



Equity Valuation

LVMH Moët Hennessy - Louis Vuitton SE

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LVMH Moët Hennessy Louis Vuitton

EXECUTIVE SUMMARY (LVMH.PA)

Profile: LVMH is a French conglomerate specialized in the manufacturing and marketing of personal luxury goods. It is the world's leading luxury goods vendor, operating in 5 distinct segments: Fashion & Leather Goods, Selective Retailing, Perfumes & Cosmetics, Wines & Spirits, and Watches & Jewelry. The group gathers more than 70 well-known brands, including: Louis Vuitton, Christian Dior, Dom Pérignon, Hennessy, Moët & Chandon, Bvlgari and Sephora.

HOLD Recommendation: This study sets a 12-month price target of €400,00 per stock, reflecting a potential upside of 11% in comparison to the current price, which considering the current economic uncertainty, results in a hold recommendation. The price target was estimated through a sum-of-the-parts WACC-based DCF valuation supported by a thorough analysis of available industry and macroeconomic information, and the company's past performance.

Growth Drivers: The group's biggest brands, i.e., Louis Vuitton, Dior, Hennessy and Moët & Chandon, as well as, the continued growth of China's middle class are expected to be the group's main drivers of future growth.

Industry Outlook: The Global Personal Luxury Goods market grew at a CAGR of 5% from 2000 to 2019E. Over most of this period, LVMH was able to consistently outperform the market due to its strong presence in different segments, the success of its products and a well-defined robust investment strategy. From 2019E to 2025E, in this market, analysts expect a solid mid-term CAGR between 3% to 5%, adding up to a total value between €335 to €375 billion.

Main Risk Factor: The negative impact of the current COVID-19 outbreak on LVMH's operations and the world's economy cannot yet be accurately quantified.

Recommendation: **HOLD**

Price (06/03/20): €360,35

12m Price Target: €400,00

Upside: 11,00%

Key Data

Market Cap: €181.987mn

52-week high (17/01/20): €439,05

52-week low (08/03/19): €305,80

Shares Outstanding: 505mn

Headquarters: Paris, France

Industry: Personal Luxury Goods

Forecast Summary

	2019H	2020E	2021E
Revenue	53.670	53.507	58.166
EBIT (%)	21,00%	19,69%	21,00%
EPS (€)	14,19	13,25	15,60
P/E	25,4x	27,2x	23,1x

Stock Price Performance



Goldman Sachs

Date: 10 September 2019

Recommendation: **BUY**

12m Price Target: €420,00

Summary of Financials ¹	2017H	2018H	2019H	2020E	2021E	2022E	2023E	2024E	2025E
Revenue (mn EUR)	42.636	46.826	53.670	53.507	58.166	62.390	66.446	70.309	73.696
Fashion & Leather Goods	36,72%	39,86%	42,24%	43,60%	44,52%	44,98%	45,38%	45,80%	46,20%
Selective Retailing	31,60%	29,48%	28,09%	27,82%	27,32%	27,06%	26,83%	26,56%	26,26%
Perfumes & Cosmetics	10,79%	10,87%	10,93%	10,75%	10,84%	10,99%	11,13%	11,25%	11,36%
Wines & Spirits	12,03%	11,09%	10,57%	10,07%	9,69%	9,42%	9,22%	9,08%	8,96%
Watches & Jewelry	8,86%	8,70%	8,17%	7,75%	7,63%	7,55%	7,44%	7,31%	7,21%
EBIT (mn EUR)	8.113	9.877	11.273	10.535	12.213	13.150	14.003	14.869	15.595
Fashion & Leather Goods	30,44%	31,01%	31,47%	29,08%	31,00%	31,00%	31,00%	31,00%	31,00%
Selective Retailing	6,72%	8,94%	8,03%	7,43%	7,70%	7,80%	7,60%	7,70%	7,50%
Perfumes & Cosmetics	11,97%	11,97%	10,08%	9,59%	10,28%	10,48%	10,68%	10,88%	11,08%
Wines & Spirits	29,32%	30,53%	29,49%	29,35%	29,79%	29,94%	30,09%	29,99%	29,84%
Watches & Jewelry	10,26%	16,21%	15,11%	12,36%	14,31%	13,91%	13,51%	13,11%	13,00%
Net Income	5.365	6.354	7.171	6.698	7.883	8.526	9.108	9.699	10.194

¹ China Lockdown scenario.

Abstract

Title: Equity Valuation – LVMH Moët Hennessy - Louis Vuitton SE

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The author's goal with the present dissertation is to provide an informed investment recommendation about LVMH Moët Hennessy Louis Vuitton SE ("LVMH") stock, based on its 2020 year-end estimated value.

LVMH is a gigantic French luxury goods conglomerate that consists of multiple businesses, with different risks, growth and cash flow profiles. Consequently, each business segment is valued separately (disaggregated valuation), as if they were standalone companies, and then added up together to derive the group's value. Each business segments' value is estimated using two distinct valuation methodologies, i.e., a WACC-based DCF and a relative valuation model. In the end, the results obtained are discussed and framed with other analysts' opinions, through their comparison with an equity research on LVMH, published by Goldman Sachs. The results of this dissertation set a 12-month price target of €400 for LVMH stock, which considering the current economic uncertainty, supports a hold recommendation.

Keywords: LVMH, Personal Luxury Goods Industry, Equity Valuation, Sum-of-the-parts Valuation, DCF, Relative Valuation.

Resumo

Título: Equity Valuation – LVMH Moët Hennessy - Louis Vuitton SE

Autor: Miguel Robbins Salazar Oliveira

O objectivo do autor com a presente dissertação é de fornecer uma recomendação de investimento sobre as ações da LVMH Moët Hennessy Louis Vuitton SE (“LVMH”), com base no seu valor estimado para o final de 2020.

A LVMH é um gigantesco conglomerado de luxo Francês que opera em múltiplos segmentos de negócios, com diferentes riscos, taxas de crescimento e fluxos de caixa. Deste modo, cada segmento foi avaliado individualmente (avaliação desagregada), como se fosse uma empresa independente, posteriormente, o valor de todos estes segmentos foi adicionado para estimar o valor total do grupo. O valor de cada segmento foi estimado através de duas distintas metodologias, um modelo DCF baseado no WACC e um modelo à base de múltiplos.

No final, os resultados obtidos são discutidos e enquadrados com a opinião de outros analistas, através da sua comparação com os resultados de um relatório da Goldman Sachs, sobre a LVMH. Os resultados da presente dissertação, definem um preço alvo a 12 meses de €400 para as ações da LVMH, que considerando a atual incerteza económica, apoia uma recomendação de manter a ação.

Palavras-chave: LVMH, Indústria de Bens Pessoais de Luxo, Avaliação de Património, Avaliação da Soma das Partes, DCF, Avaliação Relativa.

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List of Abbreviations

APV	Adjusted Present Value
beg.	Beginning
bn	Billion
CAPM	Capital Asset Pricing Model
CAPEX	Capital Expenditure
CAGR	Compound Annual Growth Rate
CVT	Convertible
COVID-19	Corona Virus Disease 2019
D	Debt
D&A	Depreciation and Amortization
DCF	Discounted Cash Flow
DDM	Dividend Discount Model
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
E	Equity
EUR	Euro
excl.	Excluding
E(CF)	Expected Future Cash Flows
FY	Fiscal Year
FTE	Flow to Equity
FCFF	Free Cash Flow to Firm
GS	Goldman Sachs
GBP	Great British Pounds (Sterling)
GDP	Gross Domestic Product
incl.	Including
ITS	Interest Tax Shields
IFRS	International Financial Reporting Standards
LVMH	LVMH Moët Hennessy Louis Vuitton SE
MRP	Market Risk Premium
MV	Market Value
mn	Million
NOPAT	Net Operating Profit After Tax
NPV	Net Present Value
NWC	Net Working Capital
NTM	Next Twelve Months
ppt	percentage point
PV	Present Value
PP&E	Property, Plant, and Equipment
ROIC	Return on Invested Capital
R_f	Risk-free rate
TV	Terminal Value
WACC	Weighted Average Cost of Capital
YoY	Year-over-Year
YTM	Yield to Maturity

1. Literature Review

1.1. Valuation

A pivotal piece of information for every manager, analyst or investor, to improve his decision-making process, is being able to assess what an asset is worth and what determines its value. Consequently, valuation plays a key role, in most areas of finance, from corporate finance to portfolio management. Perhaps a company is looking to buy a new asset or company or is planning to sell a stake in theirs to outside investors. Perhaps an investor wants to pick a stock for his portfolio or decide the appropriate price to pay for his investment. In all these cases, being able to properly value the asset or the company is vital to ensure that managers/investors do not underprice or overprice the asset they want to buy or sell.

Over the years, both academics and practitioners have developed a panoply of different valuation models. Most of these models make very different assumptions and target different aspects of the valuation problem (obscuring other aspects). Nonetheless, Young, Sullivan, Nokhasteh and Holt (1999) argue that, mathematically, most of these models are no more than a different way of expressing the same underlying model. In general, every valuation model “is always a function of these three fundamental factors – cash, timing and risk” (Luehrman, 1997a).

However, every valuation problem has different structural features and limitations, therefore, the choice between approaches should be governed by which method best accommodates these structural features and is the most robust to data imperfections (Young et al., 1999).

In general terms, the different valuation approaches can be grouped into the following categories:

- (i) **Discounted cash flow (DCF) valuation:** based on the present value of expected future cash flows, discounted at a rate that reflects “the opportunity cost of investing capital in assets of similar risk and duration” (Froot & Kester, 1995).
- (ii) **Relative valuation:** estimates the value of an asset by looking at the pricing of comparable assets relative to a common variable such as earnings, cashflows, book value or sales (Damodaran, 2012).
- (iii) **Excess returns models:** estimates the value of an asset as a function of expected excess returns, i.e., “returns on equity that exceed the cost of equity” (Damodaran, 2005).

- (iv) **Contingent claim valuation:** meant to be used to value assets that only pay off under certain contingencies (i.e., share option characteristics) by applying option pricing models to those assets (Damodaran, 2012).

The next sections will delve into the details of the valuation approaches considered the most relevant for the purpose of this dissertation.

1.2. Discounted Cash Flow (DCF) Valuation

Since the seventies, DCF models have been deemed the most accurate and flexible valuation techniques (Koller, Goedhart & Wessels, 2005). These models are premised on the principle that the value of any asset is the present value of its projected future cash flows (Rosenbaum & Pearl, 2013). This premise is depicted by equation 1 (Luehrman, 1997a).

$$Present\ Value = \sum_{t=1}^{t=n} \frac{E(CF)}{(1 + R)^t} \quad (\text{Eq. 1})$$

Thus, the value of a firm depends on the measurement of two basic parameters:

- (i) Numerator: expected future cash flows ($E(CF)$).
- (ii) Denominator: proper discount rate (R) that reflects the risk involved in the ($E(CF)$).

Consequently, different “measurements of these two parameters have resulted in several alternative DCF valuation methods” (Mitra, 2010). The most common DCF models are discussed in the following sections. For a better understanding of the different methodologies, a distinction is made between equity and enterprise value approaches (equation 2) (Rosenbaum & Pearl, 2013).

$$Equity\ Value = Enterprise\ Value - (Net\ Debt + Preferred\ Stock + Noncontrolling\ Interest) \quad (\text{Eq. 2})$$

1.2.1. Enterprise Value Methods

This section covers the two DCF methods most used to value the whole firm (Enterprise Value) – WACC-based DCF and APV-based DCF. Like every other DCF methodology, these models, involve forecasting future cash flows and then discounting them to the present, using a rate that reflects their risks.

The main difference between these two approaches is how they account for financing side effects (e.g., interest tax shields or cost of financial distress). While, WACC bundles all financing side effects into one discount rate, APV analyses each financing side effect separately (Luehrman, 1997b). As a result, each model discounts the future Free Cash Flow to Firm (FCFF) using different discount rates.

1.2.1.1. Free Cash Flow to Firm (FCFF)

FCFF is how much cash is available to the debt and equity holders of the business. As depicted in equation 3, FCFF can be viewed as the “after-tax profit of the firm less the amount reinvested in the firm, in working capital and fixed assets” (Schill, 2013). FCFF is sometimes called unlevered cash flow, since it does not consider debt payments, thus when applicable, the tax benefits of debt should be considered separately (e.g., in the discount rate) (Mitra, 2010).

$$\begin{aligned} FCFF &= NOPAT - \Delta Net\ Fixed\ Assets - \Delta Net\ Working\ Capital && \text{(Eq. 3)} \\ &= EBIT(1 - Tax\ Rate) + Depreciation\ and\ other\ non-cash\ charges - CAPEX - \Delta NWC \end{aligned}$$

The actual FCFF computation is very simple, the most challenging part is to come up with a cash flow forecast that properly reflects expectations for business growth, profits and asset efficiency, while remaining consistent with its external business environment, e.g., macroeconomic outlook and industry prospects/trends (Schill, 2013). Koller et al. (2005) state that “any valuation is only as accurate as the forecasts it relies on”.

Usually, the **explicit forecast period** lasts between three and ten years (Young et al., 1999). Schill (2013) argues that an analyst should extend the forecast period until he expects the business to sustain abnormal profits and growth.

1.2.1.2. Terminal Value

It would be unrealistic to forecast a company’s cash flow forever, hence the analyst must estimate a terminal value to capture the present value of all cash flows occurring after the forecast period (Rosenbaum & Pearl, 2013). Consequently, the terminal value is generally the most important estimate in any valuation since on average, assuming a five-year forecast, it represents around 90% of the total firm value (Young et al., 1999).

At the end of the forecast period, i.e., in the terminal year, the business is expected to be stable. Ergo, all items in the financial statements of the company are projected to grow, in perpetuity, at the same constant growth rate (Schill, 2013).

Rosenbaum and Pearl (2013) point out the following two methods used to compute a firm's terminal value - exit multiple method and constant growth model. Of those, the constant-growth model is the most used (equation 4), while the exit multiple method is mostly only applied as a check on the constant-growth model.

$$Terminal\ Value_t = \frac{Cash\ Flow_{t+1}}{(Discount\ Rate - Constant\ Growth\ Rate)} \quad (Eq. 4)$$

1.2.1.3. Weighted Average Cost of Capital (WACC)

This method estimates the value of a business by discounting to the present value the forecast FCFE using the WACC as the discount rate (equation 5).

$$Enterprise\ Value = \sum_{t=1}^{t=n} \frac{FCFE_t}{(1 + WACC)^t} + \frac{Terminal\ Value_t}{(1 + WACC)^t} \quad (Eq. 5)$$

Most companies are simultaneously financed with debt and equity, so the WACC considers the firm's cost of capital to be equal to the weighted average between the cost of debt and the cost of equity. This model uses the market values of debt (D) and equity (E), instead of their book values, and the marginal corporate tax rate (T) (equation 6) (Mitra, 2010).

$$WACC = \left(\frac{E}{E + D}\right) \times Cost\ of\ Equity + \left(\frac{D}{E + D}\right) \times Cost\ of\ Debt \times (1 - T) \quad (Eq. 6)$$

The WACC is a tax-adjusted discount rate, as it includes the after-tax cost of debt: $Cost\ of\ Debt \times (1 - T)$, instead of the pre-tax cost of debt. The purpose of this tax-adjustment is to allow the WACC to capture the tax benefits associated with debt financing (Luehrman, 1997b).

Even though, this is one of the most reliable and most often used valuation methods, it is mostly suited to simple and static capital structures. When this is not the case, the model needs to be constantly readjusted (Luehrman, 1997a).

1.2.1.3.1. Cost of Equity

The cost of equity is the expected rate of return required by equity investors. This rate is not directly observed and thus the capital asset pricing model (CAPM) is the method of choice of most analysts and academics to estimate it (Mitra, 2010).

As depicted in equation 7, the CAPM measures the expected rate of return of asset i as the risk-free rate (R_f) plus the asset's exposure to market risk - beta (β_i), multiplied by the market risk premium (MRP).

$$\text{Expected Return}_i = R_f + \beta_i \times MRP \quad (\text{Eq. 7})$$

In theory, the **risk-free rate (R_f)**, is the return expected by an investor from an investment with zero risk and therefore it is usually measured by the return of government default-free bonds. The maturity of the chosen bonds should be that which best matches the investment term in question (Rosenberg & Rudd, 1986). Damodaran (2012) states that 70% of firms use the return on 10-year government bonds or longer.

The **beta (β)** is a measure of systematic risk that quantifies the sensitivity (or co-variance) of the asset's price to market price changes. Koller, Goedhart, Wessels and McKinsey (2015) suggest two distinct approaches to estimating beta - historical market betas and bottom-up betas. Historical market betas are estimated by regressing returns on the investment (stock returns) against market returns, using a broad index as a proxy for the market portfolio (e.g., S&P 500).

To calculate a firm's bottom-up betas, first one must obtain the beta of other publicly traded comparable companies (β_{peers}^L). Secondly, compute the average unlevered beta ($\beta_{Business}^U$) by unlevering the average beta of the comparable firms by their average debt-to-equity ratio (D/E) and tax rate (T) (equation 8). The final step is to estimate the levered beta for the target company ($\beta_{Business}^L$) using its' debt-to-equity ratio and the peers average unlevered beta (equation 9) (Damodaran, 2012).

$$\beta_{Business}^U = \frac{\beta_{peers}^L}{\left(1 + (1 - T) \times \frac{D}{E}\right)} \quad (\text{Eq. 8})$$

$$\beta_{Business}^L = \beta_{Business}^U \times \left(1 + (1 - T) \times \frac{D}{E}\right) \quad (\text{Eq. 9})$$

Zenner, Hill, Clark and Mago (2008) claim that “the **market risk premium (MRP)** is one of the most critical metrics in finance”. The MRP reflects the spread premium required by an investor over the risk-free rate, to invest in a well-diversified market portfolio instead of the risk-free asset. However, there is no universal consensus among analyst and academics on how to estimate it (Mitra, 2010). Zenner et al. (2008) consider multiple approaches and recommend viewing the MRP as a range, historically between 5% and 7%, rather than a unique number.

1.2.1.3.2. Cost of Debt

Koller et al. (2015) argue that for investment-grade firms with bonds outstanding, the cost of debt should be estimated using the yield to maturity (YTM) of the company's long-term, option-free outstanding bonds. The YTM assumes that the company does not default on its bonds, therefore Koller et al. (2015), restrict this approach only to investment-grade firms since they have a very low default probability.

1.2.1.4. Adjusted Present Value (APV)

As previously mentioned, the WACC has its limitations, particularly when dealing with complex and dynamic capital structures or cross-border investments. To mitigate these issues, Myers (1974) presents an alternative framework – Adjusted Present Value (APV) – that first evaluates the firm assuming it is all-equity financed and then makes “adjustments” for all financing side effects (i.e., benefits and costs of debt financing). Equations 10-12 reflect this approach.

$$\text{Enterprise Value} = \text{Unlevered Firm Value} + \text{PV}(\text{Financing Side Effects}) \quad (\text{Eq. 10})$$

$$\text{Unlevered Firm Value} = \sum_{t=1}^{t=n} \frac{\text{FCFF}_t}{(1 + Ku)^t} + \frac{\text{Terminal Value}_t}{(1 + Ku)^t} \quad (\text{Eq. 11})$$

$$\text{PV}(\text{Financing Side Effects}) = \text{PV}(\text{ITS}) - \text{PV}(\text{E}(\text{Bankruptcy costs})) \quad (\text{Eq. 12})$$

The unlevered firm value is obtained by discounting the unlevered cash flow (FCFF) at the unlevered cost of equity (Ku), which can be computed with the CAPM (equation 7) by replacing the firm's levered beta with its unlevered beta ($\beta_{Business}^U$) (Mitra, 2010).

Theoretically, this approach can be adjusted to capture numerous financing side effects, like “interest tax shields, costs of financial distress, subsidies, hedges, issue costs and others” (Luehrman, 1997b).

1.2.2. Equity Value Methods

The two most popular DCF valuation methods used to measure the firm's equity value are the Dividend Discount Model (DDM) and the Flow to Equity (FTE).

While in the previously analysed enterprise value methods – WACC and APV – their main difference was related to the discount rate, the DDM and FTE are discounted at the same rate,

the cost of equity - see section “1.2.1.3.1. Cost of Equity”. Damodaran (2005) asserts that their main difference is the expected future cash flows (numerator), since the DDM discounts actual dividends while the FTE discounts potential dividends.

1.3. Relative Valuation: Multiples

The value of most assets is usually based on the pricing of similar assets in the marketplace. For instance, a real estate agent values a house by multiplying its square meters by the price paid per square meter for similar houses that were recently sold. Relative valuation applies this same logic when valuing companies or businesses (Schill, 2013).

The main advantages of this approach are that it requires fewer assumptions and is quicker to complete than a DCF valuation. However, the DCF method is more accurate, more flexible and provides more information about a firm’s performance than a relative valuation (Koller et al., 2005).

Relative valuation derives the value of an asset from the pricing of comparable assets, thus, the foundation of a good multiples valuation lies in the choice of the right peer group (Rosenbaum & Pearl, 2013). The right peer group is one comprised of companies with cash flows, growth potential and risks comparable to the company being valued (Damodaran, 2012). Koller et al. (2005) suggest starting by looking into a company’s industry to define an initial list of peers. After that, you must compare the operations of each of these companies, as well as their ROIC and growth rate to the target company. In the end, you should have a small but appropriate peer group.

Koller et al. (2005) define the following four basic principles for correctly using multiples:

- (i) A peer group comprised of companies with similar ROIC and growth projections.
- (ii) The use of forward-looking multiples, since empirical evidence shows that they are more accurate than historical multiples.
- (iii) The use of enterprise value multiples, since they are less affected by capital structure.
- (iv) Adjustments to the enterprise value for non-operating items, such as: exclude excess cash or add the present value of operating leases.

1.4. Valuing Conglomerates

Up to this point, all the literature reviewed has mostly focused on single-business companies. This subsection considers the different characteristics of a conglomerate company and implications regarding DCF and relative valuation models for them.

Conglomerates are large corporations that own a controlling stake in multiple businesses, usually spread geographically and across different industries. Consequently, these firms become more difficult to value than single-business companies since they represent multiple businesses (with different risk, growth and cash flow profiles), “bundled and sold as a single package” (Damodaran, 2009).

When valuing multi-business, multi-national companies, one must consider/overcome the following factors:

- (i) Different markets have different levels of risk - e.g., emerging economies are riskier than developed economies (James & Koller, 2000).
- (ii) Lack of market information (e.g., market value of equity and debt) for each business unit, since the consolidated company is the one that is listed.
- (iii) Constant shifts in the weight of each business unit for the conglomerate, due to different growth rates – weighted average risk for the whole company, needs to be constantly readjusted to reflect these changes (Damodaran, 2009).
- (iv) Different marginal tax rates across businesses.
- (v) Incomplete financial statements by business unit, e.g., in most companies, debt is consolidated at the company level (Damodaran, 2009).
- (vi) Corporate overhead costs, e.g., one company-wide accounting department. These expenses need to be allocated across different business units, using a chosen operating variable as a basis (Koller et al., 2015).
- (vii) Inter-company transactions – consolidated results eliminate internal revenues, costs, and profits as well as internal assets and liabilities to prevent double-counting (Koller et al., 2015).

The next sections discuss how DCF and relative valuation can account for these factors. However, no matter the approach, multi-business companies will always face more complexity and information gaps than single-business companies (Damodaran, 2009).

1.4.1. DCF: Sum-of-the-parts

Damodaran (2009a), discusses the pros and cons of two different DCF approaches to value conglomerates:

- (i) **DCF Aggregated Valuation:** value the company as a whole (consolidated cash flows for the firm are discounted using one discount rate – computed using the weighted averages of risk parameters).
- (ii) **DCF Disaggregated Valuation:** value each individual business unit separately (different cash flows and different discount rates).

Koller et al. (2015) argue that it is standard practice in industry-leading companies to value each segment separately (disaggregated valuation) and add them up to estimate the value of the entire company, since it generates a better estimate and a deeper insight into where and how a company is generating value. Therefore, in a world with no constraints in terms of time or information, the disaggregated valuation is always the best approach. However, in practice one key factor must be considered – information availability.

To properly value each business unit separately as if they were standalone companies (disaggregated valuation), their financial statements are needed to forecast the free cash flow generate by each business unit (equation 3) and compute their appropriate discount rate, however, most conglomerates do not provide that level of detail. Damodaran (2009) suggests assuming the “industry averages (for each business) where information is lacking”, while Koller et al. (2015) suggest allocating costs by cost drivers, e.g., allocate the aggregated staff costs by the number of employees in each business unit.

1.4.2. Relative Valuation: Sum-of-the-parts

When valuing large conglomerates that operate in many different sectors or businesses, finding good comparable firms (i.e., in terms of business mix), is practically impossible. Therefore, to value conglomerates, most analysts try to value each business unit separately by applying multiples to the earnings or revenues generated by each business unit, based upon the pricing of publicly traded comparable firms in that business (Damodaran, 2009).

1.5. Conclusion

After reviewing the state-of-the-art literature on equity valuation and considering the underlying issues when valuing large conglomerates like LVMH, as well as its specific business characteristics, the most appropriate valuation methods to value LVMH can be selected.

When valuing conglomerates, first, we must decide if we should perform an aggregated or disaggregated valuation. LVMH organizes its more than 70 brands into six business segments, where each segment is dedicated to a different type of luxury goods with different risks, growth potential and cash flow profiles. Therefore, each business segment was valued separately (disaggregated valuation) and added up to estimate the value of the entire company. Koller et al. (2015) argue that this approach is standard practice among industry-leading investment banks, as long as the necessary information is available.

The next question is which valuation method is more appropriate for valuing LVMH's business segments. The WACC-based DCF was deemed to be the best option since it is mostly suited to firms with a static capital structure. Historically that has been the case for LVMH, and they provide no indication that this will change in the foreseeable future.

Additionally, to support this dissertation's final recommendation a sum-of-the-parts valuation using multiples was performed, based on one of the most commonly used forward-looking multiples, the EV/EBITDA, since evidence shows that forward-looking multiples are more accurate than historical multiples and supports the use of Enterprise Value (EV) multiples since they are less affected by capital structure (Koller et al., 2005).

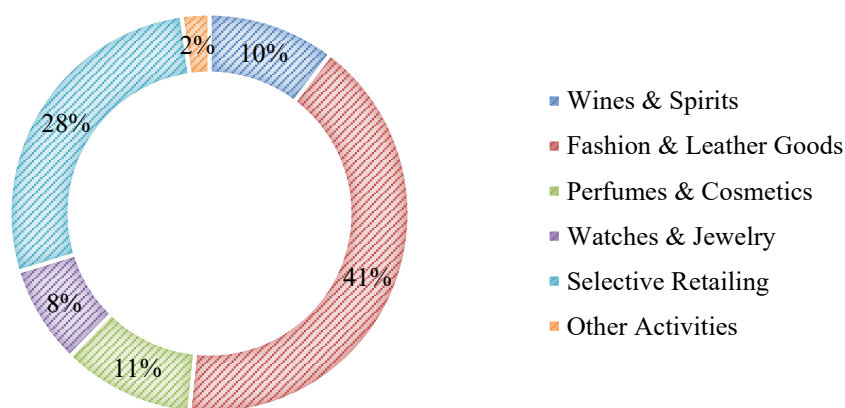
2. Business Analysis

2.1. Company Overview

LVMH is a French conglomerate specialized in the manufacturing and marketing of luxury goods, formed in 1987 following the merger of, the luxury goods producer, Louis Vuitton with, champagne and cognac producer, Moët Hennessy. LVMH is the world's leading luxury goods vendor with sales of €53,7 billion in 2019H. The group includes more than 70 prestigious brands, employs over 156.000 people and owns a retail network of over 4.910 stores worldwide. Among some of LVMH's best-known brands are: Christian Dior, Louis Vuitton, Givenchy, Celine, Fendi, Hennessy, Dom Pérignon, Moët & Chandon, Bvlgari, Tag Heuer and Sephora (see Appendix 1 for the full list of all LVMH's brands).

The group organizes its brands into six business segments: Wines & Spirits, Fashion & Leather Goods, Perfumes & Cosmetics, Watches & Jewelry, Selective Retailing, and Other Activities.

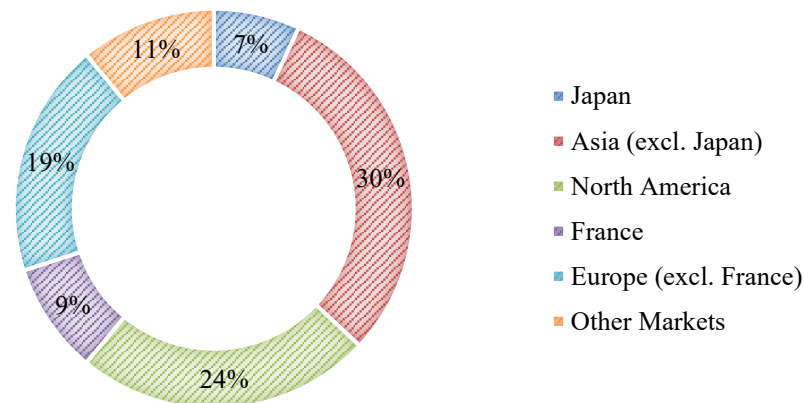
Figure 1.
LVMH's Revenue by Business Segment, in 2019H



Source: Company information.

LVMH operates in over 160 countries - Figure 2 presents the breakdown of LVMH's sales by region. Asia (excl. Japan) has been the group's main source of revenue since 2016 and the main driver of growth over the past 5 years. The strong position of the group, particularly in China, allowed them to weather the impact of the 2019 Hong Kong protests by drawing on momentum in other destinations. The group reported that the year-over-year fourth quarter sales in Hong Kong dropped 40%, however the strong performance of the group's other stores in mainland China contributed to an 18% increase of their sales in the region, over the year.

Figure 2.
LVMH's Revenue by Region, in 2019H

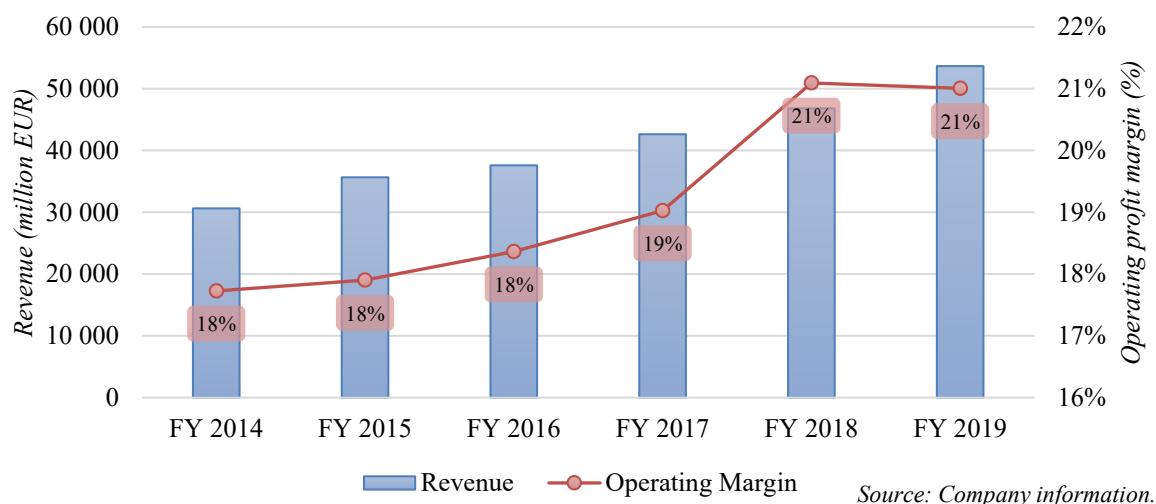


Source: Company information.

In 2020, the impact of the coronavirus (COVID-19) outbreak in China cannot yet be quantified, however it is a reason for concern since its impact could be potentially catastrophic. LVMH and other luxury brands have closed stores and cancelled fashion shows in mainland China. Furthermore, luxury sales around the world are also expected to be heavily affected since they are very reliant on tourist spending (especially, Chinese tourists), which is limited due to travel restrictions put in place by China and other governments to prevent the virus from spreading.

In terms of competitors, even though there are other prominent luxury goods conglomerates, such as: Kering SA, Compagnie Financière Richemont SA, Estée Lauder Companies or PVH Corp. They are all much smaller than LVMH and none of them have a comparable business mix to LVMH (they operate in different luxury segments).

Figure 3 depicts the evolution of LVMH's revenue and operating profit margin from 2014H to 2019H. Over this period, the group's sales registered a compound annual growth rate (CAGR) of 12% while its operating profit margin went from 18% to 21%.

Figure 3.**LVMH's Revenue and Operating Margin, from 2014H to 2019H**

2.2. Business Strategy

LVMH views itself as a collection of brands with great history and unique identities and strives to ensure the long-term development of these brands by leveraging on their heritage and roots while maintaining the excellent quality of their products. To do so, the group is constantly seeking, at an internal level, to improve its expert craftsmanship, production methods and distribution channels and encourage creativity while retaining and attracting the best designers, artisans, researchers and executives. The group markets its brands' products through: directly owned stores, franchises, online shops, wholesalers and agents.

Externally, the group makes targeted acquisitions of luxury brands with sterling reputations, which they can capitalize on (e.g., Bvlgari, Rimowa, Christian Dior and Tiffany & Co.). When warranted, LVMH is also able to use its vast resources to launch new brands, like the successful cosmetics brand - Fenty Beauty by Rihanna.

LVMH closely manages its financial structure since maintaining a good credit rating² is seen as a key strategic objective to ensure the group's capacity to access markets with favourable conditions and seize opportunities.

To conclude the Business Strategy analysis, Appendix 2 presents a summary of LVMH's identified strengths and weaknesses.

² In December 2019, Moody's affirmed LVMH A1 long-term issuer rating.

2.3. Business Segments Overview

2.3.1. Fashion and Leather Goods

This is the biggest segment of LVMH and was responsible for 41% of the group's revenue in 2019H, at its core is the group's most successful brand – Louis Vuitton. Additionally, this segment includes 16 other prestigious brands, such as Christian Dior and Celine.

LVMH supports the growth of these brands by providing them with shared resources and access to the best designers while allowing them to remain autonomous and true to their identity. Most of these brands are available to the customer through very exclusive and unique distribution channels (mostly directly owned stores), and therefore LVMH is constantly seeking to enhance the quality of and judiciously expand its retail network.

See Appendix 3 for detailed financial information reported by LVMH on this segment.

2.3.2. Selective Retailing

The second biggest segment within LVMH accounted for 28% of the group's revenue in 2019H. Sephora, the world's leading selective beauty retailer, is this segment's main source of revenue and driver of growth. In 2019, Sephora owned over 95% of the 2 011 physical stores and 30 e-commerce sites in this segment. This segment follows a customer-focused strategy and its main objective is to delight its customers with unique experiences while shopping. Going forward, LVMH plans to continue to expand its store network and online presence.

See Appendix 4 for detailed financial information reported by LVMH on this segment.

2.3.3. Perfumes and Cosmetics

This segment comprises 14 prestigious brands, including: Parfums Christian Dior, Guerlain, Givenchy Parfums and Fenty Beauty by Rihanna. These brands focus on ensuring the excellence and creativity of their products while accelerating their digital marketing and promotion activities.

LVMH strategy for this segment consists of finding the right balance between major historic brands like Parfums Christian Dior or Guerlain, and young, bold and innovative brands like Fenty Beauty by Rihanna or Make Up For Ever. Most products in this segment are sold through selective retail chains, such as Sephora, and department stores. LVMH plans to continue to grow its retail network and digital presence.

See Appendix 5 for detailed financial information reported by LVMH on this segment.

2.3.4. Wines and Spirits

Wines and Spirits features a collection of 29 internationally distinguished brands of champagnes, wines and spirits from the most prestigious origins and *terroirs* - e.g., Moët & Chandon, Hennessy, Dom Pérignon, Belvedere, Veuve Clicquot, Hennessy and Château d'Yquem. Most of the brands in this segment have over a century of history and expertise.

LVMH believes that the strong appeal of their brands, their exceptional products, their attention to customers' specific expectations and the experience that each brand has built up over the years, combined with their dynamic global distribution network, will continue to drive the growth in this segment by being able to capture the next generation of consumers.

In 2019, in terms of revenue this segment is only the fourth biggest segment for LVMH, however in terms of operating profit, due to its comfortable operating margin (31%, in 2019H), it is the second most important segment within the group, generating 15% of its operating profit.

See Appendix 6 for detailed financial information reported by LVMH on this segment.

2.3.5. Watches and Jewelry

The most recently established segment within LVMH, created in 1999, is still developing but already includes some of the most emblematic brands in this industry, such as Bvlgari, TAG Heuer and Hublot. These brands capitalize on their reputation, refined craftsmanship, expertise and creativity to indulge their customers with the products they desire.

The growth of this segment has been supported by their iconic lines and the performance of their own-retail stores. Therefore, LVMH plans to continue to renew and enrich their iconic lines, launch innovative new collections, expand their retail network and online presence, and continue to bolster its brand portfolio, with carefully selected investments. The brands in this segment are also available in handpicked multi-brand retailers and franchises.

See Appendix 7 for detailed financial information reported by LVMH on this segment.

2.3.6. Other Activities

This segment aggregates the remaining brands owned by LVMH that do not qualify for any of the other five business segments. Therefore, it combines a highly heterogeneous group of

brands, such as Les Echos, a daily financial newspaper, or Royal Van Lent, a builder of high-end luxury yachts, or Belmond, a luxury travel specialist that operates luxurious hotels, train services, river cruises and restaurants across the globe.

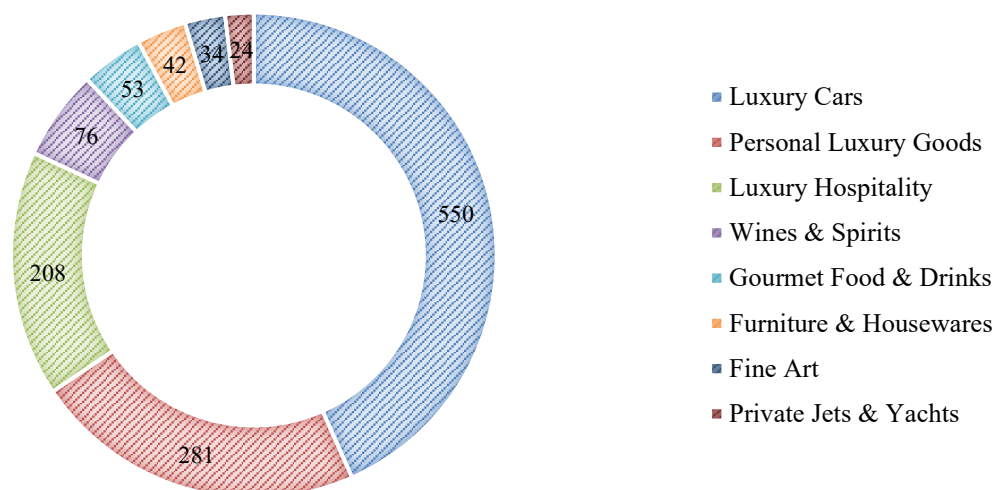
According to LVMH, these brands benefit from a vertical integration system to offer products and services to their customers that meet the group's standards of excellence. However, this segment has never generated a positive operating profit and LVMH provides no justification or details as to why.

See Appendix 8 for detailed financial information reported by LVMH on this segment and other non-allocated costs.

3. Industry Overview

As aforementioned, LVMH is a major player in the worldwide luxury market. During 2019, this market grew 4%, to an estimated €1,3 trillion. This is a highly segmented market - Figure 4 presents the breakdown of the market's value by segment. LVMH operates primarily in the Personal Luxury Goods segment, which had an estimated value of €281 billion in 2019, additionally, the group also has a considerable position in the Wines & Spirits segment (Bain & Company, 2019).

Figure 4.
Global Luxury Market by Segment, 2019E (billion EUR)

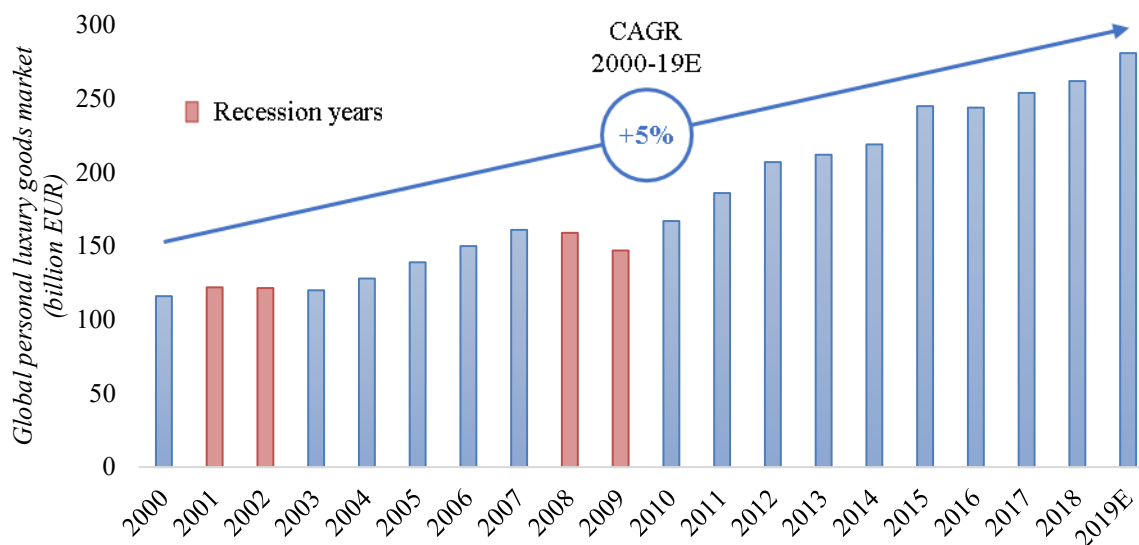


Source: Bain & Company (2019).

The Wines & Spirits segment grew at a CAGR of 7,4%, from 2010H to 2019E, most of this growth was driven by Spirits, especially gin. This segment is predicted to continue to grow at a CAGR of around 4%, from 2019E to 2025E, motivated by an increased consumption of alcohol among young adults and an increasing demand for premium products (Bain & Company, 2019).

As depicted by Figure 5, the Global Personal Luxury Goods segment grew at a CAGR of 5%, from 2000H to 2019E. This figure also illustrates the cyclical nature inherent to this industry, since sales growth rate is clearly negatively affected in both highlighted periods of economic contraction, and that over the last 20 years, each cycle had an average length of 10 years.

Figure 5.
Global Personal Luxury Goods Market, from 2000H to 2019E

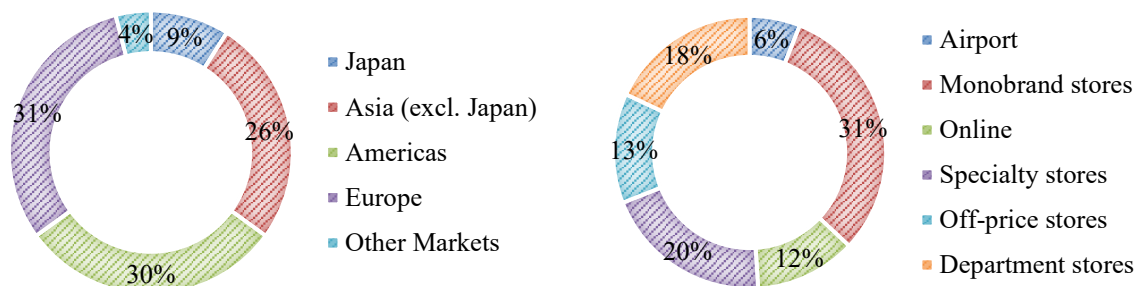


Source: Bain & Company (2019) and National Bureau of Economic Research (NBER).

Going forward, from 2019E to 2025E, analysts forecast a solid mid-term CAGR between 3% to 5%, adding up to a value between €335 to €375 billion, for the Global Personal Luxury Goods segment. This growth is expected to be driven by a growing appetite for luxury goods among the rising middle-class consumer and considers some potential turbulence resulting from social and political issues or a short-term recession (Bain & Company, 2019).

Figure 6 presents the contribution of each region and distribution channel to the Global Personal Luxury Goods segment.

Figure 6.
Global Personal Luxury Goods Market by Region and by Distribution Channel, in 2019E



Source: Bain & Company (2019).

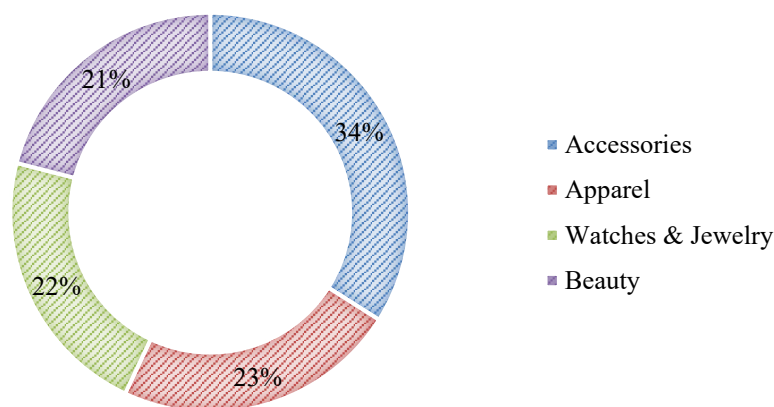
In terms of region, most of the growth in this segment has been driven by the growing middle class in China, resulting in a CAGR of 11% for Asia (excl. Japan), from 2010H to 2019E. While the other four regions highlighted in Figure 6, have all yielded a CAGR between 4% to 5%, over this period (Bain & Company, 2019).

From 2014H to 2019E, online has been the fastest-growing distribution channel with a CAGR of 23%, followed by Off-price stores and Airport sales with a CAGR of 14% and 11%, respectively. By 2025E, online sales are expected to account for around 25% of the market (ICSC, 2019).

As highlighted by Figure 7, the Personal Luxury Goods segment encompasses the following product categories: apparel, beauty (i.e., mostly perfumes and cosmetics), accessories (e.g., leather goods) and hard luxury (i.e., watches and jewellery). From 2010H to 2019E, the accessories category remained the largest and fastest-growing category, growing at a CAGR of 9%, while the apparel, beauty and hard luxury categories, over this period, grew at a CAGR of 4%, 5% and 6%, respectively.

Figure 7.

Global Personal Luxury Goods Market by Product Category, in 2019E



Source: Bain & Company (2019).

Outside the luxury goods market, LVMH is also an important player in the global beauty and personal care market through its Selective Retailing segment, acting as a distributor. This market is expected to reach €630 million by the end of 2025E, growing at a CAGR of 6,9% during 2019E-2025E (QY, 2019).

4. Valuation

4.1. Allocation of Centralized Costs

When valuing a single-business company, one of the most important factors for every analyst is to have access to accurate and trustworthy information about the company's operating details, financial structure (book and market values), capital expenditures and working capital (Damodaran, 2009). For listed companies, this information is usually available to the public through market information and the company's annual report. However, when performing a disaggregated valuation of a multi-business company, such as LVMH, all the required information, about each business, might not be available.

Large conglomerates usually have considerable centralized costs, LVMH is no exception. Centralized costs are motivated by two main factors: control over risks and the cash flow of different businesses to better manage their risks, and economies of scale - e.g., having only one company-wide accounting or marketing department.

LVMH provides enough information about each of its business segments for us to be able to perform a disaggregated valuation (Appendix 3-7). However, one problem persists – other activities and non-allocated headquarters assets and liabilities (Appendix 8), must be allocated across the company's business segments, using a chosen criteria as a basis.

Appendix 9 illustrates the allocation process and its criteria, in 2019H. The same process was replicated from 2015H to 2019H. It is important to notice that these adjustments, in most cases, are usually very small and therefore their impact on the results should be minimal.

Additionally, LVMH reports the amount of intra-group sales by segment, therefore all revenues have been adjusted to avoid double counting by excluding these amounts.

The financials of each segment after allocation, will serve as the basis for the valuation in the following sections, since not allocating the centralized costs by business segment or adjusting the revenues for intra-group transactions, might result in a significant overvaluation of each segment.

4.2. Peer Group by Business Segment

To perform LVMH's disaggregated valuation, first an appropriate peer group for each of its business segments must be identified. These peer groups will be used in the sum-of-the-parts multiples valuation and to estimate the beta of each segment.

For each business segment, a broader group of publicly traded comparable companies was gathered based on their business activities. The main challenge was that many of the brands competing against LVMH are either part of a larger diversified group or are privately held (e.g., Chanel SA and Rolex SA), which made it necessary to expand the scope of the search in some segments.

As suggested by Koller et al. (2005), from this broader group of companies with comparable operations, the final peer group for each business segment, was selected based on the peers' ROIC and revenue growth rate over the last year.

Appendix 10 presents the initial list of peers and the final peer group selected for each of LVMH's business segments.

4.3. Weighted Average Cost of Capital (WACC)

To estimate each segment's value, first a WACC that properly reflects the risk of their cash flows and operations, must be estimated.

4.3.1. Market Value of Debt and Equity

Due to the lack of market information for each segment (i.e., market value of equity and debt), since the consolidated company is the one that is listed, the company's debt to equity ratio was assumed for all segments.

The market value of equity can be directly observed from the market - LVMH currently has a market capitalization of €209,07 billion. However, the market value of debt, requires further consideration, since not all of LVMH's debt is publicly traded.

The market value of the publicly traded debt (€15,85 billion) can be directly observed in the market (see Appendix 11 for list of bonds outstanding). LVMH's other sources of debt, depicted in Table 1, are not publicly traded and consequently only their book value is available.

For Commercial Paper, Bank Overdrafts and Other Short-term borrowings their book value was assumed as their market value, since they are all short-term instruments. Furthermore, the Lease Liabilities do not require any adjustments since in accordance to IFRS 16, all leases are now recognized at their present value. Finally, Bank Loans book value was also used as their market value, since they represent less than 1% of the group's total debt and LVMH does not provide details about the loans' characteristics.

This results in a market value of debt of €34,46 billion and consequently a debt to equity ratio of 16,48%.

Table 1.
Market Value of Debt Estimation

Debt Instruments	Market Value (million EUR)
Outstanding Bonds	15.846
Bank Loans	310
Commercial Paper	4.868
Bank Overdrafts	176
Other Short-term Borrowings	712
Lease Liabilities	12.545
Market Value of Debt	34.457

Source: Thomson Reuters Eikon & FY2019 LVMH Financial Report.

4.3.2. Cost of Debt

LVMH's debt is consolidated at the company level, therefore the same cost of debt was assumed for every business segment.

Koller et al. (2015) argue that the cost of debt, when a company has bonds outstanding, can be estimated from the YTM of its option-free outstanding bonds.

LVMH has 16 outstanding bonds, adding up to a total outstanding amount of €15,85 billion. One of those bonds had embedded options (convertible bond) and hence it was not used to estimate the group's cost of debt. Therefore, the cost of debt was estimated as the weighted average of the YTM of the remaining 15 outstanding bonds, resulting in a cost of debt of 0,53%. Three of these bonds were issued in pounds sterling (GBP), and thus their YTM had to be converted to euros (see Appendix 11 for detailed calculations).

4.3.3. Cost of Equity

The CAPM model has three key inputs: the risk-free rate (R_f), the asset's exposure to market risk – beta (β_i), and the market risk premium (MRP).

Regarding the risk-free rate, the return of a euro-denominated long-term government bond was used, namely the Germany 10-year Government bond of -0.395%, on February 14, 2020. The same risk-free rate is used, when computing the cost of equity in all LVMH's business segments. The MRP, was estimated separately for each segment, as the weighted average equity risk premium of each region, using each segment's revenue by region as a basis (see Appendix 12 for the calculation). All the MRP estimates fit the range suggested by Zenner et al. (2008), between 5% to 7%, and the results of a global survey conducted by Fernandez et al. (2019).

Since different businesses face different risks and therefore have different betas, a different beta was estimated for each segment. These betas were computed through the bottom-up approach discussed in the literature review, using the previously selected peer groups.

The peers' 5-year monthly betas were collected from Thomson Reuters. A 5-year period was chosen since over this period LVMH's capital structure and business activities have remained stable, and a monthly return interval, since lower frequencies (e.g., weekly or daily) are more subject to be affected by non-trading problems (Damodaran, 1999).

Table 2 presents the betas estimated for each of LVMH's segments. The debt to equity ratio (D/E) was estimated in section "4.3.1. Market Value of Debt and Equity" and the corporate tax rate was computed based on each segment's sales per region (see Appendix 12 for calculations).

Table 2.

Bottom-up beta estimated for each of LVMH's business segment

LVMH - Business Segment	Peers Average Unlevered Beta	Corporate Tax Rate	D/E	Levered Beta
Fashion & Leather Goods	1,14	26,79%	16,48%	1,28
Selective Retailing	1,09	27,44%	16,48%	1,22
Perfumes & Cosmetics	0,93	26,57%	16,48%	1,04
Wines & Spirits	0,72	27,29%	16,48%	0,81
Watches & Jewelry	1,06	26,91%	16,48%	1,19

See Appendix 13 for the computation of the Peers Average Unlevered Beta.

Based on these estimates, and using each segment's 2019H revenues as a basis, the weighted average beta for the whole group would be 1,18, which is very close to LVMH's 5-year monthly beta of 1,20 from Thomson Reuters.

Finally, after collecting all the necessary inputs, Table 3 presents the estimated cost of equity for each of LVMH's business segments.

Table 3.
Cost of Equity by LVMH's Business Segment

Inputs	Fashion & Leather Goods	Selective Retailing	Perfumes & Cosmetics	Wines & Spirits	Watches & Jewelry
Risk-free	-0,40%	-0,40%	-0,40%	-0,40%	-0,40%
Beta Levered	1,28	1,22	1,04	0,81	1,19
Market Risk Premium	6,19%	6,10%	6,24%	6,22%	6,42%
Cost of Equity	7,52%	7,07%	6,12%	4,62%	7,24%

4.3.4. WACC

Having estimated the cost of debt and equity and their weightings, Table 4 presents LVMH's cost of capital by business segment.

Table 4.
WACC by LVMH's Business Segment

WACC	Fashion & Leather Goods	Selective Retailing	Perfumes & Cosmetics	Wines & Spirits	Watches & Jewelry
MV of Equity (M€)	209.068	209.068	209.068	209.068	209.068
MV of Debt (M€)	34.457	34.457	34.457	34.457	34.457
E/(E+D)	85,85%	85,85%	85,85%	85,85%	85,85%
Cost of Equity	7,52%	7,07%	6,12%	4,62%	7,24%
D/(E+D)	14,15%	14,15%	14,15%	14,15%	14,15%
Cost of Debt	0,53%	0,53%	0,53%	0,53%	0,53%
(1-Tax Rate)	73,21%	72,56%	73,43%	72,71%	73,09%
WACC	6,51%	6,12%	5,31%	4,02%	6,27%

4.4. FCFF Forecast

Unfortunately, LVMH does not provide detailed information about each of their segments' plans, nor do they make projections about their performance. Consequently, most of the forecasting assumptions are based on the authors judgement of available industry and macroeconomic information, and LVMH's historical performance.

As mentioned, in section "3. Industry Overview", a full cycle in this industry, over the past 20 years, exhibited an average length of 10 years. Therefore, this analysis uses an explicit forecast period of 10 years. At the end of this period, it is expected that LVMH's business segments will reach a steady state and will consequently continue to grow into perpetuity at a constant terminal growth rate.

In this valuation exercise a probabilistic approach is applied due to the current coronavirus outbreak, which is still spreading throughout the world and cannot yet be quantified. To deal with this uncertainty, three scenarios were envisaged that illustrate the three most likely repercussions of the virus at this point to LVMH's operations and the world's economy. These scenarios were constructed under the following assumptions:

- (iii) **February Base Case:** This scenario values the company as is, assuming that the virus dies out in a couple of weeks and has only a small impact on the group's growth.
- (iv) **China Lockdown:** This scenario assumes that China's lockdown measures, quarantine policies and restrictions, such as closing borders, halting public transport and restricting movement of people, remain in place for approximately one quarter of the year. Consequently, this scenario assumes that the sales generated, in 2020E, by each of LVMH's segments in Asia, will only be 75% of the Base Case. Additionally, some further considerations were made to each segment's 2020E EBIT margin, to account for potential production, distribution and sourcing problems.
- (v) **Global Pandemic:** This scenario assumes the worst-case scenario, implying a worldwide spread of the virus and global lockdown measures and restrictions. To account for these events, this scenario assumes that the overall sales of all LVMH's segments, in 2020E, will only be 75% of the Base Case, and specific consequences to each segment's 2020E EBIT margin.

4.4.1. Revenue

In most forecasts, revenue is the most important estimate, this study is no different, as most of the other variables are linked to it.

4.4.1.1. Fashion & Leather Goods

Fashion & Leather Goods is the biggest and most important segment within LVMH, encompassing over 17 different brands that operate autonomously from one another. Consequently, finding a common growth driver across all these brands was particularly challenging, since each brand operates differently and LVMH does not disclose each brand's details.

Goldman Sachs' equity research estimates that the brands Louis Vuitton and Dior collectively account for close to 80% of this segment's revenue and are also, in recent years, its two main sources of growth. Consequently, since both these brands distribute their products exclusively through directly owned stores, this segment's revenue was estimated as a function of the following equation:

$$Revenue_t = Average\ number\ of\ stores_t \times Average\ revenue\ per\ store_t$$

For 2020E, due to LVMH's goal to win market share by maintaining a robust investment strategy, the growth in the **number of stores** was estimated as the average year-over-year growth of the past five years, excluding 2017H due to the acquisition of Rimowa and Dior. Throughout the explicit forecasting period, this annual growth rate is expected to slowly decline, as the potential number of locations for high-end stores also declines and online sales replace physical stores, even for high-end luxury, such as Louis Vuitton.

The **revenue per store**, was divided into three stages. First, for 2020E and 2021E, a similar annual growth to the one observed over the past four years is expected. Secondly, from 2022E to 2026E, the annual growth of the revenue per store is projected to range between 3% to 5%, which is around the estimated industry growth, over this period (see section "3. Industry Overview"). Finally, after 2026E, the annual growth of the revenue generated per store is expected to converge to around 2%, i.e., the target inflation rate of most Central Banks.

Table 5.
Revenue Forecast Summary – Fashion & Leather Goods

<i>(million EUR)</i>	2017H	2018H	2019H	2020E	2021E	2022E	2023E
Base Case	15.655	18.666	22.670	26.069	28.934	31.358	33.690
<i>Growth (%)</i>	20,89%	19,24%	21,45%	14,99%	10,99%	8,38%	7,44%
# of stores	1.639	1.811	1.927	2.052	2.148	2.238	2.321
Sales per store	9,55	10,31	11,76	12,71	13,47	14,01	14,51
China Lockdown	15.655	18.666	22.670	23.332	25.896	28.065	30.153
Global Pandemic	15.655	18.666	22.670	19.552	21.700	23.518	25.268
<i>(million EUR)</i>	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Base Case	35.977	38.041	39.825	41.276	42.490	43.580	44.536
<i>Growth (%)</i>	6,79%	5,74%	4,69%	3,65%	2,94%	2,57%	2,19%
# of stores	2.393	2.449	2.487	2.508	2.518	2.526	2.531
Sales per store	15,04	15,54	16,01	16,46	16,87	17,25	17,59
China Lockdown	32.200	34.047	35.643	36.942	38.028	39.004	39.859
Global Pandemic	26.983	28.531	29.869	30.957	31.867	32.685	33.402

See Appendix 14 for full details.

4.4.1.2. Selective Retailing

The revenue in this segment was estimated, like the Fashion & Leather Goods segment, as a function of the following equation:

$$Revenue_t = Average\ number\ of\ stores_t \times Average\ revenue\ per\ store_t$$

This method implies that products sold online come from physical stores and not straight from the factory, and therefore includes online sales in the average revenue per store.

Until 2025E, the **revenue per store** is expected to follow North America's annual inflation rate (IMF), since it is this segment's biggest market. At that point, online sales are expected to account for around 25% of the personal luxury goods market, therefore after 2025E, the online sales growth is expected to slow down. As such, the annual revenue growth per store is forecast to slowly converge to 2%, i.e., the target inflation rate for most central banks.

Since Sephora is still investing in the expansion of their store network, the **number of stores** is projected to grow in 2020E, at the average year-over-year growth of the past five years, and then, as Sephora slows down its expansion, the annual growth rate is expected to slowly decline, until 2027E. After 2027E, a decrease in the number of stores is considered likely, as online stores replace physical stores.

Table 6.
Revenue Forecast Summary – Selective Retailing

<i>(million EUR)</i>	2017H	2018H	2019H	2020E	2021E	2022E	2023E
Base Case	13.473	13.804	15.074	16.051	17.134	18.203	19.221
<i>Growth (%)</i>	10,92%	2,46%	9,20%	6,48%	6,75%	6,24%	5,60%
# of stores	1.829	1.910	1.976	2.056	2.144	2.224	2.293
Sales per store	7,37	7,23	7,63	7,81	7,99	8,18	8,38
China Lockdown	13.473	13.804	15.074	14.887	15.892	16.883	17.828
Global Pandemic	13.473	13.804	15.074	12.038	12.851	13.652	14.416
<i>(million EUR)</i>	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Base Case	20.130	20.866	21.470	21.954	22.366	22.757	23.155
<i>Growth (%)</i>	4,73%	3,66%	2,89%	2,26%	1,88%	1,75%	1,75%
# of stores	2.348	2.386	2.407	2.413	2.410	2.404	2.398
Sales per store	8,57	8,75	8,92	9,10	9,28	9,47	9,66
China Lockdown	18.671	19.353	19.913	20.363	20.744	21.107	21.476
Global Pandemic	15.098	15.650	16.102	16.466	16.774	17.068	17.366

See Appendix 15 for full details.

4.4.1.3. Perfumes & Cosmetics

This segment's revenue was estimated based on the following equation:

$$Revenue_t = LVMH's\ Market\ Share_t \times Beauty\ Market\ Size_t$$

Based on the information gathered in section “3. Industry Overview”, the size of the global personal luxury goods market and its beauty segment were forecast, over the forecast period.

According to Bain & Company (2019) the global personal luxury goods industry, is estimated to grow at a CAGR between 3% to 5% until 2025E, therefore a 4% annual growth rate was assumed until 2025E, after that, for the remainder of the explicit forecast period, an annual growth between 3% and 4% was used, which is around the expected world's real GDP growth.

The **beauty segment** is expected to be the second biggest driver of growth for the global personal luxury goods industry, therefore it is estimated to grow slightly above the market's annual growth rate, until 2026E. After that, this segment's annual growth is expected to match overall industry growth.

LVMH's strategy for this segment is to focus on top growth drivers with the goal of gaining **market share**. This strategy appears to have been highly successful, since their market share evolved from 8% in 2015H to close to 10% in 2019H. This trend is expected to continue over this forecast. However, since this high market share annual gain is hardly sustainable, it is assumed that it will decline over the years until it reaches a market share of 12,3%, in 2027E.

Table 7.
Revenue Forecast Summary – Perfumes & Cosmetics

<i>(million EUR)</i>	2017H	2018H	2019H	2020E	2021E	2022E	2023E
Base Case	4.603	5.091	5.869	6.480	7.104	7.725	8.332
<i>Growth (%)</i>	<i>10,86%</i>	<i>10,61%</i>	<i>15,28%</i>	<i>10,41%</i>	<i>9,63%</i>	<i>8,74%</i>	<i>7,85%</i>
Beauty market size	54.000	56.000	60.000	62.804	65.676	68.614	71.614
Market share	8,52%	9,09%	9,78%	10,32%	10,82%	11,26%	11,63%
China Lockdown	4.603	5.091	5.869	5.751	6.305	6.856	7.394
Global Pandemic	4.603	5.091	5.869	4.860	5.328	5.794	6.249
<i>(million EUR)</i>	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Base Case	8.912	9.436	9.880	10.220	10.510	10.773	11.020
<i>Growth (%)</i>	<i>6,97%</i>	<i>5,88%</i>	<i>4,70%</i>	<i>3,45%</i>	<i>2,84%</i>	<i>2,50%</i>	<i>2,30%</i>
Beauty market size	74.675	77.642	80.416	82.909	85.230	87.361	89.370
Market share	11,93%	12,15%	12,29%	12,33%	12,33%	12,33%	12,33%
China Lockdown	7.910	8.375	8.768	9.070	9.328	9.561	9.781
Global Pandemic	6.684	7.077	7.410	7.665	7.882	8.079	8.265

See Appendix 16 for full details.

4.4.1.4. Wines & Spirits

The revenue of the Wines & Spirits segment was estimated based on the following equation:

$$Revenue_t = \text{Number of bottles sold}_t \times \text{Average price per bottle}_t$$

LVMH divides this segment into two categories: Champagne & Wines and Cognac & Spirits. Therefore, for each category the number of bottles sold and their average price, was estimated separately.

Over the past four years, the **number of bottles of champagne and wine sold** have been slightly decreasing. Since it seems that some of LVMH's brands in this group are in later stages of their life cycle, this small annual decline (computed as the average of the past four years) is expected to continue until 2025E. After 2025E, the number of bottles of champagne and wine sold is estimated to remain stable. Over the past few years, champagne and wine brands have been pursuing a price increase policy, which is expected to continue for at least four more years. Therefore, between 2020E to 2023E, the **average price per bottle of champagne and wine** is projected to grow at the average year-over-year growth rate of the past four years. After 2023E, this annual growth is forecast to slowly decline until it reaches France's average inflation rate over the past 20 years, i.e., 1,56% by 2030E.

In 2020E and 2021E, the **number of bottles of cognac and spirits sold** is expected to continue to grow at the average year-over-year growth rate registered over the past four years. From

2022E to 2025E, this growth is assumed to continue at 4% per year, which is the industry's expected annual growth rate until 2025E. After that, this annual growth is estimated to decline until it reaches 0% in 2030E. As for the **average price per bottle of cognac and spirits**, it is estimated to grow at France's forecast inflation rate (IMF).

France's inflation was used in this segment since it is the location of most of LVMH's wineries and distilleries.

Table 8.
Revenue Forecast Summary – Wines & Spirits

<i>(million EUR)</i>	2017H	2018H	2019H	2020E	2021E	2022E	2023E
Base Case	5.127	5.192	5.674	5.842	6.107	6.373	6.644
<i>Growth (%)</i>	4,94%	1,26%	9,28%	2,96%	4,53%	4,35%	4,26%
Champagne & Wines							
Price per bottle	21,99	22,91	24,11	25,01	25,86	26,62	27,31
# of bottles (mn)	109,40	103,40	104,00	103,36	102,71	102,40	102,08
Cognac & Spirits							
Price per bottle	24,64	24,68	25,94	26,28	26,65	27,07	27,53
# of bottles (mn)	108,70	112,40	118,30	123,93	129,52	134,70	140,08
China Lockdown	5.127	5.192	5.674	5.389	5.634	5.879	6.129
Global Pandemic	5.127	5.192	5.674	4.382	4.580	4.779	4.983
<i>(million EUR)</i>	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Base Case	6.923	7.160	7.391	7.607	7.807	7.968	8.092
<i>Growth (%)</i>	4,19%	3,43%	3,22%	2,93%	2,63%	2,07%	1,56%
Champagne & Wines							
Price per bottle	27,90	28,37	28,85	29,34	29,84	30,32	30,79
# of bottles (mn)	101,92	101,76	101,76	101,76	101,76	101,76	101,76
Cognac & Spirits							
Price per bottle	28,00	28,48	28,96	29,45	29,95	30,43	30,91
# of bottles (mn)	145,69	150,06	153,81	156,89	159,24	160,43	160,43
China Lockdown	6.386	6.605	6.818	7.017	7.202	7.351	7.465
Global Pandemic	5.192	5.370	5.543	5.705	5.855	5.976	6.069

See Appendix 17 for full details.

4.4.1.5. Watches & Jewelry

This segment's revenue was estimated, like the Perfumes & Cosmetics segment, based on the following equation:

$$Revenue_t = LVMH's\ Market\ Share_t \times Hard\ Luxury\ Market\ Size_t$$

The approach to forecast the size of the global personal luxury goods industry, was explained previously in section "4.4.1.3. Perfumes & Cosmetics".

As for the **hard luxury segment**, historically (2000H to 2019H) it was one of the main growth drivers of this industry, however, over the next five years, even though this segment is expected to keep a solid single-digit annual growth, this industry's growth is expected to be driven by the accessories and beauty categories. As such, this segment is expected to grow slightly below the market's growth rate, until 2027E. After that, this segment's annual growth is projected to match overall industry growth.

Growth in the Watches & Jewelry segment, over the past few years, was sustained by the Bvlgari brand's good momentum which continued to gain **market share**. Over the next couple of years, LVMH goal is to keep capitalizing on Bvlgari's momentum and continue to gain market share. Therefore, this forecast expects this trend to continue from 2020E to 2022E. After 2022E, this market share gain momentum is expected to fade, since LVMH's brand portfolio in this segment only includes 6 brands and is highly dependent on the performance of its biggest brand – Bvlgari. Consequently, after 2024E LVMH is expected to retain its market share – i.e., 0% annual market share gain.

Table 9.**Revenue Forecast Summary – Watches & Jewelry**

<i>(million EUR)</i>	2017H	2018H	2019H	2020E	2021E	2022E	2023E
Base Case	3.778	4.073	4.383	4.740	5.075	5.380	5.648
<i>Growth (%)</i>	9,00%	7,79%	7,64%	8,14%	7,05%	6,02%	4,98%
Hard luxury market	56.000	58.000	61.000	63.728	66.387	68.991	71.524
Market share	6,75%	7,02%	7,19%	7,44%	7,64%	7,80%	7,90%
China Lockdown	3.778	4.073	4.383	4.148	4.440	4.708	4.942
Global Pandemic	3.778	4.073	4.383	3.555	3.806	4.035	4.236
<i>(million EUR)</i>	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Base Case	5.877	6.075	6.274	6.469	6.650	6.816	6.973
<i>Growth (%)</i>	4,05%	3,37%	3,27%	3,10%	2,80%	2,50%	2,30%
Hard luxury market	74.044	76.541	79.045	81.496	83.777	85.872	87.847
Market share	7,94%	7,94%	7,94%	7,94%	7,94%	7,94%	7,94%
China Lockdown	5.143	5.316	5.490	5.660	5.819	5.964	6.101
Global Pandemic	4.408	4.557	4.706	4.852	4.987	5.112	5.230

See Appendix 18 for full details.

4.4.2. Operating Expenses

LVMH does not provide detailed information about each business segment's operating expenses, neither by function nor by nature, disclosing instead only each segment's operating profit (EBIT) and depreciation and amortization expenses.

Appendix 19 presents the estimated EBIT margins for each business segment, those margins were estimated based on the following considerations:

- (i) **Fashion & Leather Goods:** LVMH plans to maintain this segment's profitability while transforming its retail network. Over time, the EBIT margin has remained constant without significant fluctuations, as both the historical average (2010H-2019H), and the last three years averages (after the acquisition of Dior and Rimowa), are around 31%. Consequently, a constant EBIT margin of 31% was assumed throughout the forecast.
- (ii) **Selective Retailing:** Overall, the EBIT margin in this segment has been decreasing over the past 10 years, going from 10% in 2010H to 8% in 2019H. This decline makes sense given LVMH's aggressive investment strategy in marketing (digital and traditional) and service personalization, to gain market share, and the increased competition, mostly by online businesses. Therefore, this segment's EBIT margin, in 2020E, was estimated as the average of the past three years, and after that the historical slight downward trend is expected to continue.
- (iii) **Perfumes & Cosmetics:** Over the last couple of years, LVMH has been investing in R&D, marketing and social media (digital influencers) with the goal of gaining market share in this segment, which resulted in a decrease of its EBIT margin. Since LVMH plans to maintain this strategy going forward, the EBIT margin of 2020E to 2022E is expected to be equal to 2019E. After 2022E, the EBIT margin is forecast to converge back to its historical average.
- (iv) **Wines & Spirits:** The revenue forecast, assumes that this segment will maintain its current price increase policy for at least four more years, therefore the EBIT margin is expected to slightly increase every year over this period. After 2023E, the EBIT margin is projected to decrease back to the historical average of the past five years.
- (v) **Watches & Jewelry:** Over the last two years, this segment's EBIT margin was considerably higher (approximately 4%) than its historical average, however the reason for this higher margin is not clear, as LVMH provides no information about it. Additionally, LVMH states its ambition to continue to gain market share by continuing

to raise their brand awareness through events and selective partnerships with e.g., sport events and digital influencers. Consequently, the EBIT margin in this segment was estimated to slowly return to its historical average.

For the China Lockdown and the Global Pandemic scenarios, a lower EBIT margin was only assumed in 2020E, since it is expected that each segment's cost structure will revert back to normal (i.e., equal to the Base Case), in 2021E (Appendix 19). These scenarios assume a different EBIT margin in 2020E, since both, to different extents, assume extra costs from cancelled runways, fashion shows and other events, closing stores and other facilities, sourcing problems, among others.

4.4.3. Net Working Capital (NWC)

In this study, NWC is estimated as the difference between current assets (excl. cash and equivalents) and non-interest-bearing current liabilities. Therefore, throughout the explicit forecasting period, the following three accounts must be projected: Inventories, Other Current Assets (excl. Cash), and Current Liabilities (excl. Debt).

- (i) **Inventories:** Historically, all five business segments have kept a very stable inventory as a percentage of their revenue. Therefore, an average of the past five years was used (2015H to 2019H) as the basis for all business segments.
- (ii) **Other Current Assets (excl. Cash):** Also computed as a percentage of each segment's revenue. An average of the past five years was used, for all business segments.
- (iii) **Current Liabilities (excl. Debt):** Computed as a percentage of each segment's operating expenses, has also remained quite stable, therefore an average of the past five years was used as the basis for all business segments.

See Appendix 20 to 24 for detailed information about each segment's NWC.

4.4.4. CAPEX, Depreciation & Amortization

Historically, across all business segments, Capital Expenditures (CAPEX) has remained constant as a percentage of each segment's revenue, and therefore was estimated based on the average percentage of the past five years. After 2025E, since it is expected that by the end of the explicit forecast period, LVMH's business segments will be in a steady state, CAPEX was projected to gradually converge to the amount of annual Depreciation and Amortization (D&A).

D&A (excl. Right-of-use Assets), were computed as a percentage of each segment's Net Property, Plant, and Equipment (PP&E) and Net Intangible Assets of the previous year. The average of the past four years was used throughout the explicit forecast period.

Net PP&E and Intangible Assets were calculated as a function of the following equation:

$$\text{Net PP\&E and Intangibles}_t = \text{Net PP\&E and Intangibles}_{t-1} + \text{CAPEX}_t - \text{D\&A}_t$$

After the application of IFRS 16, in 2019H, LVMH did not restate its past financial statement. This standard has no impact on the actual cash flow of each business segment, but these accounts were still forecast to allow the construction of the group's consolidated financial statements at the end of this exercise. In a steady state (i.e., from 2030E onwards), the D&A of Right-of-use Assets is projected to be equal to the amount of new leases entered into in those years.

See Appendix 25 to 29 for detailed information about each segment's CAPEX and D&A.

4.4.5. Other Financial Statements Assumptions

In order to properly forecast a complete set of financial statements for each of the proposed scenarios (Appendix 30-38), some further assumptions are required:

- (i) **Deferred Tax Assets and Liabilities:** These accounts are mainly tied to operations, therefore they were computed as a percentage of the group's total revenue. These percentages remained stable, throughout the forecast period, as an average of the past five years (2015H to 2019H).
- (ii) **Borrowings (Short- and Long-term):** It was assumed that LVMH would continue to replace maturing debt with new debt, and therefore keep the company's debt constant throughout the forecast period.
- (iii) **Net Income Attributable to Non-Controlling Interests:** Mostly related to Diageo's 34% stake in LVMH's Wines & Spirits segment, therefore the same annual growth rate for this segment was used.
- (iv) **All other items:** Believed to be unrelated to operations were straight-lined through the forecasting period, e.g., investment assets and pensions.

4.5. DCF Valuation

4.5.1. Terminal Value

The terminal value is usually the most important estimate in any valuation. Consequently, the terminal growth rate in perpetuity for each of LVMH's business segments was estimated according to the following criteria:

- (i) **Fashion & Leather Goods, Perfumes & Cosmetics, and Watches & Jewelry:** By 2030E, the global personal luxury goods industry should be in a stable mature stage and most clients will probably live in developed countries (i.e., advanced economies). Consequently, the average annual inflation rate in advanced economies (IMF), over the past twenty years was used as the perpetuity growth rate – **1,78%**.
- (ii) **Wines & Spirits:** By 2030E, this industry is expected to be in a stable low growth mature stage and LVMH should be able to retain its market share thanks to the heritage and excellence of its brands. Since LVMH's most emblematic wineries and distilleries are located in France, the average annual inflation rate in France (IMF), over the past twenty years was assumed as the perpetuity growth rate – **1,56%**.
- (iii) **Selective Retailing:** By 2030E, selective retailers will be widely diffused, in both physical and online stores, and consequently it is expected that the overall industry will have little room for growth. Therefore, a perpetuity growth rate between the average population growth rate over the last ten years (i.e., around 1,1%) and the average annual inflation rate in North America (IMF), over the past twenty years (i.e., 2,39%) was used – **1,74%**. North America is this segment's main source of revenue.

4.5.2. Tiffany & Co. Acquisition

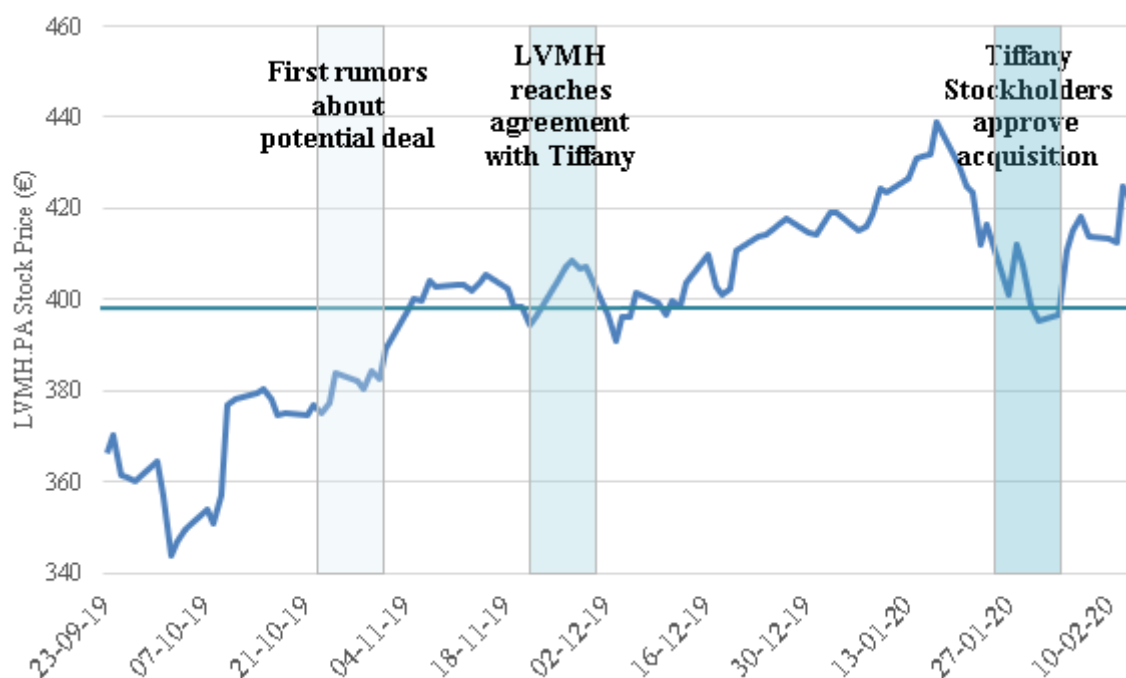
On November 25, 2019, LVMH announced an agreement for the acquisition of Tiffany & Co., a US-based global luxury jeweller, for \$135 per share in cash, placing its equity value at approximately €14,7 billion. The transaction is expected to close in the middle of 2020. This acquisition is LVMH biggest acquisition to date and aims to strengthen the group's position in the Watches and Jewelry segment by potentially more than doubling its sales and further increasing the group's presence in the United States.

In most instances, analysts report that in an acquisition, the stock price of the acquiring firm tends to drop, since the acquirer is usually paying more than the target company is worth by paying a premium to encourage the shareholders of the target company to sell their shares.

In this transaction, the price paid per share represents a premium of about 37% over Tiffany's share price prior to first reports of the acquisition. However, unlike most cases, LVMH stock price went up after the announcement, as most analysts believe the price paid is fair given the value that LVMH can extract from Tiffany, considering its brand heritage, the fast growth of the jewellery market and the past success that LVMH achieved when it acquired Bvlgari in 2011, for €3,7 billion – under LVMH's ownership Bvlgari more than doubled its sales.

Figure 8 shows the evolution of LVMH's stock price before and after the announcement of the agreement. The average stock price, throughout the month after the agreement, was €8 higher than the average stock price, over the month prior to the agreement, therefore the market appears to believe that LVMH acquired Tiffany below its fair value.

Figure 8.
LVMH stock price evolution (23/09/2019 – 14/02/2019)



Period in relation to 25/11/2019	Average Stock Price	Stock Price Low	Stock Price High
1-month before	396	380	406
1-month after	404	391	418
2-months before	381	344	406
2-months after	412	391	439

Source: Thomson Reuters Eikon.

4.5.3. Results

Finally, Table 10 presents the estimated value of each of LVMH's segments, and the group's total enterprise value, equity value and price per share.

In late February and early March, the coronavirus spread across most countries in the world and many of them are now adopting lockdown measures and quarantine policies, like China. Therefore, given these recent developments, what started as the most likely scenario, in early February (i.e., February Base Case), now appears to be one of the most unlikely. Consequently, the China Lockdown scenario was deemed the most likely scenario with a 50% probability, while the Global Pandemic and February Base Case scenario were assigned a probability of 30% and 20%, respectively. The February Base Case still received a weight of 20%, since recently, Bernard Arnault - LVMH's chairman and CEO, said that the impact of the coronavirus on the business, "if it's resolved over the next two, two and a half months, then it won't be that bad", as they would probably be able to recoup some of the losses during the next holiday season.

Table 10.

LVMH DCF Valuation summary (million EUR)

Business Segment's NPV	February Base Case (20%)	China Lockdown (50%)	Global Pandemic (30%)
Fashion & Leather Goods	171.214	153.624	129.382
Selective Retailing	22.118	20.693	17.212
Perfumes & Cosmetics	19.815	17.726	15.177
Wines & Spirits	54.163	50.091	41.011
Watches & Jewelry	10.300	9.182	8.071
LVMH Enterprise Value	277.609	251.315	210.853
Net Debt ³	(29.596)	(29.596)	(29.596)
Value of Minorities ⁴	(16.452)	(15.025)	(11.987)
LVMH Equity Value	231.561	206.693	169.271
# Shares Outstanding (mn)	505	505	505
Price per Share (€)	458,15	408,94	334,90

See Appendix 39 to 43 for detailed calculations for each business segment.

³ Net Debt includes leases and pension liabilities.

⁴ Value of Minorities was estimated based on Diageo's 34% stake of LVMH's Wines & Spirits segment.

Assuming those probabilities for each scenario, the final estimate of LVMH's intrinsic value, using a sum-of-the-parts DCF valuation, is **€396,57 per share**, which considering the market reaction to the acquisition of Tiffany, discussed in the previous section, sets a **12-month price target of €400**. This price target deems LVMH stock as being currently undervalued, since the stock is trading at €360,35 (March 6, 2020), which implies a potential upside of 11,0%. However, it is worth noticing that if the worst-case scenario (Global Pandemic) comes to fruition, the current stock price would be higher than the price estimated in this scenario.

4.5.4. Sensitivity analysis

As mankind cannot yet predict the future, the assumptions underlying the present sum-of-the-parts DCF valuation may or may not materialize. Therefore, to study and comprehend the uncertainty and limitations inherent this model, a sensitivity analysis was performed.

The WACC and the terminal growth rate (g) are the two most impactful variables in a DCF valuation. As such, Table 11 highlights the impact of potential changes to those parameters in LVMH's estimated price per share. Since different discount rates and terminal growth rates were used throughout the different business segments, this table illustrates the impact of a percentage points (ppt) increase or decrease, simultaneously in all business segments, e.g., a WACC increase of +2,00ppt and a terminal growth rate decrease of -1,00ppt, means that the WACC estimate of every segment goes up by two percentual points, while their terminal growth rate goes down by one percentual point.

Table 11.

Sensitivity Analysis – LVMH stock price as a function of WACC and Terminal growth rate

	WACC									
	-2,0ppt	-1,5ppt	-1,0ppt	-0,5ppt	0,0ppt	+0,5ppt	+1,0ppt	+1,5ppt	+2,0ppt	
Terminal growth rate (g)	-1,25ppt	564,7	476,4	410,7	359,4	318,2	284,1	255,5	231,2	210,2
	-1,00ppt	608,7	506,0	432,0	375,5	330,6	294,0	263,5	237,8	215,7
	-0,75ppt	663,7	540,9	456,4	393,5	344,4	304,8	272,2	244,9	221,5
	-0,50ppt	735,8	583,1	484,7	413,9	359,8	316,8	281,7	252,5	227,8
	-0,25ppt	838,9	635,7	518,2	437,3	377,0	330,0	292,1	260,9	234,6
	0,00ppt	1.013,7	704,8	558,6	464,4	396,6	344,7	303,5	269,9	242,0
	+0,25ppt	1.483,3	803,5	609,0	496,5	419,0	361,3	316,2	279,9	250,0
	+0,50ppt	2.733,4	970,9	675,2	535,2	445,0	380,0	330,3	290,9	258,7
	+0,75ppt	1.189,0	1.420,5	769,8	583,5	475,7	401,5	346,2	303,0	268,2
	+1,00ppt	1.248,3	2.610,6	930,1	646,9	512,8	426,4	364,2	316,6	278,8
	+1,25ppt	1.548,3	1.137,6	1.360,6	737,5	559,1	455,9	384,8	331,8	290,4

Highlighted in red are the scenarios where the price falls under €360,4; i.e., LVMH current stock price.

The price per share presented assumes a 50%, 30% and 20% weight for the China Lockdown, Global Pandemic and February Base Case, respectively. The table shows that a +0,50ppt

increase in the estimated WACC of every business segment would be enough for LVMH's projected intrinsic value to be under its current stock price.

Additionally, Appendix 44 illustrates the potential impact of a percentage points increase or decrease in each segments' EBIT margin and Tax rate throughout the explicit forecast period.

The Wines & Spirits and Fashion & Leather Goods segments, together, make up 81% of the conglomerate estimated enterprise value. Therefore, Appendix 45 presents the impact to LVMH's estimated value as a result of a percentual point increase or decrease in these segments' revenue annual growth rate.

4.6. Relative Valuation

To support and discuss the accuracy of the results attained through the main valuation approach, the WACC-based DCF, a sum-of-the-parts multiples valuation was performed, to analyse how the market was pricing similar businesses. For this purpose, the forward EV/EBITDA (NTM) multiple of the constituents of the previously selected peer group for each segment, was collected from Thomson Reuters. Table 12 presents LVMH's estimated price per share based on the peers' average trading multiples.

Table 12.

LVMH Sum-of-the-parts Multiples Valuation (million EUR)

Forward EV/EBITDA (NTM)	Fashion & Leather Goods	Selective Retailing	Perfumes & Cosmetics	Wines & Spirits	Watches & Jewelry
DCF Valuation – Implied Forward EV/EBITDA (2020E) ⁵	16,85x	8,07x	17,63x	26,89x	8,47x
Segment's EBITDA (2020E)	10.159	2.741	1.124	2.014	1.216
Peers Average Forward EV/EBITDA (NTM)	10,62x	9,72x	18,26x	13,97x	11,94x
Enterprise Value	107.889	26.648	20.527	28.133	14.520
LVMH Enterprise Value	197.717				
Net Debt	(29.596)				
Value of Minorities ⁶	(8.133)				
LVMH Equity Value	159.987				
# Shares Outstanding (mn)	505				
Price per Share (€)	316,54				

See Appendix 13 for peers' trading multiples.

The results achieved by applying the peers' forward EV/EBITDA average trading multiple to each segment's EBITDA (2020E), projected a price per share of €316,54. This price when compared to the estimate obtained through the DCF valuation (€396,57), is 20,2% lower. By comparing the implied multiples resulting from the previous DCF valuation, to the peers' average trading multiples, it is clear, that the main difference between the two approaches arises from how the market prices LVMH's peers in its two most important segments, i.e., Fashion &

⁵ Base Case EV and EBITDA.

⁶ Value of Minorities was estimated based on Diageo's 34% stake of LVMH's Wines & Spirits segment.

Leather Goods and Wines & Spirits. This might indicate that LVMH outperforms its peers in those segments, e.g., the Fashion & Leather Goods segment, in comparison to its peers, is bigger in terms of sales and has a higher ROIC and operating margin.

As previously stated, the primary purpose of this methodology was to support the results of the WACC-based DCF model, but instead, the results obtained contradict the ones estimated through the first model. Koller et al. (2005) argue that the DCF valuation is more accurate, more flexible, more detailed and provides more information about a firm's performance than relative valuations. Furthermore, the results obtained through the peers' average multiple are highly dependent upon a good selection of peers, which in this case was particularly challenging given each business segment's operations, size, high growth and ROIC, as LVMH is either the leader or one of the leaders in most industries where it operates.

Consequently, these results are deemed less reliable than the ones previously obtained, and therefore the final recommendation from this dissertation will be based upon the results of the WACC-based DCF valuation.

4.7. Investment Recommendation

Considering everything that has been previously discussed and rooted in the estimates obtained through the performed disaggregated DCF valuation, this dissertation views LVMH stock as being slightly undervalued, based on a **12-month price target of €400**, as there is a potential upside of 11,0% over the next 12 months. However, in light of the current uncertainty surrounding the coronavirus, depicted by the three envisaged scenarios, this dissertation's final recommendation is for investors to **HOLD** onto LVMH stock and ride out the market volatility over the next few months.

5. Comparison with Goldman Sachs Equity Research

Finally, to frame the results achieved with other analysts' opinion, it is important to compare them with equity research reports published by renowned investment banks. Therefore, the present results were compared to an equity research on LVMH, published by Goldman Sachs ("GS") on September 10, 2019. This report sets a 12-month stock price target of €420, with a buy recommendation.

In terms of methodology, both approaches assume a stable capital structure throughout the forecasting period, however GS performs an aggregated WACC-based DCF while the present dissertation is based on a disaggregated WACC-based DCF valuation - the different WACC and terminal growth rates used are presented in Table 13. As illustrated, GS used both a higher WACC and terminal growth rate, than the ones used in this valuation, across all business segments. The reason for this difference is not clear since GS does not specify how the WACC was estimated, however, this difference is most likely either due to a different methodology, to estimate beta and the MRP, or due to the recent bonds issued by LVMH to finance the purchase of Tiffany. Both approaches assume a similar tax rate and the yield of a German 10-year government bond has remained quite stable over the past 6 months.

Table 13.

WACC and Terminal growth rate comparison

	Fashion & Leather Goods	Selective Retailing	Perfumes & Cosmetics	Wines & Spirits	Watches & Jewelry	Goldman Sachs
WACC	6,51%	6,12%	5,31%	4,02%	6,27%	8,50%
Terminal growth (g)	1,78%	1,74%	1,78%	1,56%	1,78%	3,00%

In terms of forecast, both valuations use the same explicit forecast period, i.e., from 2020E to 2030E. However, while the present forecast is focused on each of LVMH's business segments, GS forecast, is focused on LVMH's biggest brands' performances, especially Louis Vuitton and Dior, which they estimate to collectively be responsible for 57% of the group's EBIT in 2020, and expect to drive most of the group's growth by continuing to outperform the market. According to GS, this superior performance is the combination of a successful product with a well-defined robust investment strategy. LVMH does not disclose data by brand, which means that the investment bankers probably had access to more information about their operations.

Over time, both forecasts, expect a growth deceleration in the overall luxury market. The present forecast, however, presents three different scenarios to deal with the uncertainty surrounding the coronavirus, while GS presents only one scenario and does not consider the impact of the coronavirus, because when their report was published this was not yet an issue. Consequently, as expected their forecast is closer to the February Base Case scenario, where the coronavirus impact was considered to be minimal. Additionally, LVMH announced the acquisition of Tiffany only after this GS research was published, therefore, unlike the present valuation, no consideration is made about the impact of this acquisition on LVMH's stock price.

Overall, the difference between the present valuation 12-month price target of €400 and GS's price target can be explained not only by the different methodologies applied, but mostly by the changes to LVMH's internal and external environment, which also justifies their different investment recommendations (Hold versus Buy). To conclude, Table 14 presents a summary of the main characteristics and distinctive features of the two valuation approaches.

Table 14.
Comparison Summary

	Dissertation	Goldman Sachs
WACC-based DCF	Disaggregated	Aggregated
Explicit Forecast Period	2020E - 2030E	2020E - 2030E
Forecast Focus	By Business Segment	By Brand
Different scenarios	Yes	No
COVID-19	Yes	No
Tiffany acquisition	Yes	No
12-month Price Target	€400,00	€420,00
Recommendation	Hold	Buy

6. Conclusion

The author's goal with the present dissertation is to provide a buy, sell or hold investment recommendation about LVMH stock, listed on the Eurolist by Euronext Paris, based on its 2020 year-end estimated intrinsic value. Since, LVMH is a French multinational luxury goods conglomerate each individual business unit was valued separately using two distinct methodologies, i.e., sum-of-the-parts DCF and multiples valuation, which culminated with a hold recommendation, with a 12-month price target of €400.

When valuing large conglomerates, like LVMH, an analyst must ponder the advantages and disadvantages of performing either a disaggregated or aggregated valuation, as both approaches have associated shortcomings, due to the higher complexity in comparison to a valuation of a single-business company. If on the one hand, a disaggregated valuation allows the analysts more freedom and flexibility, valuing the individual cash flow streams separately, with different risk measures and growth rates for each stream. It also requires more information (which is not always available), inputs, time and assumptions than an aggregated valuation. However, in a world with no information gaps, a disaggregated valuation should always be superior as it yields a better estimate of value than an aggregated valuation (Damodaran, 2009).

Overall, this dissertation was an enriching learning experience for its author to put into practice all the equity valuation theoretical knowledge acquired throughout his studies, while having to learn how to navigate and overcome the several shortfalls, specific to valuing multi-business companies.

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8. Appendix

8.1. Appendix 1 – LVMH Brands by Business Segment

Wines & Spirits	Fashion & Leather Goods	Perfumes & Cosmetics	Other Activities
Ao Yun Ardbeg Belvedere Bodega Numanthia Cape Mentelle Chandon Argentina Chandon Australia Chandon Brazil Chandon California Chandon China Chandon India Château Cheval Blanc Château d'Yquem Cheval des Andes Clos des Lambrays Clos19 Cloudy Bay Dom Pérignon Glenmorangie Hennessy Krug Mercier Moët & Chandon Newton Vineyard Ruinart Terrazas de los Andes Veuve Clicquot Volcan de mi Tierra Woodinville	Berluti Celine Christian Dior Emilio Pucci Fendi FENTY Givenchy Kenzo Loewe Loro Piana Louis Vuitton Marc Jacobs Moynat Nicholas Kirkwood Patou Pink Shirtmaker RIMOWA	Acqua di Parma Benefit Cosmetics Cha Ling Fenty Beauty by Rihanna Fresh Givenchy Parfums Guerlain Kenzo Parfums KVD Vegan Beauty Maison Francis Kurkdjian Make Up For Ever Marc Jacobs Beauty Parfums Christian Dior Perfumes Loewe	Belmond Cheval Blanc Connaissance des Arts Cova Investir Jardin d'Acclimatation La Samaritaine Le Parisien Les Echos Radio Classique Royal Van Lent
		Selective Retailing	
	Watches & Jewelry	DFS La Grande Epicerie Le Bon Marché Sephora Starboard Cruise Services	
	Bvlgari Chaumet Fred Hublot TAG Heuer Zenith		

Source: Company Information.

8.2. Appendix 2 – LVMH Strengths and Weaknesses

Strengths	Weaknesses
<ul style="list-style-type: none"> • Brands history and identity • Worldwide presence and recognition • Years of know-how inherited by its brands • Best talent (e.g., designers or artisans) • Perceived quality • Synergies between brands • Vertical integration (up- and downstream) • Vast resources (biggest luxury goods group) • Geographic diversification 	<ul style="list-style-type: none"> • Exposure to Asian markets • Risk of neglecting smaller brands • Competing against online exclusive/smaller luxury brands • Lower entry costs due to digital channels • Bigger brands might lose exclusivity and therefore attractiveness • Counterfeiters

Source: Own Analysis.

8.3. Appendix 3 – LVMH | Fashion and Leather Goods segment

<i>(million EUR)</i>	2014H	2015H	2016H	2017H	2018H	2019H
Revenue	10.796	12.333	12.735	15.422	18.389	22.164
<i>YoY Growth (%)</i>	9,8%	14,2%	3,3%	21,1%	19,2%	20,5%
D&A expenses	(626)	(737)	(635)	(669)	(764)	(1.856)
Operating profit	3.079	3.351	3.883	4.876	5.933	7.324
<i>Operating margin (%)</i>	28,5%	27,2%	30,5%	31,6%	32,3%	33,0%
Intangible assets and goodwill	7.242	7.207	6.621	13.149	13.246	13.120
Right-of-use assets	-	-	-	-	-	5.239
Property, plant and equipment	2.165	2.125	2.143	3.714	3.869	4.308
Inventories	1.561	1.566	1.501	1.884	2.364	2.884
Other operating assets	781	874	974	1.234	1.596	2.028
Total Assets	11.749	11.772	11.239	19.981	21.075	27.581
Lease liabilities	-	-	-	-	-	5.191
Other liabilities	2.265	2.451	2.641	3.539	4.262	4.719
Total Liabilities and Equity	2.265	2.451	2.641	3.539	4.262	9.910
Operating investments	(585)	(553)	(506)	(563)	(827)	(1.199)
Number of stores	1.534	1.566	1.508	1.769	1.852	2.002
<i># of stores growth (%)</i>	14,6%	2,1%	-3,7%	17,3%	4,7%	8,1%

Source: LVMH Financial Reports.

8.4. Appendix 4 – LVMH | Selective Retailing segment

<i>(million EUR)</i>	2014H	2015H	2016H	2017H	2018H	2019H
Revenue	9.495	11.166	11.945	13.272	13.599	14.737
<i>YoY Growth (%)</i>	6,9%	17,6%	7,0%	11,1%	2,5%	8,4%
D&A expenses	(381)	(370)	(461)	(510)	(463)	(1.409)
Operating profit	810	933	855	1.033	1.377	1.380
<i>Operating margin (%)</i>	8,5%	8,4%	7,2%	7,8%	10,1%	9,4%
Intangible assets and goodwill	3.141	3.508	3.692	3.348	3.430	3.470
Right-of-use assets	-	-	-	-	-	5.012
Property, plant and equipment	1.414	1.547	1.777	1.701	1.817	1.919
Inventories	1.647	1.873	2.172	2.111	2.532	2.691
Other operating assets	663	755	908	845	870	895
Total Assets	6.865	7.683	8.549	8.005	8.649	13.987
Lease liabilities	-	-	-	-	-	5.160
Other liabilities	2.054	2.408	2.924	2.839	3.005	2.938
Total Liabilities and Equity	2.054	2.408	2.924	2.839	3.005	8.098
Operating investments	(387)	(395)	(558)	(570)	(537)	(659)
Number of stores	1.614	1.678	1.778	1.880	1.940	2.011
<i># of stores growth (%)</i>	4,7%	4,0%	6,0%	5,7%	3,2%	3,7%

Source: LVMH Financial Reports.

8.5. Appendix 5 – LVMH | Perfumes and Cosmetics segment

<i>(million EUR)</i>	2014H	2015H	2016H	2017H	2018H	2019H
Revenue	3.384	3.907	4.083	4.534	5.015	5.738
<i>YoY Growth (%)</i>	4,8%	15,5%	4,5%	11,0%	10,6%	14,4%
D&A expenses	(158)	(185)	(213)	(254)	(275)	(431)
Operating profit	399	520	542	592	660	656
<i>Operating margin (%)</i>	11,8%	13,3%	13,3%	13,1%	13,2%	11,4%
Intangible assets and goodwill	1.203	1.283	1.305	1.280	1.406	1.401
Right-of-use assets	-	-	-	-	-	487
Property, plant and equipment	478	528	585	607	677	773
Inventories	432	502	581	634	842	830
Other operating assets	693	812	948	1.108	1.401	1.518
Total Assets	2.806	3.125	3.419	3.629	4.326	5.009
Lease liabilities	-	-	-	-	-	481
Other liabilities	1.348	1.440	1.593	1.706	2.115	2.321
Total Liabilities and Equity	1.348	1.440	1.593	1.706	2.115	2.802
Operating investments	(223)	(233)	(268)	(286)	(330)	(378)

Source: LVMH Financial Reports.

8.6. Appendix 6 – LVMH | Wines and Spirits segment

<i>(million EUR)</i>	2014H	2015H	2016H	2017H	2018H	2019H
Revenue	3.945	4.575	4.805	5.051	5.115	5.547
<i>YoY Growth (%)</i>	-4,8%	16,0%	5,0%	5,1%	1,3%	8,5%
Sales volume (mn bottles)						
<i>Champagne</i>	59,6	61,4	63,2	65,6	64,9	64,7
<i>Cognac</i>	70,4	76,0	83,8	90,9	93,3	98,7
<i>Other spirits</i>	17,3	18,6	19,1	17,8	19,1	19,6
<i>Still and sparkling wines</i>	45,1	45,4	44,2	43,8	38,5	39,3
D&A expenses	(141)	(147)	(152)	(158)	(162)	(191)
Operating profit	1.113	1.348	1.444	1.540	1.626	1.722
<i>Operating margin (%)</i>	28,2%	29,5%	30,1%	30,5%	31,8%	31,0%
Intangible assets and goodwill	3.758	4.900	5.185	6.277	6.157	7.582
Right-of-use assets	-	-	-	-	-	116
Property, plant and equipment	2.339	2.484	2.613	2.740	2.871	3.142
Inventories	4.567	4.795	4.920	5.115	5.471	5.818
Other operating assets	1.340	1.392	1.419	1.449	1.449	1.547
Total Assets	12.004	13.571	14.137	15.581	15.948	18.205
Lease liabilities	-	-	-	-	-	118
Other liabilities	1.461	1.426	1.524	1.544	1.580	1.727
Total Liabilities and Equity	1.461	1.426	1.524	1.544	1.580	1.845
Operating investments	(152)	(233)	(276)	(292)	(298)	(325)

Source: LVMH Financial Reports.

8.7. Appendix 7 – LVMH | Watches and Jewelry segment

<i>(million EUR)</i>	2014H	2015H	2016H	2017H	2018H	2019H
Revenue	2.720	3.250	3.409	3.722	4.012	4.286
<i>YoY Growth (%)</i>	2,8%	19,5%	4,9%	9,2%	7,8%	6,8%
D&A expenses	(172)	(199)	(240)	(273)	(239)	(477)
Operating profit	284	401	428	422	699	708
<i>Operating margin (%)</i>	10,4%	12,3%	12,6%	11,3%	17,4%	16,5%
Intangible assets and goodwill	5.635	5.850	5.879	5.684	5.791	5.723
Right-of-use assets	-	-	-	-	-	1.196
Property, plant and equipment	425	501	529	537	576	610
Inventories	1.244	1.361	1.403	1.420	1.609	1.823
Other operating assets	635	731	720	598	721	740
Equity	-	-	-	-	-	-
Lease liabilities	-	-	-	-	-	1.141
Other liabilities	743	922	918	895	1.075	1.046
Total Liabilities and Equity	743	922	918	895	1.075	2.187
Operating investments	(191)	(204)	(229)	(269)	(303)	(296)

Source: LVMH Financial Reports.

8.8. Appendix 8 – LVMH | Other Activities & Non-allocated Assets and Liabilities

<i>(million EUR)</i>	2014H	2015H	2016H	2017H	2018H	2019H
Revenue	298	433	623	635	696	1.199
<i>YoY Growth (%)</i>	6,4%	45,3%	43,9%	1,9%	9,6%	72,2%
D&A expenses	(75)	(61)	(55)	(67)	(169)	(155)
Operating profit	(254)	(169)	(248)	(350)	(418)	(518)
Intangible assets and goodwill	862	946	1.054	1.056	951	1.950
Right-of-use assets	-	-	-	-	-	359
Property, plant and equipment	3.566	3.972	4.492	4.563	5.302	7.781
Inventories	24	(-1)	(-31)	(276)	(333)	(331)
Other operating assets	7.547	8.090	8.232	8.977	9.685	11.875
Total Assets	11.999	13.007	13.747	14.320	15.605	21.634
Equity	23.003	25.799	27.903	30.377	33.957	38.365
Lease liabilities	-	-	-	-	-	454
Other liabilities	22.488	23.155	22.119	28.855	28.306	32.846
Total Liabilities and Equity	45.491	48.954	50.022	59.232	62.263	71.666
Operating investments	(237)	(337)	(428)	(296)	(743)	(436)

Source: LVMH Financial Reports.

8.9. Appendix 9 – “Other Activities & Non-allocated Assets and Liabilities” allocated by Business Segment, in 2019H

2019H	LVMH Consolidated	Fashion & Leather Goods	Wines & Spirits	Perfumes & Cosmetics	Watches & Jewelry	Selective Retailing	Other Activities & Not Allocated	Notes
Revenue	53.670	22.164	5.547	5.738	4.286	14.737	1.199	Allocated based on the revenue of each segment
<i>Allocated</i>	0	506	127	131	98	337	(1.199)	
Revenue w/ Allocation	53.670	22.670	5.674	5.869	4.383	15.074	0	
EBIT	11.273	7.324	1.722	656	708	1.380	(518)	Allocated based on the operating expenses incurred by each segment
<i>Allocated</i>	0	(189)	(49)	(65)	(46)	(170)	518	
EBIT w/ Allocation	11.273	7.135	1.673	591	662	1.210	0	
D&A (Right-of-use assets)	(2.408)	(1.146)	(31)	(141)	(230)	(872)	13	Allocated based on the Leased Assets of each segment.
<i>Allocated</i>	0	5	0	1	1	5	(13)	
D&A (Other)	(2.111)	(710)	(160)	(290)	(247)	(536)	(168)	Allocated based on the Tangible and Intangible Assets of each segment
<i>Allocated</i>	0	(69)	(43)	(9)	(25)	(21)	168	
D&A w/ Allocation	(4.519)	(1.920)	(234)	(439)	(501)	(1.425)	0	
EBITDA w/ Allocation	15.791	9.055	1.907	1.031	1.163	2.635	0	=EBIT + D&A
Intangibles and goodwill	33.246	13.120	7.582	1.401	5.723	3.470	1.950	Allocated based on the percentage of Intangible Assets assigned to each segment
<i>Allocated</i>	0	817	472	87	357	216	(1.950)	
Intangibles w/ Allocation	33.246	13.937	8.054	1.488	6.080	3.686	0	
PP&E	18.533	4.308	3.142	773	610	1.919	7.781	Allocated based on the percentage of PP&E assigned to each segment
<i>Allocated</i>	0	3.118	2.274	559	441	1.389	(7.781)	
PP&E w/ Allocation	18.533	7.426	5.416	1.332	1.051	3.308	0	
Right-of-use assets	12.409	5.239	116	487	1.196	5.012	359	Allocated based on the Right-of-use assets of each segment
<i>Allocated</i>	0	156	3	15	36	149	(359)	
Right-of-use assets w/ Allocation	12.409	5.395	119	502	1.232	5.161	0	
Other Non-Current Assets	5.809	-	-	-	-	-	5.809	No need to allocate
Total Non-Current Assets	69.997	-	-	-	-	-	-	=Intangibles + PP&E + Other NCA (w/allocation)

Inventories	13.717	2.884	5.818	830	1.823	2.691	(331)	Allocated based on the revenue of each segment
<i>Allocated</i>	0	(140)	(35)	(36)	(27)	(93)	331	
Inventories w/ Allocation	13.717	2.745	5.783	794	1.796	2.598	0	
Other Current Assets (excl. Cash)	7.120	2.028	1.547	1.518	740	895	392	Allocated based on the percentage of revenue generated by each segment
<i>Allocated</i>	0	166	41	43	32	110	(392)	
Other Current A. w/ Allocation	7.120	2.194	1.588	1.561	772	1.005	0	
Cash and cash equivalents	5.673	-	-	-	-	-	5.673	No need to allocate
Total Current Assets	26.510	-	-	-	-	-	-	=Inventories + Other CA + Cash (w/allocation)
Equity	38.365	-	-	-	-	-	38.365	No need to allocate
Non-interest-bearing current liabilities	12.841	4.719	1.727	2.321	1.046	2.938	90	Allocated based on the percentage of operating expenses incurred by each segment
<i>Allocated</i>	0	33	8	11	8	30	(90)	
NIBCL w/ Allocation	12.841	4.752	1.735	2.332	1.054	2.968	0	
Short-term Borrowings & Leases	9.782	-	-	-	-	-	9.782	No need to allocate
Total Current Liabilities	22.623	-	-	-	-	-	-	=Other CL + Short-term Borrowings (w/allocation)
Long-term Borrowings & Leases	15.474	-	-	-	-	-	15.474	No need to allocate
Other Non-Current Liab.	20.045	-	-	-	-	-	20.045	No need to allocate
Total Current Liabilities	35.519	-	-	-	-	-	35.519	=Other NCL+LT Borrowings
Operating Investments	3.293	1.199	325	378	296	659	436	Allocated based CAPEX of each segment
<i>Allocated</i>	0	183	50	58	45	101	(436)	
CAPEX w/ Allocation	3.293	1.382	375	436	341	760	0	
Repayment of lease liabilities	(2.187)	0	0	0	0	0	(2.187)	Allocated based on the D&A (Right-of-use assets) of each segment
<i>Allocated</i>	0	(1.036)	(28)	(128)	(208)	(788)	2.187	
Repayment of Lease Liabilities w/ Allocation	(2.187)	(1.036)	(28)	(128)	(208)	(788)	0	

8.10. Appendix 10 – Peer Group selection for each business segment

$$ROIC = \frac{NOPAT}{\text{Invested Capital}} = \frac{EBIT \times (1 - \text{Effective Tax Rate})}{(\text{Net Working Capital} + \text{PP\&E} + \text{Intangibles \& Goodwill})}$$

	Company Name	Business Description	Revenue Growth	ROIC	Beta (5 year monthly)
Fashion & Leather Goods	LVMH	Fashion & Leather Goods	20,53%	19,13%	-
	Prada SpA	Fashion & Leather Goods	14,63%	7,20%	0,89
	Tapestry, Inc.	Fashion & Leather Goods	5,34%	13,96%	1,19
	Hermes International SCA	Fashion & Leather Goods	15,38%	97,82%	0,66
	Kering SA	Fashion & Leather Goods	16,23%	14,11%	1,32
	PVH Corp.	Fashion	17,84%	9,07%	1,78
	Capri Holdings Limited	Fashion & Leather Goods	21,93%	12,31%	1,4
	Burberry Group plc	Fashion & Leather Goods	1,66%	49,25%	1,32
	Moncler SpA	Fashion & Leather Goods	14,62%	62,85%	0,67
	Ralph Lauren Corporation	Fashion & Leather Goods	12,16%	12,60%	1,15
	Salvatore Ferragamo SpA	Fashion & Leather Goods	2,26%	16,55%	0,76
	TOD'S S.p.A.	Fashion & Leather Goods	-3,19%	4,42%	0,65
	Hugo Boss AG	Fashion	3,15%	11,44%	0,98
Selective Retailing	LVMH	Multi-brand Retailer	8,37%	6,40%	-
	Ulta Beauty, Inc.	Multi-brand Retailer	24,17%	34,04%	1,24
	Nordstrom, Inc.	Luxury Department Store	1,07%	11,27%	1,06
	Asos PLC	Online Multi-brand Retailer	11,95%	4,90%	1,59
	Kohl's Corporation	Department Store	1,95%	8,20%	1,26
	Marks and Spencer Group	Department Store	-0,93%	8,90%	1,47
	NEXT plc	Multi-brand Retailer	4,19%	37,50%	1,2
	Macy's, Inc.	Department Store	0,92%	3,69%	1,12
	Dufry AG	Multi-brand Retailer	7,65%	8,90%	1,83
	CVS Health Corporation	Drugstore & Healthcare	35,01%	6,34%	0,85
	Sally Beauty Holdings, Inc.	Multi-brand Retailer and Distributor	4,99%	21,97%	0,74
	Walgreens Boots Alliance	Drugstore & Healthcare	9,83%	11,28%	0,89
Perfumes & Cosmetics	LVMH	Personal & Beauty Care	14,42%	13,33%	-
	Estée Lauder Companies	Personal & Beauty Care	11,63%	34,19%	0,7
	Shiseido Company Ltd.	Personal & Beauty Care	6,67%	11,90%	0,86
	L'Oreal SA	Personal & Beauty Care	10,90%	20,50%	0,66
	Johnson & Johnson	Personal & Health Care	2,93%	16,59%	0,69
	Coty Inc.	Beauty Care	-5,42%	-25,25%	0,73
	Revlon, Inc.	Personal & Beauty Care	-0,42%	-4,48%	0,81
	Procter & Gamble Company	Personal, Beauty, Health & Home	4,08%	4,90%	0,38
	Kao Corporation	Personal, Beauty, Health & Home	2,81%	16,10%	0,59
	Inter Parfums, Inc.	Beauty Care	8,06%	15,80%	1,04
	Colgate-Palmolive Company	Personal & Home Care	3,29%	37,80%	0,62
	e.l.f. Beauty, Inc.	Beauty Care	3,65%	9,40%	2
	Natura & Co Holding SA	Personal, Beauty & Home Care	6,50%	11,40%	0,82
	Amorepacific Corporation	Beauty Care	4,35%	9,50%	1,46
	Beiersdorf AG	Personal & Beauty Care	5,81%	29,02%	0,38
Wines & Spirits	LVMH	Wines & Spirits	8,45%	6,71%	-
	Diageo PLC	Beer, Wines & Spirits	4,49%	16,16%	0,71
	Pernod Ricard SA	Wines & Spirits	5,27%	7,25%	0,73
	Brown-Forman Corporation	Wines & Spirits	10,21%	19,30%	0,79
	Constellation Brands, Inc.	Beer, Wines & Spirits	14,82%	10,57%	0,95
	Treasury Wine Estates Ltd	Beer, Wines & Spirits	12,56%	9,70%	0,93
	Davide Campari Milano	Wines, Spirits & Soft Drinks	6,64%	14,50%	0,56
	Remy Cointreau SA	Wines & Spirits	-0,10%	10,74%	0,36
	Carlsberg A/S	Beer	5,42%	9,90%	0,88
	Heineken N.V.	Beer	6,58%	8,99%	0,74
	Anheuser Busch Inbev NV	Beer	0,94%	6,62%	1,21

Note: The final peer group selection for each segment is highlighted in bold.

Source: Thomson Reuters Eikon

	Company Name	Business Description	Revenue Growth	ROIC	Beta (5 year monthly)
Watches & Jewelry	LVMH	Watches & Jewelry	6,82%	4,79%	-
	Richemont	Watches & Jewelry	27,02%	12,85%	1,03
	Swatch Group SA	Watches & Jewelry	0,91%	7,32%	0,89
	Pandora A/S	Jewelry	-4,13%	21,39%	0,95
	Tiffany & Co.	Watches & Jewelry	15,62%	9,15%	1,46
	Signet Jewelers	Jewelry	8,68%	-24,35%	1,37
	Movado Group, Inc.	Watches	29,86%	14,14%	0,68
	Chow Tai Fook Jewellery	Watches & Jewelry	18,76%	11,70%	1,05
	Seiko Holdings Corporation	Watches & Electronic Components	-3,02%	5,63%	1,8

Note: The final peer group selection for each segment is highlighted in bold.

Source: Thomson Reuters Eikon

8.11. Appendix 11 – Cost of Debt

Issue Date	Maturity Date	Coupon	Amount Outstanding (EUR)	Is Convertible? (CVT)	Weight (excl. CVT)	YTM
13-11-2013	13-11-2020	1,75%	600.000.000	N	3,96%	-0,09%
24-9-2014	24-9-2021	1,00%	650.000.000	N	4,28%	0,19%
16-2-2016	16-2-2021	--	675.371.454	Y	--	--
26-5-2017	26-5-2020	--	1.250.000.000	N	8,24%	0,67%
26-5-2017	26-5-2022	0,38%	800.000.000	N	5,27%	0,15%
26-5-2017	26-5-2024	0,75%	1.200.000.000	N	7,91%	0,40%
14-6-2017	14-6-2022	1,00%	457.179.199	N	3,01%	0,59%
28-2-2019	28-2-2021	--	300.000.000	N	1,98%	0,11%
28-2-2019	28-2-2023	0,13%	700.000.000	N	4,61%	0,23%
11-2-2020	11-2-2022	--	1.750.000.000	N	11,54%	0,51%
11-2-2020	11-2-2023	1,00%	773.813.597	N	5,10%	0,62%
11-2-2020	11-2-2024	--	1.250.000.000	N	8,24%	0,39%
11-2-2020	11-2-2026	--	1.250.000.000	N	8,24%	0,53%
11-2-2020	11-2-2027	1,13%	939.630.797	N	6,19%	0,86%
11-2-2020	11-2-2028	0,13%	1.750.000.000	N	11,54%	0,72%
11-2-2020	11-2-2031	0,38%	1.500.000.000	N	9,89%	0,98%
TOTAL			15.845.995.047	1	100,00%	0,53%

Source: Thomson Reuters Eikon.

Highlighted in light blue are the bonds not issued in euros (all three were issued in GBP). Consequently, their YTM was converted to euros by adding the implied spread, between the bond GBP YTM and the yield on a UK government bond of the same maturity, to the yield on a Germany government bond of the same maturity. The calculations are depicted in the table below:

Time to Maturity	LVMH GBP Bond YTM (1)	UK Government Bond (2)	Spread (3)=(1)-(2)	Germany Government Bond (4)	LVMH Bond YTM converted to EUR (5)=(3)+(4)
2-year	1,40%	0,12%	1,29%	-0,70%	0,59%
3-year	1,49%	0,21%	1,28%	-0,66%	0,62%
7-year	1,73%	0,37%	1,36%	-0,51%	0,86%

Source: Thomson Reuters Eikon.

On February 11, 2020, LVMH raised €9,29 billion euros from the bond market to help finance Tiffany's acquisition.

8.12. Appendix 12 – Market Risk Premium & Corporate Tax Rate by Business Segment

Region	Equity Risk Premium	Corporate Tax Rate (2019)	Revenue by Region (% of revenue)				
			Fashion & Leather	Selective Retailing	Perfumes & Cosmetics	Wines & Spirits	Watches & Jewelry
Japan	5,89%	30,62%	11,00%	2,00%	5,00%	7,00%	12,00%
Rest of Asia	6,13%	24,20%	31,00%	27,00%	40,00%	24,00%	38,00%
<i>China (50%)</i>	5,89%	25,00%					
<i>India</i>	7,08%	30,00%					
<i>Indonesia</i>	7,08%	25,00%					
<i>Korea</i>	5,69%	25,00%					
<i>Singapore</i>	5,20%	17,00%					
<i>Thailand</i>	6,77%	20,00%					
North America	5,20%	26,75%	18,00%	37,00%	15,00%	31,00%	8,00%
<i>Canada</i>	5,20%	26,50%					
<i>United States</i>	5,20%	27,00%					
France	5,69%	31,00%	8,00%	11,00%	10,00%	5,00%	5,00%
Rest of Europe	6,47%	24,00%	23,00%	9,00%	20,00%	18,00%	23,00%
<i>Belgium</i>	5,80%	29,00%					
<i>Denmark</i>	5,20%	22,00%					
<i>Germany</i>	5,20%	30,00%					
<i>Italy</i>	7,37%	24,00%					
<i>Netherlands</i>	5,20%	25,00%					
<i>Russia</i>	7,37%	20,00%					
<i>Spain</i>	6,77%	25,00%					
<i>Turkey</i>	9,64%	22,00%					
<i>United Kingdom</i>	5,69%	19,00%					
Other Markets	8,52%	34,50%	9,00%	14,00%	10,00%	15,00%	14,00%
<i>Argentina</i>	14,08%	30,00%					
<i>Australia</i>	5,20%	30,00%					
<i>Brazil</i>	8,16%	34,00%					
<i>Nigeria</i>	10,63%	30,00%					
<i>South Africa</i>	7,37%	28,00%					
<i>Emirates</i>	5,69%	55,00%					
MRP			6,19%	6,10%	6,24%	6,22%	6,42%
Corporate Tax Rate			26,79%	27,44%	26,57%	27,29%	26,91%

Source: Damodaran website – Equity Risk Premiums & KPMG - Corporate Tax Rates Table, 2019 (Online)

8.13. Appendix 13 – Peers Unlevered Beta by Business Segment (Source: Thomson Reuters Eikon)

	Company Name	Market Cap. million EUR	Total Debt million EUR	D/E	Median Tax Rate (last 5yrs)	Beta 5-year monthly	Beta Unlevered	Forward EV/EBITDA (NTM)
Fashion & Leather	Kering SA	73.234	9.417	12,86%	25,13%	1,32	1,2	13,41
	PVH Corp.	6.021	2.473	41,07%	18,46%	1,78	1,33	11,07
	Capri Holdings Ltd.	3.947	2.288	57,95%	19,91%	1,4	0,96	9,29
	Ralph Lauren Corp.	8.296	824	9,93%	24,86%	1,15	1,07	8,7
	Average	22.874	3.750	30,45%	22,09%	1,41	1,14	10,62
Selective Retailing	Asos PLC	3.412	83	2,43%	19,88%	1,59	1,56	16,42
	Kohl's Corp.	6.429	3.017	46,93%	35,27%	1,26	0,96	7,79
	Dufry AG	4.070	3.398	83,48%	30,99%	1,83	1,16	6,59
	Walgreens Boots	43.230	15321	35,44%	18,79%	0,89	0,69	8,09
	Average	14.285	5.455	42,07%	26,23%	1,39	1,09	9,72
Perfumes & Cosmetics	Shiseido, Ltd.	24.005	2.038	8,49%	34,24%	0,86	0,82	16,01
	L'Oreal SA	149.687	2.887	1,93%	27,46%	0,66	0,65	20,1
	Inter Parfums, Inc.	2.038	21	1,01%	27,81%	1,04	1,03	18,59
	Natura & Co	12.985	2.953	22,74%	30,99%	0,82	0,71	19,81
	Amorepacific Corp.	9.430	91	0,96%	26,08%	1,46	1,45	16,81
Average	39.629	1.598	7,03%	29,32%	0,97	0,93	18,26	
Wines & Spirits	Pernod Ricard SA	44.060	7.555	17,15%	23,57%	0,73	0,64	16,5
	Treasury Wine Estates	5.038	1.108	22,00%	30,03%	0,93	0,8	15,73
	Carlsberg A/S	20.924	3.346	15,99%	30,50%	0,88	0,79	11,26
	Heineken N.V.	59.818	17052	28,51%	27,51%	0,74	0,64	12,37
	Average	32.460	7.265	20,91%	27,90%	0,82	0,72	13,97
Watches & Jewelry	Swatch Group SA	12.198	112	0,91%	23,68%	0,89	0,89	8,03
	Tiffany & Co.	15.018	871	5,80%	34,07%	1,46	1,4	15,91
	Chow Tai Fook	8.809	2052	23,30%	26,26%	1,05	0,89	11,88
	Average	12.008	1.012	10,00%	28,00%	1,13	1,06	11,94

8.14. Appendix 14 – Revenue Forecast | Fashion and Leather Goods (February Base Case)

<i>(million EUR)</i>	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
Revenue	12.485	12.950	15.655	18.666	22.670	26.069	28.934	31.358
<i>Growth (%)</i>		3,72%	20,89%	19,24%	21,45%	14,99%	10,99%	8,38%
Number of Stores								
Number of stores beg.	1.534	1.566	1.508	1.769	1.852	2.002	2.101	2.195
Number of stores ending	1.566	1.508	1.769	1.852	2.002	2.101	2.195	2.282
<i>Growth (%)</i>	2,09%	-3,70%	17,31%	4,69%	8,10%	4,96%	4,46%	3,96%
Revenue per stores								
Average number of stores	1.550	1.537	1.639	1.811	1.927	2.052	2.148	2.238
Average sales per store	8,05	8,43	9,55	10,31	11,76	12,71	13,47	14,01
<i>Growth (%)</i>		4,60%	13,40%	7,91%	14,11%	8,01%	6,01%	4,01%

<i>(million EUR)</i>	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue	33.690	35.977	38.041	39.825	41.276	42.490	43.580	44.536
<i>Growth (%)</i>	7,44%	6,79%	5,74%	4,69%	3,65%	2,94%	2,57%	2,19%
Number of Stores								
Number of stores beg.	2.282	2.361	2.425	2.472	2.502	2.514	2.523	2.529
Number of stores ending	2.361	2.425	2.472	2.502	2.514	2.523	2.529	2.533
<i>Growth (%)</i>	3,46%	2,71%	1,96%	1,21%	0,46%	0,36%	0,26%	0,16%
Revenue per stores								
Average number of stores	2.321	2.393	2.449	2.487	2.508	2.518	2.526	2.531
Average sales per store	14,51	15,04	15,54	16,01	16,46	16,87	17,25	17,59
<i>Growth (%)</i>	3,60%	3,60%	3,33%	3,06%	2,79%	2,52%	2,25%	1,98%

China Lockdown was computed assuming, Asia as the source of 42% of the base case revenue, in 2020E. Therefore:

China Lockdown 2020E Revenue = 26.069 – (26.069 * 42% * 25%) = 23.332 million EUR

Global Pandemic 2020E Revenue = 26.069 * 75% = 19.552 million EUR

After 2020E, the same growth rate is applied in all three scenarios.

8.15. Appendix 15 – Revenue Forecast | Selective Retailing (February Base Case)

<i>(million EUR)</i>	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
Revenue	11.303	12.146	13.473	13.804	15.074	16.051	17.134	18.203
<i>Growth (%)</i>		7,46%	10,92%	2,46%	9,20%	6,48%	6,75%	6,24%
Number of Stores								
Number of stores beg.	1.614	1.678	1.778	1.880	1.940	2.011	2.102	2.186
Number of stores ending	1.678	1.778	1.880	1.940	2.011	2.102	2.186	2.262
<i>Growth (%)</i>	3,97%	5,96%	5,74%	3,19%	3,66%	4,50%	4,00%	3,50%
Revenue per stores								
Average number of stores	1.646	1.728	1.829	1.910	1.976	2.056	2.144	2.224
Average sales per store	6,87	7,03	7,37	7,23	7,63	7,81	7,99	8,18
<i>Growth (%)</i>		2,36%	4,80%	-1,88%	5,58%	2,30%	2,40%	2,40%
Inflation rate @ IMF								
<i>North America</i>	0,50%	1,40%	2,50%	2,70%	2,00%	2,30%	2,40%	2,40%

<i>(million EUR)</i>	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue	19.221	20.130	20.866	21.470	21.954	22.366	22.757	23.155
<i>Growth (%)</i>	5,60%	4,73%	3,66%	2,89%	2,26%	1,88%	1,75%	1,75%
Number of Stores								
Number of stores beg.	2.262	2.324	2.371	2.401	2.413	2.413	2.407	2.401
Number of stores ending	2.324	2.371	2.401	2.413	2.413	2.407	2.401	2.395
<i>Growth (%)</i>	2,75%	2,00%	1,25%	0,50%	0,00%	-0,25%	-0,25%	-0,25%
Revenue per stores								
Average number of stores	2.293	2.348	2.386	2.407	2.413	2.410	2.404	2.398
Average sales per store	8,38	8,57	8,75	8,92	9,10	9,28	9,47	9,66
<i>Growth (%)</i>	2,40%	2,30%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%
Inflation rate @ IMF								
<i>North America</i>	2,40%	2,30%	-	-	-	-	-	-

China Lockdown was computed assuming, Asia as the source of 29% of the base case revenue, in 2020E. Therefore:

$$\text{China Lockdown 2020E Revenue} = 16.051 - (16.051 * 29\% * 25\%) = \mathbf{14.887 \text{ million EUR}}$$

$$\text{Global Pandemic 2020E Revenue} = 16.051 * 75\% = \mathbf{12.038 \text{ million EUR}}$$

After 2020E, the same growth rate is applied in all three scenarios.

8.16. Appendix 16 – Revenue Forecast | Perfumes & Cosmetics (February Base Case)

<i>(million EUR)</i>	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
Revenue	3.955	4.152	4.603	5.091	5.869	6.480	7.104	7.725
<i>Growth (%)</i>		4,98%	10,86%	10,61%	15,28%	10,41%	9,63%	8,74%
Beauty Market Share								
Market Share	7,91%	7,98%	8,52%	9,09%	9,78%	10,32%	10,82%	11,26%
<i>Growth (%)</i>		0,94%	6,75%	6,66%	7,60%	5,49%	4,84%	4,09%
Market Size								
Personal Luxury Goods	245.000	244.000	254.000	262.000	281.000	292.240	303.930	316.087
<i>Growth (%)</i>		-0,41%	4,10%	3,15%	7,25%	4,00%	4,00%	4,00%
Beauty Segment	50.000	52.000	54.000	56.000	60.000	62.804	65.676	68.614
<i>Growth (%)</i>		4,00%	3,85%	3,70%	7,14%	4,67%	4,57%	4,47%
<i>(million EUR)</i>	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue	8.332	8.912	9.436	9.880	10.220	10.510	10.773	11.020
<i>Growth (%)</i>	7,85%	6,97%	5,88%	4,70%	3,45%	2,84%	2,50%	2,30%
Beauty Market Share								
Market Share	11,63%	11,93%	12,15%	12,29%	12,33%	12,33%	12,33%	12,33%
<i>Growth (%)</i>	3,34%	2,59%	1,84%	1,09%	0,34%	0,04%	0,00%	0,00%
Market Size								
Personal Luxury Goods	328.730	341.879	354.529	366.583	377.947	388.530	398.243	407.402
<i>Growth (%)</i>	4,00%	4,00%	3,70%	3,40%	3,10%	2,80%	2,50%	2,30%
Beauty Segment	71.614	74.675	77.642	80.416	82.909	85.230	87.361	89.370
<i>Growth (%)</i>	4,37%	4,27%	3,97%	3,57%	3,10%	2,80%	2,50%	2,30%

China Lockdown was computed assuming, Asia as the source of 45% of the base case revenue, in 2020E. Therefore:

$$\text{China Lockdown 2020E Revenue} = 6.480 - (6.480 * 45\% * 25\%) = \mathbf{5.751 \text{ million EUR}}$$

$$\text{Global Pandemic 2020E Revenue} = 6.480 * 75\% = \mathbf{4.860 \text{ million EUR}}$$

After 2020E, the same growth rate is applied in all three scenarios.

8.17. Appendix 17 – Revenue Forecast | Wines & Spirits (February Base Case)

<i>(million EUR)</i>	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
Revenue	4.631	4.886	5.127	5.192	5.674	5.842	6.107	6.373
<i>Growth (%)</i>		5,50%	4,94%	1,26%	9,28%	2,96%	4,53%	4,35%
Revenue by product								
Champagne & Wines	2.221	2.288	2.406	2.369	2.507	2.585	2.656	2.726
<i>Growth (%)</i>		3,02%	5,16%	-1,54%	5,83%	3,12%	2,73%	2,65%
Cognac & Spirits	2.382	2.547	2.678	2.774	3.069	3.257	3.451	3.647
<i>Growth (%)</i>		6,93%	5,14%	3,58%	10,63%	6,13%	5,97%	5,66%
Sales Volume (mn bottles)								
# of bottles - Champ. & wines	107	107	109	103	104	103	103	102
<i>Growth (%)</i>		0,56%	1,86%	-5,48%	0,58%	-0,62%	-0,62%	-0,31%
# of bottles - Cognac & Spirits	95	103	109	112	118	124	130	135
<i>Growth (%)</i>		8,77%	5,64%	3,40%	5,25%	4,76%	4,50%	4,00%
Average price per bottle (EUR)								
Champagne & Wines	20,80	21,30	21,99	22,91	24,11	25,01	25,86	26,62
<i>Growth (%)</i>		2,44%	3,23%	4,18%	5,21%	3,77%	3,37%	2,97%
Cognac & Spirits	25,18	24,75	24,64	24,68	25,94	26,28	26,65	27,07
<i>Growth (%)</i>		-1,70%	-0,47%	0,17%	5,11%	1,30%	1,40%	1,60%
Inflation rate @ IMF								
France	0,10%	0,30%	1,20%	2,10%	1,20%	1,30%	1,40%	1,60%

(million EUR)	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue	6.644	6.923	7.160	7.391	7.607	7.807	7.968	8.092
<i>Growth (%)</i>	4,26%	4,19%	3,43%	3,22%	2,93%	2,63%	2,07%	1,56%
Revenue by product								
Champagne & Wines	2.787	2.843	2.887	2.936	2.986	3.037	3.086	3.134
<i>Growth (%)</i>	2,25%	2,01%	1,54%	1,70%	1,70%	1,70%	1,60%	1,56%
Cognac & Spirits	3.857	4.079	4.273	4.454	4.621	4.770	4.882	4.959
<i>Growth (%)</i>	5,77%	5,77%	4,75%	4,24%	3,73%	3,23%	2,36%	1,56%
Sales Volume (mn bottles)								
# of bottles - Champ. & wines	102	102	102	102	102	102	102	102
<i>Growth (%)</i>	-0,31%	-0,16%	-0,16%	0,00%	0,00%	0,00%	0,00%	0,00%
# of bottles - Cognac & Spirits	140	146	150	154	157	159	160	160
<i>Growth (%)</i>	4,00%	4,00%	3,00%	2,50%	2,00%	1,50%	0,75%	0,00%
Average price per bottle (EUR)								
Champagne & Wines	27,31	27,90	28,37	28,85	29,34	29,84	30,32	30,79
<i>Growth (%)</i>	2,57%	2,17%	1,70%	1,70%	1,70%	1,70%	1,60%	1,56%
Cognac & Spirits	27,53	28,00	28,48	28,96	29,45	29,95	30,43	30,91
<i>Growth (%)</i>	1,70%	1,70%	1,70%	1,70%	1,70%	1,70%	1,60%	1,56%
Inflation rate @ IMF								
<i>France</i>	1,70%	1,70%	-	-	-	-	-	-

China Lockdown was computed assuming, Asia as the source of 31% of the base case revenue, in 2020E. Therefore:

$$\text{China Lockdown 2020E Revenue} = 5.842 - (5.842 * 31\% * 25\%) = \mathbf{5.389 \text{ million EUR}}$$

$$\text{Global Pandemic 2020E Revenue} = 5.842 * 75\% = \mathbf{4.382 \text{ million EUR}}$$

After 2020E, the same growth rate is applied in all three scenarios.

8.18. Appendix 18 – Revenue Forecast | Watches & Jewelry (February Base Case)

(million EUR)	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
Revenue	3.290	3.466	3.778	4.073	4.383	4.740	5.075	5.380
<i>Growth (%)</i>		5,36%	9,00%	7,79%	7,64%	8,14%	7,05%	6,02%
Hard luxury Segment								
Market Share	5,87%	6,48%	6,75%	7,02%	7,19%	7,44%	7,64%	7,80%
<i>Growth (%)</i>		10,29%	4,13%	4,07%	2,34%	3,51%	2,76%	2,01%
Market Size								
Personal Luxury Goods	245.000	244.000	254.000	262.000	281.000	292.240	303.930	316.087
<i>Growth (%)</i>		-0,41%	4,10%	3,15%	7,25%	4,00%	4,00%	4,00%
Hard luxury Segment	56.000	53.500	56.000	58.000	61.000	63.728	66.387	68.991
<i>Growth (%)</i>		-4,46%	4,67%	3,57%	5,17%	4,47%	4,17%	3,92%
Inflation rate @ IMF								
<i>World</i>	2,80%	2,80%	3,20%	3,60%	3,40%	3,60%	3,50%	3,50%

(million EUR)	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue	5.648	5.877	6.075	6.274	6.469	6.650	6.816	6.973
<i>Growth (%)</i>	4,98%	4,05%	3,37%	3,27%	3,10%	2,80%	2,50%	2,30%
Hard luxury Segment								
Market Share	7,90%	7,94%	7,94%	7,94%	7,94%	7,94%	7,94%	7,94%
<i>Growth (%)</i>	1,26%	0,51%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Market Size								
Personal Luxury Goods	328.730	341.879	354.529	366.583	377.947	388.530	398.243	407.402
<i>Growth (%)</i>	4,00%	4,00%	3,70%	3,40%	3,10%	2,80%	2,50%	2,30%
Hard luxury Segment	71.524	74.044	76.541	79.045	81.496	83.777	85.872	87.847
<i>Growth (%)</i>	3,67%	3,52%	3,37%	3,27%	3,10%	2,80%	2,50%	2,30%
Inflation rate @ IMF								
<i>World</i>	3,40%	3,40%	-	-	-	-	-	-

China Lockdown was computed assuming, Asia as the source of 31% of the base case revenue, in 2020E. Therefore:

$$\text{China Lockdown 2020E Revenue} = 4.740 - (4.740 * 50\% * 25\%) = \mathbf{4.148 \text{ million EUR}}$$

$$\text{Global Pandemic 2020E Revenue} = 4.740 * 75\% = \mathbf{3.555 \text{ million EUR}}$$

After 2020E, the same growth rate is applied in all three scenarios.

8.19. Appendix 19 – EBIT Margin Forecast

The 2020E EBIT Margin in the Global Pandemic scenario, was estimated as the smallest EBIT margin over the past 10 years. The China Lockdown scenario was computed as the weighted average between the Base Case and the Global Pandemic, using the percentage of sales generated by Asia, as basis.

EBIT Margin	2020E			2021E	2022E	2023E
	China Lockdown	Global Pandemic	February Base Case			
Fashion & Leather	29,10%	26,40%	31,00%	31,00%	31,00%	31,00%
Selective Retailing	7,40%	6,30%	7,90%	7,70%	7,80%	7,60%
Perfumes & Cosmetics	9,60%	9,00%	10,10%	10,30%	10,50%	10,70%
Wines & Spirits	29,30%	28,70%	29,60%	29,80%	29,90%	30,10%
Watches & Jewelry	12,40%	10,00%	14,70%	14,30%	13,90%	13,50%

EBIT Margin	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Fashion & Leather	31,00%	31,00%	31,00%	31,00%	31,00%	31,00%	31,00%
Selective Retailing	7,70%	7,50%	7,60%	7,40%	7,50%	7,30%	7,40%
Perfumes & Cosmetics	10,90%	11,10%	11,10%	11,20%	11,30%	11,30%	11,30%
Wines & Spirits	30,00%	29,80%	29,70%	29,50%	29,40%	29,40%	29,40%
Watches & Jewelry	13,10%	13,00%	13,00%	13,00%	13,00%	13,00%	13,00%

Historic EBIT Margin	2010H	2011H	2012H	2013H	2014H	2015H	2016H	2017H
Fashion & Leather	34,0%	35,0%	33,0%	32,0%	29,0%	26,4%	29,4%	30,4%
Selective Retailing	10,0%	11,0%	11,0%	10,0%	9,0%	7,7%	6,3%	6,7%
Perfumes & Cosmetics	11,0%	11,0%	11,0%	11,0%	11,0%	12,6%	12,3%	12,0%
Wines & Spirits	29,0%	31,0%	30,0%	33,0%	29,0%	28,7%	29,0%	29,3%
Watches & Jewelry	13,0%	14,0%	12,0%	14,0%	10,0%	11,7%	11,6%	10,3%

Historic EBIT Margin	2018H	2019H	10yrs average	5yrs average	3yrs average
Fashion & Leather	31,0%	31,5%	31,2%	29,8%	31,0%
Selective Retailing	8,9%	8,0%	8,9%	7,5%	7,9%
Perfumes & Cosmetics	12,0%	10,1%	11,4%	11,8%	11,3%
Wines & Spirits	30,5%	29,5%	29,9%	29,4%	29,8%
Watches & Jewelry	16,2%	15,1%	12,8%	13,0%	13,9%

Adjusted EBITDA margin Analysis:

EBITDA Margin	2015H ⁷	2016H ⁷	2017H ⁷	2018H ⁷	2019H	2020E	2021E	2022E
Fashion & Leather	36,70%	38,77%	39,33%	40,02%	39,94%	38,97%	38,54%	38,32%
Selective Retailing	16,84%	15,91%	16,32%	18,21%	17,48%	17,08%	16,78%	16,83%
Perfumes & Cosmetics	19,01%	19,25%	19,35%	19,44%	17,56%	17,34%	17,33%	17,40%
Wines & Spirits	32,74%	32,93%	32,25%	34,93%	33,61%	34,48%	34,50%	34,54%
Watches & Jewelry	22,54%	23,41%	22,38%	27,47%	26,54%	25,65%	24,95%	24,38%

EBITDA Margin	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Fashion & Leather	38,18%	38,10%	38,10%	38,14%	38,20%	38,25%	38,28%	38,28%
Selective Retailing	16,66%	16,87%	16,87%	17,19%	17,19%	17,45%	17,36%	17,50%
Perfumes & Cosmetics	17,54%	17,75%	18,03%	18,11%	18,31%	18,47%	18,49%	18,45%
Wines & Spirits	34,59%	34,40%	34,20%	33,99%	33,79%	33,59%	33,54%	33,50%
Watches & Jewelry	23,93%	23,58%	23,61%	23,70%	23,75%	23,77%	23,75%	23,69%

Source: LVMH Financial Reports & Own Analysis.

⁷ From 2015H to 2018H, EBITDA margin had to be adjusted to reflect the estimated impact of IFRS 16.

8.20. Appendix 20 – NWC Forecast | Fashion & Leather Goods (February Base Case)

(million EUR)	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
Inventories	1.566	1.490	1.783	2.231	2.745	3.102	3.443	3.731
% of Revenue	12,54%	11,51%	11,39%	11,95%	12,11%	11,90%	11,90%	11,90%
Other Current A. (excl. Cash)	1.118	1.091	1.675	1.763	2.194	2.461	2.731	2.960
% of Revenue	8,95%	8,42%	10,70%	9,44%	9,68%	9,44%	9,44%	9,44%
Current L. (excl. Debt)	2.540	2.571	3.519	4.182	4.752	5.437	6.035	6.541
% of Operating Exp.	27,65%	28,12%	32,32%	32,47%	30,59%	30,23%	30,23%	30,23%
Net Working Capital	144	10	(61)	(187)	186	125	139	151
Change in NWC		(133)	(72)	(126)	374	(61)	14	12

(million EUR)	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Inventories	4.009	4.281	4.527	4.739	4.912	5.056	5.186	5.299
% of Revenue	11,90%	11,90%	11,90%	11,90%	11,90%	11,90%	11,90%	11,90%
Other Current A. (excl. Cash)	3.180	3.396	3.591	3.759	3.896	4.011	4.114	4.204
% of Revenue	9,44%	9,44%	9,44%	9,44%	9,44%	9,44%	9,44%	9,44%
Current L. (excl. Debt)	7.027	7.504	7.934	8.307	8.609	8.862	9.090	9.289
% of Operating Exp.	30,23%	30,23%	30,23%	30,23%	30,23%	30,23%	30,23%	30,23%
Net Working Capital	162	173	183	191	198	204	209	214
Change in NWC	11	11	10	9	7	6	5	5

Source: Company Information & Own Analysis.

The China Lockdown and the Global Pandemic scenario NWC assume the same percentages but are based on these scenarios revenues and operating expenses, instead.

8.21. Appendix 21 – NWC Forecast | Selective Retailing (February Base Case)

(million EUR)	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
Inventories	1.873	2.162	2.024	2.434	2.598	2.705	2.887	3.067
% of Revenue	16,57%	17,80%	15,02%	17,63%	17,24%	16,85%	16,85%	16,85%
Other Current A. (excl. Cash)	976	1.018	1.225	994	1.005	1.113	1.188	1.262
% of Revenue	8,63%	8,38%	9,09%	7,20%	6,67%	6,93%	6,93%	6,93%
Current L. (excl. Debt)	2.509	2.836	2.816	2.926	2.968	3.303	3.534	3.750
% of Operating Exp.	24,05%	24,91%	22,40%	23,28%	21,41%	22,34%	22,34%	22,34%
Net Working Capital	339	344	433	501	636	515	542	579
Change in NWC		4	89	68	135	(121)	27	38

(million EUR)	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Inventories	3.239	3.392	3.516	3.618	3.700	3.769	3.835	3.902
% of Revenue	16,85%	16,85%	16,85%	16,85%	16,85%	16,85%	16,85%	16,85%
Other Current A. (excl. Cash)	1.333	1.396	1.447	1.488	1.522	1.551	1.578	1.605
% of Revenue	6,93%	6,93%	6,93%	6,93%	6,93%	6,93%	6,93%	6,93%
Current L. (excl. Debt)	3.968	4.151	4.313	4.432	4.542	4.623	4.713	4.791
% of Operating Exp.	22,34%	22,34%	22,34%	22,34%	22,34%	22,34%	22,34%	22,34%
Net Working Capital	603	636	650	674	679	697	699	716
Change in NWC	24	33	14	24	5	18	2	17

Source: Company Information & Own Analysis.

The China Lockdown and the Global Pandemic scenario NWC assume the same percentages but are based on these scenarios revenues and operating expenses, instead.

8.22. Appendix 22 – NWC Forecast | Perfumes & Cosmetics (February Base Case)

(million EUR)	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
Inventories	502	578	604	806	794	895	982	1.067
% of Revenue	12,69%	13,91%	13,13%	15,83%	13,53%	13,82%	13,82%	13,82%
Other Current A. (excl. Cash)	889	985	1.238	1.447	1.561	1.769	1.939	2.109
% of Revenue	22,48%	23,74%	26,89%	28,42%	26,60%	27,30%	27,30%	27,30%
Current L. (excl. Debt)	1.473	1.565	1.698	2.087	2.332	2.577	2.819	3.059
% of Operating Exp.	42,65%	43,00%	41,92%	46,57%	44,19%	44,23%	44,23%	44,23%
Net Working Capital	(82)	(2)	143	165	23	87	102	118
Change in NWC		80	145	22	(143)	65	15	16

(million EUR)	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Inventories	1.151	1.232	1.304	1.365	1.412	1.452	1.489	1.523
% of Revenue	13,82%	13,82%	13,82%	13,82%	13,82%	13,82%	13,82%	13,82%
Other Current A. (excl. Cash)	2.275	2.433	2.576	2.697	2.790	2.869	2.941	3.009
% of Revenue	27,30%	27,30%	27,30%	27,30%	27,30%	27,30%	27,30%	27,30%
Current L. (excl. Debt)	3.291	3.513	3.711	3.886	4.015	4.124	4.227	4.324
% of Operating Exp.	44,23%	44,23%	44,23%	44,23%	44,23%	44,23%	44,23%	44,23%
Net Working Capital	134	152	169	177	188	197	202	207
Change in NWC	17	17	17	8	11	10	5	5

Source: Company Information & Own Analysis.

The China Lockdown and the Global Pandemic scenario NWC assume the same percentages but are based on these scenarios revenues and operating expenses, instead.

8.23. Appendix 23 – NWC Forecast | Wines & Spirits (February Base Case)

(million EUR)	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
Inventories	4.795	4.916	5.082	5.434	5.783	5.957	6.227	6.498
% of Revenue	103,5%	100,6%	99,1%	104,7%	101,9%	102,0%	102,0%	102,0%
Other Current A. (excl. Cash)	1.482	1.463	1.593	1.495	1.588	1.721	1.799	1.877
% of Revenue	32,01%	29,94%	31,08%	28,80%	27,99%	29,45%	29,45%	29,45%
Current L. (excl. Debt)	1.458	1.497	1.537	1.558	1.735	1.778	1.855	1.931
% of Operating Exp.	44,15%	43,15%	42,42%	43,18%	43,38%	43,26%	43,26%	43,26%
Net Working Capital	4.819	4.882	5.138	5.372	5.636	5.900	6.171	6.444
Change in NWC		62	256	234	264	263	271	273

(million EUR)	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Inventories	6.775	7.059	7.301	7.536	7.757	7.960	8.125	8.252
% of Revenue	102,0%	102,0%	102,0%	102,0%	102,0%	102,0%	102,0%	102,0%
Other Current A. (excl. Cash)	1.957	2.039	2.109	2.177	2.241	2.299	2.347	2.384
% of Revenue	29,45%	29,45%	29,45%	29,45%	29,45%	29,45%	29,45%	29,45%
Current L. (excl. Debt)	2.009	2.096	2.173	2.248	2.318	2.384	2.434	2.472
% of Operating Exp.	43,26%	43,26%	43,26%	43,26%	43,26%	43,26%	43,26%	43,26%
Net Working Capital	6.723	7.002	7.237	7.465	7.679	7.876	8.038	8.164
Change in NWC	279	279	236	228	213	197	163	125

Source: Company Information & Own Analysis.

The China Lockdown and the Global Pandemic scenario NWC assume the same percentages but are based on these scenarios revenues and operating expenses, instead.

8.24. Appendix 24 – NWC Forecast | Watches & Jewelry (February Base Case)

(million EUR)	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
Inventories	1.361	1.400	1.396	1.580	1.796	1.882	2.014	2.136
% of Revenue	41,37%	40,39%	36,94%	38,80%	40,98%	39,69%	39,69%	39,69%
Other Current A. (excl. Cash)	795	751	704	757	772	907	971	1.029
% of Revenue	24,17%	21,67%	18,64%	18,60%	17,61%	19,13%	19,13%	19,13%
Current L. (excl. Debt)	950	894	889	1.054	1.054	1.191	1.281	1.364
% of Operating Exp.	32,70%	29,20%	26,21%	30,88%	28,32%	29,46%	29,46%	29,46%
Net Working Capital	1.206	1.257	1.211	1.284	1.514	1.598	1.704	1.800
Change in NWC		51	(46)	73	231	83	107	96

(million EUR)	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Inventories	2.242	2.333	2.412	2.490	2.568	2.640	2.706	2.768
% of Revenue	39,69%	39,69%	39,69%	39,69%	39,69%	39,69%	39,69%	39,69%
Other Current A. (excl. Cash)	1.081	1.124	1.162	1.200	1.238	1.272	1.304	1.334
% of Revenue	19,13%	19,13%	19,13%	19,13%	19,13%	19,13%	19,13%	19,13%
Current L. (excl. Debt)	1.439	1.504	1.557	1.608	1.658	1.704	1.747	1.787
% of Operating Exp.	29,46%	29,46%	29,46%	29,46%	29,46%	29,46%	29,46%	29,46%
Net Working Capital	1.883	1.953	2.017	2.083	2.147	2.207	2.263	2.315
Change in NWC	83	69	64	66	65	60	55	52

Source: Company Information & Own Analysis.

8.25. Appendix 25 – CAPEX and D&A | Fashion & Leather (February Base Case)

(million EUR)	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
CAPEX	668	624	647	1.095	1.382	1.369	1.520	1.647
% of Revenue	5,35%	4,82%	4,13%	5,86%	6,10%	5,25%	5,25%	5,25%
D&A (excl. Leased A.)	756	651	698	837	779	891	911	936
% of Tang. & Intang. _(t-1)		6,02%	6,76%	4,37%	3,97%	4,17%	4,17%	4,17%
Net Tang. & Intang. A.	10.806	10.330	19.152	19.625	21.364	21.842	22.451	23.162
Net Right-of-use A.⁸	3.894	4.150	4.699	5.160	5.395	5.772	6.175	6.606
Growth (%)	-	6,57%	13,24%	9,81%	4,57%	6,98%	6,98%	6,98%
D&A (Right-of-use A.)	-	-	-	-	1.141	1.187	1.270	1.359
% of Right-of-use A. _(t-1)	-	-	-	-	22,10%	22,00%	22,00%	22,00%
New Leased A./L.	-	-	-	-	-	1.564	1.673	1.790
Repayment of Lease L.	-	-	-	-	1.036	1.187	1.270	1.359

(million EUR)	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
CAPEX	1.770	1.890	1.998	1.881	1.731	1.556	1.365	1.162
% of Revenue	5,25%	5,25%	5,25%	4,72%	4,19%	3,66%	3,13%	2,61%
D&A (excl. Leased A.)	966	999	1.037	1.077	1.110	1.136	1.154	1.162
% of Tang. & Intang. _(t-1)	4,17%	4,17%	4,17%	4,17%	4,17%	4,17%	4,17%	4,17%
Net Tang. & Intang. A.	23.966	24.857	25.819	26.623	27.243	27.664	27.876	27.876
Net Right-of-use A.	7.015	7.392	7.731	8.023	8.262	8.442	8.559	8.559
Growth (%)	6,18%	5,38%	4,58%	3,78%	2,98%	2,18%	1,38%	0,00%
D&A (Right-of-use A.)	1.453	1.543	1.626	1.701	1.765	1.818	1.857	1.883
% of Right-of-use A. _(t-1)	22,00%	22,00%	22,00%	22,00%	22,00%	22,00%	22,00%	22,00%
New Leased A./L.	1.862	1.921	1.965	1.993	2.004	1.998	1.974	1.883
Repayment of Lease L.	1.453	1.543	1.626	1.701	1.765	1.818	1.857	1.883

Source: Company Information & Own Analysis.

China Lockdown & Global Pandemic - CAPEX assumes the same % of revenue in those scenarios.

⁸ From 2015H to 2018H, Right-of-use Assets was estimated by capitalizing the scheduled lease payments using the implied discount rate applied by LVMH in 2019. (Net Right-of-use Assets = Lease Liabilities)

8.26. Appendix 26 – CAPEX and D&A | Selective Retailing (February Base Case)

(million EUR)	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
CAPEX	477	688	655	711	760	801	855	908
% of Revenue	4,22%	5,66%	4,86%	5,15%	5,04%	4,99%	4,99%	4,99%
D&A (excl. Leased A.)	380	471	519	485	558	567	586	608
% of Tang. & Intang. _(t-1)		7,78%	7,76%	8,08%	8,80%	8,11%	8,11%	8,11%
Net Tang. & Intang. A.	6.056	6.684	6.003	6.338	6.994	7.228	7.496	7.797
Net Right-of-use A.⁹	3.725	3.970	4.495	4.936	5.161	5.522	5.907	6.320
Growth (%)	-	6,57%	13,24%	9,81%	4,57%	6,98%	6,98%	6,98%
D&A (Right-of-use A.)	-	-	-	-	867	907	970	1.038
% of Right-of-use A. _(t-1)	-	-	-	-	17,56%	17,56%	17,56%	17,56%
New Leased A./L.	-	-	-	-	-	1.267	1.355	1.450
Repayment of Lease L.	-	-	-	-	788	907	970	1.038
(million EUR)	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
CAPEX	959	1.004	974	933	884	829	771	750
% of Revenue	4,99%	4,99%	4,67%	4,35%	4,03%	3,71%	3,39%	3,24%
D&A (excl. Leased A.)	632	658	686	710	728	741	748	750
% of Tang. & Intang. _(t-1)	8,11%	8,11%	8,11%	8,11%	8,11%	8,11%	8,11%	8,11%
Net Tang. & Intang. A.	8.123	8.469	8.757	8.980	9.137	9.225	9.249	9.249
Net Right-of-use A.	6.710	7.071	7.395	7.675	7.904	8.076	8.188	8.188
Growth (%)	6,18%	5,38%	4,58%	3,78%	2,98%	2,18%	1,38%	0,00%
D&A (Right-of-use A.)	1.110	1.179	1.242	1.299	1.348	1.388	1.419	1.438
% of Right-of-use A. _(t-1)	17,56%	17,56%	17,56%	17,56%	17,56%	17,56%	17,56%	17,56%
New Leased A./L.	1.501	1.540	1.566	1.579	1.577	1.561	1.530	1.438
Repayment of Lease L.	1.110	1.179	1.242	1.299	1.348	1.388	1.419	1.438

Source: Company Information & Own Analysis.

8.27. Appendix 27 – CAPEX and D&A | Perfumes & Cosmetics (February Base Case)

(million EUR)	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
CAPEX	282	330	329	437	436	495	543	591
% of Revenue	7,12%	7,96%	7,14%	8,58%	7,42%	7,65%	7,65%	7,65%
D&A (excl. Leased A.)	189	216	257	284	299	324	344	367
% of Tang. & Intang. _(t-1)		10,04%	11,21%	12,73%	11,98%	11,49%	11,49%	11,49%
Net Tang. & Intang. A.	2.156	2.294	2.230	2.493	2.821	2.992	3.191	3.415
Net Right-of-use A.⁹	362	386	437	480	502	537	574	614
Growth (%)	-	6,57%	13,24%	9,81%	4,57%	6,98%	6,98%	6,98%
D&A (Right-of-use A.)	-	-	-	-	140	147	157	168
% of Right-of-use A. _(t-1)	-	-	-	-	29,29%	29,29%	29,29%	29,29%
New Leased A./L.	-	-	-	-	-	182	195	208
Repayment of Lease L.	-	-	-	-	128	147	157	168
(million EUR)	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
CAPEX	637	681	679	666	643	614	581	533
% of Revenue	7,65%	7,65%	7,20%	6,75%	6,30%	5,85%	5,40%	4,83%
D&A (excl. Leased A.)	392	420	450	477	498	515	527	533
% of Tang. & Intang. _(t-1)	11,49%	11,49%	11,49%	11,49%	11,49%	11,49%	11,49%	11,49%
Net Tang. & Intang. A.	3.660	3.921	4.149	4.339	4.484	4.583	4.638	4.638
Net Right-of-use A.	652	687	719	746	768	785	796	796
Growth (%)	6,18%	5,38%	4,58%	3,78%	2,98%	2,18%	1,38%	0,00%
D&A (Right-of-use A.)	180	191	201	210	218	225	230	233
% of Right-of-use A. _(t-1)	29,29%	29,29%	29,29%	29,29%	29,29%	29,29%	29,29%	29,29%
New Leased A./L.	218	226	233	238	241	242	241	233
Repayment of Lease L.	180	191	201	210	218	225	230	233

Source: Company Information & Own Analysis.

⁹ From 2015H to 2018H, Right-of-use Assets was estimated by capitalizing the scheduled lease payments using the implied discount rate applied by LVMH in 2019. (Net Right-of-use Assets = Lease Liabilities)

8.28. Appendix 28 – CAPEX and D&A | Wines & Spirits (February Base Case)

<i>(million EUR)</i>	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
CAPEX	282	340	336	394	375	395	413	431
<i>% of Revenue</i>	6,08%	6,96%	6,55%	7,60%	6,60%	6,76%	6,76%	6,76%
D&A (excl. Leased A.)	162	166	173	200	203	251	253	256
<i>% of Tang. & Intang._(t-1)</i>		1,85%	1,81%	1,89%	1,88%	1,86%	1,86%	1,86%
Net Tang. & Intang. A.	8.961	9.574	10.584	10.775	13.470	13.614	13.774	13.948
Net Right-of-use A.¹⁰	86	92	104	114	119	128	137	146
<i>Growth (%)</i>	-	6,57%	13,24%	9,81%	4,57%	6,98%	6,98%	6,98%
D&A (Right-of-use A.)	-	-	-	-	31	32	35	37
<i>% of Right-of-use A._(t-1)</i>	-	-	-	-	27,03%	27,03%	27,03%	27,03%
New Leased A./L.	-	-	-	-	-	41	43	46
Repayment of Lease L.	-	-	-	-	28	32	35	37

<i>(million EUR)</i>	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
CAPEX	449	468	443	415	384	350	311	277
<i>% of Revenue</i>	6,76%	6,76%	6,19%	5,62%	5,05%	4,48%	3,91%	3,42%
D&A (excl. Leased A.)	259	263	267	270	273	275	276	277
<i>% of Tang. & Intang._(t-1)</i>	1,86%	1,86%	1,86%	1,86%	1,86%	1,86%	1,86%	1,86%
Net Tang. & Intang. A.	14.138	14.343	14.519	14.664	14.776	14.850	14.885	14.885
Net Right-of-use A.	155	164	171	178	183	187	189	189
<i>Growth (%)</i>	6,18%	5,38%	4,58%	3,78%	2,98%	2,18%	1,38%	0,00%
D&A (Right-of-use A.)	40	42	44	46	48	49	51	51
<i>% of Right-of-use A._(t-1)</i>	27,03%	27,03%	27,03%	27,03%	27,03%	27,03%	27,03%	27,03%
New Leased A./L.	49	50	52	53	53	53	53	51
Repayment of Lease L.	40	42	44	46	48	49	51	51

Source: Company Information & Own Analysis.

8.29. Appendix 29 – CAPEX and D&A | Watches & Jewelry (February Base Case)

<i>(million EUR)</i>	2015H	2016H	2017H	2018H	2019H	2020E	2021E	2022E
CAPEX	246	282	309	401	341	393	421	446
<i>% of Revenue</i>	7,49%	8,15%	8,18%	9,85%	7,78%	8,29%	8,29%	8,29%
D&A (excl. Leased A.)	212	252	284	266	272	279	284	289
<i>% of Tang. & Intang._(t-1)</i>		3,66%	4,06%	3,98%	3,97%	3,92%	3,92%	3,92%
Net Tang. & Intang. A.	6.871	6.992	6.686	6.862	7.131	7.245	7.382	7.539
Net Right-of-use A.¹⁰	889	947	1.073	1.178	1.232	1.318	1.410	1.508
<i>Growth (%)</i>	-	6,57%	13,24%	9,81%	4,57%	6,98%	6,98%	6,98%
D&A (Right-of-use A.)	-	-	-	-	229	239	256	274
<i>% of Right-of-use A._(t-1)</i>	-	-	-	-	19,42%	19,42%	19,42%	19,42%
New Leased A./L.	-	-	-	-	-	325	348	372
Repayment of Lease L.	-	-	-	-	208	239	256	274

<i>(million EUR)</i>	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
CAPEX	468	487	473	457	439	418	395	332
<i>% of Revenue</i>	8,29%	8,29%	7,79%	7,29%	6,79%	6,29%	5,79%	4,76%
D&A (excl. Leased A.)	295	302	309	316	321	326	329	332
<i>% of Tang. & Intang._(t-1)</i>	3,92%	3,92%	3,92%	3,92%	3,92%	3,92%	3,92%	3,92%
Net Tang. & Intang. A.	7.712	7.897	8.061	8.203	8.321	8.413	8.479	8.479
Net Right-of-use A.	1.601	1.687	1.765	1.831	1.886	1.927	1.954	1.954
<i>Growth (%)</i>	6,18%	5,38%	4,58%	3,78%	2,98%	2,18%	1,38%	0,00%
D&A (Right-of-use A.)	293	311	328	343	356	366	374	379
<i>% of Right-of-use A._(t-1)</i>	19,42%	19,42%	19,42%	19,42%	19,42%	19,42%	19,42%	19,42%
New Leased A./L.	386	397	405	409	410	407	401	379
Repayment of Lease L.	293	311	328	343	356	366	374	379

Source: Company Information & Own Analysis.

¹⁰ From 2015H to 2018H, Right-of-use Assets was estimated by capitalizing the scheduled lease payments using the implied discount rate applied by LVMH in 2019. (Net Right-of-use Assets = Lease Liabilities)

8.30. Appendix 30 – LVMH | Forecasted Income Statement (February Base Case)

<i>(million EUR)</i>	2017H	2018H	2019H	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue	42.636	46.826	53.670	59.182	64.354	69.038	73.536	77.819	81.579	84.839	87.526	89.822	91.893	93.776
Operating expenses	(32.592)	(34.877)	(37.878)	(41.928)	(45.725)	(49.102)	(52.359)	(55.392)	(58.060)	(60.310)	(62.211)	(63.790)	(65.316)	(66.691)
EBITDA	10.044	11.949	15.792	17.254	18.629	19.937	21.177	22.427	23.520	24.529	25.316	26.032	26.577	27.085
D&A	(1.931)	(2.072)	(4.519)	(4.824)	(5.065)	(5.331)	(5.621)	(5.909)	(6.191)	(6.448)	(6.666)	(6.839)	(6.964)	(7.039)
EBIT	8.113	9.877	11.273	12.431	13.564	14.606	15.556	16.518	17.329	18.081	18.650	19.193	19.613	20.046
Interest income and exp.	(59)	(388)	(559)	(575)	(596)	(618)	(638)	(658)	(675)	(690)	(702)	(711)	(717)	(717)
Net income before taxes	8.054	9.489	10.714	11.856	12.968	13.988	14.918	15.861	16.654	17.391	17.948	18.481	18.896	19.329
Income taxes	(2.214)	(2.499)	(2.932)	(3.192)	(3.490)	(3.765)	(4.014)	(4.268)	(4.480)	(4.679)	(4.828)	(4.971)	(5.082)	(5.199)
Net income after taxes	5.840	6.990	7.782	8.664	9.478	10.224	10.904	11.593	12.173	12.713	13.120	13.510	13.813	14.130
Minority interests	(475)	(636)	(611)	(629)	(658)	(686)	(715)	(745)	(771)	(796)	(819)	(841)	(858)	(871)
Net income	5.365	6.354	7.171	8.035	8.820	9.537	10.188	10.848	11.402	11.917	12.301	12.669	12.955	13.259

8.31. Appendix 31 – LVMH | Forecasted Income Statement (China Lockdown)

<i>(million EUR)</i>	2017H	2018H	2019H	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue	42.636	46.826	53.670	53.507	58.166	62.390	66.446	70.309	73.696	76.632	79.053	81.120	82.986	84.682
Operating expenses	(32.592)	(34.877)	(37.878)	(38.148)	(40.909)	(43.949)	(46.882)	(49.610)	(52.010)	(54.032)	(55.742)	(57.162)	(58.538)	(59.779)
EBITDA	10.044	11.949	15.792	15.359	17.258	18.441	19.564	20.698	21.686	22.600	23.311	23.958	24.448	24.903
D&A	(1.931)	(2.072)	(4.519)	(4.824)	(5.045)	(5.291)	(5.561)	(5.829)	(6.091)	(6.329)	(6.530)	(6.689)	(6.803)	(6.868)
EBIT	8.113	9.877	11.273	10.535	12.213	13.150	14.003	14.869	15.595	16.271	16.781	17.269	17.645	18.035
Interest income and exp.	(59)	(388)	(559)	(575)	(596)	(618)	(638)	(658)	(675)	(690)	(702)	(711)	(717)	(717)
Net income before taxes	8.054	9.489	10.714	9.960	11.617	12.532	13.365	14.211	14.920	15.582	16.079	16.558	16.928	17.318
Income taxes	(2.214)	(2.499)	(2.932)	(2.682)	(3.127)	(3.373)	(3.597)	(3.824)	(4.015)	(4.192)	(4.326)	(4.454)	(4.554)	(4.659)
Net income after taxes	5.840	6.990	7.782	7.278	8.490	9.159	9.768	10.387	10.906	11.389	11.753	12.103	12.374	12.659
Minority interests	(475)	(636)	(611)	(580)	(607)	(633)	(660)	(688)	(711)	(734)	(756)	(775)	(792)	(804)
Net income	5.365	6.354	7.171	6.698	7.883	8.526	9.108	9.699	10.194	10.655	10.998	11.328	11.583	11.855

8.32. Appendix 32 – LVMH | Forecasted Income Statement (Global Pandemic)

<i>(million EUR)</i>	2017H	2018H	2019H	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue	42.636	46.826	53.670	44.387	48.265	51.779	55.152	58.364	61.184	63.629	65.645	67.367	68.920	70.332
Operating expenses	(32.592)	(34.877)	(37.878)	(31.592)	(33.078)	(35.595)	(38.017)	(40.271)	(42.253)	(43.925)	(45.338)	(46.516)	(47.658)	(48.692)
EBITDA	10.044	11.949	15.792	12.795	15.187	16.184	17.135	18.093	18.931	19.704	20.306	20.851	21.262	21.639
D&A	(1.931)	(2.072)	(4.519)	(4.824)	(5.014)	(5.229)	(5.468)	(5.704)	(5.935)	(6.143)	(6.319)	(6.457)	(6.552)	(6.605)
EBIT	8.113	9.877	11.273	7.971	10.173	10.954	11.667	12.389	12.997	13.561	13.987	14.394	14.710	15.035
Interest income and exp.	(59)	(388)	(559)	(575)	(596)	(618)	(638)	(658)	(675)	(690)	(702)	(711)	(717)	(717)
Net income before taxes	8.054	9.489	10.714	7.396	9.577	10.337	11.029	11.731	12.322	12.871	13.285	13.683	13.993	14.318
Income taxes	(2.214)	(2.499)	(2.932)	(1.991)	(2.578)	(2.782)	(2.968)	(3.157)	(3.315)	(3.463)	(3.574)	(3.681)	(3.764)	(3.851)
Net income after taxes	5.840	6.990	7.782	5.405	7.000	7.555	8.061	8.575	9.007	9.408	9.712	10.003	10.229	10.467
Minority interests	(475)	(636)	(611)	(472)	(493)	(515)	(537)	(559)	(578)	(597)	(614)	(630)	(644)	(654)
Net income	5.365	6.354	7.171	4.933	6.506	7.040	7.524	8.016	8.428	8.812	9.097	9.372	9.586	9.813

8.33. Appendix 33 – LVMH | Forecasted Balance Sheet (February Base Case)

<i>(million EUR)</i>	2017H	2018H	2019H	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
ASSETS														
Intangibles & Goodwill	30.794	30.981	33.246	33.979	34.861	35.867	36.983	38.195	39.362	40.328	41.067	41.565	41.816	41.816
PP&E	13.862	15.112	18.533	18.942	19.433	19.994	20.616	21.292	21.942	22.481	22.893	23.171	23.310	23.310
Right-of-use assets	-	-	12.409	13.276	14.203	15.194	16.133	17.001	17.780	18.453	19.003	19.417	19.686	19.686
Deferred tax	1.741	1.932	2.274	2.649	2.881	3.091	3.292	3.484	3.652	3.798	3.918	4.021	4.114	4.198
Investments & others	2.297	2.724	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535
Non-Current Assets	48.694	50.749	69.997	72.381	74.913	77.681	80.560	83.507	86.272	88.595	90.416	91.709	92.460	92.545
Inventories	10.888	12.485	13.717	14.541	15.553	16.500	17.416	18.297	19.060	19.749	20.348	20.877	21.340	21.744
Accounts receivable	2.736	3.222	3.450	3.862	4.181	4.476	4.761	5.034	5.274	5.486	5.663	5.816	5.952	6.074
Income taxes	780	366	406	454	492	527	560	592	621	646	666	684	700	715
Other current assets	2.919	2.868	3.264	3.654	3.955	4.235	4.504	4.762	4.990	5.190	5.357	5.502	5.631	5.746
Cash and equivalents	3.738	4.610	5.673	8.645	11.709	14.880	18.152	21.521	25.204	29.351	33.954	38.999	44.498	50.423
Current Assets	21.061	23.551	26.510	31.156	35.890	40.617	45.393	50.206	55.148	60.421	65.989	71.879	78.121	84.702
Total Assets	69.755	74.300	96.507	103.537	110.803	118.298	125.952	133.712	141.420	149.016	156.405	163.588	170.581	177.247
EQUITY & LIABILITIES														
Equity, Group share	28.969	32.293	36.586	40.472	45.010	49.880	55.013	60.402	66.001	71.777	77.660	83.622	89.607	95.616
Minority interests	1.408	1.664	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779
Total Equity	30.377	33.957	38.365	42.251	46.789	51.659	56.792	62.181	67.780	73.556	79.439	85.401	91.386	97.395
Long-term borrowings	7.046	6.005	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101
NC lease liabilities	-	-	10.373	10.764	11.515	12.319	13.058	13.736	14.339	14.854	15.268	15.571	15.755	15.701
Deferred tax	4.989	5.036	5.498	6.466	7.031	7.543	8.034	8.502	8.913	9.269	9.563	9.814	10.040	10.246
NC provisions & others	12.354	12.469	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547
Non-Current Liabilities	24.389	23.510	35.519	36.878	38.194	39.510	40.740	41.886	42.900	43.771	44.478	45.032	45.443	45.594
Short-term borrowings	4.530	5.027	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610
Current lease liabilities	-	-	2.172	2.512	2.687	2.875	3.076	3.266	3.441	3.599	3.735	3.847	3.931	3.985
Accounts payable	4.539	5.314	5.814	6.469	7.028	7.536	8.030	8.498	8.914	9.273	9.573	9.824	10.056	10.261
Income taxes	763	538	722	803	873	936	997	1.055	1.107	1.152	1.189	1.220	1.249	1.274
Provisions & others	5.157	5.954	6.305	7.015	7.622	8.173	8.708	9.216	9.667	10.056	10.381	10.654	10.906	11.128
Current Liabilities	14.989	16.833	22.623	24.409	25.821	27.130	28.421	29.645	30.740	31.690	32.488	33.154	33.752	34.258
Total Liabilities & Equity	69.755	74.300	96.507	103.537	110.803	118.298	125.952	133.712	141.420	149.016	156.405	163.588	170.581	177.247

Source: Company Information & Own Analysis.

8.34. Appendix 34 – LVMH | Forecasted Balance Sheet (China Lockdown)

<i>(million EUR)</i>	2017H	2018H	2019H	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
ASSETS														
Intangibles & Goodwill	30.794	30.981	33.246	33.763	34.422	35.200	36.084	37.061	38.003	38.770	39.338	39.693	39.830	39.830
PP&E	13.862	15.112	18.533	18.821	19.188	19.622	20.115	20.660	21.185	21.612	21.929	22.127	22.203	22.203
Right-of-use assets	-	-	12.409	13.276	14.203	15.194	16.133	17.001	17.780	18.453	19.003	19.417	19.686	19.686
Deferred tax	1.741	1.932	2.274	2.395	2.604	2.793	2.975	3.147	3.299	3.431	3.539	3.631	3.715	3.791
Investments & others	2.297	2.724	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535
Non-Current Assets	48.694	50.749	69.997	71.790	73.951	76.344	78.842	81.405	83.803	85.801	87.343	88.403	88.968	89.044
Inventories	10.888	12.485	13.717	13.222	14.138	14.995	15.826	16.624	17.315	17.940	18.483	18.963	19.382	19.747
Accounts receivable	2.736	3.222	3.450	3.482	3.768	4.033	4.289	4.534	4.751	4.941	5.100	5.237	5.360	5.469
Income taxes	780	366	406	410	443	475	505	534	559	581	600	616	631	644
Other current assets	2.919	2.868	3.264	3.294	3.565	3.816	4.058	4.290	4.495	4.675	4.825	4.955	5.071	5.174
Cash and equivalents	3.738	4.610	5.673	9.147	11.881	14.898	17.992	21.162	24.607	28.460	32.716	37.362	42.410	47.705
Current Assets	21.061	23.551	26.510	29.554	33.795	38.216	42.669	47.144	51.726	56.597	61.724	67.133	72.853	78.740
Total Assets	69.755	74.300	96.507	101.343	107.746	114.560	121.511	128.549	135.529	142.398	149.067	155.537	161.821	167.784
EQUITY & LIABILITIES														
Equity, Group share	28.969	32.293	36.586	40.086	44.139	48.491	53.077	57.894	62.898	68.061	73.319	78.649	83.999	89.371
Minority interests	1.408	1.664	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779
Total Equity	30.377	33.957	38.365	41.865	45.918	50.270	54.856	59.673	64.677	69.840	75.098	80.428	85.778	91.150
Long-term borrowings	7.046	6.005	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101
NC lease liabilities	-	-	10.373	10.764	11.515	12.319	13.058	13.736	14.339	14.854	15.268	15.571	15.755	15.701
Deferred tax	4.989	5.036	5.498	5.846	6.355	6.817	7.260	7.682	8.052	8.373	8.637	8.863	9.067	9.252
NC provisions & others	12.354	12.469	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547
Non-Current Liabilities	24.389	23.510	35.519	36.258	37.518	38.784	39.965	41.065	42.039	42.874	43.553	44.082	44.470	44.601
Short-term borrowings	4.530	5.027	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610
Current lease liabilities	-	-	2.172	2.512	2.687	2.875	3.076	3.266	3.441	3.599	3.735	3.847	3.931	3.985
Accounts payable	4.539	5.314	5.814	5.931	6.344	6.801	7.246	7.667	8.042	8.365	8.635	8.861	9.070	9.254
Income taxes	763	538	722	736	788	845	900	952	999	1.039	1.072	1.100	1.126	1.149
Provisions & others	5.157	5.954	6.305	6.432	6.880	7.376	7.858	8.315	8.721	9.071	9.364	9.609	9.836	10.036
Current Liabilities	14.989	16.833	22.623	23.221	24.310	25.507	26.689	27.810	28.814	29.684	30.416	31.027	31.573	32.034
Total Liabilities & Equity	69.755	74.300	96.507	101.343	107.746	114.560	121.511	128.549	135.529	142.398	149.067	155.537	161.821	167.784

Source: Company Information & Own Analysis.

8.35. Appendix 35 – LVMH | Forecasted Balance Sheet (Global Pandemic)

<i>(million EUR)</i>	2017H	2018H	2019H	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
ASSETS														
Intangibles & Goodwill	30.794	30.981	33.246	33.425	33.737	34.163	34.689	35.305	35.904	36.367	36.673	36.812	36.795	36.795
PP&E	13.862	15.112	18.533	18.633	18.807	19.044	19.338	19.681	20.015	20.273	20.443	20.521	20.512	20.512
Right-of-use assets	-	-	12.409	13.276	14.203	15.194	16.133	17.001	17.780	18.453	19.003	19.417	19.686	19.686
Deferred tax	1.741	1.932	2.274	1.987	2.161	2.318	2.469	2.613	2.739	2.848	2.939	3.016	3.085	3.148
Investments & others	2.297	2.724	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535
Non-Current Assets	48.694	50.749	69.997	70.855	72.442	74.254	76.164	78.135	79.973	81.475	82.593	83.301	83.613	83.676
Inventories	10.888	12.485	13.717	10.906	11.665	12.375	13.062	13.722	14.295	14.812	15.261	15.658	16.005	16.308
Accounts receivable	2.736	3.222	3.450	2.896	3.136	3.357	3.570	3.775	3.956	4.115	4.247	4.362	4.464	4.555
Income taxes	780	366	406	341	369	395	420	444	466	484	500	513	525	536
Other current assets	2.919	2.868	3.264	2.740	2.966	3.176	3.378	3.572	3.742	3.893	4.018	4.127	4.223	4.310
Cash and equivalents	3.738	4.610	5.673	10.225	12.602	15.432	18.307	21.227	24.357	27.811	31.587	35.673	40.054	44.437
Current Assets	21.061	23.551	26.510	27.108	30.738	34.734	38.737	42.740	46.815	51.114	55.613	60.333	65.271	70.146
Total Assets	69.755	74.300	96.507	97.964	103.180	108.988	114.901	120.876	126.788	132.590	138.206	143.634	148.884	153.823
EQUITY & LIABILITIES														
Equity, Group share	28.969	32.293	36.586	39.682	43.025	46.616	50.404	54.383	58.520	62.788	67.137	71.546	75.973	80.419
Minority interests	1.408	1.664	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779	1.779
Total Equity	30.377	33.957	38.365	41.461	44.804	48.395	52.183	56.162	60.299	64.567	68.916	73.325	77.752	82.198
Long-term borrowings	7.046	6.005	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101	5.101
NC lease liabilities	-	-	10.373	10.764	11.515	12.319	13.058	13.736	14.339	14.854	15.268	15.571	15.755	15.701
Deferred tax	4.989	5.036	5.498	4.850	5.273	5.657	6.026	6.377	6.685	6.952	7.172	7.360	7.530	7.684
NC provisions & others	12.354	12.469	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547	14.547
Non-Current Liabilities	24.389	23.510	35.519	35.261	36.437	37.624	38.731	39.760	40.672	41.453	42.088	42.579	42.933	43.033
Short-term borrowings	4.530	5.027	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610	7.610
Current lease liabilities	-	-	2.172	2.512	2.687	2.875	3.076	3.266	3.441	3.599	3.735	3.847	3.931	3.985
Accounts payable	4.539	5.314	5.814	5.035	5.271	5.652	6.022	6.374	6.686	6.955	7.180	7.368	7.542	7.696
Income taxes	763	538	722	625	655	702	748	791	830	864	892	915	937	956
Provisions & others	5.157	5.954	6.305	5.460	5.716	6.129	6.531	6.912	7.250	7.542	7.786	7.990	8.179	8.346
Current Liabilities	14.989	16.833	22.623	21.242	21.940	22.968	23.987	24.953	25.818	26.569	27.202	27.730	28.199	28.592
Total Liabilities & Equity	69.755	74.300	96.507	97.964	103.180	108.988	114.901	120.876	126.788	132.590	138.206	143.634	148.884	153.823

Source: Company Information & Own Analysis.

8.36. Appendix 36 – LVMH | Forecasted Statement of Cash Flows (February Base Case)

<i>(million EUR)</i>	2018H	2019H	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
OPERATING ACTIVITIES													
EBIT	9.877	11.273	12.431	13.564	14.606	15.556	16.518	17.329	18.081	18.650	19.193	19.613	20.046
D&A	2.302	2.700	2.312	2.377	2.456	2.545	2.643	2.749	2.849	2.931	2.992	3.034	3.054
D&A (leased assets)	-	2.408	2.512	2.687	2.875	3.076	3.266	3.441	3.599	3.735	3.847	3.931	3.985
(Income)/loss from JVs/Assoc.	5	(10)	0	0	0	0	0	0	0	0	0	0	0
Other adjustments	(219)	(266)	0	0	0	0	0	0	0	0	0	0	0
Cash from ops. before chg. in WC	11.965	16.105	17.254	18.629	19.937	21.177	22.427	23.520	24.529	25.316	26.032	26.577	27.085
Interest expense	(113)	(363)	(584)	(605)	(628)	(650)	(671)	(689)	(705)	(719)	(730)	(738)	(740)
Tax paid	(2.275)	(2.940)	(3.192)	(3.490)	(3.765)	(4.014)	(4.268)	(4.480)	(4.679)	(4.828)	(4.971)	(5.082)	(5.199)
Change in working capital	(1.087)	(1.154)	(229)	(434)	(434)	(414)	(409)	(341)	(334)	(301)	(290)	(230)	(204)
Net cash from operating activities	8.490	11.648	13.250	14.099	15.110	16.099	17.080	18.010	18.811	19.468	20.040	20.527	20.942
INVESTING ACTIVITIES													
CAPEX	(3.038)	(3.294)	(3.453)	(3.751)	(4.022)	(4.283)	(4.530)	(4.568)	(4.353)	(4.082)	(3.768)	(3.424)	(3.054)
Proceeds from sale of investments	(17)	(2.478)	0	0	0	0	0	0	0	0	0	0	0
Dividends received	16	8	9	10	11	12	13	14	16	17	19	21	23
Sale of avbl. for sale NC fin. A.	(400)	(105)	0	0	0	0	0	0	0	0	0	0	0
Net cash from investing activities	(3.439)	(5.869)	(3.444)	(3.741)	(4.012)	(4.271)	(4.518)	(4.554)	(4.338)	(4.065)	(3.749)	(3.403)	(3.031)
FINANCING ACTIVITIES													
Proceeds from borrowings	1.529	2.837	0	0	0	0	0	0	0	0	0	0	0
Repayment of borrowings	(2.174)	(1.810)	0	0	0	0	0	0	0	0	0	0	0
Repayment of lease liabilities	-	(2.187)	(2.512)	(2.687)	(2.875)	(3.076)	(3.266)	(3.441)	(3.599)	(3.735)	(3.847)	(3.931)	(3.985)
Sale of avbl. for sale fin. assets	(147)	71	0	0	0	0	0	0	0	0	0	0	0
Dividends paid	(2.454)	(3.067)	(3.517)	(3.949)	(4.365)	(4.765)	(5.182)	(5.561)	(5.931)	(6.245)	(6.559)	(6.837)	(7.129)
Dividends paid to minority interests	(636)	(611)	(629)	(658)	(686)	(715)	(745)	(771)	(796)	(819)	(841)	(858)	(871)
Proceeds from sale of min. interests	(236)	(21)	0	0	0	0	0	0	0	0	0	0	0
Other equity-related transactions	(205)	54	0	0	0	0	0	0	0	0	0	0	0
Net cash from financing activities	(4.323)	(4.734)	(6.658)	(7.294)	(7.926)	(8.556)	(9.193)	(9.773)	(10.326)	(10.800)	(11.246)	(11.625)	(11.985)
Foreign Exchange Effects	67	39	0	0	0	0	0	0	0	0	0	0	0
Cash and equivalents at beg. of period	3.618	4.413	5.497	8.645	11.709	14.880	18.152	21.521	25.204	29.351	33.954	38.999	44.498
Net chg. in cash and equivalents	795	1.084	3.148	3.064	3.171	3.272	3.369	3.683	4.147	4.604	5.045	5.499	5.926
Cash and equivalents at end of period	4.413	5.497	8.645	11.709	14.880	18.152	21.521	25.204	29.351	33.954	38.999	44.498	50.423

Source: Company Information & Own Analysis.

8.37. Appendix 37 – LVMH | Forecasted Statement of Cash Flows (China Lockdown)

<i>(million EUR)</i>	2018H	2019H	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
OPERATING ACTIVITIES													
EBIT	9.877	11.273	10.535	12.213	13.150	14.003	14.869	15.595	16.271	16.781	17.269	17.645	18.035
D&A	2.302	2.700	2.312	2.358	2.416	2.485	2.564	2.649	2.730	2.795	2.843	2.872	2.883
D&A (leased assets)	-	2.408	2.512	2.687	2.875	3.076	3.266	3.441	3.599	3.735	3.847	3.931	3.985
(Income)/loss from JVs/Assoc.	5	(10)	0	0	0	0	0	0	0	0	0	0	0
Other adjustments	(219)	(266)	0	0	0	0	0	0	0	0	0	0	0
Cash from ops. before chg. in WC	11.965	16.105	15.359	17.258	18.441	19.564	20.698	21.686	22.600	23.311	23.958	24.448	24.903
Interest expense	(113)	(363)	(584)	(605)	(628)	(650)	(671)	(689)	(705)	(719)	(730)	(738)	(740)
Tax paid	(2.275)	(2.940)	(2.682)	(3.127)	(3.373)	(3.597)	(3.824)	(4.015)	(4.192)	(4.326)	(4.454)	(4.554)	(4.659)
Change in working capital	(1.087)	(1.154)	688	(593)	(395)	(377)	(374)	(310)	(305)	(274)	(265)	(209)	(186)
Net cash from operating activities	8.490	11.648	12.781	12.932	14.044	14.940	15.830	16.672	17.398	17.992	18.509	18.947	19.319
INVESTING ACTIVITIES													
CAPEX	(3.038)	(3.294)	(3.116)	(3.384)	(3.628)	(3.862)	(4.085)	(4.117)	(3.924)	(3.679)	(3.396)	(3.086)	(2.883)
Proceeds from sale of investments	(17)	(2.478)	0	0	0	0	0	0	0	0	0	0	0
Dividends received	16	8	9	10	11	12	13	14	16	17	19	21	23
Sale of avbl. for sale NC fin. A.	(400)	(105)	0	0	0	0	0	0	0	0	0	0	0
Net cash from investing activities	(3.439)	(5.869)	(3.107)	(3.374)	(3.617)	(3.851)	(4.072)	(4.103)	(3.908)	(3.662)	(3.377)	(3.065)	(2.861)
FINANCING ACTIVITIES													
Proceeds from borrowings	1.529	2.837	0	0	0	0	0	0	0	0	0	0	0
Repayment of borrowings	(2.174)	(1.810)	0	0	0	0	0	0	0	0	0	0	0
Repayment of lease liabilities	-	(2.187)	(2.512)	(2.687)	(2.875)	(3.076)	(3.266)	(3.441)	(3.599)	(3.735)	(3.847)	(3.931)	(3.985)
Sale of avbl. for sale fin. Assets	(147)	71	0	0	0	0	0	0	0	0	0	0	0
Dividends paid	(2.454)	(3.067)	(2.932)	(3.529)	(3.902)	(4.260)	(4.633)	(4.972)	(5.303)	(5.583)	(5.864)	(6.112)	(6.375)
Dividends paid to minority interests	(636)	(611)	(580)	(607)	(633)	(660)	(688)	(711)	(734)	(756)	(775)	(792)	(804)
Proceeds from sale of min. Interests	(236)	(21)	0	0	0	0	0	0	0	0	0	0	0
Other equity-related transactions	(205)	54	0	0	0	0	0	0	0	0	0	0	0
Net cash from financing activities	(4.323)	(4.734)	(6.024)	(6.823)	(7.410)	(7.995)	(8.587)	(9.125)	(9.636)	(10.074)	(10.486)	(10.834)	(11.163)
Foreign Exchange Effects	67	39	0	0	0	0	0	0	0	0	0	0	0
Cash and equivalents at beg. of period	3.618	4.413	5.497	9.147	11.881	14.898	17.992	21.162	24.607	28.460	32.716	37.362	42.410
Net chg. in cash and equivalents	795	1.084	3.650	2.734	3.017	3.094	3.170	3.444	3.853	4.256	4.646	5.048	5.295
Cash and equivalents at end of period	4.413	5.497	9.147	11.881	14.898	17.992	21.162	24.607	28.460	32.716	37.362	42.410	47.705

Source: Company Information & Own Analysis.

8.38. Appendix 38 – LVMH | Forecasted Statement of Cash Flows (Global Pandemic)

<i>(million EUR)</i>	2018H	2019H	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
OPERATING ACTIVITIES													
EBIT	9.877	11.273	7.971	10.173	10.954	11.667	12.389	12.997	13.561	13.987	14.394	14.710	15.035
D&A	2.302	2.700	2.312	2.327	2.354	2.392	2.439	2.493	2.544	2.584	2.610	2.622	2.620
D&A (leased assets)	-	2.408	2.512	2.687	2.875	3.076	3.266	3.441	3.599	3.735	3.847	3.931	3.985
(Income)/loss from JVs/Assoc.	5	(10)	0	0	0	0	0	0	0	0	0	0	0
Other adjustments	(219)	(266)	0	0	0	0	0	0	0	0	0	0	0
Cash from ops. before chg. in WC	11.965	16.105	12.795	15.187	16.184	17.135	18.093	18.931	19.704	20.306	20.851	21.262	21.639
Interest expense	(113)	(363)	(584)	(605)	(628)	(650)	(671)	(689)	(705)	(719)	(730)	(738)	(740)
Tax paid	(2.275)	(2.940)	(1.991)	(2.578)	(2.782)	(2.968)	(3.157)	(3.315)	(3.463)	(3.574)	(3.681)	(3.764)	(3.851)
Change in working capital	(1.087)	(1.154)	2.232	(730)	(326)	(310)	(307)	(256)	(251)	(226)	(218)	(173)	(153)
Net cash from operating activities	8.490	11.648	12.452	11.274	12.448	13.207	13.959	14.672	15.286	15.788	16.223	16.588	16.895
INVESTING ACTIVITIES													
CAPEX	(3.038)	(3.294)	(2.590)	(2.813)	(3.017)	(3.212)	(3.398)	(3.426)	(3.265)	(3.061)	(2.826)	(2.596)	(2.620)
Proceeds from sale of investments	(17)	(2.478)	0	0	0	0	0	0	0	0	0	0	0
Dividends received	16	8	9	10	11	12	13	14	16	17	19	21	23
Sale of avbl. for sale NC fin. A.	(400)	(105)	0	0	0	0	0	0	0	0	0	0	0
Net cash from investing activities	(3.439)	(5.869)	(2.581)	(2.804)	(3.006)	(3.200)	(3.385)	(3.412)	(3.250)	(3.044)	(2.807)	(2.576)	(2.597)
FINANCING ACTIVITIES													
Proceeds from borrowings	1.529	2.837	0	0	0	0	0	0	0	0	0	0	0
Repayment of borrowings	(2.174)	(1.810)	0	0	0	0	0	0	0	0	0	0	0
Repayment of lease liabilities	-	(2.187)	(2.512)	(2.687)	(2.875)	(3.076)	(3.266)	(3.441)	(3.599)	(3.735)	(3.847)	(3.931)	(3.985)
Sale of avbl. for sale fin. Assets	(147)	71	0	0	0	0	0	0	0	0	0	0	0
Dividends paid	(2.454)	(3.067)	(2.159)	(2.913)	(3.222)	(3.519)	(3.829)	(4.111)	(4.385)	(4.619)	(4.852)	(5.058)	(5.276)
Dividends paid to minority interests	(636)	(611)	(472)	(493)	(515)	(537)	(559)	(578)	(597)	(614)	(630)	(644)	(654)
Proceeds from sale of min. Interests	(236)	(21)	0	0	0	0	0	0	0	0	0	0	0
Other equity-related transactions	(205)	54	0	0	0	0	0	0	0	0	0	0	0
Net cash from financing activities	(4.323)	(4.734)	(5.143)	(6.093)	(6.612)	(7.131)	(7.654)	(8.130)	(8.581)	(8.968)	(9.329)	(9.632)	(9.915)
Foreign Exchange Effects	67	39	0	0	0	0	0	0	0	0	0	0	0
Cash and equivalents at beg. of period	3.618	4.413	5.497	10.225	12.602	15.432	18.307	21.227	24.357	27.811	31.587	35.673	40.054
Net chg. in cash and equivalents	795	1.084	4.728	2.377	2.830	2.875	2.920	3.130	3.455	3.775	4.086	4.380	4.384
Cash and equivalents at end of period	4.413	5.497	10.225	12.602	15.432	18.307	21.227	24.357	27.811	31.587	35.673	40.054	44.437

Source: Company Information & Own Analysis

8.39. Appendix 39 – Enterprise Value | Fashion & Leather Goods

February Base Case (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV
EBIT	8.081	8.970	9.721	10.444	11.153	11.793	12.346	12.796	13.172	13.510	13.806	
Corporate Tax Rate	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	
NOPAT (EBIT * (1-Tax Rate))	5.916	6.567	7.117	7.646	8.165	8.633	9.038	9.368	9.643	9.890	10.107	
D&A (incl. Leased Assets)	2.078	2.181	2.295	2.419	2.543	2.663	2.777	2.875	2.954	3.011	3.045	
CAPEX	(1.369)	(1.520)	(1.647)	(1.770)	(1.890)	(1.998)	(1.881)	(1.731)	(1.556)	(1.365)	(1.162)	
Repayment of Lease Liabilities	(1.187)	(1.270)	(1.359)	(1.453)	(1.543)	(1.626)	(1.701)	(1.765)	(1.818)	(1.857)	(1.883)	
Change in NWC	61	(14)	(12)	(11)	(11)	(10)	(9)	(7)	(6)	(5)	(5)	
Free Cash Flow	5.499	5.944	6.394	6.831	7.264	7.662	8.225	8.740	9.217	9.673	10.103	216.999
Discounted FCF		5.580	5.636	5.653	5.643	5.588	5.632	5.619	5.563	5.481	5.375	115.443
NPV	171.214											
China Lockdown (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV
EBIT	6.784	8.028	8.700	9.347	9.982	10.554	11.049	11.452	11.789	12.091	12.356	
Corporate Tax Rate	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	
NOPAT (EBIT * (1-Tax Rate))	4.966	5.877	6.369	6.843	7.308	7.727	8.089	8.384	8.631	8.852	9.046	
D&A (incl. Leased Assets)	2.078	2.175	2.282	2.400	2.517	2.630	2.737	2.828	2.901	2.954	2.984	
CAPEX	(1.226)	(1.360)	(1.474)	(1.584)	(1.691)	(1.788)	(1.683)	(1.549)	(1.393)	(1.222)	(1.101)	
Repayment of Lease Liabilities	(1.187)	(1.270)	(1.359)	(1.453)	(1.543)	(1.626)	(1.701)	(1.765)	(1.818)	(1.857)	(1.883)	
Change in NWC	210	(148)	(10)	(10)	(10)	(9)	(8)	(6)	(5)	(5)	(4)	
Free Cash Flow	4.842	5.274	5.809	6.196	6.580	6.933	7.434	7.892	8.316	8.721	9.042	194.214
Discounted FCF		4.951	5.120	5.127	5.112	5.057	5.091	5.074	5.019	4.942	4.810	103.322
NPV	153.624											
Global Pandemic (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV
EBIT	5.165	6.727	7.291	7.833	8.365	8.845	9.259	9.597	9.879	10.132	10.355	
Corporate Tax Rate	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	
NOPAT (EBIT * (1-Tax Rate))	3.781	4.925	5.337	5.734	6.124	6.475	6.779	7.026	7.232	7.418	7.581	
D&A (incl. Leased Assets)	2.078	2.166	2.265	2.374	2.481	2.584	2.681	2.763	2.828	2.874	2.900	
CAPEX	(1.027)	(1.140)	(1.235)	(1.327)	(1.417)	(1.499)	(1.411)	(1.298)	(1.167)	(1.024)	(1.017)	
Repayment of Lease Liabilities	(1.187)	(1.270)	(1.359)	(1.453)	(1.543)	(1.626)	(1.701)	(1.765)	(1.818)	(1.857)	(1.883)	
Change in NWC	363	(281)	(9)	(8)	(8)	(7)	(6)	(5)	(4)	(4)	(3)	
Free Cash Flow	4.008	4.400	5.000	5.319	5.635	5.926	6.342	6.720	7.071	7.407	7.577	162.749
Discounted FCF		4.131	4.407	4.402	4.378	4.323	4.342	4.320	4.268	4.197	4.031	86.582
NPV	129.382											

8.40. Appendix 40 – Enterprise Value | Selective Retailing

February Base Case (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV
EBIT	1.267	1.319	1.419	1.460	1.549	1.564	1.631	1.624	1.677	1.660	1.713	
Corporate Tax Rate	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	
NOPAT (EBIT * (1-Tax Rate))	920	957	1.030	1.059	1.124	1.135	1.183	1.178	1.217	1.205	1.243	
D&A (incl. Leased Assets)	1.473	1.556	1.645	1.742	1.837	1.928	2.009	2.076	2.129	2.166	2.188	
CAPEX	(801)	(855)	(908)	(959)	(1.004)	(974)	(933)	(884)	(829)	(771)	(750)	
Repayment of Lease Liabilities	(907)	(970)	(1.038)	(1.110)	(1.179)	(1.242)	(1.299)	(1.348)	(1.388)	(1.419)	(1.438)	
Change in NWC	121	(27)	(38)	(24)	(33)	(14)	(24)	(5)	(18)	(2)	(17)	
Free Cash Flow	807	661	692	709	746	833	936	1.016	1.110	1.180	1.225	28.447
Discounted FCF		623	614	593	588	619	655	670	690	691	676	15.699
NPV	22.118											
China Lockdown (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV
EBIT	1.106	1.223	1.316	1.354	1.437	1.451	1.513	1.506	1.555	1.540	1.588	
Corporate Tax Rate	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	
NOPAT (EBIT * (1-Tax Rate))	802	887	955	983	1.043	1.053	1.098	1.093	1.128	1.117	1.153	
D&A (incl. Leased Assets)	1.473	1.551	1.636	1.728	1.819	1.906	1.982	2.046	2.096	2.131	2.151	
CAPEX	(743)	(793)	(842)	(889)	(931)	(903)	(866)	(820)	(769)	(715)	(713)	
Repayment of Lease Liabilities	(907)	(970)	(1.038)	(1.110)	(1.179)	(1.242)	(1.299)	(1.348)	(1.388)	(1.419)	(1.438)	
Change in NWC	174	(41)	(35)	(22)	(31)	(13)	(22)	(5)	(16)	(2)	(16)	
Free Cash Flow	801	635	676	689	721	800	893	965	1.050	1.113	1.136	26.385
Discounted FCF		599	600	577	568	594	625	637	653	652	627	14.561
NPV	20.693											
Global Pandemic (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV
EBIT	756	989	1.064	1.095	1.162	1.173	1.223	1.218	1.258	1.245	1.284	
Corporate Tax Rate	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	27,4%	
NOPAT (EBIT * (1-Tax Rate))	549	718	772	795	843	851	888	884	912	904	932	
D&A (incl. Leased Assets)	1.473	1.539	1.613	1.694	1.774	1.850	1.917	1.972	2.016	2.046	2.061	
CAPEX	(600)	(641)	(681)	(719)	(753)	(731)	(700)	(663)	(622)	(578)	(623)	
Repayment of Lease Liabilities	(907)	(970)	(1.038)	(1.110)	(1.179)	(1.242)	(1.299)	(1.348)	(1.388)	(1.419)	(1.438)	
Change in NWC	294	(64)	(28)	(18)	(25)	(10)	(18)	(4)	(13)	(2)	(13)	
Free Cash Flow	809	582	638	642	660	718	787	841	905	951	919	21.335
Discounted FCF		549	567	537	520	533	551	555	562	557	507	11.774
NPV	17.212											

8.41. Appendix 41 – Enterprise Value | Perfumes & Cosmetics

February Base Case (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV
EBIT	653	730	809	890	969	1.045	1.094	1.142	1.185	1.215	1.243	
Corporate Tax Rate	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	
NOPAT (EBIT * (1-Tax Rate))	479	536	594	653	712	767	804	839	870	892	912	
D&A (incl. Leased Assets)	471	501	535	572	611	652	687	717	740	756	766	
CAPEX	(495)	(543)	(591)	(637)	(681)	(679)	(666)	(643)	(614)	(581)	(533)	
Repayment of Lease Liabilities	(147)	(157)	(168)	(180)	(191)	(201)	(210)	(218)	(225)	(230)	(233)	
Change in NWC	(65)	(15)	(16)	(17)	(17)	(17)	(8)	(11)	(10)	(5)	(5)	
Free Cash Flow	244	322	355	392	434	522	606	683	761	832	908	26.179
Discounted FCF		306	320	336	353	403	444	476	503	523	541	15.611
NPV	19.815											

China Lockdown (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV
EBIT	552	648	718	789	860	928	971	1.014	1.052	1.078	1.103	
Corporate Tax Rate	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	
NOPAT (EBIT * (1-Tax Rate))	405	476	527	580	632	681	713	744	772	792	810	
D&A (incl. Leased Assets)	471	494	522	553	587	621	651	676	696	709	717	
CAPEX	(440)	(482)	(524)	(565)	(605)	(603)	(591)	(571)	(545)	(516)	(484)	
Repayment of Lease Liabilities	(147)	(157)	(168)	(180)	(191)	(201)	(210)	(218)	(225)	(230)	(233)	
Change in NWC	(42)	(25)	(14)	(15)	(15)	(15)	(7)	(9)	(9)	(4)	(4)	
Free Cash Flow	247	306	343	373	407	483	555	622	689	751	806	23.233
Discounted FCF		290	310	320	331	373	407	433	456	472	480	13.855
NPV	17.726											

Global Pandemic (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV
EBIT	437	548	607	667	727	784	821	857	889	911	932	
Corporate Tax Rate	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	26,6%	
NOPAT (EBIT * (1-Tax Rate))	321	402	446	490	534	576	603	629	653	669	684	
D&A (incl. Leased Assets)	471	487	507	530	556	583	607	627	642	652	657	
CAPEX	(372)	(407)	(443)	(478)	(511)	(509)	(500)	(483)	(461)	(436)	(424)	
Repayment of Lease Liabilities	(147)	(157)	(168)	(180)	(191)	(201)	(210)	(218)	(225)	(230)	(233)	
Change in NWC	(20)	(34)	(12)	(12)	(13)	(13)	(6)	(8)	(7)	(4)	(3)	
Free Cash Flow	254	290	329	350	375	435	493	547	601	651	681	19.634
Discounted FCF		275	297	300	305	336	362	381	398	409	406	11.708
NPV	15.177											

8.42. Appendix 42 – Enterprise Value | Wines & Spirits

February Base Case (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV	
EBIT	1.732	1.819	1.908	1.999	2.076	2.137	2.194	2.247	2.294	2.342	2.378		
Corporate Tax Rate	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%		
NOPAT (EBIT * (1-Tax Rate))	1.259	1.323	1.387	1.454	1.510	1.554	1.596	1.634	1.668	1.703	1.729		
D&A (incl. Leased Assets)	283	288	293	299	305	311	316	321	324	327	328		
CAPEX	(395)	(413)	(431)	(449)	(468)	(443)	(415)	(384)	(350)	(311)	(277)		
Repayment of Lease Liabilities	(32)	(35)	(37)	(40)	(42)	(44)	(46)	(48)	(49)	(51)	(51)		
Change in NWC	(263)	(271)	(273)	(279)	(279)	(236)	(228)	(213)	(197)	(163)	(125)		
Free Cash Flow	851	892	940	985	1.026	1.142	1.222	1.309	1.397	1.505	1.604		66.183
Discounted FCF		858	869	875	876	937	965	994	1.019	1.056	1.082		44.632
NPV	54.163												
China Lockdown (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E		TV
EBIT	1.582	1.678	1.760	1.844	1.915	1.971	2.024	2.073	2.117	2.160	2.194		
Corporate Tax Rate	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%		
NOPAT (EBIT * (1-Tax Rate))	1.150	1.220	1.280	1.341	1.393	1.433	1.472	1.507	1.539	1.571	1.595		
D&A (incl. Leased Assets)	283	287	292	297	303	308	313	317	320	322	323		
CAPEX	(364)	(381)	(397)	(414)	(432)	(409)	(383)	(354)	(322)	(287)	(272)		
Repayment of Lease Liabilities	(32)	(35)	(37)	(40)	(42)	(44)	(46)	(48)	(49)	(51)	(51)		
Change in NWC	201	(257)	(252)	(257)	(257)	(217)	(210)	(197)	(181)	(150)	(116)		
Free Cash Flow	1.237	835	886	927	964	1.071	1.145	1.225	1.305	1.405	1.480	61.054	
Discounted FCF		803	819	824	824	879	904	930	952	985	998	41.173	
NPV	50.091												
Global Pandemic (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV	
EBIT	1.257	1.364	1.431	1.499	1.557	1.603	1.646	1.685	1.721	1.756	1.784		
Corporate Tax Rate	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%	27,3%		
NOPAT (EBIT * (1-Tax Rate))	914	992	1.040	1.090	1.132	1.165	1.197	1.225	1.251	1.277	1.297		
D&A (incl. Leased Assets)	283	286	289	293	297	301	305	308	309	311	311		
CAPEX	(296)	(310)	(323)	(337)	(351)	(332)	(311)	(288)	(262)	(262)	(260)		
Repayment of Lease Liabilities	(32)	(35)	(37)	(40)	(42)	(44)	(46)	(48)	(49)	(51)	(51)		
Change in NWC	1.229	(221)	(205)	(209)	(209)	(177)	(171)	(160)	(147)	(122)	(94)		
Free Cash Flow	2.098	713	765	798	828	913	973	1.037	1.102	1.153	1.203		49.637
Discounted FCF		685	707	709	707	750	768	787	804	809	811		33.474
NPV	41.011												

8.43. Appendix 43 – Enterprise Value | Watches & Jewelry

February Base Case (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV	
EBIT	697	726	749	763	771	790	816	841	864	886	906	13.836	
Corporate Tax Rate	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%		
NOPAT (EBIT * (1-Tax Rate))	510	531	547	558	563	577	596	615	632	648	663		
D&A (incl. Leased Assets)	518	540	563	588	613	637	658	677	692	704	711		
CAPEX	(393)	(421)	(446)	(468)	(487)	(473)	(457)	(439)	(418)	(395)	(332)		
Repayment of Lease Liabilities	(239)	(256)	(274)	(293)	(311)	(328)	(343)	(356)	(366)	(374)	(379)		
Change in NWC	(83)	(107)	(96)	(83)	(69)	(64)	(66)	(65)	(60)	(55)	(52)		
Free Cash Flow	313	287	294	302	309	349	388	432	479	527	610		
Discounted FCF		270	260	251	242	258	270	282	295	305	332		7.534
NPV	10.300												

China Lockdown (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV	
EBIT	513	636	655	668	674	691	714	736	756	775	793	12.106	
Corporate Tax Rate	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%		
NOPAT (EBIT * (1-Tax Rate))	375	465	479	488	493	505	522	538	553	567	580		
D&A (incl. Leased Assets)	518	538	559	582	605	627	646	663	677	687	693		
CAPEX	(344)	(368)	(390)	(410)	(426)	(414)	(400)	(384)	(366)	(345)	(314)		
Repayment of Lease Liabilities	(239)	(256)	(274)	(293)	(311)	(328)	(343)	(356)	(366)	(374)	(379)		
Change in NWC	145	(122)	(84)	(73)	(61)	(56)	(58)	(56)	(53)	(48)	(46)		
Free Cash Flow	455	256	289	295	300	334	367	404	445	486	534		
Discounted FCF		241	256	246	235	247	255	264	273	281	291		6.592
NPV	9.182												

Global Pandemic (million EUR)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	TV	
EBIT	356	545	561	572	578	592	612	631	648	665	680	10.377	
Corporate Tax Rate	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%	26,9%		
NOPAT (EBIT * (1-Tax Rate))	260	398	410	418	422	433	447	461	474	486	497		
D&A (incl. Leased Assets)	518	536	555	576	597	617	634	649	661	670	675		
CAPEX	(295)	(316)	(335)	(351)	(365)	(355)	(343)	(329)	(314)	(296)	(296)		
Repayment of Lease Liabilities	(239)	(256)	(274)	(293)	(311)	(328)	(343)	(356)	(366)	(374)	(379)		
Change in NWC	366	(129)	(72)	(62)	(52)	(48)	(49)	(48)	(45)	(41)	(39)		
Free Cash Flow	610	233	285	288	291	319	346	377	410	444	458		
Discounted FCF		219	252	240	228	236	240	246	252	257	249		5.650
NPV	8.071												

8.44. Appendix 44 – Sensitivity Analysis | Change in Tax rate and EBIT margin

		EBIT Margin								
		-4,0ppt	-3,0ppt	-2,0ppt	-1,0ppt	0,0ppt	+1,0ppt	+2,0ppt	+3,0ppt	+4,0ppt
Tax Rate	-3,0ppt	321,49	345,12	368,75	392,39	416,04	439,69	463,35	487,01	510,67
	-2,5ppt	318,87	342,34	365,82	389,30	412,80	436,29	459,79	483,30	506,80
	-2,0ppt	316,24	339,56	362,89	386,22	409,55	432,89	456,24	479,58	502,94
	-1,5ppt	313,62	336,78	359,95	383,13	406,31	429,49	452,68	475,87	499,07
	-1,0ppt	311,00	334,01	357,02	380,04	403,06	426,09	449,12	472,16	495,20
	-0,5ppt	308,38	331,23	354,09	376,95	399,82	422,69	445,57	468,45	491,33
	0,0ppt	305,76	328,45	351,15	373,86	396,57	419,29	442,01	464,74	487,46
	+0,5ppt	303,14	325,67	348,22	370,77	393,33	415,89	438,45	461,02	483,60
	+1,0ppt	300,51	322,90	345,29	367,68	390,08	412,49	434,90	457,31	479,73
	+1,5ppt	297,89	320,12	342,35	364,59	386,84	409,09	431,34	453,60	475,86
	+2,0ppt	295,27	317,34	339,42	361,50	383,59	405,69	427,79	449,89	471,99
	+2,5ppt	292,65	314,56	336,49	358,41	380,35	402,29	424,23	446,17	468,12
	+3,0ppt	290,03	311,79	333,55	355,33	377,10	398,89	420,67	442,46	464,25

Highlighted in red are the scenarios where the price falls under €360.4; i.e., LVMH current stock price.

8.45. Appendix 45 – Sensitivity Analysis | Chg in Main Business Segments Revenue

		Fashion & Leather Goods - Revenue Growth Rate								
		-2,0ppt	-1,5ppt	-1,0ppt	-0,5ppt	0,0ppt	+0,5ppt	+1,0ppt	+1,5ppt	+2,0ppt
Wines & Spirits Revenue Growth Rate	-2,0ppt	347,98	359,03	370,59	382,66	395,29	408,49	422,27	436,68	451,73
	-1,5ppt	348,31	359,36	370,91	382,99	395,61	408,81	422,59	437,00	452,05
	-1,0ppt	348,63	359,68	371,23	383,31	395,93	409,13	422,91	437,32	452,37
	-0,5ppt	348,95	360,00	371,55	383,63	396,25	409,45	423,23	437,64	452,69
	0,0ppt	349,27	360,32	371,87	383,95	396,57	409,77	423,55	437,96	453,01
	+0,5ppt	349,59	360,64	372,19	384,27	396,89	410,09	423,87	438,28	453,33
	+1,0ppt	349,92	360,96	372,51	384,59	397,21	410,41	424,19	438,60	453,65
	+1,5ppt	350,24	361,28	372,84	384,91	397,53	410,73	424,51	438,92	453,97
	+2,0ppt	350,56	361,61	373,16	385,23	397,85	411,05	424,83	439,24	454,29

Highlighted in red are the scenarios where the price falls under €360.4; i.e., LVMH current stock price.