in the luxury market.

4.2 Historical performance

As we have seen in the previous section, the performance over the years of LVMH has been outstanding. Key to its growth has been an excellent capital allocation for many decades.

However, we must not forget that they have been operating in an industry that has outperformed the overall economy in terms of growth. LVMH, remarkedly, has grown at a much faster pace than the industry where they play a key role as the leading company nowadays. This performance can be observed in figure 7 below:

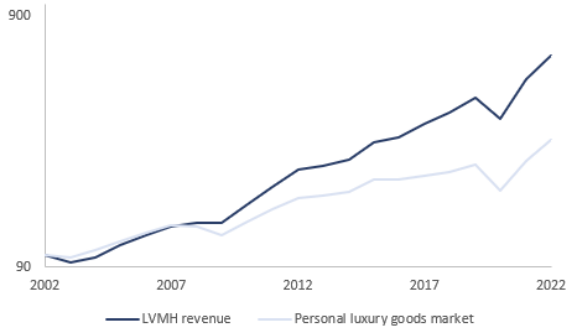

Figure 7. LVMH Revenue and Global Personal Luxury Market Size 2002-2022. Base 100, log scale. Source: Own work, Statista, S&P Capital IQ.

To be more precise, during this 20-year period, the CAGRs for LVMH's revenue and the global personal luxury market size have been of 10,1% and 5,75% respectively. The

market outperformance from LVMH seems to have accelerated during the last decade, after behaving in line with the general market in the 2000s. As of today, there are no obvious signs of why this trend shouldn't continue in the future.

When looking at interior factors driving shareholder value, the most common answer is cash generation. A business able to generate a cash surplus consistently is set for a long-term positive performance. LVMH has been able to do so for many years, hence providing good returns to its shareholders. See figure 8 below:

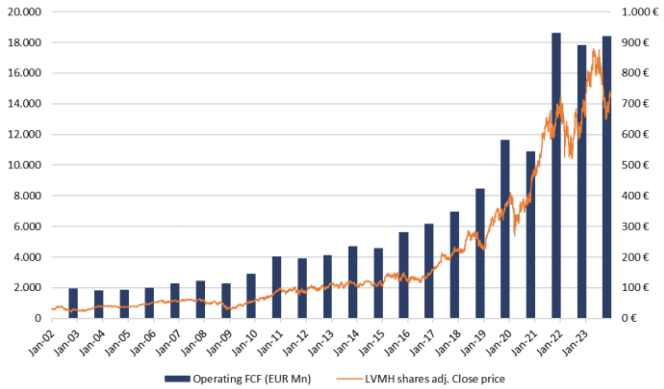

Figure 8. LVMH adjusted share price and operating free cash flow evolution 2002-2023. Source: Own work, Yahoo Finance, S&P Capital IQ.

This extraordinary performance when it comes to cash generation has led, as seen in figure 8, to a notable shareholder value creation. Nonetheless, share price increase has not been the only return given to the shareholders. LVMH has maintained an exceptional dividend policy over the last decades, allowing its equity investors to enjoy returns on top of stock performance. See figure 9 below:

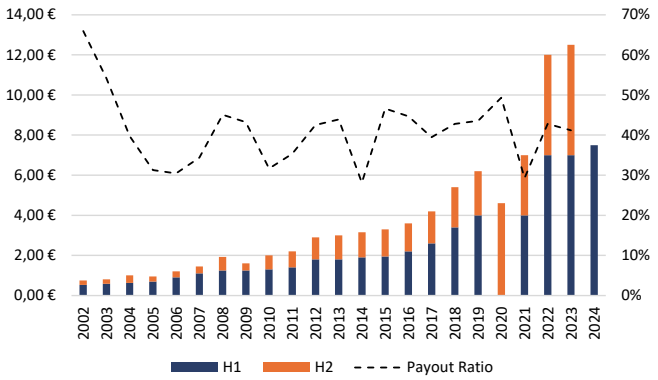

Figure 9. LVMH dividends per share in each year-half and payout ratio. Source: Own Work, Yahoo Finance, S&P Capital IQ.

In the above figure we can see how dividends per share have been increasing over the last 20 years, except briefly for periods of economic crisis. This is especially remarkable since the payout ratio has been maintained at a healthy level between 30-50%, showing that (i) there should not be any issues to keep paying dividends and (ii) there is still room to grow the dividends if considered appropriate.

Payout ratio has been calculated as follows:

$$Payout\ Ratio = \frac{Dividends\ per\ Share}{Earnings\ per\ share} \quad (14)$$

5. COMPANY VALUATION

In this section I will use the methods mentioned and analysed in section 2 in order to arrive at the fair value per share of LVMH group.

The methodology used will be a DCF model with a sum-of-the-parts (SOTP) approach, since as discussed previously, I believe is the one that fits best this case study due to firm characteristics. Assumptions applied into the model are supported by research done in section 3 and empirical data obtained from different sources.

To support the result obtained in the DCF model I will then use the relative valuation approach to compare the implicit multiples obtained with the ones of the comparable competitors in the public markets.

A sensitivity analysis will also be performed to understand the implications a potential deviation from the assumptions would have on the fair value per share.

5.1 Discounted Cash Flows approach

As mentioned before, the DCF valuation follows a SOTP approach. The segments in which the company operates and reports its results are the following: Fashion and Leather Goods; Selective Retailing; Wines and Spirits; Perfumes and Cosmetics; Watches and Jewelry; and Other and Holding Companies.

The individual FCFF was explicitly forecasted for each segment of the company for the period 2024 to 2033. After this period, the perpetual growth method was applied in order to reach a Terminal Value, calculated as per equation 8.

FCFF for the explicit period and Terminal Value were then discontinued to present value by using the WACC, which is specific to each segment.

Three different scenarios were built (base case, optimistic and pessimistic), so that a sensibility analysis could later be built upon the potential deviations from the base case. The assumptions affected by a change in these 3 different scenarios were: revenue growth YoY, operating margins and Terminal Growth Rate. These scenarios can be found in subsection 1 of the appendix.

Forecasted assumptions used for the DCF model are supported by research made on the Luxury Industry in section 3, as well 6 broker reports (BNP Paribas, 2024; Deustche Bank, 2024; HSBC, 2024; JPMorgan, 2024; Morgan Stanley, 2024; UBS, 2024) on LVMH, dating from April and May 2024.

Figures 10, 11 and 12 below provide a summary of the results obtained by the DCF analysis following a SOTP approach:

Free Cash Flow to the Firm											
Fiscal Year	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	Terminal Period
Present Value of FCFF											
Fashion and Leather Goods	11.083	10.788	10.752	10.760	10.770	10.731	10.657	10.565	10.384	10.189	223.427
Selective Retailing	1.216	1.011	1.000	1.004	1.009	1.024	1.024	1.033	1.016	1.008	20.931
Wines and Spirits	1.000	947	950	944	938	931	917	902	880	857	14.666
Perfumes and Cosmetics	497	428	422	424	425	431	429	422	408	399	7.493
Watches and Jewellery	1.392	1.251	1.238	1.234	1.231	1.230	1.220	1.202	1.176	1.152	21.632
Other and holding companies	(1.630)	(1.314)	(876)	(375)	(77)	(32)	(16)	1	16	32	669
Total PV of FCFF	**13.560**	**13.112**	**13.485**	**13.992**	**14.297**	**14.315**	**14.231**	**14.124**	**13.880**	**13.637**	**288.817**
Implicit WACC	*7,96%*	*7,98%*	*7,97%*	*7,97%*	*7,97%*	*7,97%*	*7,98%*	*7,98%*	*7,99%*	*7,99%*	*8,04%*
Implicit TGR	*3,18%*							**Value from terminal period**			67,6%

Figure 10. LVMH present value of FCFF.

Growth perpetuity method (EUR Mn)	
Enterprise value	427.449
(+) Cash	11.287
(-) Debt	(38.996)
(-) Minority Interests	(1.684)
Equity Value	**398.056**
Diluted shares outstanding (Mn)	500
Implied Share Price	**796,89 €**

LVMH Moet Hennessy Louis Vuitton SE (XPAR:MC) share price as of 20/05/2024 **€ 779,10**

Fair value upside / downside 2,28%

Figure 12. Price per Share calculation.

Share price contribution		
	Nominal (EUR Mn)	Per share (Eur)
Fashion and Leather Goods	330.106	661
Selective Retailing	31.275	63
Wines and Spirits	23.932	48
Perfumes and Cosmetics	11.779	24
Watches and Jewellery	33.958	68
Other and holding companies	(3.601)	(7)
(+) Cash	11.287	23
(-) Debt	(38.996)	(78)
(-) Minority Interests	(1.684)	(3)
Price per Share	**398.056**	**797**

Figure 11. Segment contribution to Price per Share.

These results are presented in a more visual format in figure 13:

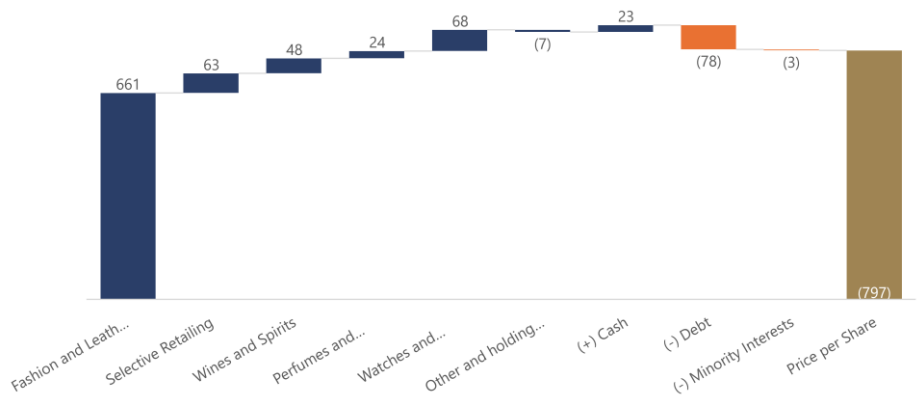

Figure 13. Price per Share contribution. Source: Own Work.

5.1.1 Free Cash Flow to the Firm

FCFF was calculated individually for each segment, as explained in section 2.3. However, some adjustments had to be made because of how the Company reports the segmented financial figures. The adjusted formula FCFF formula is as follows:

$$FCFF = EBIT * (1 - Eff.\ Tax\ Rate) + D\&A - \Delta NWC - CapEx \quad (15)$$

Since neither interest nor tax expenses are reported individually, the segments were assumed to have the same effective tax rate as the Group. Then EBIT was multiplied by one minus tax rate so this subtracted amount would include the taxes paid and also the interest tax shield. This was called *adjusted taxes*.

The exact figures for each segment as well as the aggregate one can be found in subsection 2 of the appendix.

5.1.1.1 EBIT and Terminal Growth Rate

Earnings before interests and taxes were forecasted individually for each segment by using the only two variables that were reported or could be derived from the Company's reports: revenue and operating margin.

Most of the broker reports used in order to support the assumptions made in this section did forecast segmented revenue growth and operating margins in the short-term. However, none of them did forecast the above variables in a 10-year period.

For the short-term estimations, i.e. until FY2026-FY2027, UBS, Deutsche Bank, HSBC and BNP Paribas estimates were used. A conservative average of these forecasts was used for the base case scenario, in both revenue growth YoY and operating margins.

In the FY2028-FY2033 period, since no segmented estimates were provided by the broker reports used, the revenue growth was decreased gradually so it would eventually converge to the Terminal Growth Rate applied. However, UBS and BNP Paribas did provide revenue growth estimates until FY2033. The forecasts I made for the FY2028-FY2033 are within the range of the ones made by UBS and BNP.

A similar situation occurred with the EBIT margins and the same methodology was followed. In this case, the EBIT margins were improved gradually until they reached a margin of 28,5% for the whole Company, which is the long-term EBIT margin provided by BNP Paribas.

Terminal Growth Rate was forecasted differently for each segment, based on the forecasted growth during the explicit period. No segment-specific estimates are provided by the previously mentioned banks. However, all of them except for Deutsche Bank do provide a Terminal Growth Rate estimate. The average estimate for the five

broker reports providing this variable is 3,22%, which is slightly above of the implicit one I obtained for the aggregate group.

5.1.1.2 D&A and CapEx

D&A and CapEx were forecasted in line with the recent fiscal years' trends. In order to get the figures for the mentioned variables, the percentage of D&A and CapEx over Beginning Property, Plant and Equipment (PP&E) was assigned according with historical figures and forecasted to remain constant over the forecasted period. The following formula was used:

$$Beginning\ PP\&E_t = Ending\ PP\&E_{t-1} = Beginning\ PP\&E_{t-1} - D\&A_{t-1} + CapEx_{t-1} \quad (16)$$

The individual forecasts for each segment can be found in subsection 3 of the appendix.

5.1.1.3 Net Working Capital

Net Working Capital could not be forecasted individually for each segment since the Company does not report those segmented figures. Since that information is needed to build the individual FCFF by segment, the change in NWC was calculated for the whole Group. Then, it was distributed along each segment according to the percentage of revenue it represented across LVMH. Even though this assumption is not ideal, since each business has different Working Capital requirements, I believe it is still a good approximation.

The formula to calculate NWC is as follow:

$$NWC = Accounts\ Receivables + Inventory + Prepaid\ Epxenses\ and\ Other\ Currenty\ Assets - Accounts\ Payables - Accrued\ Expenses \quad (17)$$

Prepaid Expenses and Other Current Assets, and Accrued Expenses were forecasted as a percentage of sales, in line with the historical period average.

Accounts Receivables, Inventory and Accounts Payables were forecasted using the historical period average of Days Sales Outstanding (DSO), Days Inventory Held (DIH) and Days Payable Outstanding (DPO) respectively. The formulas to calculate them are the following:

$$DSO = \frac{Accounts\ Receivables}{Revenue} * 360$$

(18)

$$DIH = \frac{Inventory}{COGS} * 360$$

(19)

$$DPO = \frac{Accounts\ Payable}{COGS} * 360$$

(20)

From the above formulas, the historical period values were first obtained. Then Accounts Receivables, Inventory and Accounts Payable were forecasted by isolating them in the formula and keeping DSO, DIH and DPO constant in line with the historical period average.

For the purpose of these calculations, and since it was not forecasted because of the methodology followed in the DCF, COGS were forecasted as a percentage of revenue using the FY2023 percentage.

The NWC forecast can be found in subsection 4 of the appendix.

5.1.2 Weighted Average Cost of Capital

The WACC was calculated for each segment individually using equation 7. Due to the reporting format used by the company, the capital structure as well as the cost of debt and the effective tax rate were the same for all segments. Even though each segment is likely to have different capital structures and effective tax rates, it was not possible to assess it accurately.

The capital structure was kept as the present one, since based on historical company data, it has been relatively stable over recent years and there are no obvious signs of why it would change in the near future.

Risk free rate used was the same across all segments too, since according to Damodaran (2021), the appropriate risk free rate to use is the one in the currency in which the cash flows are discounted. In this case the 10-Year Eurozone Central Government Bond is chosen, because it is assumed to have no default risk and it has the same time horizon as our DCF model, so no reinvestment risk is assumed.

After the mentioned variables are covered, we are still missing two key variables in the cost of equity side of the WACC: beta and market risk premium.

For the beta (β_L), each segment was treated as a private company in which we have no information on the specific beta. In order to calculate the beta it would have in the public markets, a set of comparable publicly traded companies were selected. Just taking the

average for the peer group and using it for the WACC calculation would not be precise, since the effect of the leverage used is omitted. To calculate the unlevered beta (β_u) for each selected company the following formula was used:

$$\beta_u = \frac{\beta_L}{1 + (1 - Eff.\ Tax\ Rate) * \frac{D}{E}}$$

(21)

The average of the unlevered betas of the peer group was used as the unlevered beta of the industry.

Then, it was levered back using the capital structure of the specific segment (which is the same for all segment for reasons mentioned above) using the following formula:

$$\beta_L = \beta_u * (1 + (1 - Eff.\ Tax\ Rate) * \frac{D}{E}$$

(22)

As per the market risk premium, according to Damodaran (2023), the most precise way of calculating it is to compute the weighted average of the countries where the company does business in, with the weights based upon revenue or operating income.

In this case, the weights based upon revenue were chosen because of the availability of data. The percentage of revenue coming from each region or country was multiplied by the market risk premium of that company to obtain the segment specific market risk premium.

The implicit WACC for the whole group, which is slightly different for each FY because of the different weight each segment has and can be found in figure 10, is in line with the average of the brokers reports used (except Deutsche Bank) to validate assumptions: 7,94%.

The WACC of each segment along the calculations for beta and market risk premium can be found in subsection 5 of the appendix.

5.2 Relative valuation approach

The implicit multiples obtained for LVMH in the DCF approach are compared to its peer group average in this section. The multiples used and the rationale behind this analysis are explained in section 2.4.

The results obtained can be seen in figure 14 below:

Relative Valuation (Implicit multiples from DCF)				
Company	PER	EV/EBITDA	PEG	Comparability
LVMH	**26,3x**	**16,9x**	**2,8x**	**-**
Kering	13,6x	8,4x	2,7x	100%
Hermès	55,8x	36,0x	5,4x	70%
Moncler	28,0x	17,8x	3,3x	60%
Burberry	9,8x	10,3x	4,4x	50%
Sector Adj. Average	**26,6x**	**17,6x**	**3,8x**	

Figure 14. Relative Valuation Analysis. Source: Yahoo Finance and S&P Capital IQ as of 12/05/2024.

A comparability percentage was assigned to each selected company, based on the similarity of its activity to LVMH. This had to be done since because of the peculiarities of LVMH there is almost no company engaging in the same activities.

The reason for Kering having a 100% comparability is that they are a conglomerate of many companies like LVMH while operating in the same segment in the industry, with a focus on fashion goods but also watches and jewelry, among other things.

Hermès also is focused on fashion goods, with presence in perfume and beauty, and watches. Even if in terms of activity is very similar to LVMH or Kering, there are two key differences which decrease comparability: it operates under one brand only and it is positioned in the upper segment of the luxury industry, as seen in figure 2.

Moncler operates under two brands in the business of fashion goods. However, it is highly specialized in coats and jackets.

Burberry is highly focused on fashion goods, with a certain presence in perfumes and jewelry. The reason why it is set at 50%, even though its activities would suggest that it should be higher, is that their revenue and profits have suffered a big slowdown recently. This would point out that people do not perceive the brand as “luxury”.

The formula to calculate the adjusted average for each of the multiples has been the following:

$$Adj.\ Average = \frac{\sum Multiple_i * Comparability_i}{\sum Comparability_i}$$

(23)

The results of the relative valuation analysis point out that the valuation obtained for LVMH is within the industry average in the three multiples analyzed, hence, the fair value obtained is reasonable from a comparative point of view and in line with the market momentum.

5.3 Sensitivity analysis

In order to check how different scenarios and deviations from the forecast would affect the share price fair value, some sensitivity analysis tables were built. The below figures summarize the key variables affecting the share price output of the model, namely WACC, terminal growth rate, different growth scenarios and Risk Free Rate.

Scenario	Implicit WACC				
	7,36%	**7,66%**	**7,96%**	**8,26%**	**8,56%**
Optimistic	1.093,0	1.011,8	940,7	878,1	822,3
Base Case	924,9	856,6	796,8	744,0	697,1
Pesimistic	778,4	721,2	671,2	627,0	587,7

Figure 15. Sensitivity Table 1: WACC and Growth Scenario.

Risk Free Rate	Implicit Terminal Growth Rate				
	2,68%	**2,93%**	**3,18%**	**3,43%**	**3,68%**
2,03%	916,0	958,6	1.006,7	1.061,4	1.124,1
2,53%	819,9	853,4	890,8	932,8	980,1
3,03%	740,3	767,2	796,9	829,8	866,6
3,53%	673,3	695,2	719,2	745,6	774,7
4,03%	616,2	634,3	653,9	675,4	698,9

Figure 16. Sensitivity Table 2: Terminal Growth Rate and Risk Free Rate.

Implicit WACC	Implicit Terminal Growth Rate				
	2,68%	**2,93%**	**3,18%**	**3,43%**	**3,68%**
7,36%	848,5	884,6	924,9	970,3	1.021,7
7,66%	791,1	822,2	856,6	895,0	938,2
7,96%	740,3	767,2	796,8	829,7	866,4
8,26%	694,9	718,3	744,0	772,4	803,8
8,56%	654,1	674,6	697,1	721,7	748,9

Figure 17. Sensitivity Table 3: Terminal Growth Rate and WACC.

As can be seen in the tables above, deviations from the assumptions made can have a big impact on the fair value per share obtained. However, I would be inclined to say that the downside risk is covered, at least if we consider risk free rate and WACC due to the expectations of lower interest rates in the near future (see section 3.2).

The only variable in this table which the estimates have not been as conservative as in others is the Terminal Growth Rate, estimated usually using inflation rate (2-3%) or GDP Growth Rate (CFI, n.d.). However, I am confident that LVMH can realistically achieve it because of: (i) the optimistic outlook in the luxury industry seen in section 3.1 and (ii) the ability of LVMH to outperform the industry growth consistently, as it has been doing in the past, thanks to its competitive advantages seen in section 4.1.

6. CONCLUSIONS AND LIMITATIONS OF THE ANALYSIS

After the model has been set up, the results show that LVMH Moët Hennessy Louis Vuitton SE fair value per share is 796,89€, a 2,28% increase from the current share price of 779,10€ as of 20th of May 2024. If a recommendation concerning the stock was to be given, in line with the broker reports criteria, it would be "hold/neutral".

The results are in line with the analysis done by UBS, Deutsche Bank, JPMorgan, HSBC BNP Paribas and Morgan Stanley broker reports dating from April and May 2024, who obtained an average fair value per share of 844,83€ a +6,01% deviation from the results obtained in this thesis.

The key element which could explain the deviation of the results in this thesis from the banks' estimations is the conservative nature of the hypothesis used. For instance, the optimistic scenario with the current WACC, shown in figure 15, would predict a fair value per share of 940,70€, very close to the 950€ target price per share estimated by BNP Paribas.

An important aspect, which can be seen thanks to the sum-of-the-parts methodology followed in this thesis, is that the Other and Holdings Companies segment of LVMH has a negative present value. This would suggest that it would create shareholder value to drop the activities in this segment. Nevertheless, it could be considered a strategic segment with important companies such as Le Parisien or the recently shown interest of LVMH to expand to luxury experiences such as hotels, in a bet that it will become an increasingly valuable activity for its customers.

One key limitation, which has been mentioned already and has shaped the way this thesis was developed, is the reported information from LVMH. If the company had followed the United States regulatory framework, where Reports such as the 10-K and 10-Q require detailed financial statements, comprehensive management analysis, and extensive disclosures on various aspects, including risk factors and executive compensation, the analysis and scenarios would have been more accurate and exhaustive. However, in the European framework the depth of interim disclosures is generally less extensive than in the US, with a focus on providing key updates rather than exhaustive details.

In an ideal situation, operating expenses could have been broken down for each segment, with each line item having an individual forecast. Also, revenue could have been broken down with a price times quantity analysis.

7. REFERENCES

Allman, K. A. (2010). *Corporate valuation modeling: A step-by-step guide*. John Wiley.

Aswath Damodaran (Director). (2021, February 18). *Session 5: Riskfree Rates Closure and Equity Risk Premiums*. https://www.youtube.com/watch?v=Y897MifXKMA

Aswath Damodaran (Director). (2023, February 6). *Session 5: Equity Risk Premiums*. https://www.youtube.com/watch?v=B5-RBh13aKc

BNP Paribas. (2024). *LVMH - No surprises in 1Q sales—Slightly encouraging*.

CFI. (n.d.). *Terminal Growth Rate*. Corporate Finance Institute. Retrieved May 20, 2024, from https://corporatefinanceinstitute.com/resources/valuation/what-is-terminal-growth-rate/

CFI. (2024a). *Cost of Equity*. Corporate Finance Institute. https://corporatefinanceinstitute.com/resources/valuation/cost-of-equity-guide/

CFI. (2024b). *DCF Terminal Value Formula*. Corporate Finance Institute. https://corporatefinanceinstitute.com/resources/financial-modeling/dcf-terminal-value-formula/

CFI. (2024c). *Equity Value*. Corporate Finance Institute. https://corporatefinanceinstitute.com/resources/valuation/what-is-equity-value/

CFI. (2024d). *Present Value of Growth Opportunities (PVGO)*. Corporate Finance Institute. https://corporatefinanceinstitute.com/resources/valuation/present-value-growth-opportunities-pvgo/

Chen, J. (2023). *Veblen Good: Definition, Examples, Difference from Giffen Good*. Investopedia. https://www.investopedia.com/terms/v/veblen-good.asp

Companies ranked by Market Cap—CompaniesMarketCap.com. (n.d.). Retrieved April 13, 2024, from https://companiesmarketcap.com/

Damodaran, A. (n.d.). *Damodaran Online: Home Page for Aswath Damodaran*. Retrieved May 20, 2024, from https://pages.stern.nyu.edu/~adamodar/

Damodaran, A. (2006). *Damodaran on valuation: Security analysis for investment and corporate finance* (2nd ed). John Wiley & Sons.

Damodaran, A. (2023). *Country Risk: Determinants, Measures and Implications – The 2023 Edition*.

Deustche Bank. (2024). *LVMH - A weak 1Q in absolute terms but robust in relative terms*.

Dong, J. (2024). China | Economic outlook of 2024 and 5.2% conclusion of 2023. *BBVA Research*.

Donzé, P.-Y. (2023). *Selling Europe to the World* (1st ed.). Bloomsbury Publishing.

Estrada, J. (2022). PVGO and expected stock returns. *Journal of Applied Corporate Finance*, *34*(4), 109–112. https://doi.org/10.1111/jacf.12534

Fernández, P. (2002). Valuation using multiples. How do analysts reach their conclusions? *IDEAS Working Paper Series from RePEc*. https://www.iese.edu/media/research/pdfs/DI-0450-E.pdf

Forestier, N., Ravaï, N., & Forestier, N. (1992). *The taste of luxury: Bernard Arnault and the Moet-Hennessy Louis Vuitton story*. Bloomsbury.

HSBC. (2024). *LVMH - Hold: Seven questions on everyone's minds*.

IMF. (n.d.). *People's Republic of China and the IMF*. IMF. Retrieved March 10, 2024, from https://www.imf.org/en/Countries/CHN

JPMorgan. (2024). *LVMH: Meet you at the bar*.

Ko, E., Costello, J. P., & Taylor, C. R. (2019). What is a luxury brand? A new definition and review of the literature. *Journal of Business Research*, *99*, 405–413. https://doi.org/10.1016/j.jbusres.2017.08.023

Koller, T., Goedhart, M., & Wessels, D. (2015). *Valuation: Measuring and Managing the Value of Companies* (University Edition (6th ed.)).

KPMG. (2022). *How strong is the pricing power of luxury goods*.

Luxury Fashion Market—Size, Share, Analysis. (n.d.). Retrieved May 7, 2024, from https://www.mordorintelligence.com/industry-reports/luxury-apparels-market

LVMH. (2024). *2023 Full Year Results*. https://r.lvmh-static.com/uploads/2024/01/lvmh_2023-annual-results.pdf

Morgan Stanley. (2024). *LVMH - Tweaking numbers slightly lower*.

OECD. (2024a). *Inflation forecast* [dataset]. OECD. https://doi.org/10.1787/598f4aa4-en

OECD. (2024b). *OECD Economic Outlook, Interim Report February 2024*. https://www.oecd-ilibrary.org/content/publication/0fd73462-en

Refinitiv Eikon. (n.d.). Retrieved April 28, 2024, from https://eikon.refinitiv.com/

Seeking Alpha. (2023, July 25). *LVMH Moet Hennessy Louis Vuitton SE (LVMHF) Q2 2023 Earnings Call Transcript | Seeking Alpha*. https://seekingalpha.com/article/4619719-lvmh-moet-hennessy-louis-vuitton-se-lvmhf-q2-2023-earnings-call-transcript

S&P Capital IQ. (n.d.). https://www.capitaliq.com/CIQDotNet/my/dashboard.aspx

Statista. (n.d.). *Luxury Fashion—Worldwide | Statista Market Forecast*. Statista. Retrieved March 10, 2024, from https://www.statista.com/outlook/cmo/luxury-goods/luxury-fashion/worldwide

The Luxury Empire: LVMH's Most Notable Acquisitions Since Inception. (n.d.). Retrieved April 21, 2024, from https://quartr.com/insights/company-research/the-luxury-empire-lvmh-s-most-notable-acquisitions-since-inception

The State of Fashion 2024 report | McKinsey. (n.d.). Retrieved May 7, 2024, from https://www.mckinsey.com/industries/retail/our-insights/state-of-fashion#/

UBS. (2024). *LVMH - Q1 preview: Muted start to the year*.

Yahoo Finance. (n.d.). https://finance.yahoo.com/

YCharts—10-Year Eurozone Central Government Bond Par Yield Curve. (n.d.). Retrieved May 16, 2024, from https://ycharts.com/indicators/10year_eurozone_central_government_bond_par_yield_curve

8. APPENDIX

8.1 Scenarios

The different assumptions used to forecast FCFF for each segment and scenario are detailed below:

	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Revenue										
Base case	4,0%	5,0%	5,5%	5,5%	5,5%	5,0%	5,0%	4,5%	4,5%	4,0%
Optimistic	5,5%	6,5%	7,0%	7,0%	7,0%	6,5%	6,5%	6,0%	6,0%	5,5%
Pesimistic	2,5%	3,5%	4,0%	4,0%	4,0%	3,5%	3,5%	3,0%	3,0%	2,5%
Operating Margins										
Base case	9,4%	9,6%	9,8%	10,0%	10,2%	10,4%	10,6%	10,6%	10,6%	10,6%
Optimistic	10,4%	10,6%	10,8%	11,0%	11,2%	11,4%	11,6%	11,6%	11,6%	11,6%
Pesimistic	8,4%	8,6%	8,8%	9,0%	9,2%	9,4%	9,6%	9,6%	9,6%	9,6%

Terminal Growth Rate	
Base case	2,50%
Optimistic	2,75%
Pesimistic	2,00%

Appendix 1. Perfumes and Cosmetics assumptions.

	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Revenue										
Base case	6,0%	7,0%	7,5%	7,5%	7,5%	7,0%	7,0%	6,5%	6,5%	6,0%
Optimistic	7,5%	8,5%	9,0%	9,0%	9,0%	8,5%	8,5%	8,0%	8,0%	7,5%
Pesimistic	4,5%	5,5%	6,0%	6,0%	6,0%	5,5%	5,5%	5,0%	5,0%	4,5%
Operating Margins										
Base case	39,4%	39,6%	39,8%	40,0%	40,2%	40,4%	40,6%	40,8%	40,8%	40,8%
Optimistic	40,4%	40,6%	40,8%	41,0%	41,2%	41,4%	41,6%	41,8%	41,8%	41,8%
Pesimistic	38,4%	38,6%	38,8%	39,0%	39,2%	39,4%	39,6%	39,8%	39,8%	39,8%

Terminal Growth Rate	
Base case	3,25%
Optimistic	3,50%
Pesimistic	2,75%

Appendix 2. Fashion and Leather Goods assumptions.

	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Revenue										
Base case	5,0%	6,0%	6,5%	6,5%	6,5%	6,0%	6,0%	5,5%	5,5%	5,0%
Optimistic	6,5%	7,5%	8,0%	8,0%	8,0%	7,5%	7,5%	7,0%	7,0%	6,5%
Pesimistic	3,5%	4,5%	5,0%	5,0%	5,0%	4,5%	4,5%	4,0%	4,0%	3,5%
Operating Margins										
Base case	9,6%	9,7%	9,8%	9,9%	10,0%	10,1%	10,2%	10,3%	10,3%	10,3%
Optimistic	10,6%	10,7%	10,8%	10,9%	11,0%	11,1%	11,2%	11,3%	11,3%	11,3%
Pesimistic	8,6%	8,7%	8,8%	8,9%	9,0%	9,1%	9,2%	9,3%	9,3%	9,3%

Terminal Growth Rate	
Base case	3,00%
Optimistic	3,25%
Pesimistic	2,50%

Appendix 3. Selective Retailing assumptions

	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Revenue										
Base case	5,0%	5,5%	6,5%	6,5%	6,5%	6,0%	6,0%	5,5%	5,5%	5,0%
Optimistic	6,5%	7,0%	8,0%	8,0%	8,0%	7,5%	7,5%	7,0%	7,0%	6,5%
Pesimistic	3,5%	4,0%	5,0%	5,0%	5,0%	4,5%	4,5%	4,0%	4,0%	3,5%
Operating Margins										
Base case	19,5%	19,7%	19,8%	20,0%	20,1%	20,3%	20,4%	20,4%	20,4%	20,4%
Optimistic	20,5%	20,7%	20,8%	21,0%	21,1%	21,3%	21,4%	21,4%	21,4%	21,4%
Pesimistic	18,5%	18,7%	18,8%	19,0%	19,1%	19,3%	19,4%	19,4%	19,4%	19,4%

Terminal Growth Rate	
Base case	2,50%
Optimistic	2,75%
Pesimistic	2,00%

Appendix 4. Watches and Jewelry assumptions.

	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Revenue										
Base case	1,0%	5,0%	5,5%	5,5%	5,5%	5,0%	5,0%	4,5%	4,5%	4,0%
Optimistic	2,5%	6,5%	7,0%	7,0%	7,0%	6,5%	6,5%	6,0%	6,0%	5,5%
Pesimistic	-0,5%	3,5%	4,0%	4,0%	4,0%	3,5%	3,5%	3,0%	3,0%	2,5%
Operating Margins										
Base case	29,1%	29,8%	30,1%	30,1%	30,1%	30,1%	30,1%	30,1%	30,1%	30,1%
Optimistic	30,1%	30,8%	31,1%	31,1%	31,1%	31,1%	31,1%	31,1%	31,1%	31,1%
Pesimistic	28,1%	28,8%	29,1%	29,1%	29,1%	29,1%	29,1%	29,1%	29,1%	29,1%

Terminal Growth Rate	
Base case	2,00%
Optimistic	2,25%
Pesimistic	1,50%

Appendix 5. Wines and Spirits assumptions.

	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Revenue										
Base case	6,0%	7,0%	8,0%	8,0%	8,0%	8,0%	8,0%	8,0%	8,0%	8,0%
Optimistic	8,0%	9,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Pesimistic	4,0%	5,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%
Operating Margins										
Base case	-3,3%	0,2%	3,7%	7,2%	10,7%	11,2%	11,7%	12,2%	12,7%	13,2%
Optimistic	-1,3%	2,2%	5,7%	9,2%	12,7%	12,2%	12,7%	13,2%	13,7%	14,2%
Pesimistic	-5,3%	-1,8%	1,7%	5,2%	8,7%	9,2%	9,7%	10,2%	10,7%	11,2%

Terminal Growth Rate	
Base case	3,00%
Optimistic	3,25%
Pesimistic	2,50%

Appendix 6. Other and Holding Companies assumptions.

8.2 FCFF segmented forecast

The output obtained by applying the previous section's base case scenario in each segment is shown below. Additionally, an aggregate FCFF is provided.

Free Cash Flow to the Firm(EUR Mn)													
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	Terminal Period
Revenue	7.722	8.271	8.602	9.032	9.529	10.053	10.606	11.136	11.693	12.219	12.769	13.280	
Growth %	*16,9%*	*7,1%*	*4,0%*	*5,0%*	*5,5%*	*5,5%*	*5,5%*	*5,0%*	*5,0%*	*4,5%*	*4,5%*	*4,0%*	
Operating expenses	(7.062)	(7.558)	(7.793)	(8.165)	(8.595)	(9.047)	(9.524)	(9.978)	(10.453)	(10.924)	(11.415)	(11.872)	
As % of sales	*91,5%*	*91,4%*	*90,6%*	*90,4%*	*90,2%*	*90,0%*	*89,8%*	*89,6%*	*89,4%*	*89,4%*	*89,4%*	*89,4%*	
EBIT	**660**	**713**	**809**	**867**	**934**	**1.005**	**1.082**	**1.158**	**1.239**	**1.295**	**1.353**	**1.408**	
Adjusted taxes	(176)	(187)	(213)	(229)	(246)	(265)	(285)	(305)	(327)	(342)	(357)	(371)	
Effective corporate tax rate	*26,7%*	*26,2%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	
NOPAT	**484**	**526**	**595**	**638**	**688**	**740**	**797**	**853**	**913**	**954**	**997**	**1.036**	
(+) Deppreciation and Amortization	480	507	560	594	613	631	651	671	691	713	734	757	
(+/-) Change in Net Working Capital	(292)	(274)	(4)	(110)	(126)	(133)	(141)	(138)	(145)	(141)	(147)	(141)	
(-) CapEx	(409)	(432)	(615)	(624)	(643)	(662)	(683)	(704)	(725)	(747)	(770)	(794)	
Free Cash Flow to the Firm	**263**	**327**	**537**	**499**	**531**	**576**	**624**	**682**	**734**	**778**	**813**	**858**	**16.114**
Present value of FCFF			**497**	**428**	**422**	**424**	**425**	**431**	**429**	**422**	**408**	**399**	**7.493**

Appendix 7. Perfumes and Cosmetics FCFF.

Free Cash Flow to the Firm(EUR Mn)													
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	Terminal period
Revenue	38.648	42.169	44.699	47.828	51.415	55.271	59.417	63.576	68.026	72.448	77.157	81.786	
Growth %	*25,1%*	*9,1%*	*6,0%*	*7,0%*	*7,5%*	*7,5%*	*7,5%*	*7,0%*	*7,0%*	*6,5%*	*6,5%*	*6,0%*	
Operating expenses	(22.939)	(25.333)	(27.088)	(28.888)	(30.952)	(33.163)	(35.531)	(37.891)	(40.408)	(42.889)	(45.677)	(48.418)	
As % of sales	*59,4%*	*60,1%*	*60,6%*	*60,4%*	*60,2%*	*60,0%*	*59,8%*	*59,6%*	*59,4%*	*59,2%*	*59,2%*	*59,2%*	
EBIT	**15.709**	**16.836**	**17.611**	**18.940**	**20.463**	**22.109**	**23.886**	**25.685**	**27.619**	**29.559**	**31.480**	**33.369**	
Adjusted taxes	(4.188)	(4.417)	(4.644)	(4.994)	(5.396)	(5.829)	(6.298)	(6.772)	(7.282)	(7.794)	(8.300)	(8.798)	
Effective corporate tax rate	*26,7%*	*26,2%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	
NOPAT	**11.521**	**12.419**	**12.968**	**13.946**	**15.068**	**16.279**	**17.588**	**18.912**	**20.336**	**21.765**	**23.180**	**24.570**	
(+) Deppreciation and Amortization	2.431	2.599	3.419	3.913	4.300	4.704	5.121	5.494	5.894	6.323	6.784	7.278	
(+/-) Change in Net Working Capital	(1.462)	(1.395)	(20)	(583)	(681)	(733)	(788)	(787)	(843)	(834)	(889)	(869)	
(-) CapEx	(1.872)	(3.025)	(4.362)	(4.619)	(5.025)	(5.441)	(5.864)	(6.291)	(6.750)	(7.241)	(7.768)	(8.334)	
Free Cash Flow to the Firm	**10.618**	**10.598**	**12.005**	**12.656**	**13.662**	**14.809**	**16.056**	**17.327**	**18.637**	**20.013**	**21.306**	**22.644**	**496.529**
Present value of FCFF			**11.083**	**10.788**	**10.752**	**10.760**	**10.770**	**10.731**	**10.657**	**10.565**	**10.384**	**10.189**	**223.427**

Appendix 8. Fashion and Leather Goods FCFF.

Free Cash Flow to the Firm(EUR Mn)													
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	Terminal period
Revenue	14.852	17.885	18.779	19.906	21.200	22.578	24.045	25.488	27.017	28.503	30.071	31.575	
Growth %	*26,4%*	*20,4%*	*5,0%*	*6,0%*	*6,5%*	*6,5%*	*6,5%*	*6,0%*	*6,0%*	*5,5%*	*5,5%*	*5,0%*	
Operating expenses	(14.064)	(16.494)	(16.976)	(17.975)	(19.122)	(20.343)	(21.641)	(22.914)	(24.262)	(25.568)	(26.974)	(28.322)	
As % of sales	*94,7%*	*92,2%*	*90,4%*	*90,3%*	*90,2%*	*90,1%*	*90,0%*	*89,9%*	*89,8%*	*89,7%*	*89,7%*	*89,7%*	
EBIT	**788**	**1.391**	**1.803**	**1.931**	**2.078**	**2.235**	**2.405**	**2.574**	**2.756**	**2.936**	**3.097**	**3.252**	
Adjusted taxes	(210)	(365)	(475)	(510)	(547)	(590)	(634)	(679)	(727)	(774)	(817)	(858)	
Effective corporate tax rate	*26,7%*	*26,2%*	*26,4%*	*26,4%*	*26,3%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	
NOPAT	**578**	**1.026**	**1.327**	**1.421**	**1.530**	**1.646**	**1.770**	**1.896**	**2.029**	**2.162**	**2.281**	**2.395**	
(+) Deppreciation and Amortization	1.427	1.377	1.376	1.387	1.398	1.409	1.421	1.432	1.443	1.455	1.466	1.478	
(+/-) Change in Net Working Capital	(562)	(592)	(9)	(243)	(281)	(299)	(319)	(316)	(335)	(328)	(346)	(336)	
(-) CapEx	(523)	(571)	(1.390)	(1.401)	(1.412)	(1.423)	(1.434)	(1.446)	(1.457)	(1.469)	(1.481)	(1.492)	
Free Cash Flow to the Firm	**920**	**1.240**	**1.305**	**1.164**	**1.236**	**1.333**	**1.437**	**1.566**	**1.680**	**1.819**	**1.920**	**2.044**	**42.465**
Present value of FCFF			**1.216**	**1.011**	**1.000**	**1.004**	**1.009**	**1.024**	**1.024**	**1.033**	**1.016**	**1.008**	**20.931**

Appendix 9. Selective Retailing FCFF.

Free Cash Flow to the Firm(EUR Mn)													
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	Terminal period
Revenue	10.581	10.902	11.447	12.077	12.862	13.698	14.588	15.463	16.391	17.293	18.244	19.156	
Growth %	*18,0%*	*3,0%*	*5,0%*	*5,5%*	*6,5%*	*6,5%*	*6,5%*	*6,0%*	*6,0%*	*5,5%*	*5,5%*	*5,0%*	
Operating expenses	(8.564)	(8.740)	(9.215)	(9.704)	(10.315)	(10.965)	(11.656)	(12.332)	(13.047)	(13.765)	(14.522)	(15.248)	
As % of sales	*80,9%*	*80,2%*	*80,5%*	*80,4%*	*80,2%*	*80,1%*	*79,9%*	*79,8%*	*79,6%*	*79,6%*	*79,6%*	*79,6%*	
EBIT	**2.017**	**2.162**	**2.232**	**2.373**	**2.547**	**2.733**	**2.932**	**3.131**	**3.344**	**3.528**	**3.722**	**3.908**	
Adjusted taxes	(538)	(567)	(589)	(626)	(671)	(721)	(773)	(826)	(882)	(930)	(981)	(1.030)	
Effective corporate tax rate	*26,7%*	*26,2%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	
NOPAT	**1.479**	**1.595**	**1.644**	**1.747**	**1.875**	**2.012**	**2.159**	**2.306**	**2.462**	**2.598**	**2.740**	**2.877**	
(+) Deppreciation and Amortization	994	1.012	1.631	1.724	1.822	1.926	2.036	2.151	2.274	2.403	2.540	2.684	
(+/-) Change in Net Working Capital	(400)	(361)	(5)	(147)	(170)	(182)	(194)	(192)	(203)	(199)	(210)	(204)	
(-) CapEx	(654)	(871)	(1.769)	(1.869)	(1.976)	(2.088)	(2.207)	(2.332)	(2.465)	(2.605)	(2.753)	(2.910)	
Free Cash Flow to the Firm	**1.419**	**1.375**	**1.501**	**1.455**	**1.552**	**1.669**	**1.794**	**1.933**	**2.068**	**2.196**	**2.317**	**2.448**	**45.968**
Present value of FCFF			**1.392**	**1.251**	**1.238**	**1.234**	**1.231**	**1.230**	**1.220**	**1.202**	**1.176**	**1.152**	**21.632**

Appendix 10. Watches and Jewelry FCFF.

Free Cash Flow to the Firm(EUR Mn)													
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	Terminal period
Revenue	7.099	6.602	6.668	7.001	7.386	7.793	8.221	8.632	9.064	9.472	9.898	10.294	
Growth %	*18,8%*	*(7,0%)*	*1,0%*	*5,0%*	*5,5%*	*5,5%*	*5,5%*	*5,0%*	*5,0%*	*4,5%*	*4,5%*	*4,0%*	
Operating expenses	(4.944)	(4.493)	(4.728)	(4.915)	(5.163)	(5.447)	(5.747)	(6.034)	(6.336)	(6.621)	(6.919)	(7.196)	
As % of sales	*69,6%*	*68,1%*	*70,9%*	*70,2%*	*69,9%*	*69,9%*	*69,9%*	*69,9%*	*69,9%*	*69,9%*	*69,9%*	*69,9%*	
EBIT	**2.155**	**2.109**	**1.940**	**2.086**	**2.223**	**2.346**	**2.475**	**2.598**	**2.728**	**2.851**	**2.979**	**3.099**	
Adjusted taxes	(575)	(553)	(512)	(550)	(586)	(618)	(652)	(685)	(719)	(752)	(786)	(817)	
Effective corporate tax rate	*26,7%*	*26,2%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	
NOPAT	**1.580**	**1.556**	**1.429**	**1.536**	**1.637**	**1.727**	**1.822**	**1.913**	**2.009**	**2.099**	**2.194**	**2.282**	
(+) Deppreciation and Amortization	261	274	305	332	361	394	429	467	509	554	603	657	
(+/-) Change in Net Working Capital	(268)	(218)	(3)	(85)	(98)	(103)	(109)	(107)	(112)	(109)	(114)	(109)	
(-) CapEx	(440)	(538)	(684)	(745)	(811)	(883)	(962)	(1.048)	(1.142)	(1.243)	(1.354)	(1.475)	
Free Cash Flow to the Firm	**1.133**	**1.073**	**1.047**	**1.038**	**1.090**	**1.134**	**1.180**	**1.225**	**1.264**	**1.301**	**1.329**	**1.354**	**23.179**
Present value of FCFF			**1.000**	**947**	**950**	**944**	**938**	**931**	**917**	**902**	**880**	**857**	**14.666**

Appendix 11. Wines and Spirits FCFF.

Free Cash Flow to the Firm(EUR Mn)													
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	Terminal Period
Revenue	1.586	1.820	1.929	2.064	2.229	2.408	2.600	2.808	3.033	3.276	3.538	3.821	
Growth %	*35,7%*	*14,8%*	*6,0%*	*7,0%*	*8,0%*	*8,0%*	*8,0%*	*8,0%*	*8,0%*	*8,0%*	*8,0%*	*8,0%*	
Operating expenses	(1.853)	(2.217)	(1.993)	(2.061)	(2.147)	(2.235)	(2.323)	(2.495)	(2.679)	(2.877)	(3.089)	(3.317)	
As % of sales	*116,8%*	*121,8%*	*103,3%*	*99,8%*	*96,3%*	*92,8%*	*89,3%*	*88,8%*	*88,3%*	*87,8%*	*87,3%*	*86,8%*	
EBIT	**(267)**	**(397)**	**(64)**	**4**	**82**	**173**	**278**	**314**	**354**	**399**	**448**	**503**	
Adjusted taxes	71	104	17	(1)	(22)	(46)	(73)	(83)	(93)	(105)	(118)	(133)	
Effective corporate tax rate	*26,7%*	*26,2%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	
NOPAT	**(196)**	**(293)**	**(47)**	**3**	**60**	**127**	**204**	**231**	**261**	**294**	**330**	**371**	
(+) Deppreciation and Amortization	291	388	442	473	510	551	595	643	653	663	674	684	
(+/-) Change in Net Working Capital	(60)	(60)	(1)	(25)	(30)	(32)	(34)	(35)	(38)	(38)	(41)	(41)	
(-) CapEx	(1.074)	(2.041)	(2.149)	(1.975)	(1.637)	(1.151)	(877)	(890)	(904)	(918)	(932)	(946)	
Free Cash Flow to the Firm	**(1.039)**	**(2.006)**	**(1.756)**	**(1.525)**	**(1.096)**	**(505)**	**(111)**	**(50)**	**(27)**	**2**	**31**	**68**	**1.411**
Present value of FCFF			**(1.630)**	**(1.314)**	**(876)**	**(375)**	**(77)**	**(32)**	**(16)**	**1**	**16**	**32**	**669**

Appendix 12. Other and Holding Companies FCFF.

Free Cash Flow to the Firm(EUR Mn)													
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	Terminal period
Revenue	80.488	87.649	92.125	97.908	104.621	111.800	119.478	127.104	135.225	143.210	151.676	159.911	
Growth %	*23,1%*	*8,9%*	*5,1%*	*6,3%*	*6,9%*	*6,9%*	*6,9%*	*6,4%*	*6,4%*	*5,9%*	*5,9%*	*5,4%*	
Operating expenses	(59.426)	(64.835)	(67.793)	(71.707)	(76.295)	(81.200)	(86.421)	(91.643)	(97.185)	(102.643)	(108.596)	(114.373)	
As % of sales	*73,8%*	*74,0%*	*73,6%*	*73,2%*	*72,9%*	*72,6%*	*72,3%*	*72,1%*	*71,9%*	*71,7%*	*71,6%*	*71,5%*	
EBIT	**21.062**	**22.814**	**24.331**	**26.201**	**28.327**	**30.600**	**33.056**	**35.461**	**38.040**	**40.567**	**43.080**	**45.538**	
Adjusted taxes	(5.615)	(5.985)	(6.415)	(6.908)	(7.469)	(8.068)	(8.716)	(9.350)	(10.030)	(10.696)	(11.359)	(12.007)	
Effective corporate tax rate	*26,7%*	*26,2%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	*26,4%*	
NOPAT	**15.447**	**16.829**	**17.916**	**19.293**	**20.858**	**22.532**	**24.340**	**26.111**	**28.010**	**29.871**	**31.721**	**33.531**	
(+) Deppreciation and Amortization	5.884	6.157	7.733	8.423	9.005	9.615	10.252	10.858	11.464	12.111	12.801	13.538	
(+/-) Change in Net Working Capital	(3.044)	(2.900)	(42)	(1.194)	(1.386)	(1.482)	(1.585)	(1.574)	(1.676)	(1.649)	(1.748)	(1.700)	
(-) CapEx	(4.972)	(7.478)	(10.967)	(11.233)	(11.503)	(11.649)	(12.027)	(12.711)	(13.443)	(14.224)	(15.059)	(15.952)	
Free Cash Flow to the Firm	**13.315**	**12.608**	**14.639**	**15.289**	**16.974**	**19.016**	**20.980**	**22.683**	**24.355**	**26.109**	**27.716**	**29.417**	**625.665**
Present value of FCFF			**13.560**	**13.112**	**13.485**	**13.992**	**14.297**	**14.315**	**14.231**	**14.124**	**13.880**	**13.637**	**288.817**

Appendix 13. LVMH aggregate FCFF.

8.3 D&A and CapEx segmented forecast

PP&E along D&A and CapEx, with the corresponding assumptions, for each segment is detailed below:

Fixed Assets (EUR Mn)												
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Beginning PP&E	752	839	897	951	981	1.011	1.042	1.074	1.106	1.140	1.175	1.211
D&A	(480)	(507)	(560)	(594)	(613)	(631)	(651)	(671)	(691)	(713)	(734)	(757)
CapEx	567	565	615	624	643	662	683	704	725	747	770	794
Ending PP&E	**839**	**897**	**951**	**981**	**1.011**	**1.042**	**1.074**	**1.106**	**1.140**	**1.175**	**1.211**	**1.248**
Assumptions												
D&A as a % of Beginning PP&E	63,8%	60,4%	62,5%	62,5%	62,5%	62,5%	62,5%	62,5%	62,5%	62,5%	62,5%	62,5%
CapEx as a % of Beginning PP&E	75,4%	67,3%	68,5%	65,5%	65,5%	65,5%	65,5%	65,5%	65,5%	65,5%	65,5%	65,5%

Appendix 14. Perfumes and Cosmetic D&A and CapEx.

Fixed Assets (EUR Mn)												
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Beginning PP&E	4.569	5.397	7.099	8.042	8.748	9.473	10.210	10.953	11.751	12.607	13.525	14.510
D&A	(2.431)	(2.599)	(3.419)	(3.913)	(4.300)	(4.704)	(5.121)	(5.494)	(5.894)	(6.323)	(6.784)	(7.278)
CapEx	3.259	4.301	4.362	4.619	5.025	5.441	5.864	6.291	6.750	7.241	7.768	8.334
Ending PP&E	**5.397**	**7.099**	**8.042**	**8.748**	**9.473**	**10.210**	**10.953**	**11.751**	**12.607**	**13.525**	**14.510**	**15.566**
Assumptions												
D&A as a % of Beginning PP&E	53,2%	48,2%	48,2%	48,7%	49,2%	49,7%	50,2%	50,2%	50,2%	50,2%	50,2%	50,2%
CapEx as a % of Beginning PP&E	71,3%	79,7%	61,4%	57,4%	57,4%	57,4%	57,4%	57,4%	57,4%	57,4%	57,4%	57,4%

Appendix 15. Fashion and Leather Goods D&A and CapEx.

Fixed Assets (EUR Mn)												
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Beginning PP&E	1.667	1.688	1.695	1.708	1.722	1.736	1.750	1.763	1.777	1.792	1.806	1.820
D&A	(1.427)	(1.377)	(1.376)	(1.387)	(1.398)	(1.409)	(1.421)	(1.432)	(1.443)	(1.455)	(1.466)	(1.478)
CapEx	1.448	1.384	1.390	1.401	1.412	1.423	1.434	1.446	1.457	1.469	1.481	1.492
Ending PP&E	**1.688**	**1.695**	**1.708**	**1.722**	**1.736**	**1.750**	**1.763**	**1.777**	**1.792**	**1.806**	**1.820**	**1.835**
Assumptions												
D&A as a % of Beginning PP&E	85,6%	81,6%	81,2%	81,2%	81,2%	81,2%	81,2%	81,2%	81,2%	81,2%	81,2%	81,2%
CapEx as a % of Beginning PP&E	86,9%	82,0%	82,0%	82,0%	82,0%	82,0%	82,0%	82,0%	82,0%	82,0%	82,0%	82,0%

Appendix 16. Selective Retailing D&A and CapEx.

Fixed Assets (EUR Mn)												
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Beginning PP&E	1.730	2.005	2.411	2.548	2.693	2.846	3.008	3.180	3.360	3.552	3.754	3.967
D&A	(994)	(1.012)	(1.631)	(1.724)	(1.822)	(1.926)	(2.036)	(2.151)	(2.274)	(2.403)	(2.540)	(2.684)
CapEx	1.269	1.418	1.769	1.869	1.976	2.088	2.207	2.332	2.465	2.605	2.753	2.910
Ending PP&E	**2.005**	**2.411**	**2.548**	**2.693**	**2.846**	**3.008**	**3.180**	**3.360**	**3.552**	**3.754**	**3.967**	**4.193**
Assumptions												
D&A as a % of Beginning PP&E	57,5%	50,5%	67,7%	67,7%	67,7%	67,7%	67,7%	67,7%	67,7%	67,7%	67,7%	67,7%
CapEx as a % of Beginning PP&E	73,4%	70,7%	73,4%	73,4%	73,4%	73,4%	73,4%	73,4%	73,4%	73,4%	73,4%	73,4%

Appendix 17. Watches and Jewelry D&A and CapEx.

Fixed Assets (EUR Mn)												
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Beginning PP&E	3.450	3.822	4.248	4.627	5.040	5.490	5.979	6.513	7.094	7.727	8.417	9.168
D&A	(261)	(274)	(305)	(332)	(361)	(394)	(429)	(467)	(509)	(554)	(603)	(657)
CapEx	633	700	684	745	811	883	962	1.048	1.142	1.243	1.354	1.475
Ending PP&E	**3.822**	**4.248**	**4.627**	**5.040**	**5.490**	**5.979**	**6.513**	**7.094**	**7.727**	**8.417**	**9.168**	**9.986**
Assumptions												
D&A as a % of Beginning PP&E	7,6%	7,2%	7,2%	7,2%	7,2%	7,2%	7,2%	7,2%	7,2%	7,2%	7,2%	7,2%
CapEx as a % of Beginning PP&E	18,3%	18,3%	16,1%	16,1%	16,1%	16,1%	16,1%	16,1%	16,1%	16,1%	16,1%	16,1%

Appendix 18. Wines and Spirits D&A and CapEx.

Fixed Assets (EUR Mn)												
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Beginning PP&E	8.032	9.312	10.988	12.696	14.161	15.228	15.768	16.010	16.257	16.507	16.762	17.020
D&A	(291)	(388)	(442)	(510)	(569)	(612)	(634)	(643)	(653)	(663)	(674)	(684)
CapEx	1.571	2.064	2.149	1.975	1.637	1.151	877	890	904	918	932	946
Ending PP&E	**9.312**	**10.988**	**12.696**	**14.161**	**15.228**	**15.768**	**16.010**	**16.257**	**16.507**	**16.762**	**17.020**	**17.282**
Assumptions												
D&A as a % of Beginning PP&E	3,6%	4,2%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%
CapEx as a % of Beginning PP&E	19,6%	22,2%	19,6%	15,6%	11,6%	7,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%

Appendix 19. Other and Holding Companies D&A and CapEx.

8.4 Net Working Capital aggregate forecast

Net Working Capital, with the corresponding assumptions, at the aggregate level is detailed below:

Net Working Capital (EUR Mn)												
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Accounts Receivables	7.110	7.944	8.367	8.893	9.502	10.154	10.852	11.544	12.282	13.007	13.776	14.524
DSO	*31,8*	*32,6*	*32,7*	*32,7*	*32,7*	*32,7*	*32,7*	*32,7*	*32,7*	*32,7*	*32,7*	*32,7*
Inventory	20.319	22.952	23.759	25.251	26.982	28.833	30.813	32.780	34.875	36.934	39.118	41.241
DIH	*292,7*	*307,4*	*297,6*	*297,6*	*297,6*	*297,6*	*297,6*	*297,6*	*297,6*	*297,6*	*297,6*	*297,6*
Prepaid Expenses and Other Current Assets	1.427	1.527	1.570	1.669	1.783	1.906	2.037	2.167	2.305	2.441	2.585	2.726
As % of sales	*1,8%*	*1,7%*	*1,7%*	*1,7%*	*1,7%*	*1,7%*	*1,7%*	*1,7%*	*1,7%*	*1,7%*	*1,7%*	*1,7%*
Total current operating assets	**28.856**	**32.423**	**33.697**	**35.812**	**38.268**	**40.893**	**43.702**	**46.491**	**49.461**	**52.382**	**55.479**	**58.491**
Accounts Payable	8.788	9.049	9.929	10.553	11.276	12.050	12.877	13.699	14.575	15.435	16.348	17.235
DPO	*126,6*	*121,2*	*124,4*	*124,4*	*124,4*	*124,4*	*124,4*	*124,4*	*124,4*	*124,4*	*124,4*	*124,4*
Accrued Expenses	3.992	4.398	4.750	5.048	5.394	5.764	6.160	6.553	6.972	7.383	7.820	8.244
As % of sales	*5,0%*	*5,0%*	*5,2%*	*5,2%*	*5,2%*	*5,2%*	*5,2%*	*5,2%*	*5,2%*	*5,2%*	*5,2%*	*5,2%*
Total current operating liablilities	**12.780**	**13.447**	**14.679**	**15.600**	**16.670**	**17.814**	**19.037**	**20.252**	**21.546**	**22.819**	**24.168**	**25.480**
Net Working Capital	**16.076**	**18.976**	**19.018**	**20.212**	**21.598**	**23.080**	**24.664**	**26.239**	**27.915**	**29.564**	**31.311**	**33.011**
Change in NWC	**3.044**	**2.900**	**42**	**1.194**	**1.386**	**1.482**	**1.585**	**1.574**	**1.676**	**1.649**	**1.748**	**1.700**

Assumptions												
Fiscal Year	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Revenue	80.488	87.649	92.125	97.908	104.621	111.800	119.478	127.104	135.225	143.210	151.676	159.911
COGS	24.988	26.876	28.739	30.543	32.637	34.877	37.272	39.651	42.184	44.675	47.316	49.885
Days Sales outstandig (DSO)	31,8	32,6	32,7	32,7	32,7	32,7	32,7	32,7	32,7	32,7	32,7	32,7
Days Payable Outstanding (DPO)	126,6	121,2	124,4	124,4	124,4	124,4	124,4	124,4	124,4	124,4	124,4	124,4
Days Inventory Held (DIH)	292,7	307,4	297,6	297,6	297,6	297,6	297,6	297,6	297,6	297,6	297,6	297,6

Appendix 20. Net Working Capital projection.

8.5 WACC calculations

The WACC obtained for each segment, along the comparable companies used for the beta and market risk premiums used with the corresponding weight, is detailed below:

Weighted Average Cost of Capital (WACC) Calculation			
Market Cap (EUR Mn)	390.220		
Debt (Eur Mn)	38.996		
Cost of Debt	2,95%		
Tax Rate	26,4%		
After Tax Cost of Debt	**2,2%**		
D/(D+E)	9,1%	Last 3y average:	9,3%
Risk Free Rate (US10-Yr Treasury Yield)	3,03%		
Market Risk Premium	6,22%		
Levered Beta	0,89		
E/(D+E)	90,9%	Last 3y average:	90,7%
Cost of Equity	**8,5%**		
WACC	**8,0%**		

Cost of Debt	
Interest Expense/Debt	2,50%
2033 Notes	3,40%
Cost of Debt	**2,95%**

* FR001400KJO0 YTM as of 28/04/2024. Source: LSEG Refinitiv.

Appendix 21. Perfumes and Cosmetics WACC.

Beta (Comps) Source: S&P Capital IQ, as of 28/04/2024						
Company	**Levered Beta**	**Equity Value (bn)**	**Total Debt (bn)**	**Debt/Equity**	**Eff. Tax Rate**	**Unlevered Beta**
L'Oréal	0,71	233,0	8,7	4%	22,6%	0,69
The Estée Lauder Companies	1,07	49,5	9,7	20%	33,9%	0,95
Beiersdorf	0,26	31,4	0,1	0%	32,2%	0,26
Shiseido Company Ltd	0,51	10,0	1,7	17%	22,1%	0,45
Coty Inc.	1,84	9,6	3,8	39%	38,4%	1,48
Inter Parfums Inc.	1,16	3,6	0,2	5%	26,9%	1,12

Average unlevered Beta	0,83
Perfumes & Cosmetics estimated levered Beta	**0,89**

Weighted Market Risk Premium					
Region	**Revenue (€ Mn)**	**Weight (%)**	**Region MRP**	**Weighted MRP**	
France	744	10%	5,32%	0,55%	
Europe (Excl. France)	1.737	24%	5,99%	1,45%	***1**
United States	1.571	22%	4,60%	1,00%	
Japan	414	6%	5,63%	0,32%	
Asia (Excl. Japan)	2.729	38%	7,63%	2,89%	***2**
Total	7.196	100%	-	**6,22%**	

*1 EU & Environs MRP

*2 Average MRP of Asia (Excl. China, India and Japan), China and India

Appendix 22. Perfumes and Cosmetics beta and MRP calculations. Additional sources: YCharts, LVMH 2023 Annual Report, Damodaran NYU Website, Country Risk 2023 ed. By Damodaran.
Sources applicable to all WACC calculations.

Weighted Average Cost of Capital (WACC) Calculation			
Market Cap (EUR Mn)	390.220		
Debt (Eur Mn)	38.996		
Cost of Debt	2,95%		
Tax Rate	26,4%		
After Tax Cost of Debt	**2,2%**		
D/(D+E)	9,1%	Last 3y average:	9,3%
Risk Free Rate (US10-Yr Treasury Yield)	3,03%		
Market Risk Premium	6,34%		
Levered Beta	0,93		
E/(D+E)	90,9%	Last 3y average:	90,7%
Cost of Equity	**8,9%**		
WACC	**8,3%**		

Cost of Debt	
Interest Expense/Debt	2,50%
2033 Notes	3,40%
Cost of Debt	**2,95%**

* FR001400KJO0 YTM as of 28/04/2024. Source: LSEG Refinitiv.

Appendix 23. Fashion and Leather Goods WACC.

Beta (Comps) Source: S&P Capital IQ, as of 28/04/2024						
Company	**Levered Beta**	**Equity Value (bn)**	**Total Debt (bn)**	**Debt/Equity**	**Eff. Tax Rate**	**Unlevered Beta**
Christian Dior SE	1,05	133,7	39,0	29%	26,4%	0,86
Prada S.p.A	1,2	19,4	2,6	13%	30,7%	1,10
Moncler S.p.a	1,08	17,5	0,8	5%	29,7%	1,05
Burberry Group PLC	1,12	4,8	1,8	38%	24,1%	0,87
Ermenegildo Zegna N.V.	0,58	2,8	1,0	35%	19,8%	0,45

Average unlevered Beta	0,87
Fashion & Leather Goods estimated levered Beta	**0,93**

Weighted Market Risk Premium					
Region	**Revenue (€ Mn)**	**Weight (%)**	**Region MRP**	**Weighted MRP**	
France	2.952	8%	5,32%	0,41%	
Europe (Excl. France)	7.590	20%	5,99%	1,18%	***1**
United States	7.169	19%	4,60%	0,86%	
Japan	4.217	11%	5,63%	0,62%	
Asia (Excl. Japan)	16.446	43%	7,63%	3,27%	***2**
Total	38.374	100%	-	**6,34%**	

Appendix 24. Fashion and Leather Goods beta and MRP calculations.

Weighted Average Cost of Capital (WACC) Calculation			
Market Cap (EUR Mn)	390.220		
Debt (Eur Mn)	38.996		
Cost of Debt	2,95%		
Tax Rate	26,4%		
After Tax Cost of Debt	**2,2%**		
D/(D+E)	9,1%	Last 3y average:	9,3%
Risk Free Rate (US10-Yr Treasury Yield)	3,03%		
Market Risk Premium	5,42%		
Levered Beta	0,89		
E/(D+E)	90,9%	Last 3y average:	90,7%
Cost of Equity	**7,8%**		
WACC	**7,3%**		

Cost of Debt		
Interest Expense/Debt	2,50%	
2033 Notes	3,40%	* FR001400KJO0 YTM as of 28/04/2024. Source: LSEG Refinitiv.
Cost of Debt	**2,95%**	

Appendix 25. Selective Retailing WACC.

Beta (Comps) Source: S&P Capital IQ, as of 28/04/2024						
Company	**Levered Beta**	**Equity Value (bn)**	**Total Debt (bn)**	**Debt/Equity**	**Eff. Tax Rate**	**Unlevered Beta**
Ulta Beauty Inc.	1,31	18,2	1,8	10%	23,9%	1,22
Avolta AG	1,77	5,3	11,5	214%	27,4%	0,69
L'Occitane International S.A.	0,76	5,2	0,8	15%	40,8%	0,70
Sally Beauty Holdings Inc.	1,49	1,0	1,5	151%	26,6%	0,71

Average unlevered Beta	0,83
Selective Retailingestimated levered Beta	**0,89**

Weighted Market Risk Premium					
Region	**Revenue (€ Mn)**	**Weight (%)**	**Region MRP**	**Weighted MRP**	
France	1.967	13%	5,32%	0,71%	
Europe (Excl. France)	1.610	11%	5,99%	0,66%	***1**
United States	8.227	56%	4,60%	2,58%	
Japan	179	1%	5,63%	0,07%	
Asia (Excl. Japan)	2.683	18%	7,63%	1,40%	***2**
Total	14.666	100%	-	**5,42%**	

Appendix 26. Selective Retailing beta and MRP calculations.

Weighted Average Cost of Capital (WACC) Calculation			
Market Cap (EUR Mn)	390.220		
Debt (Eur Mn)	38.996		
Cost of Debt	2,95%		
Tax Rate	26,4%		
After Tax Cost of Debt	**2,2%**		
D/(D+E)	9,1%	Last 3y average:	9,3%
Risk Free Rate (US10-Yr Treasury Yield)	3,03%		
Market Risk Premium	6,20%		
Levered Beta	0,87		
E/(D+E)	90,9%	Last 3y average:	90,7%
Cost of Equity	**8,4%**		
WACC	**7,8%**		

Cost of Debt	
Interest Expense/Debt	2,50%
2033 Notes	3,40%
Cost of Debt	**2,95%**

* FR001400KJO0 YTM as of 28/04/2024. Source: LSEG Refinitiv.

Appendix 27. Watches and Jewelry WACC.

Beta (Comps) Source: S&P Capital IQ, as of 28/04/2024						
Company	**Levered Beta**	**Equity Value (bn)**	**Total Debt (bn)**	**Debt/Equity**	**Eff. Tax Rate**	**Unlevered Beta**
Compagnie Financière Richemont SA	1,21	78,1	16,0	21%	17,9%	1,04
Chow Tai Fook Jewellery	0,78	13,1	3,3	25%	25,4%	0,66
The Swatch Group AG	0,91	10,3	0,1	1%	22,7%	0,90
Seiko Group Corp.	0,63	1,0	0,8	77%	32,4%	0,41
Movado Group Inc.	1,15	0,5	0,1	16%	21,0%	1,02

Average unlevered Beta	0,81
Watches & Jewelry estimated levered Beta	**0,87**

Weighted Market Risk Premium					
Region	**Revenue (€ Mn)**	**Weight (%)**	**Region MRP**	**Weighted MRP**	
France	327	3%	5,32%	0,19%	
Europe (Excl. France)	1.635	17%	5,99%	1,04%	***1**
United States	2.507	27%	4,60%	1,23%	
Japan	1.199	13%	5,63%	0,72%	
Asia (Excl. Japan)	3.707	40%	7,63%	3,02%	***2**
Total	9.376	100%	-	**6,20%**	

Appendix 28. Watches and Jewelry beta and MRP calculations.

Weighted Average Cost of Capital (WACC) Calculation			
Market Cap (EUR Mn)	390.220		
Debt (Eur Mn)	38.996		
Cost of Debt	2,95%		
Tax Rate	26,4%		
After Tax Cost of Debt	**2,2%**		
D/(D+E)	9,1%	Last 3y average:	9,3%
Risk Free Rate (US10-Yr Treasury Yield)	3,03%		
Market Risk Premium	5,79%		
Levered Beta	0,33		
E/(D+E)	90,9%	Last 3y average:	90,7%
Cost of Equity	**4,9%**		
WACC	**4,7%**		

Cost of Debt	
Interest Expense/Debt	2,50%
2033 Notes	3,40%
Cost of Debt	**2,95%**

* FR001400KJO0 YTM as of 28/04/2024. Source: LSEG Refinitiv.

Appendix 29. Wines and Spirits WACC.

Beta (Comps) Source: S&P Capital IQ, as of 28/04/2024						
Company	**Levered Beta**	**Equity Value (bn)**	**Total Debt (bn)**	**Debt/Equity**	**Eff. Tax Rate**	**Unlevered Beta**
Pernord Richard SA	0,45	36,0	13,0	36%	21,4%	0,35
Diageo Plc	0,32	71,9	20,9	29%	21,9%	0,26
Rémy Cointreau SA	0,35	4,6	0,9	19%	27,8%	0,31

Average unlevered Beta	0,31
Wines & Spirits estimated levered Beta	**0,33**

Weighted Market Risk Premium					
Region	**Revenue (€ Mn)**	**Weight (%)**	**Region MRP**	**Weighted MRP**	
France	462	8%	5,32%	0,43%	
Europe (Excl. France)	1.320	23%	5,99%	1,39%	***1**
United States	2.113	37%	4,60%	1,71%	
Japan	396	7%	5,63%	0,39%	
Asia (Excl. Japan)	1.386	24%	7,63%	1,86%	***2**
Total	5.678	100%	-	**5,79%**	

Appendix 30. Wines and Spirits beta and MRP calculations.

Weighted Average Cost of Capital (WACC) Calculation			
Market Cap (EUR Mn)	390.220		
Debt (Eur Mn)	38.996		
Cost of Debt	2,95%		
Tax Rate	26,4%		
After Tax Cost of Debt	**2,2%**		
D/(D+E)	9,1%	Last 3y average:	9,3%
Risk Free Rate (US10-Yr Treasury Yield)	3,03%		
Market Risk Premium	5,32%	*France equity risk premium. Source: Damodaran's webpage	
Levered Beta	0,99	*Source: Yahoo Finance	
E/(D+E)	90,9%	Last 3y average:	90,7%
Cost of Equity	**8,3%**		
WACC	**7,7%**		

Cost of Debt		
Interest Expense/Debt	2,50%	
2033 Notes	3,40%	* FR001400KJO0 YTM as of 28/04/2024. Source: LSEG Refinitiv.
Cost of Debt	**2,95%**	

Appendix 31. Other and Holding Companies WACC.