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Company Valuation: Melia Hotels International

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1. INTRODUCTION

Nowadays, companies face several situations in which they find necessary to determine the intrinsic value of a company, that is, the objective estimation of the current and potential value of the enterprise and not the price or the market value that a business may have; aimed at finding information that allows rational decisions to be made.

The valuation of companies is considered by many an art more than a science due to the degree of subjectivity that flows from the person who performs the valuation, as the vital complexity that characterizes any company leads to the difficulty of establishing a financial formula to value it.

For a correct valuation of a company, it is very relevant to make a contextualization of the macroeconomic environment, the sector in which the company operates as well as other external and internal variables which will allow us to reach to more precise conclusions in order to support our valuation.

There are different valuation methods and not all of them give the same value, being advisable to determine which method best suits in each case. Among the most widely used methods, we can find the patrimonial methods and the methods based on profitability, which are based on the business's ability to create wealth, which implies taking into account a component of uncertainty and an additional complexity.

Within the methods based on profitability, we find the discounted cash flow method, considered as a method of correct application in the case of a company with a long maturity period.

Based on the hypothesis of the operational continuity principle, we are going to estimate an interval for the value of **Melia Hotels International**, by using the Discounted Cash Flow Model as the main tool as well as the comparable multiples method, by making assumptions and arguments about the evolution of the company which will be developed throughout the project.

2. MELIA HOTELS INTERNATIONAL

2.1. HISTORY OF MELIA

Melia Hotels International is one of the leading companies in the hospitality industry, situating itself among the top twenty hotel companies at an international level. Currently operating 326 hotels and 83,778 rooms in 44 different countries, from which 48% are resort hotels and 52% urban, furnishing them with a competitive advantage against possible crisis among the different segments of demand. (Melia Hoteles, 2020)

The history of Melia Hotels International starts in 1956 when Gabriel Escarrer founded the company in Mallorca, Spain. Since then, they have emphasized on three main concepts: vision, family and passion. The vision of the founder, backed by a family with strong values that support a responsible company and the passion for service, and for offering the customer the best hotel experiences. (Melia Hoteles, 2015)

During the 1960's they developed their business in the Balearic island Mallorca by establishing different assets.

In the 1980's they developed their business in the main Spanish cities through the acquisition of the hotel chain HOTASA (1984) becoming the largest hotel group in Spain. They also acquired the hotel chain Melia (1987) changing the company name to Sol Melia. At the same time, they opened their first international hotels in Bali and Egypt.

In 1994 they launched the Melia loyalty program, currently known as "Melia rewards".

In 1995 they opened Paradisus Resorts specialising in the luxury sector among the hospitality industry.

Melia hotels was the first hotel company to go public (1996), a step that represented a reinforcement in demand for transparency, control and social responsibility.

Additionally, in 1997 they launched the booking website Melia.com.

Between the 1999 and the early 2000's, Melia hotels characterised itself by gaining presence in the European gateway cities London, Milan and Paris through the acquisition of the hotel chain TRYP (2000), the launch of holiday club (2004), ME by Melia (2006) and the acquisition of the German brand INNSIDE (2007).

From 2010 onwards they have continued developing and gaining presence in different parts of the world where New York, Miami, the Caribbean and the East region could be highlighted.

In 2011, the company that had been decades operated by the name Sol Melia embarked on a new journey under the brand that represents its present and its future: Melia Hotels International.

At the moment, as mentioned before, it operates in 44 different countries and expects to continue expanding its business to many other countries around the world. At the same time, they are adapting to the new trends by digitalizing their model, a step that started in 2014 with the Melia Digital Project, made to transform client relations, strengthening their management model value proposal and which continues to improve in order to optimise processes, their capacity to generate revenue and personalise their customers' experiences. Furthermore, they have also been able to consolidate with social media given the evident influence it has on business reputation and performance through two main instruments, amplify and #AskCEOMelia.

2.2. MELIA'S BUSINESS MODEL

Melia's strategic vision is aligned in order to be recognised as a world benchmark in excellence, responsibility and sustainability as well as to bring about the transformation required by an environment that is increasingly competitive, changing and global, reinforcing in that manner, their leadership in the leisure segment.

In order to achieve its objective, they have developed five main core strategies: Excellence in management, successfully differentiating and positioning their different brands; culture and transformation, strengthening their employer brand image in order to drive forward the cultural transformation; reputation and recognition, ensuring excellence and transparency as well as reinforcing the relations with their stakeholders by driving forward a solid and consistent model of governance; asset strategy, building based on criteria of sustainability and digitalization and innovation.

Melia Hotels International, operates through four different types of management (owned, leased, managed and franchise) and under seven different brands (Gran Melia hotels &

resorts, Paradisus by Melia, ME by Melia, Melia hotels & resorts, Inside by Melia, Sol by Melia and Tryp by Windham).

The Group's reputation and experience on the holiday sector is a mix of their seven brands. Each one having its own distinctive personality and having clearly defined psychographic and demographic profiles accomplishing the needs of their customers as well as adapting to changes and new trends by constantly innovating based on ongoing researches.

Their presence map could therefore be divided by type of management and brands. Going through their active portfolio, 39% is under management (Melia manages the property of a third party under one of its brands and fees are charged to Melia for running the hotel); 33% are leased (The hotel is rented and managed by Melia); 14% is property owned (Hotel is both owned and managed by Melia) and the other 14% are franchises (Hotel owner operates with a Melia brand and hires their marketing channels). Having a two-way focus strategy, asset management and selective joint ventures. Carried out with digitalization and connectivity as their best allies to keep moving forward as leaders.

On the other hand, Melia Hotels International brands could be divided on three different ranges: Upper scale, which represents the 11% of the business and its operated by Gran Melia hotels & resorts, Paradisus by Melia and ME by Melia; the upscale which contributes 47% of the portfolio where Melia hotels & resorts and Inside by Melia appear and lastly, midscale which represents 37% of the business with Sol by Melia and Tryp by Windham. The other 5% are consolidated by other hotels managed by Melia. (Melia Hoteles, 2019)

Furthermore, Melia has transformed their distribution channels towards their own direct sales channels as well as developing a loyalty program in order to boost system-wide profitability through: The circle by Melia, an experience-driven program that strives to personalize every detail to the customers' expectations (Circle By Melia, 2020); Melia Pro, a reservations portal for professionals empowering users to manage and control their professional activity flexibly offering the best guaranteed rate; and through Melia rewards, used to relate with their customers as well as to their professional segments and employees being therefore, one of the main pillars of the company.

Melia Hotels International, has therefore been able to lead the online development of the sector as well as reinforced their omnichannel presence at both B2C and B2B level, through Melia.com and Meliapro.com respectively, reaching levels of growth at RevPAR (Revenue per available room) that surpass their competing international brands.

2.3. RISKS AND OPPORTUNITIES

Melia Hotels International is a leading global presence company aimed at servicing local needs.

Its activity (measured as % of rooms) is distributed among 7 different areas: EMEA (15.6%), Spain (16.5%), Mediterranean (30.9%), Brazil (3.6%), Cuba (16.1%), America (11.3%) and Asia (6.1%). (CNMV, 2019)

Additionally, the operating profit (EBIT) contribution could be divided in: Europe & Middle East (17%), Spain (38%), Americas (40%), Africa (3%) and Asia (2%).

Based on the information provided above, we could conclude that among the business risks Melia has, we could clearly find the distribution portfolio, as they have certain dependence on some regions (Americas and Spain, especially Spain giving its size), but based on the sector analysis, which is further explained later, this distribution is coherent to the distribution of tourism. Nevertheless, Melia is working in order to continue improving this situation through its strategic plan focused, among other things, in maintaining a balanced portfolio.

On the other hand, as it has a global presence, they are affected by the global economic, sociocultural, political and legal environment. Which is currently highlighted by: The deterioration between the relationship of the two great motors of the world (United States and China), which have had a real effect on the rest of the world among near regions and countries; the political conflicts in Cataluña; The uncertainty created by BREXIT; and the “Greta Thunberg effect”, globalized during 2019 which has positioned climate change as a priority issue both in the public and private sector, with an increasing impact in the decision making process of companies, governments, investment funds and other key interest groups for the touristic sector. Not to mention, the recent Covid-19 outbreak which is generating a global uncertainty and panic which is starting to present the first signs of deceleration in the economy. However, for this valuation, I am not going to take

into account the effects of Covid-19, as we don't have clear information about all the future effects as there is no data beyond an increase in the discount rate due to the increased risk perception. . (eldiario.es, 2020)

Among the different risks Melia Hotels International faces, the presence of competitors, also takes part, hotel chains such as NH Hoteles, Wyndham Worldwide and Millennium Hotels & Resorts among many others. The touristic sector is constantly evolving and Melia has to be able to keep up with the changing tendencies as well as being able to take advantage of the opportunities the sector presents, such as the collaborative growth with its competitors as previously occurred with TRYP (with Wyndham). Additionally, the new trends coming from new platforms such as Airbnb, also represents a risk for the urban hotels of Melia, which represents 52% of its portfolio as mentioned before.

Other risks that could also influence Melia Hotels International, could be:

- The technological advances that among other risks, increase threats from cyber-attacks.
- Changes in environmental patterns that involve risks such as the increased frequency of natural disasters or the scarcity of resources.
- Sociodemographic trends such as the aging population and lifestyle changes that modify consumption patterns and behaviours.
- The risks associated with expansion regarding the choice of country, areas and partners.
- Exchange rate risks when not financing with the functional currency of the business

Among the different opportunities of Melia Hotels International we could highlight the international development and digitalization opportunities.

In addition, Melia Hotels International could encourage the change in the tourism industry in terms of sustainability, converting the current context and the new demands in an opportunity, either by reformulating the current offer or creating new sustainable concepts that reinforce their brands.

Last but not least, it is important to point out that the global maintenance of low interest rates, could mean a relief for Melia's financial debt, repaying the debt at a greater speed, reducing the leverage of the company.

3. SECTOR ANALYSIS

The hospitality industry is highly dependent and related to the touristic sector. Therefore, in order to make an overview of how the sector is evolving across the different continents, we are going to look at the evolution and expectation of tourism.

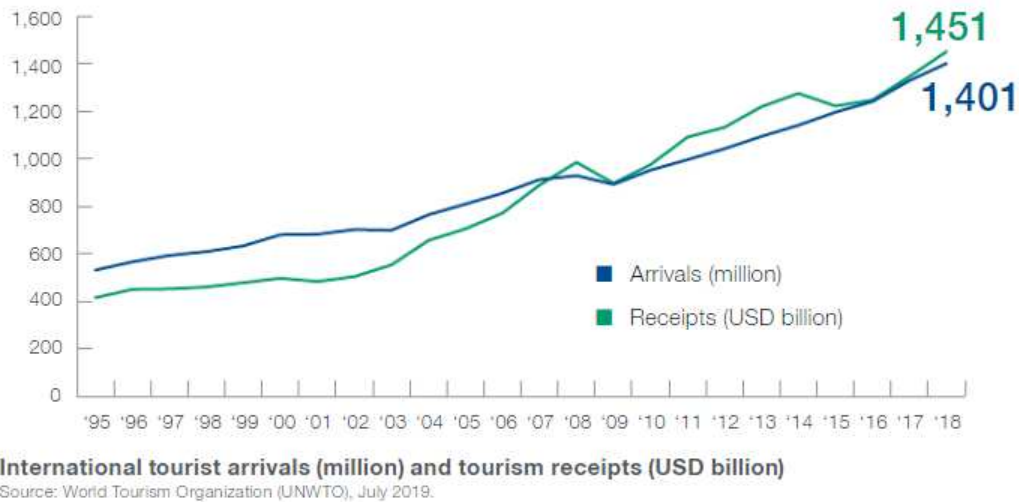


Table 1. International tourism evolution
(World Tourism Organization, 2019)

As we can see on the graph above, the tourism sector has followed a continued expansion overtime, despite occasional shock; demonstrating the sector’s resilience and strengths.

The year 2019 has been a turbulent year for the sector, but it still remains as one of the growth engines of the World economy. Tourism GDP registered a growth of 3.6%, slightly lower than the 3.9% achieved in 2018. But, the sector remained optimistic about the future. With a 3% estimated growth in new trips and reaching a volume of 1.6 billion trips in 2024 according to the World Travel & Tourism Council (WTTC).

It is important to realise that with growth comes responsibility, minimizing the adverse effect of tourism; prioritizing value to volume and managing tourism in a sustainable manner. At the same time, adapting to the new trends (innovation, digitalization, societal changes) in order to remain competitive.

Within the tourism sector there are different means and purposes of travel, where we can find: Business, leisure, health and other.

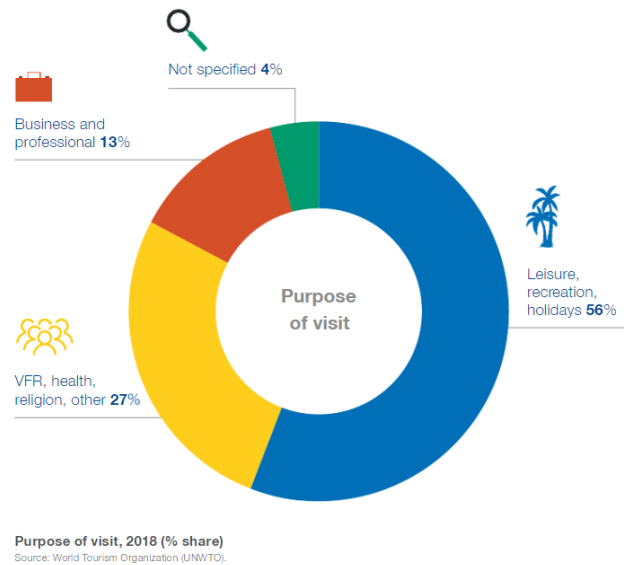


Table 2. Purposes of visit
(World Tourism Organization, 2019)

As mentioned before, Melia Hotels International, has residential as well as holiday hotels covering the different needs of their current clientele.

On the other hand, as Melia Hotels International operates globally, I find important to look at tourism expectations across the different continents, in order to see if they are following an efficient strategy. (World Tourism Organization, 2019)

Europe, the world's most visited region, had a sustained growth for the ninth year in a row, with an expected growth of 3% in 2020, where southern Mediterranean destinations could be highlighted.

Americas, had mixed results across destinations, having a 2% growth in touristic arrivals (15% share) and 0% growth in terms of tourist receipts (23% share). On the one hand, North America represents 2/3 of total arrivals, whereas the Caribbean continues to show a mixed solid growth.

The Middle East, grew 5% in tourist arrival and 4% in receipts. It is important to mention that historically tourism was a major pillar only for some regions, but now, some oil-based economies are also starting to open up for strong tourism development.

Asia and the Pacific, is the fastest growing region having up to a 7% growth in both tourist arrivals and receipts, as a result of a growing purchasing power and the increased air connectivity which have boost travels within and outside the region.

Lastly, Africa is characterised by a robust performance with a 7% growth in tourist arrivals but just a 2% in receipts.

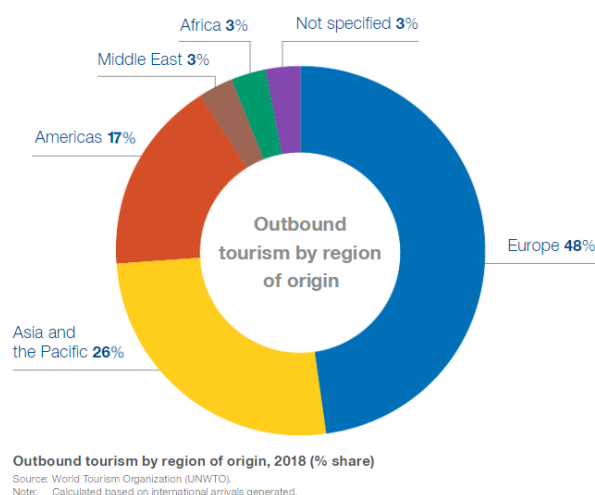


Table 3. Outbound tourism by region
(World Tourism Organization, 2020)

Based on the graph above, we can now understand why Melia Hotels International operating profit comes mainly from Europe and Americas and explains why they are planning to expand towards the Asian region as mentioned in their annual report, having 20 hotels in its pipeline (32%) in order to consolidate their presence in countries such as China, Indonesia, Malaysia, Thailand or Vietnam.

4. VALUATION METHOD: DISCOUNTED CASH FLOWS

Every asset has an intrinsic value that can be estimated based on its characteristics in terms of cash flows, risk and growth. The discounted cash flow valuation, is a tool for estimating that intrinsic value.

Through this valuation method, the expected value of a company is determined through the estimation of future cash flows discounted at the adjusted rate in order to reflect the appropriate risk.

As I am making the valuation of a company which is mature and has a consolidated business which is expected to continue generating cash flows in the future. I believe the discounted cash flow method to be the most accurate one in order to estimate its present value.

Within the DCF method, there are three different approaches in order to value the same cash flow. (IEB, 2018)

- Free Cash Flow – Represents the firm’s cash flow as if it was entirely financed by equity, isolating the tax effects of the financing.
- Capital Cash Flow – Represents the cash flows that investors receive, computed by the dividends paid to shareholders, the change in debt and the interest paid to bondholders.
- Equity Cash Flow – Represents the company’s residual cash flows after tax and interest have been paid.

For this valuation, I have decided to use the Free Cash Flow (FCF) method in order to obtain the present value of Melia Hotels International.

4.1. FREE CASH FLOW (FCF)

The Free Cash Flow (from now onwards, FCF) means how much after-tax cash flow the company generates on a recurring basis after taking into account non-cash expenses, change in working capital and the required capital expenditures (Capex).

The reason of using the FCF in the DCF Method for Melia Hotels International valuation, is because it closely corresponds to the actual cash flow that an investor would receive each year if they decided to buy the entire company.

Therefore, in order to obtain the free cash flow, we forget about the financing in order to focus on the economic performance of the company’s assets after taxes, seen from a perspective of an ongoing business and taking into account in each period the necessary investments for the business continuity.

In order to calculate the FCF we are going to use the following scheme:

(+) Earnings before Interest and Taxes (EBIT)

(-) Taxes

Net Operating Profit after Taxes (NOPAT)

(+) Amortization/Depreciation

(+) Provisions

(+) Deferred Taxes

Operating Cash Flow

(+/-) Capital Expenditure (Capex)

(+/-) Change in Working Capital

(+/-) Free Cash Flow

4.2. PROJECTION PERIOD: TIME HORIZON

In order to develop the valuation of Melia Hotels International through this method, it is necessary to decide the time horizon that we are going to consider in our analysis, meaning, the number of years for which we are going to project the future free cash flows.

Theoretically, we should estimate an unlimited stream of cash flows, and therefore, an infinite time horizon since we assume that all companies have a vocation for permanence as a business, having therefore, an indefinite duration in time. (Yirepa, 2020)

However, we know that it is impossible to make an adequate forecast of an infinite period. Therefore, we divide the projections into two periods as an alternative:

Firstly, a period of time normally between 3 to 5 years in which due to its proximity in time to the current moment, facilitates a detailed calculation of cash flows, since there is sufficient information with high degree of reliability in order to make individual projections. (Fernández, Pablo)

For Melia Hotels International, I have decided to choose a time horizon of five years for the detailed projections, as it is a consolidated business which is great positioned in a

mature market as the hospitality industry is. Additionally, the operational data does not have large fluctuations in time and the growth obtained over the last years has been very similar.

Secondly, as mentioned earlier, we assume that the company tends to infinity, therefore, the second period begins at the end of the first period, and it consists of the calculation of a terminal value through a perpetuity, applying a constant growth rate to the last estimated cash flow in order to capture the value at the end of the period. (Damodaran, 2020)

4.3. PROJECTION PERIOD: FREE CASH FLOWS

In order to develop the projections for Melia, I will first start with a brief conceptual framework in order to understand several of the assumptions made.

As previously mentioned, most of Melias' hotels are under management, having therefore, many leasing agreements; which explains why I have considered relevant to explain more in depth what the IFRS 16 means.

On January 1, 2019, the new IFRS16 lease regulation came into force, which entails significant changes in the composition of assets and liabilities and in the structure of the consolidated income statement, as well as in the cash flow statement.

IFRS16 introduces new requirements in relation to the accounting for leases and significant changes in it, eliminating the distinction between operating and financial leases, requiring the recognition of a right of use and a lease liability on the commencement date of all leases (with exception of those which are less than one year and under low value of the underlying asset).

IFRS 16 will increase the enterprise value of Melia as net debt will increase, while equity value should remain the same. In the DCF Model, in which enterprise values are assessed based on the NPV of expected FCF, this will generally be reflected via the following two effects: (Deloitte, 2019)

- Following IFRS16 leverage ratios of (peer group) companies which are used to estimate the target capital structure in the WACC, will increase. A higher leverage, with unchanged observed levered betas will lead to a lower WACC and a high NPV of FCF's.

- After IFRS16, the future FCF's will be higher over the remaining lease period, as rental expenses are excluded from EBITDA and hence, FCF. The depreciation charge is a non-cash expense and consequently does not negatively impact FCF.

The lease payments are reflected in the CF Statement via interest payments and redemptions of the lease obligation, however, these are financing items and also do not impact FCF.

The increase in the enterprise value should theoretically be exactly offset by the increase in the net debt (representing the NPV of the remaining lease obligation) of the company that is being valued. Hence, this would theoretically result in the same equity value.

Once mentioned this, I will now start with Melia's revenues, which based on its financial statement, we can say that they have a Compound annual growth rate (CAGR) of 0.89%.

Based on the historical revenues, we can conclude that the magnitude is a fairly consolidated figure, since there are no great fluctuations between the years, which is mainly due to the fact that we are in a mature market.

However, in order to carry out an adequate projection of the revenues, I consider necessary to take into account the expected performance of the touristic sector, as this company is highly affected by it. As previously mentioned, the touristic sector has presented sustainable and constant growth rates and it has a positive view of its future performance. Therefore, we can assume that the sector will keep growing at a similar rate, nevertheless, in order for Melia to keep expanding at the same rate, they also need to keep developing their business at the same speed as previous years.

Furthermore, as we are in an increasingly stricter and demanding market, especially when it comes to the upper scale range, Melia also needs to keep improving its services in order to keep up with customer needs, and consequently, with the same growth rate.

Gabriel Escarrer, declared that they were going to open 23 new hotels in 2020 maintaining its international commitment; opening 12 hotels in Europe, 9 in the Asia-Pacific region and 2 in America; focusing on the vacation and bleisure segment (business with leisure) and high and premium brands. He also announced that in this way the rate of openings would be similar to the previous years at an average of one hotel every two weeks. Moreover, the 90% of this hotels will be under management, in line with the light asset business model towards which they have turned in recent years. (El Confidencial, 2020)

Additionally, based on Melia Hotels International annual report, in order to achieve these objectives, Melia has consider of utmost importance to reinforce their client relationship in order to consolidate a commercial transformation.

This commercial strategy has been designed to transit from a global perspective to a local profitability, considering the particularities of each region and destinations where they operate, allowing the company to generate improvements in the business profitability. This strategy is mainly given by:

- Enhance a culture of total revenue management: Development of a big data technology platform to enhance revenue management.
- Positioning in high growth segments: Strengthen regional strategy, focus on emerging markets and enhancement and development of strategic alliances.
- Maximize the average room rate (ARR) as the main driver in generating income: Dynamize the price in response to a deep understanding of the behaviour of the customer and strategic optimization of sales channels.

According to the aforementioned, we could choose the CAGR in order to project the future revenues. However, given that the company has followed an annual decrease of 3% in the last two years I have considered appropriate to reduce the CAGR by 0,19% leaving the 0.70% as the adequate percentage in order to project the revenues.

In relation to operational expenses, taking into account that in the last years, the gross margin on sales has remained almost constant excepting the last year due to the effect of IFRS16, I have decided to take into account just the percentage of 2019.

With reference to the PPE (Property, Plant and Equipment), based on the announcement of Gabriel Escarrer about its future openings and the company's strategy towards the asset light business model, and in order to be consistent with the revenue growth, I am going to assume an annual growth of (0.5%), considering it the amount necessary in order to develop those future operations.

Regarding intangible assets, among which computer application, transfer rights and industrial property are included, I have considered to establish an annual growth of 1.5% as they will probably make investments in intangible assets since they have planned to create a big data application. As well as to improve their omnichannel presence to carry out their expansion and digitalization strategy,

On the other hand, regarding the amortization, we can observe a constant historical evolution except for the year 2019 due to the effects of IFRS16, therefore, I have decided to use the percentage of the last year (14.2%) making it proportional to revenues.

According to the projection for the corporation tax rate, since there have been many fluctuations in the recent years, I have considered the best option, to use the theoretical tax rate of 25%.

Estimation of Net Capital Expenditure (CAPEX)

The capital expenditure is the money used to buy, improve, or extend the life of fixed assets in an organization, and that has a useful life for one year or more. Such assets include tangible assets (mainly property, plant and equipment) as well as intangible assets, essentially, software, patents and licenses. (Tim Koller)

Capital Expenditure can take two forms: (Corporatefinanceinstitute, 2020)

- Maintenance Capex: Refers to the investment that is necessary for the company to continue operating in its current form.
- Growth Capex: Is the expenditure on new assets that are intended to grow the company's productive capacity, unlike maintenance capex, if the company decided not to proceed with growth capex, the business will still be able to operate in its current form, though, perhaps below the management's expectation.

Due to the capex substantial initial costs, irreversibility and long-term effects, capital expenditure decisions are very critical to an organization. Therefore, budgeting for capital expenditures ought to be carefully and efficiently planned and executed.

In real life, when it comes to project the future investments, the company gives you their expenditure plans for the future. However, as we lack of this information we are going to forecast it.

Many investors, in order to forecast the investment, take it as a percentage of revenues. Nevertheless, in the case of Melia Hotels International, we are going to assume that the company is going to carry out investments and disinvestments in the amount that results from the difference between the net tangible fixed assets (PPE & other fixed assets) and the projected net intangible assets and the same corresponding to the previous year plus the adequate depreciation expense.

Applying therefore, the following formula:

$$\text{CAPEX} = \text{Net Value of Fixed assets (n)} - \text{Net value of Fixed assets (n-1)} + \text{Depreciation (n)}$$

Estimation of the Need of Funds

When it comes to the valuation of a company, it is necessary to look at the investment in fixed assets (capex) as well as the investment in current assets, which is the effort made by the company, in financial terms, to develop its corporate purpose which is directly related to the production process or the provision of services. (Kenton, Investopedia, 2019)

In order to analyse the variation in the operating need of funds, we need to calculate the net investment effort of the company in its operating cycle, that is, the short-term investment for the acquisition of inventories and the customer credit policy. (Quickbooks, 2019)

We are going to calculate it according to the following expression:

+ Change in inventories	=	+ Inventories _n	+ Inventories _{n-1}
+ Change in clients	=	+ Clients _n	+ Clients _{n-1}
+ Change in suppliers	=	+ Suppliers _n	+ Suppliers _{n-1}
= Variation in NOF	=	+ NOF_n	+ NOF_{n-1}

It is important to clarify that as we are looking at the variation, if the current assets increase this means, Melia has less liquidity and therefore higher needs of funds; conversely, if current liabilities increase the need of funds of the company will decrease.

Determination of the capital structure

Regarding the projection of the capital of Melia, I have considered appropriate to maintain the actual amount of equity constant, and with reference to the extra cash made by the business, it will be used to distribute dividends to their shareholders instead of using them in order to repay the debt.

This means that most of Melia Hotels International's earnings will be given to its shareholders, which in fact, is quite an aggressive consideration, but as it is what Melia has been doing historically I have consider appropriate to follow the same dividend

policy, as their shareholders are used to earning that amount of dividends and if we stop giving them, the market capitalization could crash. Therefore, I have consider realistic to keep the same strategy.

Moreover, the long-term financial debt has been projected with an annual increase of 1,5%, as mentioned before, the earning will be used to give dividends and therefore the debt will increase although not dramatically.

On the other hand, I have projected the account “other fixed liabilities” as a constant value based on the last cash flow due to the instability of historical values and the lack of information available regarding Melia’s future performance

The current financial debt, has been greatly reduced in recent years. However, in order to be conservative, I have decided to estimate an annual growth of 2% to maintain this account in the historical minima without reducing it further, since I consider it unwise.

Additionally, the account “other liquid liabilities” due to the volatility of the historical values, I have considered appropriate to do it as a percentage of sales, this being a weighted historical average, as 2019 weights more due to the IFRS16 effect.

4.4. ESTIMATION OF THE DISCOUNT RATE

4.4.1. Calculation of the discount rate in the discounted cash flow method: WACC (Weight Average Cost of Capital)

The weight average cost of capital is used in financial modelling as the discount rate to calculate the net present value of a business, and it’s therefore, an integral part of a DCF Valuation model as well as an important concept to understand in order to obtain the most accurate value possible. (Santi Alcover, 2009)

The WACC is based on the hypothesis that investors in the capital markets of any sector, demand returns in accordance with the perceived risk level of their investment; and it represents the compound cost of capital across all sources including common shares, preferred shares and debt, weighted by its percentage of total capital, determining the cost of each part of the company’s capital structure. (Corporatefinanceinstitute, 2020)

Being therefore, a weighted average of two magnitudes: (Pablo Fernández, 2010)

- The cost of debt (K_d)
- The required return on shares (K_e)

In order to calculate it, we are going to use the following formula:

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

Where:

- **K_e** : Cost of equity (required return on shares that reflect the risk implied)
- **E** : Equity of the company (market value of the shares)
- **D** : Debt of the company
- **K_d** : Cost of debt (market value of debt)
- **t** : Tax rate

The discount rate is a function of the risk inherent in any business and sector; the degree of uncertainty relative to the projected cash flows and the capital structure assumed.

The greater the incertitude about the projected cash flow, the higher the appropriate discount rate will be and the lower the current value of the cash flows.

4.4.2. Cost of Debt (K_d)

The cost of debt is the effective rate that a company pays for the debt that it has in a given period of time. Basically, the cost that the company will have to bear in order to carry out its activity through external resources such as loans or credits.

In order to calculate it, we exclude commercial financing such as commercial creditors or accrued taxes as they don't carry out cost unless the commercial term is not met. Therefore, financial debt is the only one considered as part of the external resources, whose cost is materialized through financial expenses (interests). (Burguillo, 2020)

It is determined as the weight financial expenses, reflected in the income statement, represented over the average financial debt for the year.

$$K_d = \frac{\text{Financial Expenses}}{(\text{Financial debt } n-1 + \text{financial debt } n)/2}$$

However, the fact that financial expenses are deductible in the company's income tax, implies a tax shield which has to be reflected in the formula. In order to do so, we multiply the previous cost by the tax rate.

$$Kd = \frac{\text{Financial Expenses}}{(\text{Financial debt } n-1 + \text{financial debt } n)/2} * (1 - t)$$

In this case, we are not going to make the average of the financial debt, as due to the effects on the IFRS16 the financial debt is completely different from the one of previous years.

We are going to use the data obtained through Melia Hotels International financial statements:

Data expressed in thousand €	
Gross Financial debt 2019	2.163.993
Financial expenses 2019	87.203
Cost of debt (<i>Kd</i>)	4,03%

Table 4. Calculation of cost of debt

Own elaboration from the data provided by the Financial Statements of Melia

For this analysis, we are going to use the theoretical tax rate, which is the tax rate established by the tax law corporation (25%).

Therefore, the **effective cost of debt** would be = 4,03% * (1-25%) = 3,02%

4.4.3. Cost of Equity (*Ke*)

The cost of equity is an implied cost or an opportunity cost of capital. It is the rate of return shareholders require, in theory, in order to compensate them for the risk of investing in the stock; it is calculated using the Capital Asset Pricing Model (CAPM) which equates rates of return to volatility (risk vs. return).

Under the CAPM Model, we assume a perfect competition market and therefore, the interaction of supply and demand will determine the price of the assets. As we know, the higher the risk, the higher the return, consequently, if we are able to measure and grant values to the level of risk assumed, we could know the exact potential return of the different assets. (Juste, 2019)

The total risk of a financial asset can be divided in:

- Systematic risk: Is the risk derived from the general economic uncertainty, it depends on the market in which the financial asset is listed and therefore it cannot be controlled by the company. (Ucha, Economipedia, 2019)
- Non – systematic risk: Is the intrinsic risk of the financial asset and it can be controlled through diversification, understood as, the combination of different assets that allow compensation in adverse movements with the assets that make up a portfolio. (Ucha, 2019)

However, the CAPM Model only takes into account the systematic risk.

This model interprets, therefore, that in a market in equilibrium, the profitability that an investor expects to obtain from an asset is equal to the value which would be obtained from a risk-free investment plus a compensation for the systematic risk that it has to bear. This compensation, in turn, is given by the market risk premium multiplied by the beta coefficient.

Mathematically expressed as:

$$K_e = R_f + (R_m - R_f) \beta_i$$

Where:

- R_f : The risk-free rate
- R_m : Expected market return
- $R_m - R_f$: Market risk premium
- β_i : Beta (systematic risk factor)

Determination of the risk-free rate (R_f)

The risk-free rate refers to the return obtained by investing in a certain financial asset which in principle, doesn't have any risk of default, having a guaranteed return and being a secured financial product.

The risk-free rate is therefore, the return that can be earned by investing in a risk-free security. When we talk about the risk-free profitability of financial products, we talk about those coming from public institutions, to which this term is usually associated, such as treasury bills or government bonds, since they are considered to be the safest financial products in the market. (Pablo Fernández, 2019)

It is true, that many investors mention that the risk-free return is tenuous in many countries, but in general, the risk is so minuscular that we could refer to it as a risk-free return.

For the valuation of Melia Hotels International, the most accurate measure would be to use the Spanish bond. But, the rate of return is lower than its real value due to the quantitative easing policy made by the European Central Bank on 2012. Therefore, I find this measure unreliable.

It is true that several experts, such as Pablo Fernández, have mentioned that the risk-free rate is the one obtained through the purchase of the actual bond, and qualifies as an error to use a historical average.

According to the statements mentioned before, I have considered the best option to use the risk-free published by eminences of business valuation such as Pablo Fernández as the most accurate value.

It is also important to mention, that the time horizon matters, thus the risk-free rates in valuation will depend upon when the cash flow is expected to occur and will vary across time. Meaning that if your cash flow stretch out over the long-term, your risk free rate has also need to be long-term.

For this reason, I have looked at the evolution of the Spanish yield curve as shown below.

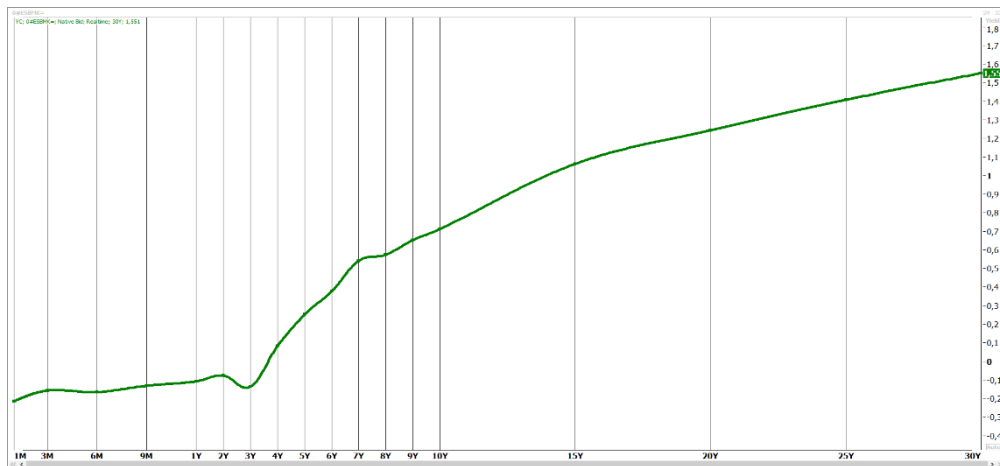


Table 5. Evolution of the Spanish yield curve

Own elaboration from the data provided by Thomson Reuters

As we can appreciate on the graph, the annual growth of the interest rate is almost near to 0%. Additionally, neither the ECB nor the IMF have mentioned a change in the policy of interest rates. Which makes me believe that the spot value of the risk-free is also valid for the long-term as we won't suffer an increase of interest rates.

Finally, we can conclude, that based on the information provided, the risk-free rate of Spain for the following years will be:

$$R_f = 1,3\%$$

Determination of the market return (R_m) and the market risk premium ($R_m - R_f$)

The market risk premium is part of the CAPM which analysts and investors use to calculate the acceptable rate of return for an investment. (Pablo Fernández, 2009)

The market risk premium (MRP) is defined as the additional return an investors will receive, or more precisely, expects to receive, from holding a risky market portfolio instead of a risk-free asset. (Pablo Fernández)

It is considered to be one of the most controversial financial parameters, mainly because the term designates four different concepts and realities. (Corporatefinanceinstitute, 2019)

- Historical market risk premium – The difference between the historical return of the stock market and the fixed income. Which will produce the same result for all investors as the value's calculation is based on past performance
- Expected market risk premium – Is the expected future performance of the fixed income exchange and is therefore based on the investor's return expectation
- Required market risk premium - Refers to the minimum amount investors should accept.
- Implicit market risk premium – Is the required market risk premium that corresponds to the market price.

It is true that at the moment, there is no consensus on the magnitude of the risk premium or on how to calculate it due to the heterogeneous expectations of investors.

Nevertheless, the theoretical formula we have in order to estimate is as follows:

$$\text{MRP} = \text{Expected rate of return (} R_m \text{)} - \text{Risk-free rate (} R_f \text{)}$$

According to Pablo Fernández the result should oscillate between the 3% and 10%.

In order to estimate the MRP I have considered the most accurate way to look at one of the analyst researches. Specifically, Pablo Fernandez's one, which estimates the rate by making an average of the results obtained by asking many professionals of the sector. As mentioned before, investors have heterogeneous expectations, therefore, I consider acceptable and reliable to use an average of those expectations.

$$\text{MRP} = 6,3\%$$

Based on the formula mentioned above, the expected rate of return would be:

$$R_m = \text{MRP} + R_f \rightarrow R_m = 6.3\% + 1.3\% \rightarrow R_m = 7,6\%$$

Determination of Beta (β)

The CAPM adjust for company-specific risk through the use of beta, which measures how a company's stock price responds to movements in the overall market; helping investors to understand whether a stock moves in the same direction as the rest of the market, and how volatile it is compare to the market. (Pablo Fernández, 2008)

Therefore, it describes the activity of a security's returns responding to swings in the market. It is calculated by dividing the product of the covariance of the security's returns and the market's returns by the variance of the market's returns over a specific period. (Kenton, Investopedia, 2020).

$$\text{Beta coefficient } (\beta) = \frac{\text{Covariance } (R_e, R_m)}{\text{Variance } (R_m)}$$

Where:

- **Re:** The return on an individual stock.
- **Rm:** The return on the overall market.
- **Covariance:** How changes in a stock's returns are related to changes in the market's return.
- **Variance:** How far the market's data points spread out from their average value.

If a stock has a beta of 1.0 it indicates that its price activity is strongly correlated with the market. Adding a stock to a portfolio with a beta of 1.0 doesn't add any risk to the portfolio and consequently doesn't increase the likelihood that the portfolio will provide an excess return.

A beta value of less than 1.0 means that the security is theoretically less volatile than the market, meaning the portfolio is less risky with the stock included than without it.

A beta that is greater than 1.0 indicates that the security's price is theoretically more volatile than the market. This indicates that if we add this stock to the portfolio both the risk and the return of the portfolio will increase.

The beta coefficient theory assumes that stock returns are normally distributed from a statistical perspective. However, financial markets are prone to large surprises, so in reality, returns aren't always normally distributed.

Since beta statistic is calculated using historical data points, it also becomes less meaningful for investors looking to predict a stock future's movements. Additionally, it doesn't factor any new information on the market becoming less useful for long-term investments.

For the valuation of Melia Hotels International, we could use the beta of the company given that it is a public company. But, based on the aforementioned, individual company

betas can at any point in time be heavily influenced by no repeated events; therefore, I have considered a more precise method to use an industry peer median rather than the historically measured for Melia Hotels International.

In order to estimate the beta for Melia Hotels International through this method, we should first estimate a beta for each company in the peer group and then convert each beta into unlevered beta. Once collected all the betas, we would take the median to ensure that the current beta is representative of the risk. Nevertheless, in order to simplify the method I have decided to look at the sector beta calculated by one of the eminences of company valuation. (Damodaran, 2020)

$$\text{Unlevered Beta } (\beta) = 0,64\%$$

But, if the company has debt, it's not fair to ignore that altogether in the calculation, as debt does create an additional risk and we need to account for it. Therefore, once we have the unlevered beta of the hospitality industry, we are now going to re-lever it to calculate the approximate levered beta for Melia Hotels International, in order to determine the company's true, inherent business risk, based on the comparable.

We are going to re-lever Beta for Melia Hotels International according to the following formula:

$$\text{Levered Beta} = \text{Unlevered Beta} * (1 + (1 - \text{Tax rate}) * (\text{Debt}/\text{Equity}))$$

Following this structure, the levered beta of Melia hotels International would be:

Unlevered Beta	0,64%
Tax rate	25%
Financial debt	1.991.354
Equity	1.825.417
Levered Beta	1,16%

Table 6. Calculation of the levered beta

Own elaboration

After determining the last variable of the cost of equity, we can now compute Ke

$$K_e = R_f + (R_m - R_f) \beta \rightarrow 1,30 + (7,6 - 1,3) * 1,16 = 8,61\%$$

For Melia Hotels International I have also considered relevant to include a company risk premium as I perceive a higher overall risk for Melia than for the rest of the sector. This additional risk can be illustrated in how the company has evolved in recent years, with a negative growth as well as a decreasing market capitalization, while the sector has been in a continuous growth as mentioned in the sector analysis, even Gabriel Escarrer recognized an evolution in the stock market which is “*extremely negative*” (Funds&Markets, 2019).

Melia Hotels International is therefore being punished in the stock market, which could be mainly caused by the decreasing activity in the Caribbean and the insecurity of Mexico. Additionally, it has also been affected by the lower arrival of tourists in the national market, specifically, in the Balearic or Canary Islands caused by the increasing competition from countries like Turkey and Egypt. (Velázquez, 2019). Not to mention the increasing competition coming from new platforms such as Airbnb, which is changing consumer trends and it is highly affecting the urban hotel industry.

Based on the aforementioned, and knowing that 38% of Melia’s profit margin comes from Spain and 40% from Americas, I have considered appropriate to include a company risk premium of 1% in order to represent the additional risk of the company.

$$\mathbf{K_e = 8,61\% + CRP = 8,61\% + 1\% = 9,61\%}$$

4.4.4. Capital structure

The capital structure is the particular combination of debt and equity used by a company to finance its overall operations and growth. The most accurate value would be to use the market value of both, we are going to use the market capitalization of Melia Hotels International in order to determine the value of equity (1.825.417) at December 2019. (Investing.com, 2020) .However, for the value of debt we are going to use its book value, as most of its debt is financial debt (96%) and only 4% is given by obligations and other negotiable securities. (CNMV, 2019).

	Thousands of €	Proportion
Equity	1.825.417	47,82%
Financial Debt	1.991.354	52,18%
Total	3.816.771	100%

Table 7. Capital Structure

Own elaboration from data provided by the Financial Statements of Melia and Investing.com

4.4.5. Calculation of WACC

Once we have obtained all the variables necessary concerning the calculation of the Weight Average Cost of Capital, we are now going to determine the discount rate we are going to use for the expected free cash flows of Melia Hotels International as to obtain the final value of the company.

$$\text{WACC} = 3,02\% * 52,18\% + 9,61\% * 47,82\% = 5,69\%$$

4.5. TERMINAL VALUE

When building a DCF Model, as mentioned before, there are two major components regarding the time horizon: The forecast period: For which we have considered a five year period, a reasonable amount of time to make detailed assumptions and the terminal value, which is the estimated value of a business beyond the explicit forecast period.

The terminal value, is a critical part of the financial model as it typically makes up a large percentage of the total value of the business. In order to calculate it, there are two main approaches: (Corporatefinanceinstitute, 2019)

- Exit Multiple: Which assumes the business will be sold for a multiple of some metric based on currently observed comparable trading multiples for similar business (e.g. EBITDAx)
- Perpetual growth: Also known as Gordon-Saphiro model, which assumes the business will continue to generate free cash flows at a normalized state forever (perpetuity).

For the valuation of Melia Hotels International, we are going to calculate through the Gordon-Saphiro model from which we can obtain the value of the perpetuity through the last free cash flow estimated, according to the following formula.

$$\text{Terminal Value} = \frac{\text{FCFn} * (1+g)}{\text{WACC} - g}$$

Where:

- **FCFn:** Last estimated Free Cash Flow
- **WACC:** Weight Average Cost of Capital
- **g:** Terminal growth rate

The terminal growth is the rate at which a firm's expected free cash flows are assumed to grow indefinitely. In other words, we will assume that firm's free cash flow will continue to grow at the terminal growth rate, rather than projecting the free cash flow for every period in the future.

It is very important to use the correct terminal growth rate. According to several analysts, it should be less or equal to the country's GDP growth rate, the rate of inflation or something else like that. Otherwise, eventually the company's FCF will exceed the GDP of the entire country, which wouldn't make sense.

For the valuation of Melia Hotels International, I am going to use as a reference the Spanish GDP which according to Banco de España is of 2% for 2019 and have an expected GDP of 1,7%, 1,6% and 1,5% for the years 2020, 2021 and 2022 respectively. (Banco de España, 2020)

However, in order to estimate the terminal value of Melia, considering the continuous decrease of its market capitalization, the increasing competition and the uncertainty that is facing nowadays, in order to be conservative, I have decided to use a terminal growth rate of 0.5%. At the same time, as Melia operates in a mature market and we are not expecting it to have an exponential growth, conversely, we are actually considering that it will stay more less the same, I find this rate the most accurate one.

Once applied the formula showed before, we obtain the following terminal value:

$$\text{Terminal Value} = 3.016.842\text{€}$$

4.6. RESULT OF THE VALUATION OF MELIA HOTELS INTERNATIONAL USING THE DCF MODEL

Following the assumptions taken for the valuation of Melia, we have come to the following free cash flow projections for Melia Hotels International as for the period 2020-2024 as well as its terminal value.

Data in thousand €	2020	2021	2022	2023	2024
Free Cash Flow	146.031	205.970	205.925	205.761	205.458
Terminal Value					3.978.525

Table 8. Free Cash Flow and Terminal Value of Melia

Own elaboration

Once obtained the free cash flows, we then have to discount them by the Weight Average Cost of Capital (WACC) previously calculated, in order to obtain its Enterprise Value:

Data in thousand €		2020	2021	2022	2023	2024
Free Cash Flow		146.031	205.970	205.925	205.761	205.458
WACC	5,69%					
NPV FCF	817.680	138.169	184.389	174.424	164.902	155.795

Terminal Value						3.978.525
WACC	5,69%					
g	0,5%					
NPV TV	3.016.842					3.016.842
Enterprise Value	3.834.523					

Table 9. Enterprise Value of Melia Hotels International

Own elaboration

The enterprise value is the value of a company's core business operations that is available to all shareholders (debt and equity holders).

We are now going to calculate the equity value, which is the total value of a company that is available to equity investors.

In order to calculate it, we are going to take the enterprise value and we are going to subtract the net debt which in the case of Melia is calculated with the following structure:

+ Long-term debt	799.135
+ Short-term debt	100.516
+ Liabilities for leases	1.264.282
+ Other liquid liabilities	244.988
-Other liquid assets	88.623
-Cash	328.944
= Total Net Debt	1.991.354

Table 10. Net debt of Melia

Own elaboration from data provided by the Financial Statements of Melia

Once we have calculated the net debt we are now going to compute in order to get the equity value:

$$\text{Equity Value} = 3.834.523 - 1.991.354 = 1.843.169$$

4.7. SENSITIVITIES

In this section, we will be introducing changes in the initial valuation of Melia Hotels International, with the aim of observing the variations that may exist in it. In order to do so, I have considered reasonable to make this sensitivity analysis on the most critical variables of the valuation, which in this case are, the terminal growth rate (g) and the Weight Average Cost of Capital (WACC).

The main reason for this sensitivity analysis is that we should not take the final enterprise value as a fixed figure, since this value has been calculated through assuming several facts which have been explained throughout the whole project.

Based on the aforementioned, in order to show an interval of the estimated value of Melia, different scenarios will be made in which both, the value of the terminal growth (g) and the value of WACC will be a calibration of the considered ones, while keeping all the other parameters constant.

		WACC				
		4,69%	5,19%	5,69%	6,19%	6,69%
TV (g)	0,40%	4.665.173	4.173.359	3.774.548	3.444.648	3.167.224
	0,45%	4.712.190	4.210.314	3.804.249	3.468.957	3.187.425
	0,50%	4.760.328	4.248.058	3.834.523	3.493.693	3.207.952
	0,55%	4.809.630	4.286.615	3.865.385	3.518.868	3.228.813
	0,60%	4.860.136	4.326.012	3.896.853	3.544.493	3.250.016

Table 11. Sensitivities scenarios

Own elaboration

According to the scenarios contemplated in the table above, we can see that the most pessimistic scenario occurs when the WACC is 6,69% and g is 0,4%, obtaining an enterprise value of 3.167.224. On the other hand, the most optimistic occurs when the WACC is 4,69% and g is 0,6% with an enterprise value of 4.860.136

However, the scenarios in line with our valuation are the ones highlighted in green, and will therefore be the ones considered in order to establish our valuation interval.

Valuation interval = 3.468.957 – 4.286.615

5. VALUATION METHOD: TRADING MULTIPLES

As previously mentioned in the conceptual framework of this project, various methods can be used in order to calculate the intrinsic value of a company, and consequently it is very frequent to complement each other.

We have based this project on the discounted cash flow method. However, in this section we are going to complement the preceding valuation by obtaining the value of Melia Hotels International using the trading multiples method, which is based on the analysis of ratios between companies among the same sector.

In order to calculate the value of Melia through this method, we first need to determine which companies are going to be used in order to calculate the ratios and thus be able to carry out the valuation.

The selection of the comparable group is one of the most important tasks in this method. Therefore, it is very relevant that the companies that are compared keep similarities between each other.

Melia Hotels International, as mentioned before, operates in different ways and through various brands of different ranges, therefore, the most accurate method would be to look for comparable companies depending on each business line. However, given the limited information we have access to and the greater complexity this would entail, we are going to use the same companies that Melia uses to define its main competitors in order to achieve a value as accurate as possible.

Among its competitors, I have decided to choose NH Hotels, Accor, Wyndham Hotels & Resorts, Hyatt Hotels and Marriott as the group of comparable companies.

- NH Hotels: Spanish multinational hotel chain founded in 1978. Its main headquarters are established in Madrid and it is listed on the Madrid stock exchange. NH Hotels mainly operates in Europe and Latin America through six different brands, over 400 establishments and 60.000 rooms. (NH Hotel Group, 2020). With 1.708.078 thousand € total revenues in 2019 and a net income of 98.851 thousand €. (CNMV, 2019)
- Accor: French group founded in 1967, headquartered in Paris and listed on the Euronex Paris Market, it is present in more than 95 countries with more than 4.200 hotels. (Accor Hotel Group, 2020). Its total revenue for 2019 accounted for 4.049.000 thousand € and a net income of 624.000 thousand €. (Accor, 2019)
- Wyndham Hotels & resorts: International hotel & resort chain based in the United States, founded in 1981 and listed in S&P500, it has 9.280 hotels under management and operates under 21 different brands around 75 countries. (Wyndham Hotels & Resorts, 2020). It had a total revenue of \$1.686.000 thousand for 2018 and a net income of \$162.000. (United States securities and exchange commission, 2019)
- Hyatt Hotels: American international hotel company founded in 1657, it has more than 640 hotels, 165.000 rooms and operates in 52 different countries under 10 different brands. (Hyatt Hotels, 2020). In 2018 it amounted for a total revenue of 4.685.000 thousand and a Net income of 250.000 thousand. (United states securities exchange commission, 2018)
- Marriott: International Hotel Company founded in 1993 in the United States, it has under its management more than 4.200 hotels distributed through 79 countries. Its operations are mainly based in America. It amounted for a total revenue in 2019

of 20.972.000 thousand and a net income of 1.800.000 thousand. (Marriott Hotels, 2020)

Once determined the group of comparable companies we are now going to make the valuation of the company through two different ratios (MarketScreener, 2020).

The PER is a ratio that relates the price of a company's share to the revenue that it generates. It represents a measure of quality of investors on the benefits of a certain company and is the most widely used on the stock market.

$$PER = \frac{Market\ Cap}{Net\ Income}$$

Company	2018	2019	2020	2021
NH Hotels	12.8x	20.4x	31.1x	17.4x
Accor	4.88x	19.4x	42.8x	22x
Wyndham	28x	38.8x	13.1x	10.2x
Hyatt Hotels	10.1x	12.4x	-111x	73.4x
Marriott	20.2x	39.9x	43.3x	15.8x
Average	15.19x	26.18x	32.58x	27.76x

Table 12. Calculation of PER

Investing.com and own elaboration

Valuation	2018	2019	2020	2021
Average	15.19	26.18	32.58	27.76
Net Income of Melia	144.236	121.679	140.179	144.022
EV of Melia	2.190.945	3.185.556	4.567.031	3.998.050
Net Debt of Melia	529.020	1.991.354	2.049.034	2.047.248
Equity Value Melia	1.661.925	1.194.202	2.517.997	1.950.802

Table 13. EV and Equity Value of Melia through PER

Own elaboration

As we can observe on the table above, through the price-earnings ratio we obtain a valuation interval of **(3.185.556 – 4.567.031)**, I have decided not to take the year 2018 into account as it doesn't have the effects of IFRS 16 included.

As we can see, the valuation range obtained through the DCF Model (3.468.957 – 4.286.615) is within the PER valuation interval.

On the other hand, we are going to calculate the EV/EBITDA (Enterprise Value/ EBITDA) ratio, this multiplier helps us obtain the market value of the assets of a company regardless of how it is financed. Therefore, it determines whether the company incorporates greater or lesser value than the one directly related to the resources generated. Accordingly, whether the company's management is higher or lower than the results obtained.

Company	2020	2021
NH Hotels	5.38x	5.18x
Accor Hotels	11.6x	16.9x
Wyndham Hotels	9.82x	8.55x
Hyatt Hotels	12.9x	9.59x
Marriott	17.7x	11.3x
Average	11.48x	10.3x

Table 14. Calculation of EV/EBITDA

Investing.com and own elaboration

Valuation	2020	2021
Average	11.48	10.3
EBITDA of Melia	507.339	510.891
EV of Melia	5.824.252	5.262.177
Net Debt of Melia	2.049.034	2.047.248
Equity Value of Melia	3.775.218	3.214.929

Table 15. EV and Equity Value of Melia through EV/EBITDA

Own elaboration

However, based on this ratio, the valuation range we obtain is higher than the one obtained through the two methods previously used, the range being (5.262.177 – 5.824.252). The EV/EBITDA multiple is a control measure that contrast the company's cash generation (EBITDA) with respect to its valuation and should therefore be very similar in companies within the same sector. However, this difference could be explained as follows:

Regarding the American chains, it is normal for their EV/EBITDA multiple to be much higher than the European ones, as it happens with many other sectors and it seems to be a bubble indication. However, I am more shocked by the difference in EV/EBITDA of Accor which is a French company, which I think is because the EVs that appear in the listed companies could be overvalued by the enormous liquidity that there is/was in the markets due to a simple supply and demand issue, there is a lot of demand to invest, but little supply which causes the price of companies to rise “artificially” in the markets, which is why it must be corrected with an ad hoc analysis as it has been done.

6. CONCLUSION

After carrying out the valuation of Melia Hotels International I have reach to the following conclusions.

- Developing the valuation of a company is a complex process due to the many variables that make up the valuation methods, in addition to the fact that these in many cases are based on assumptions.
- Although many analysts and authors refer to the DCF method as the most complete, we cannot conclude that there is actually a better method. Instead, depending on the circumstances or factors that influence a specific company, we should consider the most appropriate method.
- We have observed that in none of the cases the value that is obtained through any of the exposed methods constitutes the exact value of the company. In each and every model, the idea is to try to estimate the value of a company. Therefore, none of the values provided by each method constitute categorical statements regarding the value of the company.
- The valuation of a company should therefore be taken as a guideline value. Accordingly, the results obtained by any valuation method should provide a range of values between which the market price of a company will fluctuate.
- The DCF model is very susceptible to giving very different values depending on the hypotheses used, therefore we recognize that in order to use this method and consider it efficient, a full knowledge of the business and its future plan is necessary in order to make the most accurate assumptions for its future projections.

- Based on the sensitivities table, we have seen that the WACC directly influences the value of the company, the higher the discount rate the lower the current value of the future cash flows and therefore, the lower the value of the company. Keeping the same forecast in the variables and slightly changing the discount rate leads to very disperse results.
- The combination of the different valuation methods allows us to achieve more precise results than the isolate application of each one of them.

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9. APPENDIX

Cuentas Consolidadas	Historical					CAGR	Forecast				
	31/12/2015	31/12/2016	31/12/2017	31/12/2018	31/12/2019		31/12/2020	31/12/2021	31/12/2022	31/12/2023	31/12/2024
	mil EUR	mil EUR	mil EUR	mil EUR	mil EUR		mil EUR	mil EUR	mil EUR	mil EUR	mil EUR
Balance de situación	2015	2016	2017	2018	2019		2020	2021	2022	2023	2024
Inmovilizado	2.419.686	2.540.562	2.473.950	2.760.640	4.114.756	4,49%	4.113.543	4.112.752	4.112.375	4.112.402	4.112.825
Fondo de comercio	61.036	60.769	60.714	67.999	72.267		72.267	72.267	72.267	72.267	72.267
Inmovilizado inmaterial	139.091	141.136	135.900	149.437	116.267	1,50%	118.011	119.781	121.578	123.402	125.253
Inmovilizado material	1.578.997	1.693.393	1.649.614	1.856.801	1.923.267	0,50%	1.932.883	1.942.548	1.952.260	1.962.022	1.971.832
Activos por impuesto diferido	132.186	135.941	122.334	239.781	297.298		297.298	297.298	297.298	297.298	297.298
Otros activos fijos	508.376	509.323	505.388	446.622	454.402	-2,77%	441.829	429.604	417.716	406.158	394.920
Derechos de uso					1.251.255		1.251.255	1.251.255	1.251.255	1.251.255	1.251.255
Activo circulante	743.343	782.908	746.857	714.519	640.904	-3,64%	610.179	629.552	648.765	667.832	686.765
Existencias	81.460	63.954	53.255	26.492	29.260	-22,58%	51.253	51.611	51.973	52.337	52.703
% s/ventas	2,8%	4,7%	3,5%	2,8%	1,4%						
Deudores	254.488	275.269	258.072	249.076	194.077	-6,55%	246.562	248.288	250.026	251.776	253.538
% s/ventas	13,6%	14,6%	13,3%	13,6%	10,8%						
Otros activos líquidos	58.778	76.910	103.645	126.049	88.623	10,81%	90.494	91.127	91.765	92.407	93.054
% s/ventas	5,0%	3,4%	4,3%	6,9%	4,9%						
Tesorería	348.617	366.775	331.885	312.902	328.944	-1,44%	221.871	238.526	255.002	271.313	287.470
Total activo	3.163.029	3.323.470	3.220.807	3.475.159	4.755.660	10,73%	4.723.722	4.742.304	4.761.140	4.780.234	4.799.590
Fondos propios	1.314.549	1.563.613	1.522.757	1.384.204	1.286.030		1.286.030	1.286.030	1.286.030	1.286.030	1.286.030
Capital suscrito	39.811	45.940	45.940	45.940	45.940		45.940	45.940	45.940	45.940	45.940
Reservas	1.234.223	1.414.725	1.343.369	1.194.028	1.118.411		1.099.911	1.096.068	1.091.856	1.087.224	1.082.112
Beneficio neto	40.515	102.948	133.448	144.236	121.679		140.179	144.022	148.234	152.866	157.978
Pasivo no corriente	974.684	881.352	891.410	1.383.885	2.699.654		2.711.641	2.723.808	2.736.157	2.748.692	2.761.414
Deudas financieras a LP	511.237	584.684	653.928	734.910	799.135	1,50%	811.122	823.289	835.638	848.173	860.895
Otros pasivos fijos	252.263	76.402	25.567	402.370	384.544		384.544	384.544	384.544	384.544	384.544
Pasivos por arrendamientos					1.264.282		1.264.282	1.264.282	1.264.282	1.264.282	1.264.282
Pasivos por impuestos diferidos	161.715	184.689	167.107	189.312	221.888		221.888	221.888	221.888	221.888	221.888
Change in deferred taxes		22.974	-17.582	22.205	32.576						
Provisiones	49.469	35.577	44.808	57.293	29.805		29.805	29.805	29.805	29.805	29.805
Change in provisions		-13.892	9.231	12.485	-27.488						
Pasivo líquido	873.796	878.505	806.640	707.070	769.976		726.051	732.466	738.953	745.512	752.145
Deudas financieras	399.424	290.502	281.092	166.592	100.516	2,00%	102.526	104.577	106.668	108.802	110.978
Acreedores comerciales	397.344	459.663	443.274	474.009	424.472		440.056	443.137	446.239	449.362	452.508
% s/ventas	24,3%	25,9%	23,5%	25,9%	23,6%						
Otros pasivos líquidos	77.028	128.340	82.274	66.469	244.988		183.468	184.753	186.046	187.348	188.660
% s/ventas	10,1%	4,4%	7,1%	4,4%	3,6%						
Total pasivo y capital propio	3.163.029	3.323.470	3.220.807	3.475.159	4.755.660	10,73%	4.723.722	4.742.304	4.761.140	4.780.234	4.799.590

	Historical					Forecast					CAGR
	31/12/2015 mil EUR	31/12/2016 mil EUR	31/12/2017 mil EUR	31/12/2018 mil EUR	31/12/2019 mil EUR	31/12/2020 mil EUR	31/12/2021 mil EUR	31/12/2022 mil EUR	31/12/2023 mil EUR	31/12/2024 mil EUR	
Cuentas Consolidadas	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Ingresos de explotación	1.738.207	1.801.962	1.885.166	1.831.315	1.800.748	1.813.353	1.826.047	1.838.829	1.851.701	1.864.663	0,70%
Importe neto Cifra de Ventas	1.738.207	1.801.962	1.885.166	1.831.315	1.800.748	1.813.353	1.826.047	1.838.829	1.851.701	1.864.663	0,89%
Consumo de mercaderías y de materias	-214.823	-222.783	-215.232	-190.785	-199.035	-208.935	-210.398	-211.871	-213.354	-214.847	
% s/ revenues	11,5%	12,4%	12,4%	11,4%	10,4%	11,5%	11,5%	11,5%	11,5%	11,5%	
Resultado bruto	1.523.384	1.579.179	1.669.934	1.640.530	1.601.713	1.604.418	1.615.649	1.626.958	1.638.347	1.649.816	
Otros gastos de explotación	-1.230.306	-1.293.553	-1.359.681	-1.314.003	-1.123.803	-1.097.079	-1.104.758	-1.112.492	-1.120.279	-1.128.121	
% s/ revenues	60,5%	70,8%	71,8%	72,1%	71,8%	60,5%	60,5%	60,5%	60,5%	60,5%	
Dotaciones para amort. Inmov	-129.130	-109.880	-124.305	-120.979	-255.116	-256.902	-258.700	-260.511	-262.335	-264.171	
% s/ revenues	14,2%	7,4%	6,1%	6,6%	14,2%	14,2%	14,2%	14,2%	14,2%	14,2%	
Resultado Explotación	163.948	175.746	185.948	205.548	222.794	250.437	252.190	253.956	255.733	257.524	7,97%
Ingresos financieros	12.165	12.378	31.623	20.543	20.720	23.671	27.041	30.892	35.291	40.317	14,24%
Gastos financieros	-74.494	-40.536	-41.523	-40.697	-87.203	-87.203	-87.203	-87.203	-87.203	-87.203	4,02%
Resultado financiero	-62.329	-28.158	-9.900	-20.154	-66.483	-63.532	-60.162	-56.311	-51.912	-46.886	1,63%
EBT	101.619	147.588	176.048	185.394	156.311	186.905	192.029	197.645	203.822	210.637	11,37%
Impuestos sobre sociedades	-61.104	-44.640	-42.600	-41.158	-34.632	-46.726	-48.007	-49.411	-50.955	-52.659	25,00%
Resultado Actividades Ordinarias	40.515	102.948	133.448	144.236	121.679	140.179	144.022	148.234	152.866	157.978	31,64%
Ingresos extraordinarios	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	
Gastos extraordinarios	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	
Resultados actividades extraordinarias	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	
Resultado del Ejercicio	40.515	102.948	133.448	144.236	121.679	140.179	144.022	148.234	152.866	157.978	31,64%

Cash Flow	Historical					Forecast				
	31/12/2015	31/12/2016	31/12/2017	31/12/2018	31/12/2019	31/12/2020	31/12/2021	31/12/2022	31/12/2023	31/12/2024
	mil EUR	mil EUR	mil EUR	mil EUR	mil EUR	mil EUR	mil EUR	mil EUR	mil EUR	mil EUR
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
EBIT	163.948	175.746	185.948	205.548	222.794	250.437	252.190	253.956	255.733	257.524
- Taxes	-98.583	-44.640	-42.600	-41.158	-34.632	-46.726	-48.007	-49.411	-50.955	-52.659
+ Depreciation/Amortization	-129.130	109.880	124.305	120.979	255.116	256.902	258.700	260.511	262.335	264.171
+ Provisions		-13.892	9.231	12.485	-27.488	0	0	0	0	0
+ Deferred taxes		19.219	-3.975	-95.242	-24.941	0	0	0	0	0
= CFO	-63.765	246.313	272.909	202.612	390.849	460.613	462.883	465.056	467.113	469.035
- CAPEX	0	-227.268	-71.355	-282.937	-296.192	-255.689	-257.909	-260.133	-262.361	-264.594
- NOF	0	59.044	11.507	66.494	2.694	-58.893	996	1.003	1.010	1.017
- Rest		-175.594	-50.780	369.518	-1.273.349	0	0	0	0	0
= CFI	0	-343.818	-110.628	153.075	-1.566.847	-314.582	-256.914	-259.131	-261.352	-263.577
- Change in Equity	1.314.549	146.116	-174.304	-282.789	-219.853	-140.179	-144.022	-148.234	-152.866	-157.978
+ Change in Debt	0	15.837	13.768	-49.323	1.440.950	-47.522	15.502	15.734	15.970	16.210
- Interest		-28.158	-9.900	-20.154	-66.483	-63.532	-60.162	-56.311	-51.912	-46.886
= CFF	1.314.549	133.795	-170.436	-352.266	1.154.614	-251.233	-188.682	-188.810	-188.808	-188.654
= CF	1.250.784	36.290	-8.155	3.421	-21.384	-105.202	17.288	17.114	16.953	16.804