



**MERGERS & ACQUISITIONS:**

**LUXURY SECTOR**

**CASE OF A MERGER BETWEEN LVMH AND HERMÈS**

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## ABSTRACT

The strong competitive environment that nowadays characterizes the Luxury Goods market has led companies to look for new alternatives of value creation. In this sense, Mergers and Acquisitions are found to be an alternative to increase shareholders wealth, since they allow companies to create value. The reasoning behind this deal lies on the cost synergies and efficiency that can arise from the combination of LVMH and Hermès.

This dissertation focus on the analysis of a possible acquisition involving the two companies mentioned above. The synergies value is found to be € 5 773 million, which results in an equity value for the merged entity of € 53 215 million. As a result, an offer price of € 13 494 million is determined, from which € 5 398 will be paid in cash and € 8 097 with shares issue, resulting in a premium over the market cap of 36.99%.

## TABLE OF CONTENTS

<b>1. Acknowledgments .....</b>	<b>6</b>
<b>2. Introduction.....</b>	<b>7</b>
<b>3. Literature review.....</b>	<b>8</b>
3.1. Valuation approaches .....	8
3.1.1. Weighted average cost of capital.....	10
3.1.2. Capital asset pricing model .....	10
3.1.3. Discounted cash-flows approach.....	12
3.1.4. Relative valuation (multiples) .....	16
3.2. M&A related issues.....	17
3.2.1. M&A procedure .....	18
3.2.2. M&A classification .....	18
3.2.3. Motivations for M&A .....	19
3.2.4. Value creation - synergies .....	20
3.2.5. Payment methods .....	20
3.2.6. Mergers and acquisitions premium .....	21
3.2.7. Post-deal returns.....	21
3.3. Conclusion on M&A .....	21
<b>4. Industry and company analysis .....</b>	<b>22</b>
4.1. Overview of the luxury market .....	22
4.2. Company overview –LVMH.....	23
4.2.1. History.....	23
4.2.2. Products offering .....	24
4.2.3. Financial analysis .....	26
4.3. Company overview – Hermès .....	27
4.3.1. History.....	27
4.3.2. Products offering .....	27
4.3.3. Financial analysis .....	29
<b>5. Forecast assumptions .....</b>	<b>30</b>
5.1. Inflation.....	31
5.2. Cost of financial distress .....	31
5.3. LVMH assumptions .....	31
5.3.1. Revenue.....	32

5.3.2.	Operating margin.....	34
5.3.3.	Net working capital .....	35
5.3.4.	Capital expenditures .....	36
5.3.5.	Depreciation .....	36
5.3.6.	Debt and financial expenses .....	37
5.3.7.	Income tax expenses.....	37
5.3.8.	Cash and equivalents and dividends payout.....	37
5.4.	Hermès assumptions.....	37
5.4.1.	Revenue.....	38
5.4.2.	Operating margin.....	40
5.4.3.	Net working capital .....	40
5.4.4.	Capital expenditures .....	40
5.4.5.	Depreciation .....	40
5.4.6.	Debt and financial expenses .....	41
5.4.7.	Income tax expenses.....	41
5.4.8.	Cash and equivalents and dividends payout.....	41
<b>6.</b>	<b>Standalone valuation.....</b>	<b>41</b>
6.1.	LVMH.....	42
6.1.1.	Free cash flow to the firm (FCFF).....	42
6.1.2.	Adjusted present value (APV).....	43
6.1.3.	Sensitivity analysis – LVMH .....	43
6.2.	Hermès .....	44
6.2.1.	Free cash flow to the firm (FCFF).....	44
6.2.2.	Adjusted present value (APV).....	44
6.2.3.	Sensitivity analysis – Hermès.....	44
6.3.	Relative valuation of LVMH and Hermès .....	45
<b>7.</b>	<b>Valuation of merged entity .....</b>	<b>46</b>
7.1.	Valuation of merged entity without synergies .....	46
7.2.	Valuation of merged entity with synergies.....	47
7.2.1.	Operating synergies.....	47
7.2.2.	Financial synergies .....	50
7.2.3.	Integration costs .....	50
7.2.4.	Valuation outcome .....	51

<b>8. The transaction.....</b>	<b>52</b>
8.1. Approaching shareholders.....	52
8.2. Distribution of synergies benefits .....	53
8.3. Method of payment .....	53
<b>9. Conclusion.....</b>	<b>55</b>
<b>10. Appendices.....</b>	<b>56</b>
<b>11. Bibliography .....</b>	<b>73</b>

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## 2. INTRODUCTION

Conventional business understanding suggests low prices stimulate demand, business size increases competitiveness, and consumers shop for functional use. However, in the luxury market these and many more conventions are turned upside down, since demand can increase with price, a brand's diffusion has a negative impact on its desirability, and consumers make extraordinary efforts to purchase products that usually do not exceed the functional performance of considerably less expensive and more reasonable alternatives. In this scenario, Groups such as LVMH and Hermès are trying to pursue their business goals.

In this sense, the objective of this dissertation is to analyse the merger of two companies and present reasonable reasons for their consolidation. The thesis focuses on a possible merger between the two companies mentioned before, arriving at final valuation values and other relevant findings.

This study is divided in the following sections: literature review, industry and companies' overview, standalone and merged entity's valuation, and transaction and conclusions of the proposed merger.

In the literature review section, it will be provided an analysis of the existing academic literature regarding valuation approaches. Also, for a better understanding, this section will focus, as well, on M&A related issues, such as type of acquisition and method of payment.

In the industry and companies' analysis section will assess their performance based on present and past information. More specifically, each company will be analysed in the different segment where it operates.

In the standalone and merged entity's valuation, the expectations about LVMH and Hermès are translated into numbers. To do this, some assumption will be made and some valuation models will be developed. In this sense, this section will define exactly the areas where future benefits are expected to arise.

Finally, after consolidation benefits are defined, it will be possible to design a possible transaction path and detailed acquisition offer. Therefore, the last section focuses in the final conclusion about the potential acquisition of LVMH to Hermès.

### **3. LITERATURE REVIEW**

“Companies grow in two main ways: either organically or by merging with or acquiring other companies.” (Barbara Petitt and Kenneth Ferris, 2013)

How much is a company worth? What are the ratios used by analysts to determine whether a stock is undervalued or overvalued? How valid is the discounted present value approach? How can one value a company as a going concern, and how does this change in the context of a potential acquisition, or when the company faces financial stress?

Finding a value for a company is not an easy task, but doing it is an essential component of effective management because it's simple to destroy value with ill-judged acquisitions, investments or financing methods.

According to Alfred Rappaport (2006), companies typically create most of their value through day-to-day operations, but a major acquisition can create or destroy value faster than any other corporate activity. With record levels of cash and relatively low debt levels, companies increasingly use mergers and acquisitions to improve their competitive positions: M&A announcements worldwide exceeded \$2.7 trillion in 2005. The reasoning behind these strategies is that the two firms combined may be more valuable than the sum of their individual values due to new business opportunities. However, the benefits from M&A are not consensual, as according to Damodaran (2005), the results could be improved considering the fact that firms have not been able to absorb completely the benefits associated with M&A.

Also, the additional value generated by combining two firms - creating opportunities that would not have been available to these firms operating independently - is called synergy and can be difficult to measure accurately. Nonetheless, it's considered that this value should be the difference between the value of the two combined companies and the sum of the value of each firm independently, as if optimally managed.

To ensure a good explanation about M&A valuations, this literature review is divided in two sections: valuation approaches and M&A related issues.

#### **3.1. VALUATION APPROACHES**

“There are those who are disingenuous enough to argue that value is in the eye of the beholder, and that any price can be justified if there are other investors willing to pay that price. Perceptions need to

be backed up by reality, which implies that the paid for any asset should reflect the cash flows it is expected to generate.” (Damodaran, 2002)

Understanding a firm valuation mechanism is essential for anyone involved in corporate finance sector, not only because of its importance in the allocation of resources and strategies, but also because it helps to identify sources of economic value creation and destruction within the company.

Nowadays, there is a huge variety of valuation frameworks and therefore is necessary to establish some criteria to select them. However, according to Young, et al. (1999), “most valuation approaches are equal under certain assumptions”. If the same information is used in all procedures, the expected results for the company value shall be the same.

According to Fernández (2007), the methods of valuing a company can be classified in six groups:

MAIN VALUATION METHODS					
BALANCE SHEET	INCOME STATEMENT	MIXED (GOODWILL)	CASH FLOW DISCOUNTING	VALUE CREATION	OPTIONS
Book value	Multiples	Classic	Equity cash flow	EVA	Black and Scholes
Adjusted Book value	PER	Union of European Accounting Experts	Dividends	Economic profit	Investment option
Liquidation value	Sales	Abbreviated income	Free cash flow	Cash value added	Expand the project
Substantial value	P/EBITDA	Others	Capital cash flow	CFROI	Delay the investment
	Other multiples		Adjusted Present value		Alternative use

Due to the business nature of the companies considered in this thesis, the Discounted Cash Flows (DCF) methodology will allow to determine the individual and joint values of both companies. Following this line of thought, the Free Cash Flows to the Firm (FCFF) and the Adjusted Present Value (APV) will be used. According to Damodaran (2010), the first provides an estimation of value from an operational point of view, while the second allows distinguishing the contribution of the side effects and financing options. These are the most used techniques, estimating the company’s value as a cash flow generator by discounting to the present the estimated future cash flows at the appropriate discount rate. Nowadays, it is considered the only conceptually correct valuation method and therefore the most used.

Additionally, in order to provide a market perspective, a relative valuation will be performed. In this way, the income statement-based method aims to determine the company’s value through the size of its earnings, sales or other indicators.

### 3.1.1. WEIGHTED AVERAGE COST OF CAPITAL

In order to discount the future free cash flows, the weighted average cost of capital (WACC) needs to be estimated. According to Wessels et al. (2010), the WACC blends the rates of return required by the debt holders ( $K_d$ ) and equity holders ( $K_e$ ). For a company financed solely with debt and equity, the WACC is defined as the follow:

$$WACC = \frac{D}{D + E} K_d(1 - T) + \frac{E}{D + E} K_e$$

where debt ( $D$ ) and equity ( $E$ ) are measured using market values. The cost of debt is reduced by the marginal tax rate ( $T$ ) since the interest tax shield (ITS) has been excluded from free cash flow. Although, since the interest tax shield has value it must be incorporated in the valuation and, therefore, the DCF values the tax shield by reducing the weighted average cost of capital.

The equation above shows three critical components of the WACC: the cost of equity, the after-tax cost of debt, and the target capital structure. To estimate the cost of equity the most used methodology is the Capital Asset Pricing model, requiring the access to some historical data related to the risk-free rate, market risk premium and beta parameters. In order to determine the after-tax cost of debt, the expected return obtained through the yield to maturity on long term debt will be used and it also requires the access to the risk free rate, default spread and marginal tax rate. The capital structure is the proportion of debt and equity to enterprise value.

The problem with using the WACC to discount future cash flows is that, implicitly, it assumes a constant capital structure at a target ratio of debt to equity. Any change to the capital structure will make the current WACC understate/overstate the expected tax shield. Ultimately, the WACC formula could be adjusted every period to make up for changes in capital structure or, in alternative the use of the Adjusted Present Value would be better.

### 3.1.2. CAPITAL ASSET PRICING MODEL

The most common model used to estimate the cost of equity is the CAPM. This model was introduced by Sharpe (1964) and Lintner (1965) and adjusts to the company-specific risk through the use of beta, which measures a stock's co-movement with the market and represents the extent to which a stock may diversify the investor's portfolio.

This model has been recently criticized, but according to Wessels et al. (2010), CAPM remains the best model for estimating the cost of equity if the WACC can be developed to be used in the company valuation.

The model can be summarized in the following formula:

$$E(R_i) = r_f + \beta_i [E(R_m) - r_f]$$

where  $E(R_i)$  is the expected return of security  $i$ ,  $r_f$  is the risk-free rate,  $\beta_i$  is the stock's sensitivity to the market and  $E(R_m)$  is the expected return of the market. The risk-free rate and the market risk premium will be common to all companies, only the beta parameters will vary across entities.

#### **3.1.2.1. RISK-FREE RATE, $R_F$**

According to Oded, J. (2007), the first element of the CAPM model is the expected return on investment without default risk – risk-free rate, meaning  $\beta$  equal to zero. However, Copeland et al. (1996) conclude that the application of the long-term Treasury bond yield, in terms of maturity, for the calculation of the risk-free rate in the cost of capital computation, allows a more reliable and correct valuation on which risk-free rate is less dependent on inflation.

Nonetheless, since financial crisis (2007), the market started to distinguish creditworthiness across countries. Hence, the usual German bonds for the Euro market should be replaced by bonds issued by a company's home country.

#### **3.1.2.2. MARKET RISK PREMIUM**

Mayfield (2004) defines the market risk premium as one of the most important numbers in finance. However, estimating and understanding its value has proven to be difficult. Merton (1980) suggests estimating the risk premium based on the theoretical relationship between expected returns and the contemporaneous variance of returns. Yet, according to Goetzmann et al. (2005), the most popular approach to compute the value of market risk premium is inferring it from past market returns relative to riskless investments.

The markets returns are usually obtained from the most representative equity markets and according to Damodaran (2002), a good index is the one which includes the highest number of securities, assuming they are market weighted. However, an index will never be completely accurate since investments, like bonds or real estate, are part of the market portfolio, though they are not included in equity market

indices. According to Fama & French (1996), the miscalculation of market portfolio can be one reason for the empirical failures of CAPM. Also, CAPM assumes that investors may borrow or lend any amount of money at the riskless rate. Black (1972), states that this assumption is not a very good approximation for many investors and this would significantly change the model, which should be relaxed.

In alternative to CAPM there are two other models: Arbitrage Pricing Model (APM), which considers that the return on an asset is totally incorporated in a set of factors and a random noise; and Fama & French (1992) Three Factor Model, which develops a regression of a stock's excess return of high over low book to market stocks.

### **3.1.2.3. BETA, $\beta$**

As mentioned before, the beta coefficients will differ across stocks since it measures the exposure to the systematic risk of each stock (non-diversifiable risk). The higher the beta value, the more it amplifies market shocks. According to Damodaran (2002), the beta can be roughly estimated by the regression of an asset's historical returns against a representative equity market index, for a period of at least three years. To avoid miscalculation, one should look at the betas for similar companies in the same industry. When doing the calculations, the capital structure of each company should also be taken into account, in order to incorporate the leverage effect. Therefore, according with Damodaran (1994), the leverage beta is always higher than the unlevered one because payments of interest to debtholders increases the variability of shareholders return. One can determine the levered beta through the following relation:

$$\beta_L = \beta_U \left[ 1 + \frac{D}{E} \times (1 - T) \right]$$

However, Rosenberg and Rudd (1982) stated that the calculation of beta based on historical returns makes the beta value unstable. As a solution, Copeland et al. (2000) suggests a more forward-looking approach, using published estimates of the unlevered beta for the industry.

### **3.1.3. DISCOUNTED CASH-FLOWS APPROACH**

A valuation based on discounted cash flows starts by estimating the value of nominal and real future cash flows. This task carries some difficulties and may lead to several mistakes due the growth rates, returns on invested capital and growth periods expectations.

In many cases, as Damodaran (2002) shows, for purposes of simplicity, the cash-flows are forecasted for a limited period of time and expected to grow at a constant nominal rate in perpetuity. As a result, all cash flows need to be discounted at a specific rate which will catch the riskiness of those streams.

In the next subsections some of the parameters that are necessary to complete the valuation will be explored.

### 3.1.3.1. FREE CASH FLOW TO THE FIRM (FCFF)

“The most commonly-used DCF approach, is the one on which the value of a leveraged firm can be calculated by discounting the unleveraged cash flows at the firm weighted average cost of capital” (Kaplan & Ruback, 1996). Thus, the enterprise value is estimated according to the following formula:

$$\text{Enterprise value} = \sum_{i=1}^n \frac{\text{FCFF}_i}{(1 + \text{WACC})^i} + \frac{\text{FCFF}_{n+1}/(\text{WACC} - \text{TGR})}{(1 + \text{WACC})^n}$$

This formula can be decomposed into two stages: the first represents the present value of cash-flows up to a predetermined horizon date (n), generally until a company enters into a stable growth rate; the second comprises the present value of future cash-flows beyond the horizon date and is usually referred as terminal value (TGR - terminal value growth rate) (Ohlson & Zhang, 1999).

According to Damodaran (2005), the FCFF is the amount of cash earned by a company after paying all operating expenses, taxes and reinvestment needs, but before paying any interest or dividends to debt holders or equity holders. Therefore can be summarized as:

$$\text{FCFF} = \text{EBIT} (1-T) + \text{Depreciation} - \text{CAPEX} - \Delta \text{NWC} \pm \text{Other Non-cash items}$$

These cash-flows should be discounted to the present using the corresponding WACC, which is the discount rate that adjusts for the tax effect. The next subsection will analyse the second stage on enterprise value’s formula - the terminal value.

### 3.1.3.2. TERMINAL VALUE

Damodaran (2002) states that firms “do not last forever” and it is necessary to establish a moment in the future to estimate its liquidation value. Similarly, Luehrman (1997) considers that after computing operating cash-flows, it is required to add the present value of cash flows beyond the horizon date.

Following the perpetuity growth method, the terminal value can be computed as:

$$TV = \frac{FCFF_{n+1}}{WACC - g}$$

Alternatively, using a multiples approach,

$$TV = EBITDA_n \times \text{Exit Multiples}$$

where a frequently used terminal multiple is Enterprise Value/EBITDA or EV/EBITDA.

Since firm's operations are assumed to continue indefinitely, it can be implicitly assumed that future operations will grow at a given rate. The terminal value is, typically, the main component of firm's value and is very sensitive to changes either in the discount rate or in the terminal growth rate (TGR).

### 3.1.3.3. EXPECTED GROWTH RATE

Although, usually companies start operations with high growth rates, these tend to gradually stabilize. Damodaran (2008) defines the growth rate as the product of the after-tax return on invested capital (ROIC) multiplied by the reinvestment rate (RR).

$$g = RR \times ROIC$$

Where,

$$ROIC = \frac{NOPLAT}{\text{Invested Capital}}$$

This stable growth rate cannot exceed the growth rate of the economy but it can be set lower. A common approach is to calculate the TGR at a constant rate equal to the expected real or nominal growth rate of the GDP of the economy, depending in whether the inflation was considered or not in the cash flows. According to Damodaran (2002), another simple proxy for the nominal growth rate of the economy is the risk-free rate. In addition, Kaplan and Ruback (1996) suggest that in a stable stage the analyst shall consider capital expenditures equal to depreciation.

### 3.1.3.4. ADJUSTED PRESENT VALUE (APV)

Luehrman (1997) defends that APV approach, besides being less susceptible to valuation errors than the traditional WACC, it also computes how much a firm asset is worth and where the value comes from.

The Adjusted Present Value method defines the company's value as the addition of three different values: the value of the company assuming that the company has no debt, the value of the tax shield

obtained by the fact that the company is financed with debt and the value of other costs, such as distress costs.

Regarding this subject, Damodaran (2005) explains that, the value of the company without debt is obtained by discounting the FCFF using the rate of required return to equity, which would be applicable to the company if it was to be considered as having no debt - unlevered rate or required return to assets. This rate of return will be lower than the required return to equity if the company has debt since, in this case, the equity holders would bear the financial risk implied by the existence of debt and would demand a higher equity risk premium.

$$\text{Value of Unlevered Enterprise } (V_U) = \sum_{i=1}^n \frac{\text{FCFF}_i}{(1 + R_U)^i} + \frac{\text{FCFF}_{n+1}/(R_U - \text{TGR})}{(1 + R_U)^n}$$

The present value of the tax shield arises from the fact that the company is being financed with debt and it is the specific result of the lower tax paid, as a consequence of the interest paid on the debt in each period.

$$\text{Present Value of Tax Shields (PVTs)} = \sum_{i=1}^n \frac{D_i \times R_D \times T_C}{(1 + R_D)^i} + \frac{D_i \times R_D \times T_C / (R_D - g)}{(1 + R_D)^n}$$

According to Luehrman (1997), in the long-run, it is assumed that indebtedness grows at the same pace as the company, making the perpetual tax shield growth (g) equal to growth in operations (TGR).

Thirdly, the cost of financial distress should be considered as the present value of loss in a firm's value in case of distress. This can be computed by multiplying, in each period, the value of the unlevered firm by the percentage of loss that varies across industries (Damodaran, 2002).

$$\text{Cost of Financial Distress (CFD)} = \sum_{i=1}^n \frac{\%CFD_i \times V_{u_i}}{[1 + R_D + P(D)]^i}$$

Thereby, as Myers (1974) claimed, the final step is to put everything together to get the APV value:

$$\text{Firm Value} = V_u + [1 - P(D)] \times \text{PVTs} - [P(D) \times \text{CFD}]$$

Since the PVTs only exists when the firm is operating, this component must be multiplied by the probability of no distress and the CFD must be multiplied by the probability of bankruptcy.

Although APV model provides more information than WACC, the criteria to choose between the two models depends on the nature of firm's capital structure.

### 3.1.4. RELATIVE VALUATION (MULTIPLES)

Multiples approaches assume that a company will be worth some multiple of future earnings or book value in the continuing period. Several empirical studies have shown that multiple-based valuation can give similar accuracy to DCF valuation. Kaplan and Ruback (1995) show, for a sample of highly leveraged transactions, that valuation using EBITDA multiples is as accurate as DCF. Other developments have also demonstrated that there is a strong theoretical basis for using multiples (Feltham and Ohlson, 1995).

Although, according to Goedhart et al. (2005) the multiples are considered the simplest valuation method and there are two important decisions: (i) the definition of a peer group and (ii) the definition of the right multiples.

Following the same thought as Kaplan (1996), it can be considered that the relative valuation method relies on two main assumptions: (i) the comparable companies are assumed to have an expected future cash flow that grows at the same rate and have the same level of risk as those firms being valued and (ii) the value of the firm is assumed to vary proportionally to the changes in the variables being measured.

Damodaran (2002) states that any company with similar cash flows, growth, leverage and risk rates can be used as a comparable firm. Still, Lie & Lie (2002) argue that, in general, such similarity can be found only in the same industry.

There are three main principles in the multiples approach, which are considered by Goedhart et al. (2005): (i) use peers with similar prospects for ROIC and growth; (ii) use forward looking multiples based on latest information or forecasted indicators; and (iii) use enterprise value multiples adjusted for non-operating items.

Some examples of frequently used multiples are (Krishnamurti & Vishwanath, 2008):

- The price-to-earnings (P/E) multiple =  $\frac{\text{stock price per share}}{\text{earning per share}}$ ;
- The price-to-sales (P/S) multiple =  $\frac{\text{stock price per share}}{\text{sales per share}}$ ;
- The price-to-book (P/BV) multiple =  $\frac{\text{market price per share}}{\text{book value per share}}$ ;

- The enterprise value-to-EBITDA (EV/EBITDA) multiple =

$$= \frac{\text{Enterprise value}}{\text{EBITDA}} = \frac{\text{Market value Equity} + \text{Book value Debt}}{\text{EBITDA}}$$

The first three are equity multiples, whereas the fourth is a value multiple. In general, according with Imam et al. (2008), multiples are only of importance when they are based on either earnings or cash flows.

Also, Damodaran (2006) describes several reasons why multiples could be preferred over discounted cash flow models, including (i) the fact that using the multiples method costs less time and resources compared to the use of standard DCF, which requires more information, assumptions and, consequently, it is more time consuming; (ii) the outcomes of the multiples method are easier to defend compared to the outcomes of a DCF model; (iii) the multiples method reflects better the mood of the market since the valuation is based on comparable assets, whereas DCF models try to capture the intrinsic value of an asset; and (iv) since the outcomes of the multiples method are easier to explain, compared to the relatively complicated outcomes of DCF models, it is also easier to sell stocks to investors and portfolio managers based on this number, .

Nevertheless, according to Kaplan and Ruback (1996), it is not worth using this method alone since the results obtained are dispersed, but it is helpful to use it to make comparisons with the market. Also, multiples are even more accurate in the valuation of large companies (Alford, 1992). Taking all the facts into consideration, valuation by multiples is very useful to complement the DCF approach.

### 3.2. M&A RELATED ISSUES

Mergers and acquisitions come in “waves.” Martynova and Renneboog (2008) reviewed a century of transactions and identified six major waves of M&As: 1890–1903, 1910–1929, 1950–1973, 1981–1989, 1993–2001, and 2003–2007. Their study shows that the end of a wave typically coincides with a crisis or a recession. What triggers the start of a wave varies across time, but three factors have constantly motivated M&A activity: industrial and technological shocks, regulatory changes, and credit availability.

What do Daimler-Benz, Hewlett-Packard (HP), Microsoft, Quaker Oats, and Sprint have in common? They are all multinational companies with well established brands and products. But they have something else in common: they have all made bad acquisitions!

Acquisitions fail for different reasons, but a recurrent one is overpay. The acquirers overestimate either the target's value or the expected synergies associated with the acquisition, or both. When the benefits of the acquisition fail to materialize, an acquirer has to write off part, and sometimes all, of the purchase price (Ferris, 2013).

However, not all mergers and acquisitions are bound to fail. Some of the strongest companies result from large M&As, the combinations of Exxon and Mobil in 1998, Vodafone and Mannesmann in 1999, and Pfizer and Warner Lambert in 1999, created leaders in the oil and gas, telecommunication and pharmaceutical industries, respectively. Acquisitions that are well planned and well executed offer companies the opportunity to grow successfully.

### **3.2.1. M&A PROCEDURE**

In order to start up a M&A deal, some steps must be taken carefully before getting to a final agreement that guarantees a good result for both parties.

Wang et al. (2005) recognizes that a successful merger or acquisition should well handle M&A process management, confidential target selection, negotiation assistance, preparation and administration of complete diligence, between other steps. In practice, the M&A process can be split into five major steps: (i) perform a pre-acquisition review, (ii) search and screen the target, (iii) investigate and value the target, (iv) acquire the target through negotiation, and (v) perform post-merger integration.

### **3.2.2. M&A CLASSIFICATION**

M&A deals can be categorized differently. As Ross et al. (2003) state, there are two different perspectives for classifying M&A deals – legal or financial.

Focusing on the legal procedures classification there are three different deals to be considered: merger or consolidation; acquisition of stock and acquisition of assets.

In the case of a merger, the buyer absorbs the target company through the purchase of all the assets and liabilities whereas in a consolidation, a new legal entity is created combining both companies. In these two types of deal, the involved companies' stockholders have to approve it.

On the other hand, acquisition of stock allows the acquirer to place an offer for the target's stocks. Generally, this operation is accomplished through a tender offer – buying publicly the target's shares. There is no need for a general meeting for a previous approval by the company's shareholders, since

the buyer deals directly them. Nevertheless, it can be difficult to buy the entire company since each shareholder can decide whether to sell or not his shares.

In an acquisition of assets the bidding company buys all the assets from the target. However, it requires a formal approval from the shareholders and can be costly, since those assets need to be transferred to the new owners.

Given the typical financial analysts' classification, the deals can be characterized as (i) horizontal acquisition – both the bidding and the target companies are competitors from the same industry; (ii) vertical acquisition – a deal in which one firm acquires a supplier or another firm closer to the existing customers and therefore, it is a deal between firms that are from a different stage in the production process; or (iii) conglomerate acquisition – the companies involved in the deal are not related at all, belonging to different industries.

### **3.2.3. MOTIVATIONS FOR M&A**

Companies make acquisitions for a long list of reasons. Some of these reasons may be good, but unfortunately, others are bad or at least questionable. In line with the CFA Institute studies, there are three motives why a merger or acquisition occurs.

The first motive for a M&A deal is the creation of value that can arise from synergies, which imply that the value of the combined companies is greater than the sum of their individual values, being able to invest in the external growth, increase market power and acquiring unique capabilities or resources.

The second motive concerns cross-border deals that can exploit market imperfections, such as cheap labour and low-cost raw materials. It allows to overcome adverse government policies (tariffs and barriers to trade), consents the access to new technology or resources, supports product differentiation and “buys” reputation for entry into a market and permits to follow clients.

Lastly, there are also dubious motives like diversification - investors can diversify their own portfolios, so there is generally no value to companies to diversify; bootstrapping earning – occurs if the acquirer's shares trade at a higher P/E than the targets; managers' personal incentives, such as compensations and decrease in their personal employment risk; and tax considerations.

### **3.2.4. VALUE CREATION - SYNERGIES**

According to Pettit (2013), companies should pursue an acquisition only if it creates value, meaning that the value of the acquirer and the target should be greater if they operate as a single entity than as separate ones. In another way, a merger or acquisition is justified if there are synergies associated with the transaction. These synergies can arise in different ways and can be classified as operating, financial or managerial synergies.

Operating synergies are originated from the combination of the acquirer and target's operations, such as revenue enhancement, which includes gaining pricing power, increase sales volume and cost reduction. From the size increase, firms are able to benefit from economies of scale with lower production costs.

Financial synergies result from lower financing costs. Big enterprises usually have access to a wider and cheaper pool of funds than small companies. Diversifying into unrelated business allows companies to reduce risk and, therefore, increase their debt capacity and lower their before tax cost of financing.

On the other hand, managerial synergies emerge when a high-performing management team replaces a poor-performing one. The acquirer gives the opportunity to remove incompetent managers, which could improve the target's performance.

### **3.2.5. PAYMENT METHODS**

According to Zenner et al. (2008), M&As deals can be financed with cash, stock, a mix of both, or even through a payout depending on the target assets future performance – earnout contract. The later delivers a greater performance incentive for the seller and a risk management device for the buyer (Bruner, 2004).

Hazelkorn et al. (2004) state that an equity-financed deal tends to signal overpriced stocks. Also, if the transaction is paid through exchange of stocks, the target company's shareholders will, not only capture the risk of the deal, but also, the potential synergies. If the management is certain about the future gains, there is no incentive to share it with other shareholders. Moreover, Martin (1996) explored the motives behind the choices of payment methods and concluded that stock payments are more likely if the target firm presents more growth opportunities. Conversely, a cash offer sends positive signals to the market, since it represents the acquirer's confidence in re-establishing the cash balance, as well as confining all the potential gains from the transaction to the existing shareholders.

In theory, the choice between cash and stock must take into account the availability of cash in hand, the perceived value of stock and the tax implications (Damodaran, 2002). Furthermore, Martynova and Renneboog (2009) consider the acquirer's financing decision as a result of the cost of capital and therefore, the company will seek the cheapest way of financing and structuring the method of payment.

### **3.2.6. MERGERS AND ACQUISITIONS PREMIUM**

According to Ferris and Pettit (2013), the premium in M&A deals is defined as the difference between the offer price and the market price of the target, before the announcement of the transaction. Empirical evidence suggests that M&A premiums average 20 to 30 percent above the target's pre-acquisition share price. As an example, Kengelbach and Roos (2001) found that, from 1990 to 2010, the average premium was 36 percent. A high premium may mean an overpayment and, consequently a reduction in the likelihood of making the acquisition a success.

### **3.2.7. POST-DEAL RETURNS**

According to Damodaran's (2005), the "synergy share" depends on the effort and skills disbursed by the target and acquirer for the existence of the synergy. Nonetheless, Sirower and Sahni (2006) research suggest that target shareholders are the obvious winners in the short-run and their Relative Total Shareholder Return (RTSR) has been, on average, 20%. Furthermore, they found that a cash-financed transaction tends to outperform, and subsequently provides larger benefits than stock-financed deals.

However, Loughran and Vijh (1997) state that in the long-term, approximately 5 years, the results are different. Target shareholders that accept stock offers have low or even negative abnormal returns, when the relative size of the target acquirer is high. On the other hand, tender offers, usually cash-financed, have positive excess returns, despite acquirers earn little or nothing from them.

## **3.3. CONCLUSION ON M&A**

Without disregarding all previous research, M&A subject has still some unclear results. Authors such as Burner (2004) argue that researches have been made based on results before and after M&A deals, whereas the comparison of the current situation with a hypothetical one, where M&A has not occurred, would be more relevant. Indeed, definitive conclusions cannot be made based only on statistical results, since they may not be reliable driven by the fact that all situations are different from each other's. Nevertheless, M&A deals create value for the economy as a whole since the large percentage gains of sellers offset the small percentage losses of acquirers (Sirower and Sahni, 2006).

In conclusion, even though M&A is a complex and hard process to value, these transactions should be viewed as an opportunity to add value to forthcoming companies and to the economy as a whole.

**4. INDUSTRY AND COMPANY ANALYSIS**

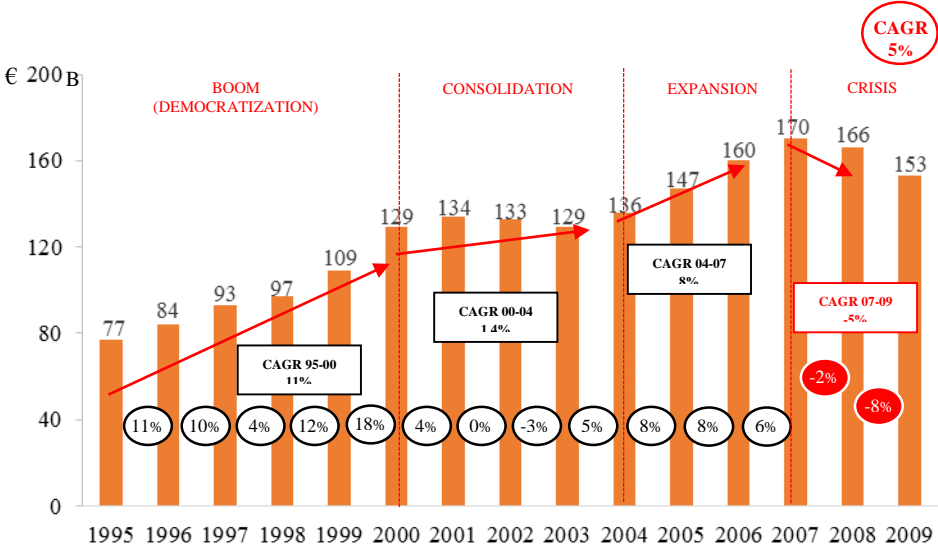
**4.1. OVERVIEW OF THE LUXURY MARKET**

“With luxury goods, we are seeing the emergence of a new normal: the global market is maturing, stabilizing and consolidating. It is becoming more resilient to economic crisis, more responsive to a demanding and highly mobile global consumer base, and less reliant on market booms for growth. For all these reasons, luxury brands everywhere should be focusing on how to build growth organically.” (Claudia D’Arpizio, Bain&Company Partner).

Luxury is usually stratified in three layers: accessible, aspirational and absolute. A few other factors that determine the degree of luxury are price, uniqueness, availability, promotion, and brand. Moreover, the luxury industry usually covers products like perfumes and cosmetics, hard luxury, cognac, handbags and cases, furniture, vehicles, etc. These products are sold through wholesale, retail or online channel.

Economic growth worldwide, rising income and wealth levels, consumption of luxury goods by middle class population and continuous global urbanization are stimulating the development of the global luxury goods market. Its growth has high correlation with macro indicators, such as real GDP, tourist arrivals, wealth, and disposable income.

**Figure 1:** Worldwide Luxury Goods Market trend (1995-2009)



As can be seen in figure 1, the Luxury market has been growing over the years. Since 2007, the beginning of the last crisis, luxury market saw a severe shrinking, decreasing by 2% and 8% in 2008 and 2009, respectively. Personal income and wealth declined following the financial chaos triggered by the subprime mortgage crisis and subsequent economic downturn. With high unemployment rates and low consumer confidence, luxury consumption declined sharply, especially in the mature markets of the U.S., Europe and Japan. Emerging markets, excluding China, were hit less severely and recovered quickly, with good prospects for next years.

The results began to improve only at the end of 2009, after three negative quarters, as a result of the holiday season that exceeded the expectations and the inventory normalization with the end of the de-stocking.

According to Bain&Company's Luxury Market Study (Spring 2010), the market was expected to grow 4% in 2010 (at current exchange rates), with a growth spread across all geographies, except Japan and with Asia.

One of the main drivers propelling the growth of this market is the growing global online personal luxury goods market. The emergence of an off-price strategy in the online market is making personal luxury goods accessible to a greater number of individuals, since they can compare the prices of different products and make purchases. Furthermore, men are increasing their contribution to this market through online channels.

Therefore, for 2010, it is expected the recovery of macroeconomic indicators across the world, such as an expected GDP increase of 4.3%; strong urbanization and infrastructure investment in Asia, especially in China; political stability in U.S. enhancing consumer confidence; and a slight decrease of unemployment rate. The consumer Confidence Index is expected to increase in 2010, Chinese consumers will continue to spend heavily in luxury and a boom is expected in e-commerce sales.

## **4.2. COMPANY OVERVIEW –LVMH**

When he was only sixteen years old, Louis Vuitton made a decision that would not only change his own life but the lives of his sons and future generations: he would become a trunk-maker.

### **4.2.1. HISTORY**

In 1854, Louis Vuitton began manufacturing trunks in Paris. What he did not know was that the company he started went on to become one of the world's most famous makers of luxury goods. The

company is now especially known for its designer logo, a beige-on-chestnut monogram of an intertwined "LV". As the years went by, the Vuitton line gained international recognition, thanks in part to a bronze medal at the 1867 World's Fair and a gold medal at the 1889 World's Fair, both held in Paris. Vuitton's luggage company became a world leader in luxury consumer goods, with products that include travel books, perfume, distilled spirits and designer clothing.

#### **4.2.2. PRODUCTS OFFERING**

The Luis Vuitton Moët Hennessey (LVMH) Group includes over 60 brands, split into 5 categories: Fashion & Leather Goods, Perfumes & Cosmetics, Wines & Spirits, Watches & Jewellery, Selective retailing and other activities.

##### **a. Fashion & leather goods**

The luxury Fashion & Leather Goods sector includes a group of mainly French brands, but also includes Spanish, Italian, British and American companies, each of them relying on quality, authenticity and originality of design to be successful. In order to keep pace with its enormous success around the world, major high-visibility stores were opened in Hong Kong, Macao, Singapore and Las Vegas. In 2008, the group accounted for 1090 stores over the world, increasing this number to 1164 in 2009. Also, this sector is the one that delivered higher profits during the last years, mostly originated in the Asian Continent. Through the last two years, business in Asia gained more value for the company, while Europe (excl. France) and United States lost.

Louis Vuitton is one of the most famous brands in this sector, which offers trunks, leather goods, ready-to-wear, shoes and accessories. Other brands owned by the LVMH Group include Fendi, Givenchy, Marc Jacobs, Donna Karan, Kenzo, Céline, Loewe, Berluti, Emilio Pucci, Thomas Pink, Edun, Nowness, Loro Piana and Nicholas Kirkwood.

For 2010, Louis Vuitton will implement a dynamic program of new store openings in new countries and an expansion in the ones where the Group is already present, such as China.

##### **b. Perfumes & cosmetics**

LVMH is one of the most thriving companies in the steadily growing market of perfumes and cosmetics. Driven by the contemporary consumer's quest for beauty and wellbeing, as well as, rising levels of income in emerging countries and more diverse customer bases with differing needs, this market has numerous development opportunities.

Also, the Group's perfumes, make-up and skincare sector relies primarily on a portfolio of brands representing French companies with an international presence: Christian Dior, Guerlain, Givenchy and Kenzo. Nevertheless, the group also supports the development of high-potential brands: Benefit and Fresh, Acqua di Parma, Perfumes Loewe and Make Up For Ever.

The fact that the Group holds a significant number of brands allows for relevant synergies in this sector and constitutes a relational advantage, since the success of this sector depends heavily on design and advertising.

#### **c. Wines & spirits**

The LVMH Wines & Spirits business group focuses its growth on the high-end market segments of the market. Although, LVMH is the world leader in champagne, it also produces still and sparkling wines from the world's most famous wine-growing regions. The Group is also the world leader in cognac with Hennessy. It holds 24 different brands, such as Moët & Chandon, Dom Pérignon, Château Cheval Blanc, among others. The portfolio of brands is served by a powerful international distribution network. As mentioned in the Perfumes & Cosmetics sector, Europe has been losing power, allowing Asia to climb to the top of revenue delivering regions.

#### **d. Watches & jewellery**

The most recent of the LVMH business groups holds a portfolio of luxury brands with highly complementary market positions. This business group benefits in particular from TAG Heuer's recognition as the world leader in high-precision chronographs and from the solid Hublot brand. The business group also counts on the watch making expertise of Zenith, a member of the select group of Swiss Manufactures; the development and transition to high-end products of Dior timepieces; and the creativity and productivity of the jewellery collections from Chaumet, Fred and De Beers.

As many other sectors, watches and jewellery business segment recognized 2009 as a catastrophic year, which combined with the economic decline in demand and the reductions in inventories by multi-brand retailers and distributors, heavily affected the traditional major markets like the United States and Japan, where LVMH brands have a strong presence.

#### **e. Selective retailing**

The LVMH Selective Retailing companies operate in Europe, North America, Asia and the Middle East. Their businesses are conducted in two segments: retailing, designed for customers who are

international travellers (“travel retail”), and the selective retailing concepts represented by Sephora, the most innovative company in the beauty segment. Hence, the Selective Retailing sector encompasses 3 different brands: DFS – Retailer for international travellers; Starboard – Duty-free retail sales of luxury products aboard cruise ships; and Sephora, already mentioned, which focus on retail beauty chain. This sector is where United States outstands, appearing before Europe and Asia. However, it can also be observed the gradual progression of the Asian Continent on revenues delivery.

#### f. Other activities

LVMH’s activities that do not fall in the categories presented above belong to “other”. These include media communications, through the financial newspaper and website Les Echos; luxury super yacht industry represented by Royal Van Lent Shipyard B.V. brand; high-end luxury hotels entitled Cheval Blanc; an attraction park called Jardin d’Acclimatation, located in Paris; and La Samaritaine riverside real estate complex, located in central Paris.

#### 4.2.3. FINANCIAL ANALYSIS

The last years have been unpredictable for the Louis Vuitton Group. The beginning of a world crisis has been affecting the Luxury Goods Market and, consequently, disturbing a well-established brand as LVMH.

As can be seen in table 1, from 2007 to 2008 it was still possible for the company to grow, although at a lower rate. However, 2009 was a catastrophic year for the company with a negative growth in revenues and EPS, and with a decrease on gross profit and EBITDA margins. Nevertheless, the brand was able to keep growing, seeing its value rising.

**Table 1:** Key statistics

€ million	2007	2008	2009
Revenue	16 481	17 193	17 053
Growth %	(7.68)	(4.32)	(0.81)
Gross Profit	10 695	11 181	10 889
Margin %	64.89	65.03	63.85
EBITDA	4 109	4 323	4 055
Margin %	24.93	25.14	23.78
Adjusted EPS	4.27	4.28	3.58
Growth %	11.34	0.12	(16.21)
Total Assets	30 384	31 483	32 106
Total Equity	12 528	13 793	14 785
Total Debt	5 615	5 585	5 785
Last Price	71.17	42.14	70.95
Current Shares Outstanding	490	490	490
Number of Employees	71 885	77 087	77 302

In a particularly uncertain economic context, the stock markets recorded extreme variations in 2009, reaching new lows in 2008.

Comparing the revenue distribution over the last three years, it can be notice a slight shift from the Perfumes & Cosmetics, Watches & Jewellery and Wines & Spirits sectors to the Fashion & Leather Goods and Selective Retailing business segments. Nonetheless, across the years, these last two sectors have been the top two in achieving higher revenues for the Group.

In line with the increasing number of LVMH Group stores and expansion to new markets, the investment on new assets and improvements of old ones has been increasing through the years with a slight decrease in 2009, as a result of the recent crisis and costs cuts.

### **4.3. COMPANY OVERVIEW – HERMÈS**

For the last 175 years, Hermès has been creating, inventing and innovating. Some of their models have never gone out of style, and are still popular today. Reissued, reinterpreted and reinvented, these timeless creations forge the identity of Hermès.

#### **4.3.1. HISTORY**

The Hermès Fashion House was established in Paris as a harness making shop in 1837 by Thierry Hermes (1801-1878). This man started handcrafting horse harnesses for caliches and carriages in 1837. It was in late 1879 that the line was expanded by Charles-Emile Hermès and it was only in 1922 that the company introduced its first handbags.

#### **4.3.2. PRODUCTS OFFERING**

Hermès is a French company focused on Leather Goods – Saddlery, Ready-to-Wear & Fashion Accessories, Silk & Textiles, Perfumes, Watches, Tableware, Jewellery & Art of Living, and also incorporating other group brands and products.

##### **a. Leather goods – saddlery**

Leather Goods-Saddlery, the original métier of the house of Hermès, is expressed in collections of bags and clutches, briefcases, luggage, diaries and writing products, small leather goods, saddles, equestrian articles and clothing for both horse and rider. As demand continues to exceed supply, the Group further expanded its production capacity in 2009, opening new stores and improving old ones.

### **b. Ready-to-wear & accessories**

Ready-to-Wear & Accessories is the Hermès Group's second-largest business line, accounting for 19% of consolidated revenue. Christophe Lemaire, artistic director of women's ready-to-wear, continues to build up the Hermès wardrobe. Also, the fashion accessories include jewellery, gloves, hats, belts and shoes.

This segment is one of Hermès' sectors that have been registering consistent revenues over the last years.

### **c. Silk & textile**

Silk and Textiles is Hermès' third-largest sector and accounts for 12% of consolidated revenue. The types of products present in this sector include the world famous carrés (square scarves), ties as well as other scarf models produced in cashmere and silk. Despite the crisis environment, this segment has been registering an increase of revenues.

### **d. Perfumes**

Perfumes sales suffered a lot from the worldwide recession, which caused a drop in consumption and induced both retailers and distributors to scale back their inventories. Even so, Hermès' fragrance lines held up extremely well owing to the House's efforts to add new products to fragrance collections. However, the Perfumes segment was strongly affected by the recent crisis, registering a decrease in revenues, presenting in this way a negative growth rate from 2008 to 2009.

### **e. Watches**

Despite a serious crisis in the Swiss watchmaking sector, La Montre Hermès gained market share, building on its reputation as an alternative to other famous names in watches. The sector expanded into new markets in Eastern Europe, Middle East and South America, which yielded excellent results within the first few weeks. However, the improvements made were offset by revenues drop, which have been recording negative growth rates over the last two years.

### **f. Tableware**

This segment encompasses La Table Hermès, Les Cristalleries de Saint-Louis and Puiforcat. As in the watches sector, 2009 was a particularly difficult year, owing to a combination of lower sales and substantial inventory drawdowns by distributors.

### **g. Art of living and jewellery**

Hermès derived 4% of its sales from its other métiers, which include Jewellery and Art of Living. The Jewellery sector continued its strong dynamic with numerous creations, collection development and events.

Carried by its distinctive vision of the art of living, Hermès now puts its name to a complete range for the home. New collections of furniture, furnishing fabrics, wallpapers and carpets extend the existing collections of decorative objects, tableware and textiles. However, the lower purchasing power that has been affecting the population around the world, did not allowed this sector to grow over the last two years.

### **h. Other group brands and products**

While the Hermès brand is the centre of the Group's business, there are also other brands and products under the Hermès world that are fully aligned with the Group's identity. This segment embraces John Lobb Bootmaker, Textiles, Tanning and Precious Leathers, Hermès Horizons and Petit H.

In 2009, Hermès announced the launch of a new brand in Shanghai called Shang Xia, which will design, manufacture and distribute objects that employ exceptional Chinese materials and know-how. Shang Xia, whose Shanghai store opens in 2010, will offer a collection of furniture, art of living products, ready-to-wear and accessories.

Nevertheless, the bad performance of these brands is evident in 2009, with a very negative growth rate of revenues.

### **4.3.3. FINANCIAL ANALYSIS**

Despite the uncertain economic climate, Hermès stores generated strong sales growth in 2009. This is because they proved extraordinarily in their response to the situation, while steadfastly abiding by the house's fundamental values.

Hermès products are available worldwide through a network of 304 exclusive stores and 21 other retail outlets. Watches, perfumes and tableware are also sold through networks of specialised stores, on board aircraft and in airport duty-free stores.

**Table 2:** Key statistics

€ million	2007	2008	2009
Revenue	1 625	1 765	1 914
Growth %	7.27	8.58	8.48
Gross Profit	1 055	1 140	1 213
Margin %	64.89	64.61	63.34
EBITDA	484	528	548
Margin %	29.75	29.90	28.63
Adjusted EPS	2.61	2.76	2.74
Growth %	5.28	5.70	(0.98)
Total Assets	2 065	2 326	2 441
Total Equity	1 475	1 602	1 804
Total Debt	86	96	65
Last Price	79.23	92.62	87.36
Current Shares Outstanding	106	105	106
Number of Employees	7 455	7 894	8 057

In 2009, the Hermès Group's consolidated revenue registered €1 914 million, a year-on-year rise of 4.1% at constant exchange rates and of 8.5% at current exchange rates. The gross margin was 63.3%, a 1.3 percentage point decrease compared with 2008, due to adverse currency impact and to the low activity at certain production sites. Equity increased, once again, thanks to the profits generated by the Group. Shareholders' equity rose from €1 589 million, as at 31 December 2008, to €1 790 million, as at 31 December 2009.

The Hermès Group created 163 new jobs during the year. At the end of 2009, the Group had 8 057 employees throughout the world.

Regarding revenues distribution, the eight sectors that Hermès comprises have been stable through the years. Leather Goods and Saddles sector, accounts for almost half of Hermès' revenues. From 2007 to 2009, there are only slight changes on revenues distribution by sector.

Despite crisis environment, Hermès Group has been remarkable in its investments, which present an increasing trend across the years. The constant stores opening and expansion to diverse markets has been requiring an increasing investment from this company.

## 5. FORECAST ASSUMPTIONS

As already mentioned in the literature review, the analysis of the synergies created by the combination of Louis Vuitton Mœt Hennessy and Hermès requires, in the first place, an individual valuation of both companies, as if they were optimally managed. For that reason, it needs to be taken into account

not only the future evolution of the luxury sector, but also the way each company will behave inside this sector.

To provide more consistent results, the procedure adopted will involve three different valuation methods – WACC, APV and Multiples. Nonetheless, the result of these methods should be approximately the same, as long as the assumptions for each of them are the same. Moreover, it will be performed a scenario analysis, so that one can understand the implications of the economic uncertainty felt nowadays.

Each company's valuation will be centred on its future strategic objectives, without disregarding the way they have behaved in past years. For this reason, historical data was collected to allow a perspective of the trend in the last years, incorporating, in this way, the last world crisis – how the companies reacted to the beginning of a crisis and how they are recovering. The explicit period used to forecast companies' future performances will be 10 years. Although, it can be thought that 10 years is too long to forecast any unpredicted trend, it will allow to reach a stable growth period for both companies.

## **5.1. INFLATION**

Since both companies provide financial information in Euros, it is reasonable to assume an inflation rate related to this currency, so that estimations can be more accurate. Therefore, based on European Central Bank's studies, an inflation of 1.3% will be used for 2010, 1.4% for 2011 and 2% for the remaining years. These inflation rates will reflect the prospects for a slow economic recovery worldwide.

## **5.2. COST OF FINANCIAL DISTRESS**

For the APV method there is a need of finding cost of financial distress. Based on literature review, for both LVMH and Hermès, a 10% of total firm value will be assumed in case of default. Also, taking into account debt ratings, a 0.5% of probability of default will be considered.

## **5.3. LVMH ASSUMPTIONS**

In 2009, at the end of a year marked by an unprecedented global crisis, LVMH Group increased its market share. The Group's resilience was largely due to the businesses diversity: while the Wines & Spirits and Watches & Jewellery brands were more affected by the crisis, due to destocking at distributors and retail traders, the rest of the sectors enjoyed better conditions.

As previously referred, LVMH Group will be valued using WACC, APV and Relative Valuation methods. Thus, this part aims to clarify all assumptions that will be made concerning growth rates and capital structures. At the end, it will be possible to set a price target through the WACC method. This price might be compared with the APV price target once the tax shields and the cost of financial distress are calculated. The Relative Valuation will imply a comparison of the company with its peer group focused on market multiples applied to several financial indicators.

### **5.3.1. REVENUE**

The Group is composed by six different segments, each of them with information for six different geographic regions. The information provided by this company, makes possible to allocate consolidated values to each specific segment and discriminate them by geographic regions.

Revenue forecast is the most important step on valuation since it affects all the other values, such as operating margins. In LVMH case, revenues are expected to keep increasing, resulting from the expansion strategy of the company.

#### **a. Fashion & leather goods**

As shown in previous sections, the Fashion & Leather Goods sector is the strongest one. During the last years represented around 34-37% of total revenues and it is expected to remain its key driver. For this share, the Asian Continent was the biggest contributor, accounting for 45-47% of total revenue. From 2008 to 2009, Asian countries (excl. Japan), increased its revenue share by 6 p.p. up to 31%, followed by Europe (excl. France) with 19% and United States with 18%. This trend is expected to continue with Louis Vuitton new stores openings and new developments, which include expansion to new countries and in China's market. The company is also planning the launch of new products in the men's segment.

According to Bain&Company studies, for 2010 the Fashion & Leather Goods sector is expected to grow around 20% with a fast positive rebound of US. Nevertheless, Goldman Sachs report stated that the expected increase in urban population suggested global 14% revenue growth for 2011 and 2012. As world comes out of the crisis, the revenues will tend to stabilize and reach an annual grow of 4% until 2019.

### **b. Perfumes & cosmetics**

Perfumes & Cosmetics segment only represents 15-16% of total revenue. From 2008 to 2009, its revenues decreased by 5%, representing 1 p.p. drop on its share of revenues delivery. This drastic reduction is a result of global crisis, which led to cut in retailers' inventories so that they could maintain their cash flows.

In this sector, 53% of total revenue was originated in Europe, followed by the Asian continent (25%). However, from 2008 to 2009, while Asia share increased by 5 p.p., Europe lost power with a drop of 5 p.p. It is expected that Europe continues to be the dominant region but closely followed by Asia. For 2010, LVMH brands were bet on quality and creativity for new releases.

Due to the recent crisis that has been affecting seriously this sector, some of LVMH brands have not performed so well. Nonetheless, a slow recovery is expected with a growth rate increase, which will stabilize at 5% in the long term.

### **c. Wines & spirits**

In 2009, Wines & Spirits sector accounted for € 2 732 million, 16% of total revenues, representing a 12.35% drop relatively to 2008. It has been two years of consequent losses due to markets uncertainty. The consequences of the recession for consumption and massive inventory reductions by distributors created a particularly difficult environment, although with significant sector and regional differences.

The clear strategy, solid positions in traditional and in emerging markets, a reputation for excellence,; a strong capacity for innovation and the contribution of expanded resources in the field will allow the brands to seize every opportunity for short-term growth and to continue to build and strengthen their leadership in the longer term. For this reason, it is expected a growth rate of 11% on the next four years, until 2013, and from then onwards a 2% will be assumed.

### **d. Watches & jewellery**

In the past two years, Watches & Jewellery only represents, on average, 5% of LVMH total revenue. As a result of the recent recession, revenues decreased by 12.86%, from 2008 to 2009. Even so, this sector amounted for € 752 million, 24% coming from Europe (excl. France), followed by Asia (excl. Japan).

Driven by the projected events for the next years, such as the 150<sup>th</sup> anniversary of TAG Heuer and Hublot's investments in production, this sector is expected to grow 10% yearly, until 2014.

#### **e. Selective retailing**

In the last three years, Selective Retailing segment has been representing more than 25% of total revenue. This sector depends heavily on "travel retail", and consequently on tourism. One of the main destinations is the Asian continent, which represents a great opportunity for expansion on "travel retail". DFS, Miami Cruiseline and Sephora will continue to expand and betting on a strong strategy in order to benefit from the best growth opportunities. Hence, the sector is expected to grow around 9%, 14%, 19% and 9% in the following four years, respectively, and from then on to stabilize until 5%.

#### **f. Other activities**

These other activities developed by LVMH, which incorporate real estate, media communications and high-end luxury hotels, represent only 2% of consolidated revenues and it will remain at the same proportion in the following years.

### **5.3.2. OPERATING MARGIN**

#### **a. Fashion & leather goods**

In 2009, Fashion & Leather Goods sector accounted for an operating margin of 32%, the highest percentage and more than half of operating income results from this business. However, in the last three years, it has shown a decreasing trend. The growth in this sector is largely driven by Asia and Europe, which LVMH brands will continue to explore. According to the constant evolution in this sector, operating margin is expected to increase 2 p.p. for 2010 and stabilize in the 32% in the next years.

#### **b. Perfumes & cosmetics**

Due to the competitive environment on Perfumes & Cosmetics segment, operating margins have been low. Nevertheless, LVMH brands have been sustaining a 10-11% margin that, probably, will remain as so in the following years.

### **c. Wines & spirits**

In 2009, Wines & Spirits' operating margin decreased 6 p.p., relatively to 2008, showing the economic uncertainty during this period. Better control of costs and the careful targeting of advertising and promotional expenditure were not able to offset the impact of lower sales volume. Nonetheless, in the last two years, this has been the segment with highest operating margin. In the next two years. For the next years it is expected an increase of 2 p.p., driven by the expansion for emerging markets.

### **d. Watches & jewellery**

One sector heavily affected by the crisis environment was Watches & Jewellery. Decline in demand, combined with reductions in inventories by multi-brand retailers and distributors, seriously affected the traditional major markets like the United States and Japan, where LVMH brands have a strong presence. The investment on Hublot and Tag Heuer will have a positive impact on operating margin, which is expected to rise to 13% in the next years.

### **e. Selective retailing**

As a small sector inside LVMH Group, Selective retailing owns a small operating margin that has been decreasing in the past few years. Nonetheless, Sephora, a strong brand in this sector, is planning new stores opening and to develop online sales in Europe, which represents a great growth opportunity. Therefore, operating margin in this segment will be set on 10% in 2010, 11% in the following two years, and reaching 10% on long term.

### **f. Other activities**

In past years, other activities developed by LVMH, which incorporate real estate, media communications and high-end luxury hotels, have been presenting negative operating margin. However, the Group can still sustain its position in this sector. Nevertheless, it is expected a reversion of this negative performance to positive or close to zero margins.

## **5.3.3. NET WORKING CAPITAL**

Net working capital is a financial metric that a business owner can use in order to help measure the cash and operating liquidity position of the business firm. Companies with current liabilities that exceed current asset are operating with a working capital deficiency, which may prevent them from

fulfilling short term obligations. The net working capital value can be found through the following formula:

$$\text{NWC} = \text{Inventory} + \text{Accounts Receivable} - \text{Accounts Payable}$$

In LVMH Group, the working capital requirements decreased by € 91 million, a remarkable performance in both absolute and relative terms compared to 2008, when they increased by € 730 million. In particular, changes in inventories generated cash resources.

For each item an historical trend will be used. In what concerns accounts receivable, 31 days of sales outstanding will be used. Through computations using historical values for costs of goods sold and inventories, days of inventory outstanding are assumed to be 314. Lastly, for the accounts payable, the amount of days outstanding is assumed to be 128 days.

#### **5.3.4. CAPITAL EXPENDITURES**

Capital expenditure (CAPEX) refers to the money that a business spends purchasing or upgrading fixed assets for future business benefit. It represents the most important decision taken by a company because it will affect the long term, since provides the framework for future activities. However, CAPEX decisions pose difficulties driven by measurement problems and uncertainty, since it is impossible to predict exactly what will happen in the future.

Over the years, capital expenditures have been growing. Fashion & Leather Goods and Selective Retailing are the segments which absorb most of the LVMH's CAPEX. In the short term, expenditure is assumed to grow at higher rates, since the company will be investing in stores opening and expansion to new markets. Afterwards, capital expenditure levels shall fall to investment replacement levels, meaning that in a stable stage CAPEX will be equal to depreciation (Kaplan and Ruback, 1996).

#### **5.3.5. DEPRECIATION**

The way assets will be depreciated in the future is expected to be in line with the current trend. Historically, depreciation and amortization average 12.22% of fixed assets. Since LVMH will continue to expand in the next years, depreciation and amortization will be assumed equal to historical average for the next years.

### 5.3.6. DEBT AND FINANCIAL EXPENSES

In order to find a target capital structure, a peer group will be used based on industry and market capitalization. For this matter, a set of debt to equity ratios were collected from Bloomberg.

**Table 3:** Peer group debt to equity ratios

	<b>Company</b>	<b>D/E</b>
	<b>LVMH</b>	<b>0.15</b>
<b>Peer Group</b>	L'Oreal	0.07
	Estee Lauder	0.22
	Oriflame	0.11
	Hermès International	0.01
	Kering	0.52

As shown in table 3, debt to equity ratio varies between 1 and 57 %. On average, this ratio is set on 18%, which will be the target capital structure used for the long run.

### 5.3.7. INCOME TAX EXPENSES

According to past results, income tax expenses are, on average, 28.28% of earnings before taxes. Although French statutory tax rate has been 34.40% in the last four years, LVMH Group justifies the difference by the different rates used in foreign companies that the group holds. Nevertheless, since the Group is settled in France, in the long run, all income will be subject to the French income tax rate.

### 5.3.8. CASH AND EQUIVALENTS AND DIVIDENDS PAYOUT

Cash and equivalents increased significantly from € 1 billion, as at the end of 2008, to € 2.4 billion, at the end of 2009. In the last three years, this rubric accounted for an average of 10% of total revenue, with an annual growth of 3%. Hence, this growth rate will have an impact of dividends payout.

LVMH adopts a policy of steady dividends distributions. In 2008 and 2009, the Group distributed € 1.60 and € 1.65, respectively. The dividends payout is driven by end-of-year cash reserves and therefore, it will be assumed as a share of future cash and equivalents. For 2010, as a result from high investments, dividend payout will be 10% and onwards it will gradually increase to 60% until 2014 and to 70% until 2019.

## 5.4. HERMÈS ASSUMPTIONS

In a year full of setbacks, driven by the world crisis, a solid group as Hermès was still able to preserve its revenues. Sales growth was originated, essentially, by Leather Goods & Saddlery sector, under the

impetus of leather bags, and by Silks & Textiles, due to a stream of new silk creation for women and men. Despite the growth in these last sectors, Perfumes, Watches and Tableware's sales fell, as a consequence of inventory drawdowns over the last months.

The valuation methods applied in the LVMH Group will also be adapted to Hermès in order to find an accurate value for the company.

#### **5.4.1. REVENUE**

The information provided by Hermès, allows to assign consolidated values to each specific segment and geographic regions. The Group is composed by eight sectors and spreads its activities in six different geographic regions.

For the next years, Hermès is expected to continue to follow its long-term strategy of maintaining control over its know-how and distribution network. Therefore, for 2010, revenues are foreseen to continue growing, as a result of new investments in the distribution network and new stores.

##### **a. Leather goods – saddlery**

As shown in previous sections, Leather Goods own around half of Hermès revenues and in the last three years, accounted for 42%, 43% and 49% of total revenues. The last years' gains were possible due to the solid image of the brand in the Asian countries, such as China, Macau and Hong Kong, which contributed for a big share of this performance.

Since demand for luxury goods is accelerating as Chinese shoppers buy more high-end clothing and accessories, and U.S. and European retailers replenish inventories after the recession, the dominance of Leather Goods segments is expected to continue, in order to meet the continuing demand's growth. For the next years, a 17-12% growth will be used to determine the sector's revenue.

##### **b. Ready-to-wear & accessories**

Ready-to-Wear & Accessories are the second biggest sector of Hermès, accounting in the last years for 19% of total revenue. In 2009, generated € 360 million in sales, a rise of 3% at constant exchange rates. The sector that englobes women and men clothing and also accessories was able to contradict the present crisis environment, keeping its good performance in the market.

In the last four years, this segment presented an historical growth of 5%, which due to the expected investments and creative design, is estimated to range from 12% to 8% in the next years.

### **c. Silk & textile**

Silk and Textiles is Hermès third-largest sector and accounts for 12% of consolidated revenue. In 2009, sales of carrés, ties and scarves summing up € 227 million, increased 6% at constant exchange rates. Although, it does not represent a big share of total revenue, it is an important sector for the brand's future. Therefore, following the slow world recovery trend, Silk and Textile segment is expected to grow around 14-10% annually for the next five years.

### **d. Perfumes**

Hermès perfumes proved resilient in 2009's distressed economy, generating 6% of total Group sales, corresponding to €117 million, which went down by 7% at constant exchange rates. Accounting for an average of 14% annual growth, for the last four years, the Perfumes segment forecasts are more optimistic expecting an annual growth of 17-18% for the following years.

### **e. Watches**

This sector represents only 5% of the Group's total business. Sales came to € 87 million in 2009, down 13% at constant exchange rates. Nevertheless, despite historical negative growth rates, the sector expansion into new markets in Eastern Europe and South America, expects to originate more positive results rounding the 10% annual growth.

### **f. Tableware**

In this sector, the last years have been particularly difficult, owing to a combination of lower sales and substantial inventory drawdowns by distributors. In 2009, sales totalled € 38 million, down 21% at constant exchange rates. This sector is the smallest one, representing only 3-2% of consolidated revenues. Like in the Watches sector, the Group expansion to new market it is expected to deliver better results over the next years (around 8% annual growth).

### **g. Art of living & Jewellery**

Hermès derived 4% of its sales from its other métiers, which include Jewellery and Art of Living. In 2009, aggregate sales from this sector came to € 78 million, down 6% at constant exchange rates. The same reasoning of Watches and Tableware segments is applied to this sector forecasts, where it is foreseen an annual growth of 10%.

#### **h. Other group brands and products**

Representing only 5% of total revenue, the other activities of Hermès Group were severely affected by crisis going down by 35%. Nonetheless, futures revenue growth is expected to be positive and around 20%, as Hermès implements strategies to increase its brands recognition.

#### **5.4.2. OPERATING MARGIN**

The information provided by the Group does not discriminate operating margin by activity sector. However, total operating margin is still disclosed. Over the last years, margins have been increasing, with exception for 2008, period when these margins registered a slight reduction. Historically, operating margins have been ranging between 20-27%.

#### **5.4.3. NET WORKING CAPITAL**

Since the last year, net working capital requirements decreased by € 44 million, a notable performance compared with 2008, year when it was registered an increase of € 101 million. A reduction in account receivables, payables and inventories allowed Hermès to achieve these good results.

For the forecasts, an historical trend for each of working capital components will be used. Regarding account receivables, 13 days of sales outstanding will be taken into account. For inventories, 314 days outstanding will be considered. Lastly, for days payables outstanding, 128 days will be assumed.

#### **5.4.4. CAPITAL EXPENDITURES**

However, CAPEX presents an increasing trend since 2009, it suddenly decreased 28%. The European continent is the one absorbing most of Hermès' capital expenditures. For the next years, this rubric will be assumed to grow at higher rates, since the company strategy projects new stores opening in new markets and an expansion and improvements in regions where the Group is already present. Afterwards, growth rates are expected to stabilize until capital expenditures fall to investment replacement levels.

#### **5.4.5. DEPRECIATION**

For depreciation levels, an historical growth rate of 13% will be considered. Since the Hermès will continue to expand in the next years, future depreciation levels will be assumed to behave according to the historical growth rate.

#### **5.4.6. DEBT AND FINANCIAL EXPENSES**

Unexpectedly, Hermès capital structure is defined by a negative net debt situation, which means that the Group has more cash in hand than all outstanding financial debt. This fact results from Hermès policy of conservative management with high liquidity to insure financing for new opportunities. For 2009, Hermès debt to equity ratio corresponded to only 1%.

Since Hermès was able to use hedging instruments, the cost of debt cannot be found. Consequently, for simplicity, hedging instruments will be ignored and a debt to equity ratio of 1% will be assumed. Thus, Hermès registered € 0 on financial expenses over the last three years. Nevertheless, it is expected to increase in the next year. Through the computation of the company's historical cost of debt, future financial expenses will be obtained, accordingly, also to the debt levels.

#### **5.4.7. INCOME TAX EXPENSES**

Since French statutory tax rate rounds the 34.4% and Hermès is settled in France, this rate will be used for tax expenses forecasts.

#### **5.4.8. CASH AND EQUIVALENTS AND DIVIDENDS PAYOUT**

Cash and equivalents, excluding current available for sale financial assets, have been constant across time, with a fall in 2008, which can be justified by the company's needs to cover some losses driven by the crisis. Over the last three years, cash and equivalents accounted for, on average, 29% of total revenues. Since it will take time for the company to recover from the crisis, a low growth rate will be applied for future values of cash and equivalents.

Hermès assumes a policy of steady dividends payment. In 2008 and 2009, the company distributed € 1.06 and € 1.11 per share, respectively. Since dividends payout depends on the values of cash reserves, as cash and equivalents increase over the years, dividends are expected to also follow this tendency.

### **6. STANDALONE VALUATION**

Incorporating all assumptions already mentioned, the three valuation methods: DCF, Multiples and APV, will be performed for both companies on a standalone terms.

## 6.1. LVMH

### 6.1.1. FREE CASH FLOW TO THE FIRM (FCFF)

Louis Vuitton Mœt Hennessy uses debt as an important source of capital. Through regression computations it was found a leverage beta of 1.14 and a leverage cost of equity of 9.86%. When analysing financial statements, cost of debt is determined to be, on average, 3.70% and an after tax cost of debt of 2.65%, based on a 28% tax rate. Hence, WACC is found to be 9.14%, taking into consideration the target capital structure. The best approach would be to change WACC for every single year, since the company's capital structure is not constant. Nevertheless, for simplicity, debt-to-equity ratio of 2009 will be used, since it is not expected a suddenly change on debt levels. Also, for the terminal value, a growth rate of 2.50% was considered reasonable.

After joining all items that compose free cash flows to the firm, an enterprise value of € 40 544 million is found, from which a debt value of € 3 649 million are deducted. Therefore, equity value is concluded to be € 36 895 million, which combined with 473.33 million of shares outstanding, results on a value per share of € 77.13. When looking at market price at the end of 2009, € 78.38, compared to the price obtained, there is a slight undervaluation of the company by 2%.

**Table 4:** Discounted Cash Flow valuation

€ million	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Free Cash Flow</b>	2 304	1 275	949	794	989	1 063	1 724	2 368	3 002	3 630
<b>Terminal Value</b>										77 997
<b>Discounted FCF</b>	2 111	1 070	730	560	639	629	935	1 177	1 367	31 328

WACC	9.14%
Growth rate	2.50%
Target D/E	18.00%

<b>Firm Value</b>	40 544
Net debt	3 649
<b>Equity value</b>	36 895
<b>Price</b>	77.13

### 6.1.2. ADJUSTED PRESENT VALUE (APV)

The results from the APV valuation slightly differ from the ones obtained through the discounted cash flows method. The total value of tax shields achieved accounts for € 1 978 million, which combined with € 19.44 million of distress costs and unlevered free cash flows of € 38 871 million, results in an enterprise value of € 41 347 million. From this value € 3 721 million corresponds to debt level and € 37 626 million to equity value, which divided by the 478.33 million shares, delivers a share price of € 78.66. Compared to the market price in 2009 (€ 78.38), presents an accurate price estimation.

**Table 5:** APV valuation

€ million	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019																				
<b>Operating Cash Flows</b>																														
Free Cash Flow	2 304	1 275	949	794	989	1 063	1 724	2 368	3 002	3 630																				
Terminal Value										75 545																				
Discounted FCF	2 107	1 066	725	555	633	622	922	1 158	1 342	29 741																				
<b>Tax Shields</b>																														
Tax Shield	64	67	71	76	86	91	94	96	98	99																				
Terminal value										2 701																				
Discounted Tax Shield	62	62	63	66	72	73	73	72	71	1881																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 50%;"><math>r_u</math></td> <td style="width: 50%;">9.35%</td> <td style="width: 50%;"><b>Firm Value</b></td> <td style="width: 50%;">41 347</td> </tr> <tr> <td><math>r_d</math></td> <td>3.70%</td> <td>Net Debt</td> <td>3 721</td> </tr> <tr> <td>Growth rate</td> <td>2.50%</td> <td>Equity value</td> <td>37 626</td> </tr> <tr> <td>Probability of default</td> <td>0.50%</td> <td>Price</td> <td>78.66</td> </tr> <tr> <td>Expected bankruptcy costs (% firm value)</td> <td>10.00%</td> <td></td> <td></td> </tr> </tbody> </table>											$r_u$	9.35%	<b>Firm Value</b>	41 347	$r_d$	3.70%	Net Debt	3 721	Growth rate	2.50%	Equity value	37 626	Probability of default	0.50%	Price	78.66	Expected bankruptcy costs (% firm value)	10.00%		
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Probability of default	0.50%	Price	78.66																											
Expected bankruptcy costs (% firm value)	10.00%																													

### 6.1.3. SENSITIVITY ANALYSIS – LVMH

Although LVMH is a well-established company in the luxury goods market, the aggressive competitiveness can represent a threat to future developments of the company. Therefore, all the assumptions stated above may not concretize in the future and consequently, it is important to analyse possible deviations from the base case. Thus, this section provides a sensitivity analysis to variations in revenues, margins and growth rates. Therefore, the previous results are considered as a base case scenario, whereas the bull and bear cases will be considered. The “bull case” scenario assumes an adjustment of 2% increase in factors mentioned. On the other hand, the “bear case” scenario assumes a symmetric adjustment (-2%).

The first scenario, “bull case”, leads to a price target of € 142.71, whereas the “bear case” indicates a target price of € 58.35. These variations have a significant impact on the price target, which consequently will vary between these two values.

## 6.2. HERMÈS

### 6.2.1. FREE CASH FLOW TO THE FIRM (FCFF)

As opposed to LVMH Group, Hermès does not make debt as a significant source of capital. Since the company does not present any net debt and it is not expected to change its strategy, the FCFF method using WACC gives the same result as using the cost of unlevered equity. As a result, Hermès accounts with a present value of € 10 721 million on free cash flows. Based on 115.27 million shares outstanding, the price is set on € 93.00. At the end of 2009, Hermès market price was around € 93.31. Therefore, this valuation can represent an accurate estimation of Hermès value with a potential downside of 0.3%.

**Table 6:** Discounted Cash Flow valuation

€ million	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Free Cash Flow</b>	261	281	335	404	480	579	634	693	726	799
<b>Terminal Value</b>										18 359
<b>Discounted FCF</b>	240	239	263	293	321	357	361	364	352	7 931

WACC	8.38%
Growth rate	2.5%
Target D/E	0.00%

<b>Firm Value</b>	10 721
Net debt	0
<b>Equity value</b>	10 721
<b>Price</b>	93.00

### 6.2.2. ADJUSTED PRESENT VALUE (APV)

The aim of an adjusted present value valuation method is to discriminate company’s value in operating effects and financing policy. With an enterprise as Hermès, this method is useless, since it will be summarized by the free cash flows to the firm methodology because the company has no net debt.

### 6.2.3. SENSITIVITY ANALYSIS – HERMÈS

Since Hermès is smaller than LVMH Group, the impact of changes in the economy is higher, representing a substantive threat to future developments of the company. Therefore, as before, all the assumptions stated above may not concretize in the future and consequently, it is relevant to analyse

possible deviations from the base case. As in LVMH analysis, this section provides a sensitivity analysis to variations in revenues, margins and growth rates. Therefore, the previous results are considered as the base case scenario, whereas the bull and bear cases will incorporate adjustments of 2% and -2%, respectively.

The bull case, leads to a price target of € 169.85, whereas the bear case indicates a target price of € 98.13. These variations have a significant impact on the price target, which consequently will vary between these two values.

### 6.3. RELATIVE VALUATION OF LVMH AND HERMÈS

As explained before, relative valuation does not provide a direct estimate of a company's fundamental value. Multiples do not indicate whether a company is fairly priced, instead they indicate only whether it is fairly priced relatively to some benchmark or peer group. Like absolute value models, investors may use relative valuation models when determining whether a company's stock is a good buy.

However, as any other valuation tool, relative valuation has its limitations. The biggest limitation is the assumption that the market has valued the business correctly. Secondly, all valuation metrics are based on past performance and therefore it does not take into account future growth. Lastly, this method does not assure that the “cheaper” company will outperform its peers.

Considering the fact that LVMH and Hermès are two large multinationals with several business segments in common makes it more difficult to select its peer companies. Nevertheless, a set of industry comparable was chosen based on size, geographical presence and growth projections, among other factors.

**Table 7:** Peer group ratios

Name	Country	EV (€m)	Share Price (€)	P/E	EV/ EBITDA	P/ Sales	P/ BV
<i>Average</i>				15.43	7.07	1.04	2.07
Hermès	France	9 361	93.31	26.60	10.35	4.50	3.52
LVMH	France	42 548	78.38	18.88	14.52	1.94	1.05
Burberry	UK	1 316	6.75	n.a.	5.07	1.01	2.26
Christian Dior	France	27 433	71.76	18.40	6.69	0.72	2.04
Ralph Lauren	USA	2 840	56.51	9.80	4.68	0.88	1.61
Swatch Group	Switzerland	8 811	176.23	18.10	11.84	1.55	2.38

One of the multiples computed is the price-earnings ratio, which implies that both companies are trading at a premium to its peers. This fact results from the previous focus on growth instead of profitability, but also the result of the investments and depreciation expected in the near future.

Regarding price-to-book and price-to-sales ratio, Hermès gains position with the highest value among the peer group.

For both companies, the enterprise value to EBITDA is slightly above the mean. In fact, the last multiple has the advantage of insensitivity to depreciation issues. Nevertheless, both LVMH and Hermès are trading at a premium to its peers.

## **7. VALUATION OF MERGED ENTITY**

In order to have a more clear perception of the synergies created by a merged entity, it is important to have the model of the merged entities without synergies. Since no synergies will be incorporated, the enterprise value of the new entity will be just the sum of all components of each company valued independently.

Nevertheless, this method has an inconvenient. This process can cause a double counting of some financial items, especially if companies do a lot of business with each other. Therefore, the problem of “intra-company transactions” should be eliminated. However, in the real world, there is no access to the kind of information needed to solve this problematic situation. Therefore, usually, double counting is just ignored, which will be the procedure adopted in this valuation.

Since relative valuation for this scenario is not an appropriate method, because it is not possible to estimate the enterprise value through it, only the DCF and APV models will be used.

### **7.1. VALUATION OF MERGED ENTITY WITHOUT SYNERGIES**

The aim of this section is to ensure that the new valuation of combined companies is based on the same structural assumptions used before. Hence, as long as the assumptions are the same and synergies are not taken into account, the valuation results must be equal to the sum of the values obtained for each single company. This equivalence is justified by the simple fact that there are no diversification gains from joining two publicly traded entities.

Balance sheet, Income and Cash Flow statements of the new entity are estimated as the direct sum of each standalone company statements. In order to determine the value of the weighted average cost of capital, some inputs, equal to the ones used in the individual valuations, will be used, namely unlevered beta, unlevered cost of equity, risk free rate and market risk premium. In what concerns the cost of debt, according to Damodaran (2005), it can be obtained through a weighted average of each companies cost of debt. For the capital structure, due to the entrance of Hermès in the group, debt to

equity ratio will reduce to 15% (weighted average between LVMH and Hermès ratios), which, consequently, originates a leverage beta of 1.09 and a cost of equity of 9.57%. With a WACC of 9.00%, the merged entity collects € 51 289 million in free cash flows and € 47 442 million on equity. The APV valuation gives a slightly higher value for the merged company of € 51 846 million, from which € 47 180 million are equity.

## **7.2. VALUATION OF MERGED ENTITY WITH SYNERGIES**

A merger between Louis Vuitton Mœt Hennessy and Hermès is expected to create numerous opportunities that would not be available if both companies were operating independently. The combination of these companies will create the largest player ever in the luxury goods market. Therefore, the economies of scale and the increasing pricing power that result from this process are considerable. The synergies that will be generated can be split into two groups: operating and financial. The operating synergies can be summarized in economies of scale, increasing pricing power and higher growth potential. Financial synergies, on the other hand, are focused in tax benefits, diversification and higher debt capacity.

### **7.2.1. OPERATING SYNERGIES**

The operating synergy theory of mergers state that economies of scale exist in industry and that before a merger takes place, the levels of activity that the firms operate at are insufficient to exploit the economies of scale. These kinds of synergies allow firms to increase their operating income from existing assets, increase growth or both.

#### **a. Economies of scale**

The economies of scale enable the combined firms to become more cost-efficient and profitable. In a merger like this, with two companies from the same business, synergies are more probable to be generated.

In 2009, LVMH accounted for 2 423 stores, from which 1 164 are dedicated to Fashion and Leather Goods, while Hermès owned only 1 601 stores, where around 300 focused in this sector. If both companies are well synchronized, they will be able to gain bargaining leverage in renting or acquiring new stores for the group. The companies can even rent or acquire bigger properties in order to combine both brands. Moreover, improvements on store networks are also projected, since some of the existing stores can be closed down or adapted to work with the various brands of the Group. For this reason is

expected an operating margin increase of 0.50% after one year. Nevertheless, LVMH is going to preserve Hermès brands and identity, as well as its stores network.

#### **b. Pricing power**

Driven from reduced competition and higher market share, greater pricing power should result in higher margins and operating income. The combined firms can highly influence the market, promoting tighter pricing policies. LVMH close relationship with customers allow a better control of prices and enable brand-wide pricing decisions to be implemented. During the last years of crisis, Louis Vuitton did not offered any promotions to drain inventory, like most of the brands in the business. Hermès also adopts a price control strategy, which combined with LVMH, allow more consistency and market power, resulting in a 0.20% increase in margin from recurring operations.

#### **c. Combination of different functional strengths**

The combination of the two entities can generate benefits arising from goods product lines. LVMH Group owns production facilities that cover almost all production needs. Nevertheless, some segments also incorporate subcontractors, such as Leather Goods. The sharing of know-how, production techniques and the greater bargaining power will have a positive effect on production costs. Since LVMH still works in small scale for Watches and Jewellery, the integration of Hermès in this sector will improve profit margins, due to economies of scale, and also create benefits for Louis Vuitton brands and expertise.

Jointly, production and distribution synergies can generate a 0.5% increase in recurring operation margins.

#### **d. Higher growth in new or existing markets**

As previously mentioned, emerging markets have been very important for the development of luxury market. Although, Louis Vuitton has already a strong presence on emerging markets, such as China, Hermès is still trying to develop a strategy that will allow a good position in the market. With both entities combined, the efforts to stablish strong presence on emerging markets will be more successful. The investment in new stores will project higher growth rates, as well as higher capital expenditures in order to maintain the activities of both companies. These factors will affect not only China, but also other Asian and Latin American countries. Consequently, it is expected an increase on operating margins of 0.15% in the next two years and 0.10%, from 2012 to 2019.

### e. Working capital requirements

The access to the cash conversion cycle of LVMH and Hermès leads to conclusions about the length of time, that it takes for a company to convert resource into cash. These resources include labour, raw materials, utilities, among others. Therefore, this metric can be used to the working capital analysis. Companies should aim to have the shortest possible cycle as it means capital is tied up for less time, making the bottom line stronger. In a short cash conversion cycle, capital is freed up for investment purposes or capital expenditure and in a long cash conversion cycle, capital is locked into core operations and cannot be used for anything else.

Looking at table 8, it can be seen that Hermès presents lower cash conversion cycles comparing with LVMH, probably due to the fact that inventory items spend less time in the Group's possession. For Hermès it is also believed that the improvements in CCC are a result of the progress on distribution channels and tighter supervision of suppliers and customers. In the case of LVMH, the result of network improvements is not yet reflected on cash conversion cycles, since it has been increasing in the last years. Nevertheless, it seems reasonable that the merged entity will achieve better cash conversion cycle than both companies independently, driven by the greater bargaining power with suppliers and customers and inventory control.

For the valuation of the merged entity, the synergies originate in this field will be reflected on a 277 days of inventory outstanding, 30 days of sales outstanding and 108 days of payables outstanding.

**Table 8:** LVMH and Hermès cash conversion cycle

	Year	DIO <sup>1</sup>	DSO <sup>2</sup>	DPO <sup>3</sup>	CCC <sup>4</sup>
LVMH	2007	290	34	117	207
	2008	322	35	115	241
	2009	338	33	127	244
Hermès	2007	250	28	103	176
	2008	279	30	106	203
	2009	262	27	112	177

<sup>1</sup> Days inventories outstanding

<sup>2</sup> Days sales outstanding

<sup>3</sup> Days payables outstanding

<sup>4</sup> Cash conversion cycle = DIO + DSO - DPO

### f. Marketing, administrative and labour expenses

General costs with marketing and administrative expenses are the first ones to be anticipated as a synergy driven from the merger. Therefore, joint marketing efforts are expected to help reduce costs in

the luxury business. In 2009, LVMH reported 44% of revenues as costs with marketing, selling, general and administrative expenses, while Hermès presented 144%, resulting in negative operating income. The concentration of common management services, the restructuring of store network, and the increase in production and distribution efficiency will allow cost reductions. In total, all these improvements should increase operating margins by 0.2% in the next two years and 0.1% until 2019.

### **7.2.2. FINANCIAL SYNERGIES**

Regarding financial synergies, these can be translated into higher cash flows or a lower cost of capital (discount rate) or both. Then, financial synergies include the value increase of projects, which can be taken with the excess cash, that otherwise would not have been taken; the increase on debt capacity, since earnings and cash flows may become more stable and predictable; higher tax benefits, which can result from the acquisition taking advantage of tax laws to write up the target company's assets; and diversification, however for publicly traded firms this is not the biggest source of synergy.

In this specific case, LVMH uses its size to collect capital from banks, bonds, stock and other instruments, which are used to finance new stores opening and development of new products. Conversely, Hermès is still a family owned company with more conservative management guidelines. This kind of management allows the company to finance its projects with large net cash surplus, maintaining high liquidity and lower risk. The fact that both companies are estimated to be on the top level of credit rating eliminates the possible synergies that could arise from an increase in debt capacity. Nevertheless, LVMH influence on Hermès after the merger is expected to generate an increase on debt levels to industry standards, which will result in a lower cost of capital and, consequently, in higher valuation.

### **7.2.3. INTEGRATION COSTS**

Until this point, the analysis has been focused on the opportunities that can arise from merging Louis Vuitton Mœt Hennessy and Hermès into a new entity. However, these new gains do not come without a cost that cannot be ignored. The real value of synergies will be obtained only after discounting all integration costs. The projection of these costs is not an easy task if there is not accessible information about internal processes of the companies involved. Consequently, the following analysis will be simply based on generic assumptions about the key expenses of restructuring.

The first cost that arises is directly related with the transaction itself. Since both companies are publicly traded, the costs from law firm, necessary to secure the interests of the parts involved and to conduct the legal process, are high. Furthermore, the taxes amount paid, in a consolidation financed with cash,

are considerable. These can be characterized as direct costs together with expenses related to investment bankers, accountants, consultants, operational and market studies. There is also an opportunity cost associated to the length of time necessary to complete the transaction and the decreasing focus in normal business operations.

Secondly, in order to generate some of the synergies, some structural changes need to be done, which does not come without a cost. As mentioned before, some of the synergies will arise from costs savings connected to the stores network and renegotiation of contracts. However, the implementation of these changes implies the payment of additional fees. The change of production and distribution processes requires some studies with the aim of becoming more efficient. Also, the same reasoning is applied to marketing efforts, restructuring of common division, harmonization of IT systems and information channels, which somehow will imply dismissing former employees and hiring new ones.

After all the research, costs related to the merger and its synergies are projected to account for 25% of total synergies. In other words, integration costs will be directly associated with the gains from the deal. However, these costs are not all deducted in the first year, instead they are spread for the next three years, keeping up with the transformations of the entities.

#### **7.2.4. VALUATION OUTCOME**

The assumptions used in this valuation are similar to the ones assumed for the merger entity without synergies. Nevertheless, as a consequence of the consolidation of both companies, the debt structure of the merger entity will be affected, resulting in a lower WACC (8.81%) and, consequently, a rise of company valuation.

The new entity will enjoy higher revenues growth rates, larger operating margins, working capital conditions more favourable and lower WACC, as a result of higher resource to debt comparing to the situation where companies were standing alone.

As presented in the figure bellow, the total value of synergies corresponds € 5 773 million. The field that absorbs most of these synergies incorporates the combination of different functional strengths (35%), emphasizing the importance of combining the production lines of both companies. Moreover, other important synergies are related to working capital requirements, economies of scale and pricing power, driven by the gain of bargaining power between the new entity, suppliers and customers. The synergies feedback concerns all the interaction between synergies types, such as the increase of revenues growth, driven by the expansion into emerging markets, or the increase in profit, from the reduction in administrative expenses.

**Table 9:** Value of synergies

€ million	Value	% of total
<b>Equity value of merged entity without synergies</b>	<b>47 442</b>	
Economies of scale	799	14%
Pricing power	799	14%
Combination of different functional strengths	1 997	35%
Higher growth in new or existing markets	422	7%
Marketing, administrative and labour expenses	445	8%
Working capital requirements	1 213	21%
Financial synergies	675	12%
Integration costs	(1 155)	-20%
Synergy feedback	577	10%
<b>Total value of synergies</b>	<b>5 773</b>	<b>100%</b>
<b>Equity value of merged entity with synergies</b>	<b>53 215</b>	

From the free cash flow approach, the merged entity is expected to achieve an enterprise value of € 59 128 million and an equity value of € 53 215 million. In the case of the APV method, the enterprise value is found to be € 59 374 million, while equity accounts for € 53 436 million.

## 8. THE TRANSACTION

The integration process between both companies can be made in diverse ways. The merger between LVMH and Hermès will not be a fusion between the two companies, in which both entities pay to have a portion of the other entity. Given the discrepancy between enterprises value, the appropriate deal will be the acquisition of Hermès (smallest company) by the LVMH Group. Nevertheless, the size of the company is not the only decisive factor. Others factors, such as LVMH participation in several partnerships during the last years and its position in the market, makes it the proper acquirer for Hermès.

Regarding the deal process, it will begin on 23<sup>rd</sup> of October, 2010 with the announcement of the deal and it will end 2 years later. Since it is a complex procedure, it requires the participation of outside consultants to integrate both companies in the best way.

### 8.1. APPROACHING SHAREHOLDERS

One very important issue concerns the company approach to shareholders of the acquired corporation. The way the deal is planned can induce different market reactions. In order to instigate a positive reaction, the best approach should be through a tender offer, using a mix of shares and cash in order to

finance the business, showing to the market and to the shareholders of the target company that the acquirer company believes in the acquired company's potential.

The proposal for the merger should be done directly to Hermès shareholders, presenting a possible price for the outstanding stocks. The direct contact is an important factor in the image that the acquirer company wants to show. In this way, LVMH will show that is willing to negotiate with Hermès and achieve the best proposal for the deal.

## 8.2. DISTRIBUTION OF SYNERGIES BENEFITS

The distribution of the synergy benefits computed above must be based on the contribution of each company to its existence. More specifically, it is important to include in this analysis a variable related to the uniqueness of skills. Thus, the more difficult it is to reproduce an operator's capability, the higher must be the share obtained by the operator in the benefits provided by that capability.

In the case of LVMH, most synergies arise from the economies of scale and combination of different functional strengths. Regarding Hermès, it owns the biggest share on the financial synergies field, which makes sense since the opportunity to raise debt lies in Hermès. The next table provides an estimation of the synergies distribution between both companies.

**Table 10:** Synergies distribution

€ million	LVMH	Hermès
Economies of scale	479	320
Pricing power	399	399
Combination of different functional strengths	1 398	599
Higher growth in new or existing markets	169	253
Marketing, administrative and labour expenses	222	222
Working capital requirements	485	728
Financial synergies	135	540
Integration costs	(577)	(577)
Synergy feedback	289	289
<b>Total value of synergies</b>	<b>3 000</b>	<b>2 773</b>

## 8.3. METHOD OF PAYMENT

The type of financing used by LVMH to acquire Hermès represents a very significant decision, given that it can produce effects on the outcome of the deal. As previously discussed in the literature review, market players tend to perceive the method of payment as a signal of the acquirer's confidence in the

deal. A portion should be paid in cash in order to satisfy the shareholders who want to sell, and the rest should be covered by shares issue, in order to keep debt ranking intact. However, there is an inevitable side effect from paying in stock, since it will trigger a change in market stock price. Nevertheless, the market should understand this as a sign that the company believes in its own stock to be above fair price and adjust accordingly.

**Table 11:** Valuation summary

<b>€ million</b>			
	<b>Bear</b>	<b>Base</b>	<b>Bull</b>
<i>Without synergies</i>			
LVMH equity value	27 909	36 895	68 264
Price (€)	58.35	77.13	142.71
Hermès equity value	7 721	10 721	19 598
Price (€)	66.82	92.84	169.85
<i>With synergies</i>			
LVMH equity value	30 909	39 895	71 264
Price (€)	65.26	84.24	150.47
Hermès equity value	10 494	13 494	22 372
Price (€)	99.82	128.36	212.80

As the merger will be partially financed with stock, LVMH Group needs to establish the exchange ratio of shares, which translates the number of shares that Hermès shareholders will receive for the transaction. This ratio can be summarized by the following equation:

$$\text{Exchange ratio} = \frac{\text{Offer price}}{\text{Share price of acquirer}}$$

Applying the prices shown in the table above, it gives an exchange ratio of 1.52, meaning that each Hermès shareholder will receive 1.52 LVMH's shares. Nevertheless, the next table shall resume the offer that LVMH will be doing.

**Table 12:** Offer summary

<b>€ million</b>	
Cash offer	5 398
Shares offer	8 097
No. of shares	96.12
Price per share (€)	84.24
Premium to be offered in relation to Mkt Cap	36.99%
Premium to be offered in relation to Equity value	25.87%

## 9. CONCLUSION

The high level of worldwide competition between luxury goods companies increases the pressure for companies to position themselves strategically to be efficient and develop new products. For many companies a way to strengthen their presence in the market passes by acquiring other companies.

The consolidation between LVMH and Hermès will leverage the competitive position of both brands, increasing the efficiency of the company due to the complementary factor that will arise with the merger. LVMH will continue to operate in all segments with the benefit of having one more brand in all the segments, which encourages growth rates in the medium term. Additionally, with the perspective of expanding to new markets, the positioning of each brand and the way customers sees them is an important factor that may have implications for the success in the future.

From both companies analysis, it was concluded that both companies were slightly underpriced, taking into consideration the assumptions made. Therefore, the hypothetic situation of a merger between both companies seems reasonable and should take place with LVMH acquiring Hermès. Therefore, Hermès will be integrated into LVMH structure. As shown by the analysis made the last section, synergies can arise from this deal, increasing the market power of both brands, creating cost synergies, which will allow more efficiency in products production and higher growth rates in each business segment.

Concluding, the transaction is planned to be partly paid in cash and equity. This mixture will require an immediate disbursing of cash from LVMH Group, which will be balanced with new shares issue in order to complete the payment.

However, this study finds a merger a rational option real life factors have prevent this deal to happen. Differences of philosophies between brands owners' do not allow this deal to take place, disregarding the benefits that could arise for both Groups.

## 10. APPENDICES

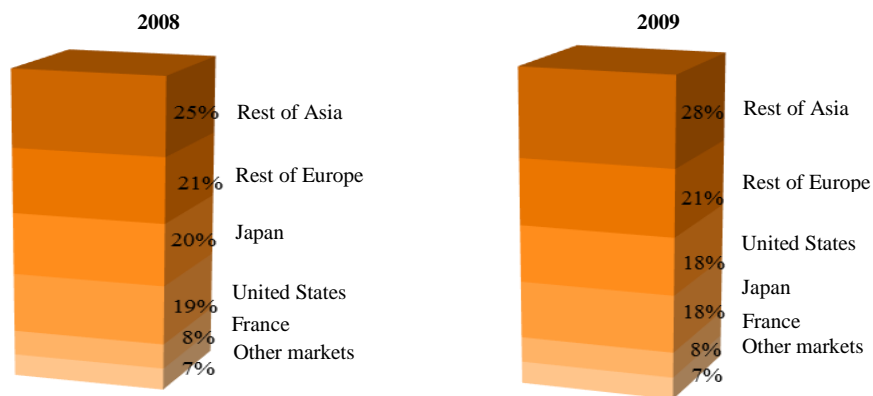
### Appendix 1 – Luxury Goods Market

**Figure 2:** Worldwide Luxury Goods Market by Area

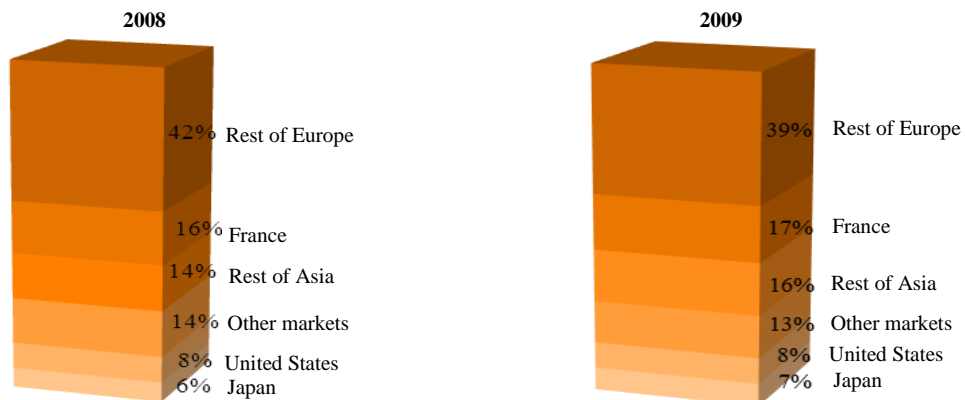


### Appendix 2 – LVMH revenues' distribution and capital expenditure evolution

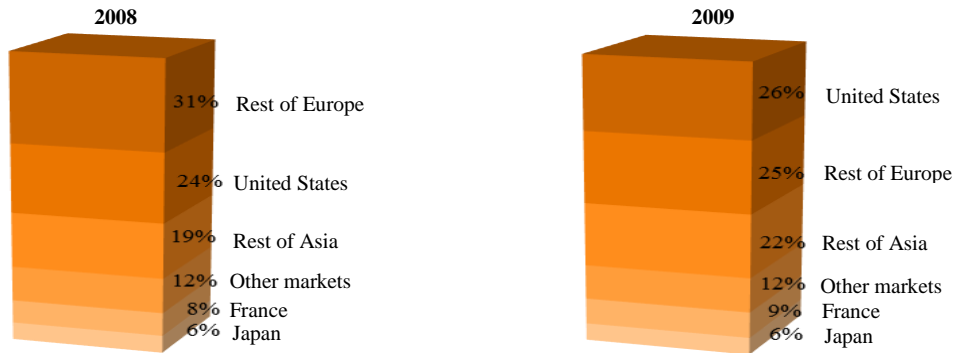
**Figure 3:** Fashion & Leather Goods' revenue by geographic region of delivery



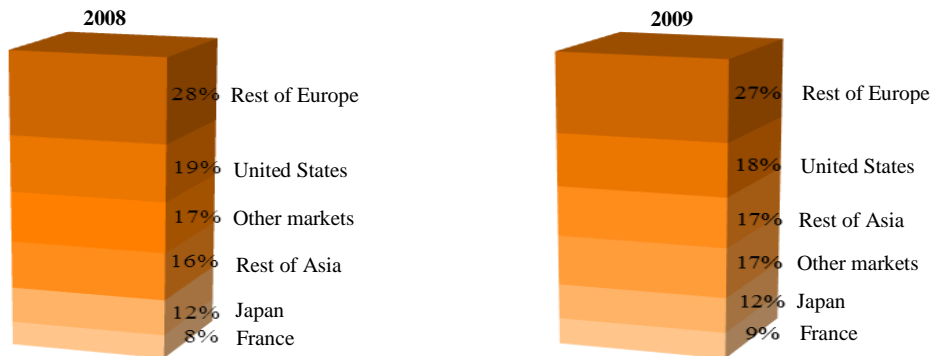
**Figure 4:** Perfumes & Cosmetics' revenue by geographic region of delivery



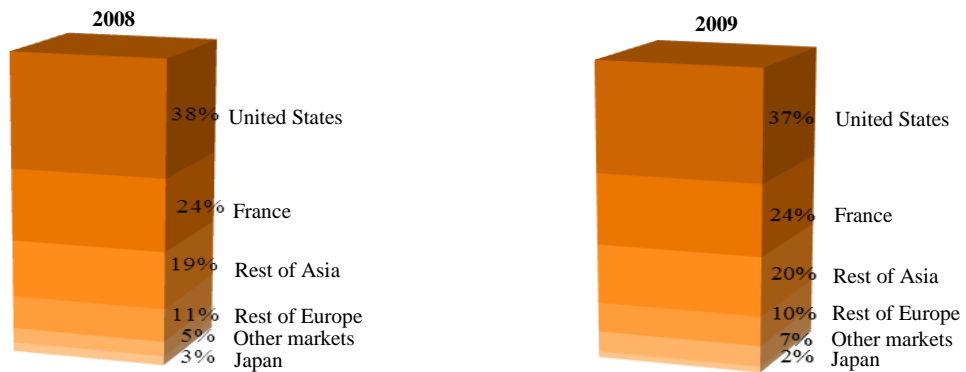
**Figure 5:** Wines & Spirits' revenue by geographic region of delivery



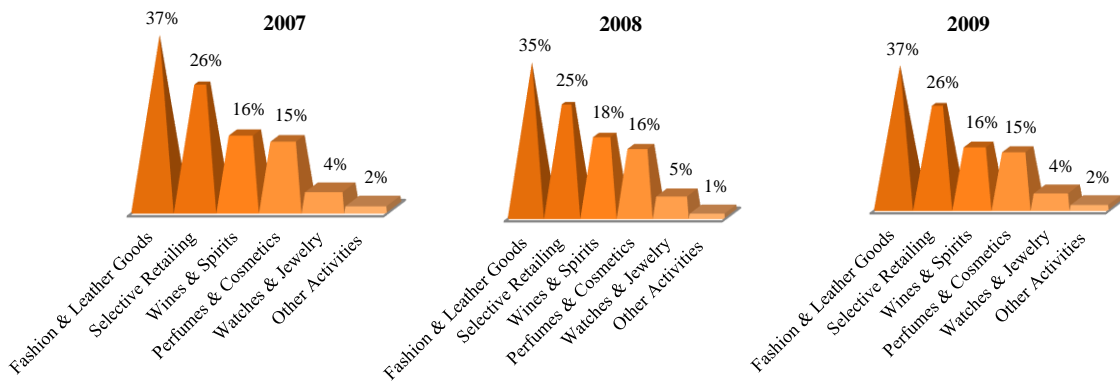
**Figure 6:** Watches & Jewellery's revenue by geographic region of delivery



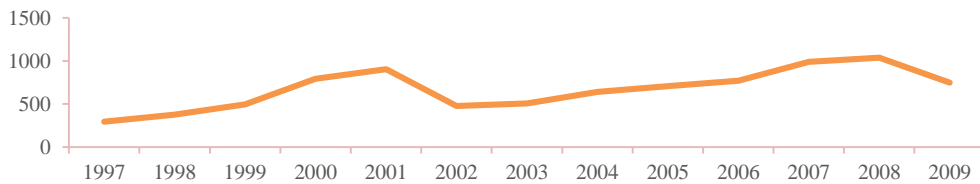
**Figure 7:** Selective retailing's revenue by geographic region of delivery



**Figure 8: LVMH's revenues distribution by sector**

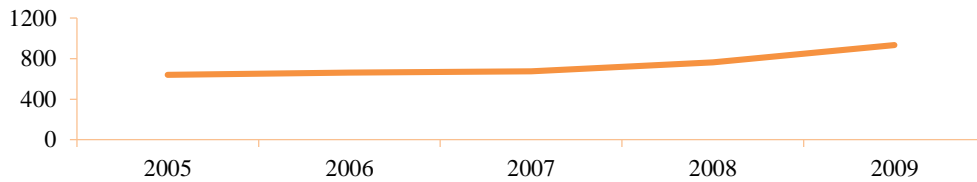


**Figure 9: LVMH - Capital Expenditure (in million euros)**

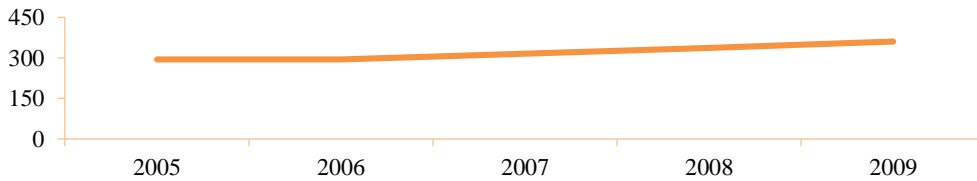


**Appendix 3 – Hermès revenues' distribution and capital expenditure evolution**

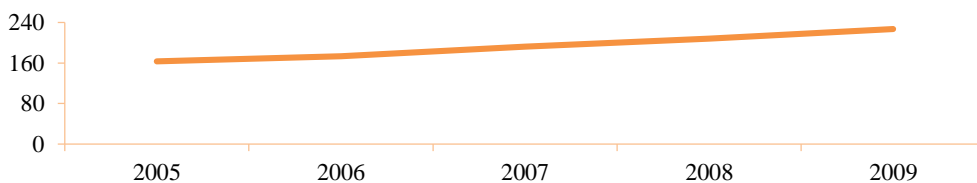
**Figure 10: Leather Goods' revenues evolution (in million euros)**



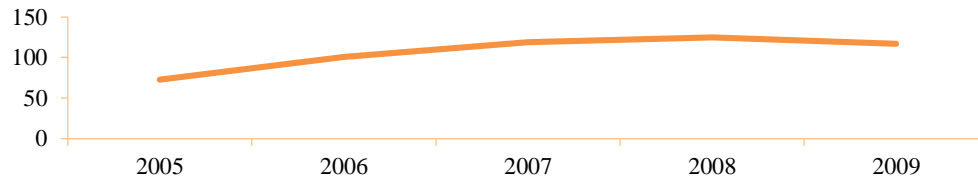
**Figure 11: Ready-to-Wear & Accessories' revenues evolution (in million euros)**



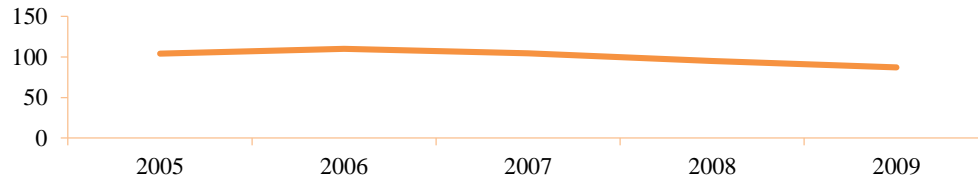
**Figure 12: Silk & Textile's revenues evolution (in million euros)**



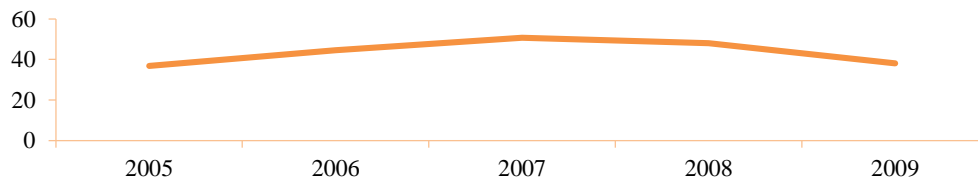
**Figure 13:** Perfumes' revenues evolution (in million euros)



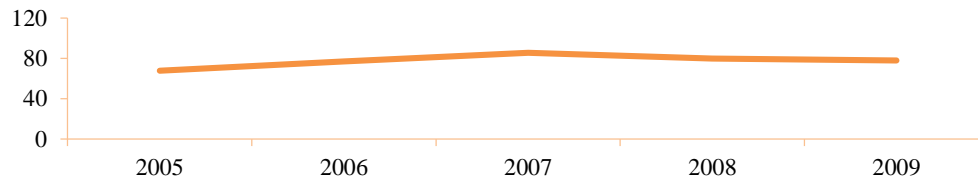
**Figure 14:** Watches' revenues evolution (in million euros)



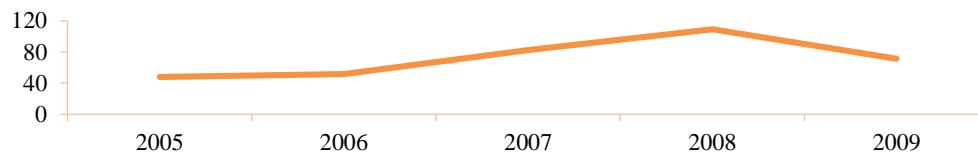
**Figure 15:** Tableware's revenues evolution (in million euros)



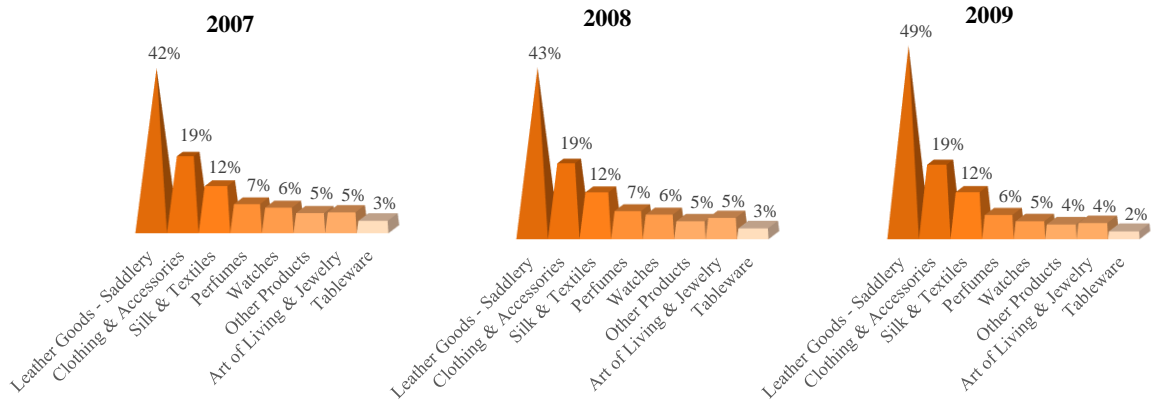
**Figure 16:** Other Hermès sectors' revenues evolution (in million euros)



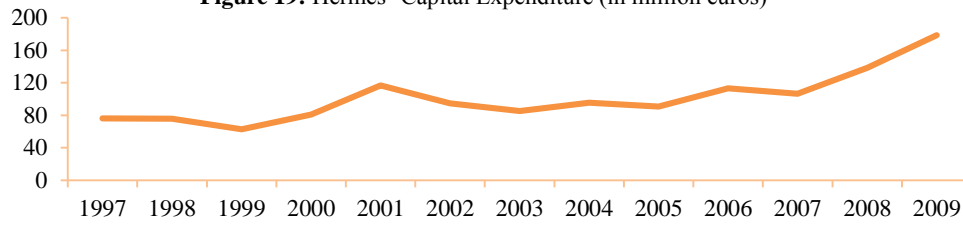
**Figure 17:** Other group brand and products' revenues distribution (in million euros)



**Figure 18: Revenues distribution by sector**



**Figure 19: Hermès' Capital Expenditure (in million euros)**



## Appendix 4 – LVMH Analysis

### LVMH - Income statement

<i>(EUR millions, except for earning per share)</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Revenue</b>	<b>16 481</b>	<b>17 193</b>	<b>17 053</b>	<b>19 090</b>	<b>21 690</b>	<b>24 636</b>	<b>27 525</b>	<b>29 918</b>	<b>31 931</b>	<b>34 092</b>	<b>36 411</b>	<b>38 902</b>	<b>41 577</b>
Fashion & Leather Goods	5591	5976	6274	7 245	8 375	9 739	11 126	12 256	13 126	14 058	15 056	16 125	17 270
Perfumes & Cosmetics	2563	2665	2520	2 680	2 881	3 115	3 336	3 505	3 629	3 757	3 889	4 027	4 169
Wines & Spirits	3220	3117	2732	3 072	3 458	3 879	4 194	4 364	4 540	4 724	4 914	5 113	5 320
Watches & Jewellery	818	863	752	838	935	1 030	1 113	1 192	1 265	1 342	1 423	1 510	1 602
Selective Retailing	4167	4361	4517	4 988	5 765	6 586	7 457	8 291	9 049	9 876	10 778	11 763	12 839
Other activities	122	211	258	267	276	287	298	311	323	336	350	364	379
<b>Operating Costs</b>	<b>(12 926)</b>	<b>(13 565)</b>	<b>(13 701)</b>	<b>(14 699)</b>	<b>(16 701)</b>	<b>(18 970)</b>	<b>(21 194)</b>	<b>(23 037)</b>	<b>(24 587)</b>	<b>(26 251)</b>	<b>(28 037)</b>	<b>(29 954)</b>	<b>(32 014)</b>
<b>PROFIT FORM RECURRING OPERATIONS</b>	<b>3 555</b>	<b>3 628</b>	<b>3 352</b>	<b>4 391</b>	<b>4 989</b>	<b>5 666</b>	<b>6 331</b>	<b>6 881</b>	<b>7 344</b>	<b>7 841</b>	<b>8 375</b>	<b>8 947</b>	<b>9 563</b>
Profit from recurring operations margin (%)	22	21	20	23	23	23	23	23	23	23	23	23	23
Other operating income and expenses	512	552	635	0	0	0	0	0	0	0	0	0	0
<b>OPERATING PROFIT (EBITDA)</b>	<b>4 067</b>	<b>4 180</b>	<b>3 987</b>	<b>4 391</b>	<b>4 989</b>	<b>5 666</b>	<b>6 331</b>	<b>6 881</b>	<b>7 344</b>	<b>7 841</b>	<b>8 375</b>	<b>8 947</b>	<b>9 563</b>
<i>EBITDA margin (%)</i>	0.25	0.24	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Depreciation and amortization expense	(638)	(695)	(826)	(834)	(843)	(851)	(860)	(868)	(877)	(886)	(894)	(903)	(912)
<b>EBIT</b>	<b>3 429</b>	<b>3 485</b>	<b>3 161</b>	<b>3 556</b>	<b>4 146</b>	<b>4 815</b>	<b>5 471</b>	<b>6 013</b>	<b>6 467</b>	<b>6 956</b>	<b>7 480</b>	<b>8 044</b>	<b>8 650</b>
<i>EBIT margin (%)</i>	20.81	20.27	18.54	18.63	19.12	19.55	19.88	20.10	20.25	20.40	20.54	20.68	20.81
Cost of net financial debt	(207)	(257)	(187)	(186)	(194)	(206)	(222)	(251)	(266)	(274)	(280)	(285)	(287)
Other financial income and expenses	(45)	(24)	(155)	0	0	0	0	0	0	0	0	0	0
<b>Earning before tax (EBT)</b>	<b>3 177</b>	<b>3 204</b>	<b>2 819</b>	<b>3 370</b>	<b>3 952</b>	<b>4 610</b>	<b>5 249</b>	<b>5 763</b>	<b>6 202</b>	<b>6 681</b>	<b>7 200</b>	<b>7 759</b>	<b>8 363</b>
Income taxes	(853)	(893)	(849)	(1 159)	(1 359)	(1 586)	(1 806)	(1 982)	(2 133)	(2 298)	(2 477)	(2 669)	(2 877)
Income (loss) from investments in associates	7	7	3	6	6	6	6	6	6	6	6	6	6
<b>NET PROFIT BEFORE MINORITY INTERESTS</b>	<b>2 331</b>	<b>2 318</b>	<b>1 973</b>	<b>2 217</b>	<b>2 599</b>	<b>3 030</b>	<b>3 450</b>	<b>3 786</b>	<b>4 074</b>	<b>4 389</b>	<b>4 729</b>	<b>5 096</b>	<b>5 492</b>
Minority interests	(306)	(292)	(218)	(251)	(288)	(332)	(381)	(438)	(504)	(580)	(667)	(767)	(882)
<b>NET PROFIT, GROUP SHARE</b>	<b>2 025</b>	<b>2 026</b>	<b>1 755</b>	<b>1 966</b>	<b>2 310</b>	<b>2 698</b>	<b>3 068</b>	<b>3 348</b>	<b>3 570</b>	<b>3 809</b>	<b>4 062</b>	<b>4 329</b>	<b>4 610</b>
<i>Net profit margin (%)</i>	12.29	11.78	10.29	10.30	10.65	10.95	11.15	11.19	11.18	11.17	11.16	11.13	11.09
<b>BASIC GROUP SHARE OF NET EARNINGS PER SHARE (in euros)</b>	<b>4.27</b>	<b>4.28</b>	<b>3.71</b>	<b>4.15</b>	<b>4.88</b>	<b>5.70</b>	<b>6.48</b>	<b>7.07</b>	<b>7.54</b>	<b>8.04</b>	<b>8.58</b>	<b>9.14</b>	<b>9.73</b>
Number of shares on which the calculation is based	474.33	473.55	473.60	473.60	473.60	473.60	473.60	473.60	473.60	473.60	473.60	473.60	473.60
<b>DILUTED GROUP SHARE OF NET EARNING PER SHARE (in euros)</b>	<b>4.22</b>	<b>4.26</b>	<b>3.70</b>	<b>4.14</b>	<b>4.87</b>	<b>5.68</b>	<b>6.46</b>	<b>7.05</b>	<b>7.52</b>	<b>8.02</b>	<b>8.56</b>	<b>9.12</b>	<b>9.71</b>
Number of shares on which the calculation is based	479.89	475.61	474.84	474.84	474.84	474.84	474.84	474.84	474.84	474.84	474.84	474.84	474.84

**LVMH - Cash Flow statement**

<i>EUR millions</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Cash From Operating Activities</b>													
EBIT	3 429	3 485	3 161	3 556	4 146	4 815	5 471	6 013	6 467	6 956	7 480	8 044	8 650
Income taxes	(853)	(893)	(849)	(1 159)	(1 359)	(1 586)	(1 806)	(1 982)	(2 133)	(2 298)	(2 477)	(2 669)	(2 877)
Depreciation and amortization expense	638	695	826	834	843	851	860	868	877	886	894	903	912
Changes in working capital	474	810	66	(269)	559	619	715	592	498	535	574	616	662
Receivables	1 595	1 650	1 455	1 514	1 720	1 954	2 183	2 373	2 532	2 704	2 887	3 085	3 297
Accounts Payable	2 095	2 292	1 911	2 343	2 586	2 851	3 185	3 462	3 695	3 945	4 214	4 502	4 812
Inventories	4 812	5 764	5 644	5 748	6 344	6 994	7 814	8 494	9 065	9 678	10 337	11 044	11 803
Net Working Capital	4 312	5 122	5 188	4 919	5 478	6 097	6 811	7 404	7 902	8 437	9 011	9 627	10 289
<b>Net Operating Cash Flow</b>	<b>2 740</b>	<b>2 477</b>	<b>3 072</b>	<b>3 501</b>	<b>3 070</b>	<b>3 462</b>	<b>3 810</b>	<b>4 307</b>	<b>4 713</b>	<b>5 008</b>	<b>5 324</b>	<b>5 662</b>	<b>6 024</b>
<b>Cash From Investing Activities</b>													
Capital Expenditures	(990)	(1 039)	(748)	(1 197)	(1 795)	(2 513)	(3 016)	(3 318)	(3 649)	(3 284)	(2 956)	(2 660)	(2 394)
Sales of Fixed Assets & Businesses	58	100	26	26	26	25	25	25	25	25	24	24	24
Purchase of Investments	(45)	(155)	(93)	(93)	(93)	(93)	(93)	(93)	(93)	(93)	(93)	(93)	(93)
Sale of Investments	33	184	49	49	49	49	49	49	49	49	49	49	49
Other Investing Activities	(349)	(650)	(285)	(328)	(377)	(433)	(433)	(433)	(433)	(433)	(433)	(433)	(433)
<b>Net Investing Cash Flow</b>	<b>(1 293)</b>	<b>(1 560)</b>	<b>(1 051)</b>	<b>(1 543)</b>	<b>(2 191)</b>	<b>(2 965)</b>	<b>(3 468)</b>	<b>(3 770)</b>	<b>(4 102)</b>	<b>(3 737)</b>	<b>(3 409)</b>	<b>(3 114)</b>	<b>(2 848)</b>
<b>Cash From Financing Activities</b>													
Cash Dividends Paid	(686)	(758)	(758)	(872)	(1 002)	(1 153)	(1 326)	(1 458)	(1 604)	(1 765)	(1 853)	(1 945)	(2 043)
Change in Capital stock	(15)	(148)	(64)	(96)	(144)	(216)	(216)	(216)	(216)	(216)	(216)	(216)	(216)
Repurchase of Common & Preferred Stock	15	5	64	96	144	216	216	216	216	216	216	216	216
Sale of Common & Preferred Stock	0	(143)	0	0	0	0	0	0	0	0	0	0	0
Issuance/Reduction of Debt - net	1 278	(353)	377	815	(245)	(232)	(221)	42	42	43	43	44	44
Change in Current Debt	-	-	-	-	-	-	-	-	-	-	-	-	-
Change in Long-Term Debt	1 278	(353)	377	815	(245)	(232)	(221)	42	42	43	43	44	44
Other Funds	(843)	(1 087)	(327)	(376)	(432)	(497)	(572)	(658)	(756)	(870)	(1 000)	(1 150)	(1 323)
<b>Net Financing Cash Flow</b>	<b>(266)</b>	<b>(2 346)</b>	<b>(772)</b>	<b>(528)</b>	<b>(1 824)</b>	<b>(2 099)</b>	<b>(2 334)</b>	<b>(2 290)</b>	<b>(2 534)</b>	<b>(2 808)</b>	<b>(3 026)</b>	<b>(3 268)</b>	<b>(3 538)</b>

**LVMH - Balance Sheet**

<i>EUR millions</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>ASSETS</b>													
Brands and other intangible assets - net	7 986	8 523	8 697	9 567	10 428	11 053	11 606	12 186	12 552	12 928	13 316	13 716	13 990
Goodwill - net	4 824	4 423	4 270	4 270	4 270	4 270	4 270	4 270	4 270	4 270	4 270	4 270	4 270
Property, plant and equipment - net	5 412	6 081	6 140	7 000	7 910	8 859	9 656	10 235	10 645	10 964	11 183	11 407	11 635
Investments in associates	129	216	213	247	287	332	386	447	519	602	698	810	940
Non-current available for sale financial assets	823	375	540	648	778	933	1 120	1 344	1 612	1 935	2 322	2 786	3 344
Other non-current assets	586	841	750	735	720	706	692	678	664	651	638	625	613
Deferred tax	532	670	521	521	521	521	521	521	521	521	521	521	521
<b>NON-CURRENT ASSETS</b>	<b>20 292</b>	<b>21 129</b>	<b>21 131</b>	<b>22 987</b>	<b>24 913</b>	<b>26 675</b>	<b>28 250</b>	<b>29 682</b>	<b>30 783</b>	<b>31 872</b>	<b>32 949</b>	<b>34 135</b>	<b>35 312</b>
Inventories and work in progress	4 809	5 764	5 644	5 748	6 344	6 994	7 814	8 494	9 065	9 678	10 337	11 044	11 803
Trade accounts receivable	1 595	1 650	1 455	1 514	1 720	1 954	2 183	2 373	2 532	2 704	2 887	3 085	3 297
Income taxes	151	229	217	1 159	1 359	1 586	1 806	1 982	2 133	2 298	2 477	2 669	2 877
Other current assets	1 884	1 698	1 213	1 334	1 441	1 585	1 664	1 748	1 835	1 927	2 023	2 124	2 230
Cash and cash equivalents	1 559	1 013	2 446	2 519	2 595	2 673	2 753	2 781	2 808	2 836	2 851	2 865	2 879
<b>CURRENT ASSETS</b>	<b>9 998</b>	<b>10 354</b>	<b>10 975</b>	<b>12 275</b>	<b>13 460</b>	<b>14 791</b>	<b>16 220</b>	<b>17 377</b>	<b>18 374</b>	<b>19 443</b>	<b>20 575</b>	<b>21 787</b>	<b>23 087</b>
<b>TOTAL ASSETS</b>	<b>30 290</b>	<b>31 483</b>	<b>32 106</b>	<b>35 262</b>	<b>38 372</b>	<b>41 466</b>	<b>44 470</b>	<b>47 058</b>	<b>49 157</b>	<b>51 315</b>	<b>53 524</b>	<b>55 923</b>	<b>58 399</b>
<b>LIABILITIES AND EQUITY</b>													
Share capital	147	147	147	147	147	147	147	147	147	147	147	147	147
Share premium account	1 736	1 737	1 763	1 763	1 763	1 763	1 763	1 763	1 763	1 763	1 763	1 763	1 763
Treasury shares and LVMH-share settled derivatives	(877)	(983)	(929)	(883)	(794)	(715)	(643)	(579)	(521)	(469)	(422)	(380)	(342)
Revaluation reserves	976	818	871	1 132	1 359	1 631	1 957	2 348	2 583	2 841	3 125	3 438	3 781
Other reserves (retained earnings)	8 098	9 430	10 684	11 752	12 928	14 220	15 642	17 207	18 927	20 820	22 902	25 192	27 712
Cumulative translation adjustment	(608)	(371)	(495)	-	-	-	-	-	-	-	-	-	-
Net profit, Group share	2 025	2 026	1 755	1 966	2 310	2 698	3 068	3 348	3 570	3 809	4 062	4 329	4 610
<b>Equity, Group share</b>	<b>11 497</b>	<b>12 804</b>	<b>13 796</b>	<b>15 878</b>	<b>17 712</b>	<b>19 744</b>	<b>21 934</b>	<b>24 233</b>	<b>26 469</b>	<b>28 911</b>	<b>31 577</b>	<b>34 489</b>	<b>37 671</b>
Minority interests	937	989	989	996	1 003	1 011	1 018	1 025	1 033	1 040	1 047	1 055	1 063
<b>TOTAL EQUITY</b>	<b>12 434</b>	<b>13 793</b>	<b>14 785</b>	<b>16 874</b>	<b>18 716</b>	<b>20 755</b>	<b>22 952</b>	<b>25 258</b>	<b>27 502</b>	<b>29 951</b>	<b>32 625</b>	<b>35 544</b>	<b>38 734</b>
Long term borrowings	2 477	3 738	4 077	4 892	4 648	4 415	4 195	4 237	4 279	4 322	4 365	4 409	4 453
Provisions	976	971	990	998	1 006	1 014	1 022	1 030	1 038	1 047	1 055	1 064	1 072
Deferred tax	2 843	3 113	3 117	3 117	3 117	3 117	3 117	3 117	3 117	3 117	3 117	3 117	3 117
Other non-current liabilities	4 147	3 253	3 089	2 588	3 002	3 198	3 083	2 401	1 816	1 274	681	79	-615
<b>NON-CURRENT LIABILITIES</b>	<b>10 443</b>	<b>11 075</b>	<b>11 273</b>	<b>11 595</b>	<b>11 773</b>	<b>11 744</b>	<b>11 417</b>	<b>10 784</b>	<b>10 250</b>	<b>9 759</b>	<b>9 218</b>	<b>8 668</b>	<b>8 027</b>
Short term borrowings	3 138	1 847	1 708	2 135	2 669	3 336	4 170	5 212	5 734	6 020	6 201	6 325	6 388
Trade accounts payable	2 095	2 292	1 911	2 343	2 586	2 851	3 185	3 462	3 695	3 945	4 214	4 502	4 812
Income taxes	332	304	221	234	248	263	279	296	313	332	352	373	396
Provisions	296	306	334	354	375	398	422	447	474	502	532	564	598
Other current liabilities	1 552	1 866	1 874	1 725	2 001	2 132	2 056	1 600	1 210	849	454	52	(410)
<b>CURRENT LIABILITIES</b>	<b>7 413</b>	<b>6 615</b>	<b>6 048</b>	<b>6 792</b>	<b>7 880</b>	<b>8 980</b>	<b>10 112</b>	<b>11 018</b>	<b>11 427</b>	<b>11 649</b>	<b>11 753</b>	<b>11 817</b>	<b>11 784</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>30 290</b>	<b>31 483</b>	<b>32 106</b>	<b>35 262</b>	<b>38 372</b>	<b>41 466</b>	<b>44 470</b>	<b>47 058</b>	<b>49 157</b>	<b>51 315</b>	<b>53 524</b>	<b>55 923</b>	<b>58 399</b>

## LVMH -Sensitivity analysis

### Bull Case

€ million	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Free Cash Flow</b>	2 267	1 284	1 017	932	1 221	1 404	2 185	2 966	3 756	4 561
<b>Terminal Value</b>										163 593
<b>Discounted FCF</b>	2 077	1 078	782	657	789	831	1 185	1 474	1 710	64 434
WACC	9.14%									
Growth rate	5.00%									
Target D/E	18.00%									
<b>Firm Value</b>										75 016
Net debt										6 751
<b>Equity value</b>										68 264
<b>Price</b>										142.71

### Bear Case

€ million	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Free Cash Flow</b>	2 341	1 264	880	659	765	735	1 300	1 839	2 355	2 854
<b>Terminal Value</b>										56 279
<b>Discounted FCF</b>	2 145	1 061	677	464	494	435	705	914	1 072	22 702
WACC	9.14%									
Growth rate	2.00%									
Target D/E	18.00%									
<b>Firm Value</b>										30 670
Net debt										2 760
<b>Equity value</b>										27 909
<b>Price</b>										58.35

## Appendix 5 – Hermès Analysis

### Hermès - Income statement

<i>(EUR millions, except for earning per share)</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Revenue</b>	<b>1 625</b>	<b>1 765</b>	<b>1 914</b>	<b>2 180</b>	<b>2 510</b>	<b>2 907</b>	<b>3 323</b>	<b>3 722</b>	<b>4 019</b>	<b>4 340</b>	<b>4 689</b>	<b>5 067</b>	<b>5 476</b>
Leather Goods - Saddlery	675	763	936	1 081	1 260	1 479	1 704	1 929	2 106	2 298	2 508	2 738	2 988
Ready-to-Wear & Accessories	315.2	337	360	398	443	497	553	604	640	679	721	764	811
Silk & Textile	192.7	208	227	255	290	331	375	417	442	469	498	528	560
Perfumes	118.9	125	117	137	163	195	230	265	292	322	355	391	431
Watches	104.7	95	87	96	107	120	134	143	150	158	166	174	183
Tableware	50.7	48	38	41	45	50	54	58	60	63	65	68	71
Art of Living & Jewellery	85.6	80	78	86	96	108	120	131	139	147	156	166	176
Other brands	82.3	109.1	71.2	86	104	128	153	174	188	204	220	238	257
<b>Operating Costs</b>	<b>(1 211)</b>	<b>(1 316)</b>	<b>(1 451)</b>	<b>(1 548)</b>	<b>(1 757)</b>	<b>(2 035)</b>	<b>(2 326)</b>	<b>(2 605)</b>	<b>(2 773)</b>	<b>(2 995)</b>	<b>(3 236)</b>	<b>(3 496)</b>	<b>(3 779)</b>
<b>PROFIT FORM RECURRING OPERATIONS</b>	<b>415</b>	<b>449</b>	<b>463</b>	<b>632</b>	<b>753</b>	<b>872</b>	<b>997</b>	<b>1 116</b>	<b>1 246</b>	<b>1 346</b>	<b>1 454</b>	<b>1 571</b>	<b>1 698</b>
Profit from recurring operations margin (%)	26	25	24	29	30	30	30	30	31	31	31	31	31
Other operating income and expenses	116	98	50	50	50	50	50	50	50	50	50	50	50
<b>OPERATING PROFIT (EBITDA)</b>	<b>531</b>	<b>547</b>	<b>513</b>	<b>682</b>	<b>803</b>	<b>922</b>	<b>1 047</b>	<b>1 166</b>	<b>1 296</b>	<b>1 396</b>	<b>1 504</b>	<b>1 571</b>	<b>1 698</b>
<i>EBITDA margin (%)</i>	0.33	0.31	0.27	0.31	0.32	0.32	0.32	0.31	0.32	0.32	0.32	0.31	0.31
Depreciation and amortization expense	(62)	(75)	(82)	(92)	(104)	(118)	(133)	(151)	(170)	(192)	(217)	(245)	(277)
<b>EBIT</b>	<b>469</b>	<b>473</b>	<b>431</b>	<b>590</b>	<b>699</b>	<b>804</b>	<b>914</b>	<b>1 016</b>	<b>1 126</b>	<b>1 203</b>	<b>1 286</b>	<b>1 325</b>	<b>1 420</b>
<i>EBIT margin (%)</i>	29	27	23	27	28	28	27	27	28	28	27	26	26
Cost of net financial debt	0.00	0.00	0.00	0.18	0.16	0.14	0.13	0.12	0.10	0.09	0.08	0.08	0.07
Other financial income and expenses	(23)	(6)	19	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
<b>Earning before tax (EBT)</b>	<b>446</b>	<b>467</b>	<b>450</b>	<b>587</b>	<b>696</b>	<b>801</b>	<b>911</b>	<b>1 013</b>	<b>1 123</b>	<b>1 200</b>	<b>1 284</b>	<b>1 322</b>	<b>1 417</b>
Income taxes	(144)	(160)	(148)	(202)	(239)	(276)	(313)	(349)	(386)	(413)	(442)	(455)	(488)
Income (loss) from investments in associates	(9)	(11)	(7)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)
<b>NET PROFIT BEFORE MINORITY INTERESTS</b>	<b>293</b>	<b>295</b>	<b>296</b>	<b>376</b>	<b>447</b>	<b>517</b>	<b>588</b>	<b>656</b>	<b>728</b>	<b>778</b>	<b>833</b>	<b>858</b>	<b>921</b>
Minority interests	(6)	(5)	(7)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(16)	(17)
<b>NET PROFIT. GROUP SHARE</b>	<b>288</b>	<b>290</b>	<b>289</b>	<b>369</b>	<b>439</b>	<b>508</b>	<b>579</b>	<b>645</b>	<b>716</b>	<b>765</b>	<b>819</b>	<b>843</b>	<b>903</b>
<i>Net profit margin (%)</i>	18	16	15	17	18	17	17	17	18	18	17	17	16
<b>BASIC GROUP SHARE OF NET EARNINGS PER SHARE (in euros)</b>	<b>2.71</b>	<b>2.76</b>	<b>2.75</b>	<b>3.51</b>	<b>4.14</b>	<b>4.74</b>	<b>5.35</b>	<b>5.91</b>	<b>6.50</b>	<b>6.89</b>	<b>7.30</b>	<b>7.45</b>	<b>7.92</b>
Number of shares on which the calculation is based	106.14	105.07	105.13	105.13	106.13	107.13	108.13	109.13	110.13	111.13	112.13	113.13	114.13
<b>DILUTED GROUP SHARE OF NET EARNING PER SHARE (in euros)</b>	<b>2.71</b>	<b>2.76</b>	<b>2.74</b>	<b>3.51</b>	<b>4.14</b>	<b>4.74</b>	<b>5.35</b>	<b>5.90</b>	<b>6.49</b>	<b>6.88</b>	<b>7.30</b>	<b>7.44</b>	<b>7.91</b>
Number of shares on which the calculation is based	106.27	105.17	105.21	105.21	106.21	107.21	108.21	109.21	110.21	111.21	112.21	113.21	114.21

## Hermès - Cash Flow statement

<i>EUR millions</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Cash From Operating Activities</b>													
EBIT	469	473	431	590	699	804	914	1 016	1 126	1 203	1 286	1 325	1 420
Income taxes	(161)	(160)	(148)	(202)	(239)	(276)	(313)	(349)	(386)	(413)	(442)	(455)	(488)
Depreciation and amortization expense	62	75	82	92	104	118	133	151	170	192	217	245	277
Changes in working capital	58	101	(44)	23	67	81	84	81	60	65	71	77	83
Receivables	135	153	132	153	176	204	233	261	281	304	328	355	383
Accounts Payable	205	211	198	220	253	293	335	375	405	437	472	510	551
Inventories	432	522	486	510	587	680	777	871	940	1 016	1 097	1 186	1 281
Net Working Capital	363	464	420	443	510	591	675	757	817	882	953	1 030	1 113
<b>Net Operating cash flow</b>	<b>311</b>	<b>286</b>	<b>409</b>	<b>457</b>	<b>497</b>	<b>566</b>	<b>649</b>	<b>737</b>	<b>849</b>	<b>917</b>	<b>991</b>	<b>1 039</b>	<b>1 127</b>
<b>Cash From Investing Activities</b>													
Capital Expenditures	(107)	(139)	(179)	(196)	(216)	(231)	(245)	(257)	(270)	(284)	(298)	(313)	(328)
Sales of Fixed Assets & Businesses	4	0	1	2	2	2	2	2	2	2	2	2	2
Purchase of Investments	(1)	(2)	(70)	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(24)
Sale of Investments	15	1	-	8	8	8	8	8	8	8	8	8	8
Other Investing Activities	1	(22)	(30)	(26)	(26)	(26)	(26)	(26)	(26)	(26)	(26)	(26)	(26)
<b>Net Investing Cash Flow</b>	<b>(88)</b>	<b>(161)</b>	<b>(278)</b>	<b>(236)</b>	<b>(256)</b>	<b>(271)</b>	<b>(285)</b>	<b>(297)</b>	<b>(310)</b>	<b>(324)</b>	<b>(338)</b>	<b>(353)</b>	<b>(368)</b>
<b>Cash From Financing Activities</b>													
Cash Dividends Paid	(107)	(111)	(116)	(121)	(126)	(131)	(136)	(141)	(147)	(153)	(159)	(165)	(172)
Change in Capital stock	(99)	(51)	(4)	(73)	(73)	(73)	(73)	(73)	(73)	(73)	(73)	(73)	(73)
Repurchase of Common & Preferred Stock	2	-	4	3	3	3	3	3	3	3	3	3	3
Sale of Common & Preferred Stock	101	51	-	76	76	76	76	76	76	76	76	76	76
Issuance/Reduction of Debt - net	7	19	(17)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Change in Current Debt	-	-	-	-	-	-	-	-	-	-	-	-	-
Change in Long-Term Debt	(7)	(19)	(17)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Other Funds	2	6	1	3	3	3	3	3	3	3	3	3	3
<b>Net Financing Cash Flow</b>	<b>(196)</b>	<b>(138)</b>	<b>(128)</b>	<b>(193)</b>	<b>(198)</b>	<b>(203)</b>	<b>(208)</b>	<b>(213)</b>	<b>(219)</b>	<b>(225)</b>	<b>(231)</b>	<b>(237)</b>	<b>(244)</b>

## Hermès - Balance Sheet

<i>EUR millions</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>ASSETS</b>													
Brands and other intangible assets - net	45	53	61	71	82	96	111	129	149	173	201	233	270
Goodwill - net	32	36	35	36	38	39	41	42	44	46	48	50	52
Property, plant and equipment - net	565	672	685	760	844	937	1 040	1 154	1 281	1 422	1 579	1 753	1 945
Investments in associates	22	16	15	14	12	13	13	14	15	16	16	17	18
Investment property	12	10	95	39	43	47	52	57	63	69	76	84	92
Financial assets	45	50	119	130	144	158	174	191	210	231	254	280	308
Loans and deposits	15	20	21	25	29	35	41	48	57	67	79	93	110
Other non-current assets	0	2	2	2	2	2	2	2	2	2	2	2	2
Deferred tax	110	141	143	143	143	143	143	143	143	143	143	143	143
<b>NON-CURRENT ASSETS</b>	<b>846</b>	<b>999</b>	<b>1 176</b>	<b>1 220</b>	<b>1 337</b>	<b>1 469</b>	<b>1 616</b>	<b>1 781</b>	<b>1 964</b>	<b>2 169</b>	<b>2 398</b>	<b>2 653</b>	<b>2 939</b>
Inventories and work in progress	430	522	486	510	587	680	777	871	940	1 016	1 097	1 186	1 281
Trade accounts receivable	135	153	132	153	176	204	233	261	281	304	328	355	383
Income taxes	3	5	4	4	4	4	4	4	4	4	4	4	4
Other current assets	119	155	118	40	40	40	40	40	40	40	40	40	40
Cash and equivalents	530	486	530	531	533	534	536	537	539	541	542	544	546
<b>CURRENT ASSETS</b>	<b>1 217</b>	<b>1 326</b>	<b>1 265</b>	<b>1 237</b>	<b>1 339</b>	<b>1 462</b>	<b>1 589</b>	<b>1 712</b>	<b>1 804</b>	<b>1 904</b>	<b>2 011</b>	<b>2 128</b>	<b>2 254</b>
<b>TOTAL ASSETS</b>	<b>2 063</b>	<b>2 326</b>	<b>2 441</b>	<b>2 458</b>	<b>2 676</b>	<b>2 931</b>	<b>3 206</b>	<b>3 493</b>	<b>3 768</b>	<b>4 072</b>	<b>4 409</b>	<b>4 781</b>	<b>5 193</b>
<b>LIABILITIES AND EQUITY</b>													
Share capital	54	54	54	54	54	54	54	54	54	54	54	54	54
Share premium account	44	49	50	53	56	59	63	66	70	75	79	84	89
Other shares and share settles derivatives	(17)	(52)	(23)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)
Revaluation reserves	-	-	-	-	-	-	-	-	-	-	-	-	-
Other reserves (retained earnings)	1 136	1 273	1 452	1 626	1 821	2 039	2 284	2 558	2 865	3 209	3 594	4 025	4 508
Cumulative translation adjustments	(45)	(26)	(31)	-	-	-	-	-	-	-	-	-	-
Net profit. Group share	288	290	289	369	439	508	579	645	716	765	819	843	903
<b>Equity. Group share</b>	<b>1 459</b>	<b>1 588</b>	<b>1 790</b>	<b>2 071</b>	<b>2 340</b>	<b>2 630</b>	<b>2 949</b>	<b>3 293</b>	<b>3 675</b>	<b>4 073</b>	<b>4 516</b>	<b>4 976</b>	<b>5 525</b>
Minority interests	13	14	14	14	14	14	14	14	14	14	14	14	14
<b>TOTAL EQUITY</b>	<b>1 473</b>	<b>1 602</b>	<b>1 804</b>	<b>2 085</b>	<b>2 354</b>	<b>2 644</b>	<b>2 963</b>	<b>3 307</b>	<b>3 689</b>	<b>4 087</b>	<b>4 530</b>	<b>4 990</b>	<b>5 539</b>
Long term borrowings	25	25	19	17	16	14	13	11	10	9	8	8	7
Provisions	2	3	8	4	4	4	4	4	4	4	4	4	4
Deferred tax	8	10	10	10	10	10	10	10	10	10	10	10	10
Other non-current liabilities	65	71	79	86	95	104	115	126	139	153	168	185	204
<b>NON-CURRENT LIABILITIES</b>	<b>100</b>	<b>108</b>	<b>115</b>	<b>118</b>	<b>125</b>	<b>133</b>	<b>142</b>	<b>152</b>	<b>163</b>	<b>176</b>	<b>191</b>	<b>207</b>	<b>224</b>
Short term borrowings	61	71	45	41	37	33	30	27	24	22	20	18	16
Trade accounts payable	205	211	198	220	253	293	335	375	405	437	472	510	551
Income taxes	35	45	39	43	47	51	56	61	66	72	79	86	93
Provisions	15	15	14	13	12	11	10	9	8	8	7	7	6
Other current liabilities	175	274	224	265	312	369	435	513	606	715	843	995	1 174
<b>CURRENT LIABILITIES</b>	<b>490</b>	<b>615</b>	<b>521</b>	<b>581</b>	<b>660</b>	<b>756</b>	<b>865</b>	<b>984</b>	<b>1 109</b>	<b>1 253</b>	<b>1 420</b>	<b>1 615</b>	<b>1 840</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>2 063</b>	<b>2 326</b>	<b>2 441</b>	<b>2 783</b>	<b>3 139</b>	<b>3 533</b>	<b>3 970</b>	<b>4 443</b>	<b>4 961</b>	<b>5 516</b>	<b>6 141</b>	<b>6 811</b>	<b>7 603</b>

## Hermès -Sensitivity analysis

### Bull case

€ million	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Free Cash Flow</b>	289	322	392	481	580	708	790	883	953	1 067
<b>Terminal Value</b>										38 113
<b>Discounted FCF</b>	<b>267</b>	<b>274</b>	<b>308</b>	<b>349</b>	<b>388</b>	<b>437</b>	<b>450</b>	<b>464</b>	<b>462</b>	<b>16 201</b>

WACC	8.38%
Growth rate	4.50%
Target D/E	0.00%

<b>Firm Value</b>	19 598
Net debt	0
<b>Equity value</b>	19 598
<b>Price</b>	169.85

### Bear case

€ million	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Free Cash Flow</b>	265	273	313	365	421	496	528	563	540	581
<b>Terminal Value</b>										12 189
<b>Discounted FCF</b>	<b>245</b>	<b>233</b>	<b>246</b>	<b>264</b>	<b>281</b>	<b>306</b>	<b>301</b>	<b>296</b>	<b>262</b>	<b>5 289</b>

WACC	8.38%
Growth rate	2.00%
Target D/E	0.00%

<b>Firm Value</b>	7 721
Net debt	0
<b>Equity value</b>	7 721
<b>Price</b>	66.82

## APPENDIX 6 – Merger Valuation

### MERGER WITHOUT SYNERGIES

#### Income statement

<i>(EUR millions, except for earning per share)</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Revenue	18 106	18 958	18 967	21 270	24 199	27 543	30 848	33 640	35 950	38 432	41 100	43 969	47 053
Operating Costs	(14 137)	(14 881)	(15 152)	(16 247)	(18 458)	(21 005)	(23 520)	(25 642)	(27 360)	(29 246)	(31 272)	(33 451)	(35 793)
<b>PROFIT FORM RECURRING OPERATIONS</b>	<b>3 970</b>	<b>4 077</b>	<b>3 815</b>	<b>5 023</b>	<b>5 741</b>	<b>6 538</b>	<b>7 328</b>	<b>7 998</b>	<b>8 590</b>	<b>9 187</b>	<b>9 828</b>	<b>10 518</b>	<b>11 260</b>
Profit from recurring operations margin (%)	22	22	20	24	24	24	24	24	24	24	24	24	24
Other operating income and expenses	628	650	685	50	50	50	50	50	50	50	50	50	50
<b>OPERATING PROFIT (EBITDA)</b>	<b>4 598</b>	<b>4 727</b>	<b>4 500</b>	<b>5 073</b>	<b>5 791</b>	<b>6 588</b>	<b>7 378</b>	<b>8 048</b>	<b>8 640</b>	<b>9 237</b>	<b>9 878</b>	<b>10 568</b>	<b>11 310</b>
<i>EBITDA margin (%)</i>	25	25	24	24	24	24	24	24	24	24	24	24	24
Depreciation and amortization expense	(700)	(770)	(908)	(927)	(947)	(969)	(993)	(1 019)	(1 047)	(1 078)	(1 112)	(1 149)	(1 190)
<b>EBIT</b>	<b>3898</b>	<b>3958</b>	<b>3592</b>	<b>4146</b>	<b>4845</b>	<b>5620</b>	<b>6385</b>	<b>7029</b>	<b>7593</b>	<b>8159</b>	<b>8767</b>	<b>9419</b>	<b>10121</b>
<i>EBIT margin (%)</i>	22	21	19	19	20	20	21	21	21	21	21	21	22
Cost of net financial debt	(207)	(257)	(187)	(186)	(194)	(205)	(222)	(250)	(265)	(274)	(280)	(285)	(287)
Other financial income and expenses	(68)	(30)	(136)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
<b>Earning before tax (EBT)</b>	<b>3 623</b>	<b>3 671</b>	<b>3 269</b>	<b>3 957</b>	<b>4 648</b>	<b>5 411</b>	<b>6 160</b>	<b>6 776</b>	<b>7 325</b>	<b>7 882</b>	<b>8 483</b>	<b>9 132</b>	<b>9 830</b>
Income taxes	(997)	(1 053)	(997)	(1 361)	(1 599)	(1 861)	(2 119)	(2 331)	(2 520)	(2 711)	(2 918)	(3 124)	(3 364)
Income (loss) from investments in associates	(2)	(4)	(4)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
<b>NET PROFIT BEFORE MINORITY INTERESTS</b>	<b>2 624</b>	<b>2 613</b>	<b>2 269</b>	<b>2 593</b>	<b>3 046</b>	<b>3 547</b>	<b>4 038</b>	<b>4 442</b>	<b>4 802</b>	<b>5 167</b>	<b>5 562</b>	<b>6 005</b>	<b>6 463</b>
Minority interests	(312)	(297)	(225)	(258)	(296)	(340)	(391)	(449)	(516)	(593)	(681)	(783)	(899)
<b>NET PROFIT. GROUP SHARE</b>	<b>2 313</b>	<b>2 316</b>	<b>2 044</b>	<b>2 335</b>	<b>2 749</b>	<b>3 206</b>	<b>3 647</b>	<b>3 993</b>	<b>4 286</b>	<b>4 574</b>	<b>4 881</b>	<b>5 222</b>	<b>5 564</b>
<i>Net profit margin (%)</i>	13	12	11	11	11	12	12	12	12	12	12	12	12

## MERGER WITHOUT SYNERGIES

### Cash Flow statement

<i>EUR millions</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Cash From Operating Activities</b>													
EBIT	3898	3958	3592	4146	4845	5620	6385	7029	7593	8159	8767	9419	10121
Income taxes	(997)	(1 053)	(997)	(1 361)	(1 599)	(1 861)	(2 119)	(2 331)	(2 520)	(2 711)	(2 918)	(3 124)	(3 364)
Depreciation and amortization expense	700	770	908	927	947	969	993	1019	1047	1078	1112	1149	1190
Changes in working capital	532	911	22	-246	626	699	799	673	559	600	645	693	745
<b>Net Operating Cash Flow</b>	<b>3 069</b>	<b>2 763</b>	<b>3 481</b>	<b>3 958</b>	<b>3 566</b>	<b>4 028</b>	<b>4 459</b>	<b>5 044</b>	<b>5 562</b>	<b>5 925</b>	<b>6 315</b>	<b>6 751</b>	<b>7 201</b>
<b>Cash From Investing Activities</b>													
Capital Expenditures	(1 097)	(1 178)	(927)	(1 393)	(2 011)	(2 744)	(3 261)	(3 575)	(3 919)	(3 568)	(3 254)	(2 973)	(2 723)
Sales of Fixed Assets & Businesses	62	100	27	28	28	27	27	27	27	27	26	26	26
Purchase of Investments	(46)	(157)	(163)	(117)	(117)	(117)	(117)	(117)	(117)	(117)	(117)	(117)	(117)
Sale of Investments	48	185	49	57	57	57	57	57	57	57	57	57	57
Other Investing Activities	(348)	(672)	(315)	(354)	(403)	(459)	(459)	(459)	(459)	(459)	(459)	(459)	(459)
<b>Net Investing Cash Flow</b>	<b>(1 381)</b>	<b>(1 721)</b>	<b>(1 329)</b>	<b>(1 779)</b>	<b>(2 447)</b>	<b>(3 236)</b>	<b>(3 753)</b>	<b>(4 067)</b>	<b>(4 412)</b>	<b>(4 061)</b>	<b>(3 747)</b>	<b>(3 466)</b>	<b>(3 216)</b>
<b>Cash From Financing Activities</b>													
Cash Dividends Paid	(793)	(869)	(874)	(993)	(1 128)	(1 284)	(1 462)	(1 600)	(1 751)	(1 917)	(2 012)	(2 111)	(2 215)
Change in Capital stock	(114)	(199)	(60)	(169)	(217)	(289)	(289)	(289)	(289)	(289)	(289)	(289)	(289)
Repurchase of Common & Preferred Stock	17	5	68	99	147	219	219	219	219	219	219	219	219
Sale of Common & Preferred Stock	101	(92)	0	76	76	76	76	76	76	76	76	76	76
Issuance/Reduction of Debt - net	1 285	(335)	360	813	(247)	(234)	(223)	40	40	41	41	42	42
Change in Current Debt	-	-	-	-	-	-	-	-	-	-	-	-	-
Change in Long-Term Debt	1 271	(335)	360	813	(247)	(234)	(223)	40	40	41	41	42	42
Other Funds	(841)	(1 081)	(326)	(373)	(429)	(494)	(569)	(655)	(753)	(867)	(997)	(1 147)	(1 320)
<b>Net Financing Cash Flow</b>	<b>(462)</b>	<b>(2 484)</b>	<b>(900)</b>	<b>(721)</b>	<b>(2 021)</b>	<b>(2 301)</b>	<b>(2 542)</b>	<b>(2 503)</b>	<b>(2 753)</b>	<b>(3 033)</b>	<b>(3 257)</b>	<b>(3 506)</b>	<b>(3 782)</b>

## MERGER WITHOUT SYNERGIES

### Balance Sheet

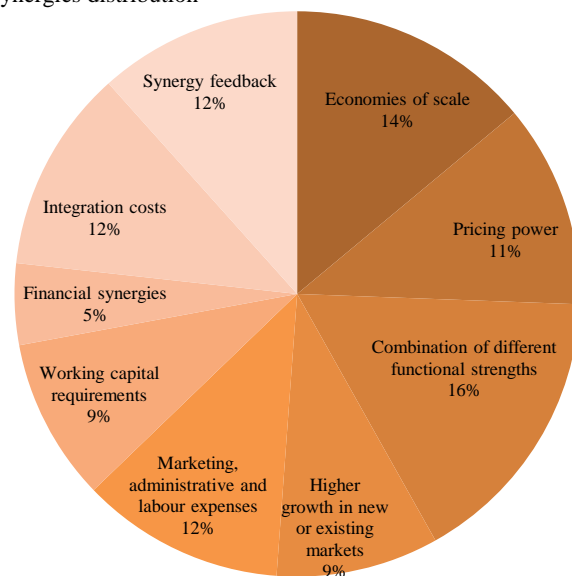
<i>EUR millions</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>ASSETS</b>													
Brands and other intangible assets - net	8 031	8 576	8 758	9 638	10 510	11 149	11 717	12 315	12 701	13 101	13 517	13 949	14 260
Goodwill - net	4 856	4 459	4 305	4 306	4 308	4 309	4 311	4 312	4 314	4 316	4 318	4 320	4 322
Property, plant and equipment - net	5 977	6 753	6 825	7 760	8 754	9 796	10 696	11 390	11 926	12 386	12 762	13 160	13 580
Investments in associates	163	242	323	300	342	392	451	519	597	687	791	911	1 050
Non-current available for sale financial assets	883	445	680	803	950	1 125	1 334	1 583	1 879	2 233	2 655	3 159	3 761
Other non-current assets	586	843	752	737	722	708	694	680	666	653	640	627	615
Deferred tax	642	811	664	664	664	664	664	664	664	664	664	664	664
<b>NON-CURRENT ASSETS</b>	<b>21 138</b>	<b>22 128</b>	<b>22 307</b>	<b>24 208</b>	<b>26 250</b>	<b>28 144</b>	<b>29 867</b>	<b>31 462</b>	<b>32 747</b>	<b>34 040</b>	<b>35 347</b>	<b>36 789</b>	<b>38 252</b>
Inventories and work in progress	5 239	6 286	6 130	6 258	6 931	7 674	8 591	9 364	10 005	10 694	11 434	12 229	13 085
Trade accounts receivable	1 730	1 803	1 587	1 666	1 896	2 157	2 415	2 633	2 814	3 007	3 216	3 440	3 680
Income taxes	154	234	221	1 163	1 363	1 589	1 809	1 986	2 137	2 302	2 480	2 673	2 880
Other current assets	2 003	1 853	1 331	1 374	1 481	1 625	1 704	1 788	1 875	1 967	2 063	2 164	2 270
Cash and cash equivalents	2 089	1 499	2 976	3 050	3 128	3 207	3 289	3 318	3 347	3 377	3 393	3 409	3 425
<b>CURRENT ASSETS</b>	<b>11 215</b>	<b>11 674</b>	<b>12 244</b>	<b>13 512</b>	<b>14 799</b>	<b>16 253</b>	<b>17 809</b>	<b>19 089</b>	<b>20 178</b>	<b>21 347</b>	<b>22 586</b>	<b>23 915</b>	<b>25 341</b>
<b>TOTAL ASSETS</b>	<b>32 352</b>	<b>33 803</b>	<b>34 551</b>	<b>37 720</b>	<b>41 048</b>	<b>44 396</b>	<b>47 676</b>	<b>50 551</b>	<b>52 926</b>	<b>55 387</b>	<b>57 933</b>	<b>60 704</b>	<b>63 592</b>
<b>LIABILITIES AND EQUITY</b>													
Share capital	201	201	201	201	201	201	201	201	201	201	201	201	201
Share premium account	1 780	1 786	1 813	1 816	1 819	1 822	1 826	1 829	1 833	1 838	1 842	1 847	1 852
Other shares and share settles derivatives	(894)	(1 035)	(952)	(913)	(824)	(745)	(673)	(609)	(551)	(499)	(452)	(410)	(372)
Revaluation reserves	976	818	871	1 132	1 359	1 631	1 957	2 348	2 583	2 841	3 125	3 438	3 781
Other reserves (retained earnings)	9 234	10 703	12 136	13 378	14 749	16 260	17 927	19 765	21 793	24 029	26 496	29 218	32 220
Cumulative translation adjustments	(653)	(397)	(526)	-	-	-	-	-	-	-	-	-	-
Net profit, Group share	2 313	2 316	2 044	2 335	2 749	3 206	3 647	3 993	4 286	4 574	4 881	5 172	5 514
<b>Equity, Group share</b>	<b>12 956</b>	<b>14 392</b>	<b>15 586</b>	<b>17 949</b>	<b>20 052</b>	<b>22 375</b>	<b>24 883</b>	<b>27 527</b>	<b>30 144</b>	<b>32 984</b>	<b>36 093</b>	<b>39 465</b>	<b>43 196</b>
Minority interests	950	1 003	1 003	1 010	1 017	1 025	1 032	1 039	1 047	1 054	1 061	1 069	1 077
<b>TOTAL EQUITY</b>	<b>13 907</b>	<b>15 395</b>	<b>16 589</b>	<b>18 959</b>	<b>21 069</b>	<b>23 399</b>	<b>25 915</b>	<b>28 566</b>	<b>31 191</b>	<b>34 038</b>	<b>37 154</b>	<b>40 534</b>	<b>44 272</b>
Long term borrowings	2 502	3 763	4 096	4 910	4 663	4 430	4 207	4 248	4 289	4 331	4 373	4 416	4 459
Provisions	978	974	998	1 002	1 010	1 018	1 026	1 034	1 042	1 051	1 059	1 068	1 076
Deferred tax	2 851	3 123	3 127	3 127	3 127	3 127	3 127	3 127	3 127	3 127	3 127	3 127	3 127
Other non-current liabilities	4 212	3 324	3 168	2 674	3 097	3 302	3 198	2 527	1 955	1 427	850	264	(411)
<b>NON-CURRENT LIABILITIES</b>	<b>10 543</b>	<b>11 183</b>	<b>11 388</b>	<b>11 713</b>	<b>11 898</b>	<b>11 877</b>	<b>11 559</b>	<b>10 936</b>	<b>10 413</b>	<b>9 935</b>	<b>9 409</b>	<b>8 874</b>	<b>8 251</b>
Short term borrowings	3 199	1 918	1 753	2 176	2 706	3 369	4 200	5 239	5 758	6 042	6 220	6 343	6 404
Trade accounts payable	2 300	2 503	2 109	2 563	2 839	3 144	3 520	3 837	4 100	4 382	4 686	5 012	5 363
Income taxes	367	349	260	277	295	314	335	356	380	404	431	459	489
Provisions	311	321	348	367	387	409	432	456	482	510	539	571	604
Other current liabilities	1 727	2 140	2 098	1 990	2 314	2 501	2 490	2 114	1 816	1 564	1 297	1 047	764
<b>CURRENT LIABILITIES</b>	<b>7 903</b>	<b>7 230</b>	<b>6 569</b>	<b>7 372</b>	<b>8 540</b>	<b>9 736</b>	<b>10 976</b>	<b>12 002</b>	<b>12 535</b>	<b>12 902</b>	<b>13 174</b>	<b>13 432</b>	<b>13 624</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>32 353</b>	<b>33 809</b>	<b>34 547</b>	<b>38 046</b>	<b>41 511</b>	<b>44 999</b>	<b>48 440</b>	<b>51 502</b>	<b>54 119</b>	<b>56 831</b>	<b>59 664</b>	<b>62 734</b>	<b>66 003</b>

## Appendix 7 – Synergies

### Synergies Distribution

€ million	Synergy Value	Allocated to			
		LVMH %	LVMH Value	Hermès %	Hermès Value
Economies of scale	799	60	479	40	320
Pricing power	799	50	399	50	399
Combination of different functional strengths	1 997	70	1 398	30	599
Higher growth in new or existing markets	422	40	169	60	253
Marketing, administrative and labour expenses	445	50	222	50	222
Working capital requirements	1 213	40	485	60	728
Financial synergies	675	20	135	80	540
Integration costs	(1 155)	50	(577)	50	(577)
Synergy feedback	577	50	289	50	289
<b>Total value of synergies</b>	<b>5773</b>		<b>3 000</b>		<b>2 773</b>

Figure 20: LVMH synergies distribution



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