



CATÓLICA
LISBON

SCHOOL OF BUSINESS & ECONOMICS

UNIVERSIDADE CATÓLICA PORTUGUESA

Equity Valuation Dissertation

Walt Disney Company

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30th December 2014

Dissertation submitted in partial fulfilment of requirements for the degree of MSc in Finance, at the Universidade Católica Portuguesa, December 30th 2014.



Walt Disney Company is a diversified multinational mass media company, being one of the most known worldwide. Although it is the world second largest broadcasting company, it is primarily known by the production of animated films through its studio entertainment segment.

After a deceleration on its growth, as consequence of the economic financial crisis of 2008, the company has retaken the growth trend over the later years, due to the improvement of the economic environment worldwide and the company's investment and development on its operational segments.

Its revenues have been increasing in the later years, being this trend expected to maintain. This is supported by the plans that Walt Disney has already disclosed, as the release of new animated films and the opening and expansion of new theme parks, but also by the possibility of expanding its activity to new geographic markets, as it did in China and India. The developments of the company's mature segments through acquisitions and new projects, jointly with the progress of the recent interactive media segment, are factors that can dictate the fastness of the company's growth.

Moreover, the expected increase in Walt Disney capital expenditures and working capital represent its ambition to be one of the market leaders in its different business fields.

This way, Walt Disney presents itself as a growing company, with dynamic and adventurous upcoming years which, considering its easiness to finance itself turns it into a low risk investment opportunity in financial markets.

Recommendation:

BUY

Price Target:

\$ 88,52

Company Financial Information:

Enterprise Value: \$172.500 million

Equity Value: \$153.294 million

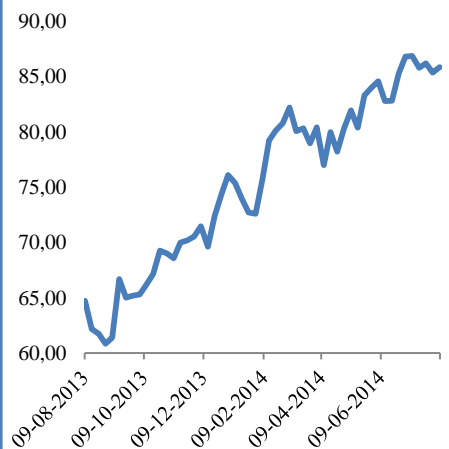
Debt Value: \$19.206 million

Shares Outstanding: 1.732 million

Market Price: \$85,38

Credit Rating (S&P): A

Price Performance:



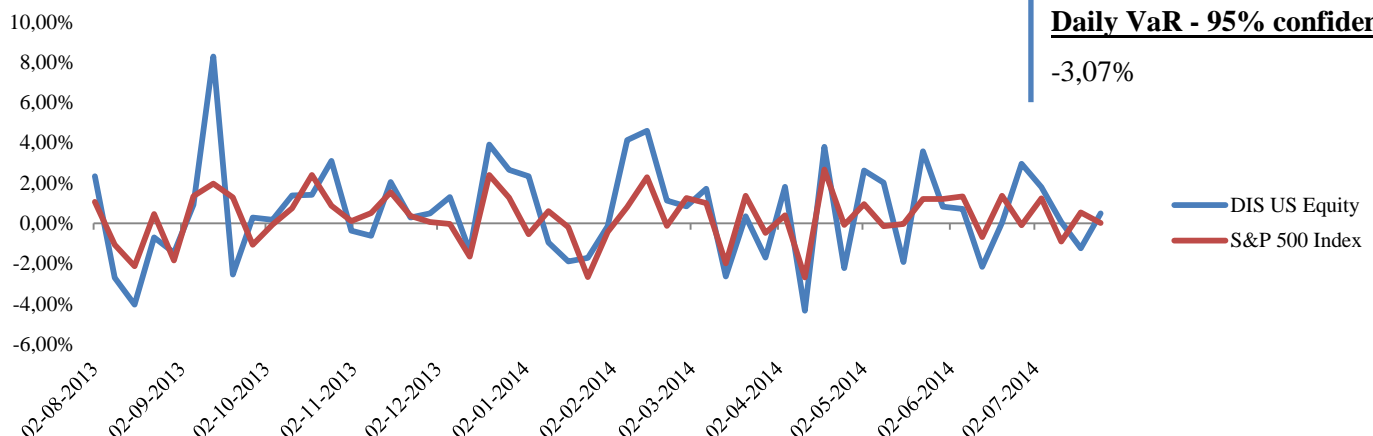
52 Week Price Range:

\$60,83 – \$86,89

Daily VaR - 95% confidence

-3,07%

Price Variance Performance



Abstract

This dissertation aims to evaluate Walt Disney Company (ticker: DIS US Equity). The evaluation process is done through three different mechanisms in order to achieve a more accurate and complete valuation exercise.

The first valuation method is the Discounted Cash Flows model, in which each company's segment is valued separately, therefore obtaining the company's overall valuation by combining them all. This model provides a Walt Disney share price estimation of \$88,52 which, compared to its market price of \$85,38, represents a buying opportunity.

The second valuation method is the Economic Value Added model. Through this valuation technique, the Walt Disney share price is estimated as of \$77,89 which, compared to its market price, represents a selling opportunity.

The third and last valuation method presented is the relative valuation. By applying the Enterprise Value to EBITDA multiple, it is achieved a company share price of \$83,96 which also represents a selling opportunity.

Lastly, it is compared the valuation obtained through this dissertation to the one accomplished by J.P.Morgan, in which the Walt Disney share price is estimated as \$90,00. By doing so, one can conclude that the valuation in this dissertation is more conservative, being the different assumptions made examined further in this report.

Acknowledgements

This dissertation is the result of a hard working long process, which allowed me to enrich my knowledge in the equity valuation field.

I want to express my gratitude to the ones that were around me during this period and gave me continuous support, because without them this would be much more difficult.

In the first point, I want to thank to professor José Carlos Tudela Martins for the patience, support and guidance through the fulfilment of this dissertation.

I want also to thank to João Castro and Inês Mira for their help and exchange of hints and advices for this valuation exercise during this period.

Per last, as this dissertation represents the culmination of my academic journey, I want to truly thank to my parents and sisters, André Bernardino, Ana Queiroga, Nuno Madeira, João Vieira, Roula Kalavrytinou and Valia Dimitriadi for their help and for everything they taught me, making of me who I am today.

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1. Introduction

The present dissertation targets to evaluate Walt Disney Company (ticker: DIS US Equity), a public listed company. The company, one of the most known companies worldwide, is nowadays a complex and expanded one, and so detailed and deep analysis should be paid under its valuation.

Therefore, firstly are introduced several methods to perform a valuation exercise, and their respective advantages and disadvantages. The objective of this is to, according to Walt Disney characteristics and particularities, determine the methods that best suit for this company. This is followed by a description of the company and the industries in which it operates, with intention to contextualize the valuation exercise.

Then, Walt Disney is evaluated through the Discounted Cash Flows model, the Economic Value Added model, and the relative valuation method. After reaching a dissertation's share price for the company, it is compared to the one yielded by the market (S&P 500 Index) at 1st August, 2014.

The dissertation finishes with the comparison between the valuation obtained within this study and the one performed by J.P.Morgan. This comparison aims to identify the main assumptions and variables that lead to different estimated valuations.

2. Literature Review

This section is dedicated to the presentation of the different methods that may be used to perform a valuation exercise. The models are defined and explained, accompanied by the identification of their respective advantages and disadvantages.

In the end of this section are identified the methods to be applied in this valuation exercise, as well as the reasoning behind these choices.

2.1. Introduction

In this section are explained the different methods that can be applied on a valuation exercise. Fernandez (2007) highlights the importance of understanding the mechanisms of a valuation exercise not only due to its significance for valuation in mergers and acquisitions “but also because the process of valuing the company and its business units

helps identify sources of economic value creation and destruction within the company”¹, providing therefore useful information for the company’s management.

Damodaran (2005) states that analysts use a wide spectrum of models to perform valuation exercises, ranging from the simplistic to the most sophisticated ones. Nevertheless, according to Luehrman (1997), a valuation exercise is always a function of three essential factors: cash, risk and timing. As one concludes later in this section, these factors are managed differently according to the different methods applied, which in part justify the different valuations they lead to.

Even though one may believe that different models yield different valuations, Young et al (1999) state that it is indifferent which model is used, since they all should lead to comparable values if the assumptions made are consistent transversely on the different models.

2.2. Relative Valuation

Damodaran (2006) states that the relative valuation purpose is to value assets based on the price of similar ones in the market. Even though relative valuation is not considered the best valuation method, it is very used and useful in financial studies. It is a perceptive tool, easy to perform and gives investors a general estimative of the asset considered compared to the overall market.

Nevertheless relative valuation has some limitations that may be critical, and can turn the valuation misleading. According to Fernandez (2001), multiples are useful when used as a second stage of a valuation, complementing the valuation performed by any other method. Further, the author states that “a comparison with the multiples of comparable firms enables us to gage the valuation performed and identify differences between the firm valued and the firms it is compared with”². Moreover, Goedhart et al (2005) emphasize that, if executed properly, a relative valuation can be useful for companies to stress-test its forecasted cash flows and to hold useful deliberations about its strategic position to create value, compared to its competitors.

The attractiveness of the multiples approach is that it is not a hard practical process. The first step is to find comparable companies that are priced in the market, which are defined by Damodaran (2006) as the ones that exhibit similar risk, cash flows and

¹ Fernández, Pablo. "Company valuation methods. The most common errors in valuations." Research Paper no 449 (2007).

² Fernandez, Pablo. "Valuation using multiples. How do analysts reach their conclusions?." IESE Business School (2001).

potential growth as the company analyzed. Nonetheless this definition is not coherent, as Foushee et al (2012) point out that for relative valuation purposes, the only relevant comparable companies “are those that compete in the same markets, are subject to the same set of macroeconomic forces, and have similar growth and returns on capital”³. The second step consists in scaling the market prices to a common variable to generate comparable standardize prices. It is at this point that most of the controversial principles of relative valuation arise. According to Damodaran (2012), the multiples composition has to be consistent, i.e. if the numerator of a multiple is a market value, then it is expected that the denominator is a market value as well. The same logic applies if either the numerator or denominator is a book value. Nevertheless, this condition is discredited by several analysts, which argue that multiples just have to be consistent across companies, therefore being computed in the same way.

The third and last step consists solely on applying the multiple obtained on the value driver in order to determine the company’s valuation.

It is important to realize that certain multiples may fit better in some situations, being therefore imperative to understand their fundamentals. According to Goedhard et al (2005), even though price-to-earnings multiple is the most used one in financial analysis, it is powerfully affected by capital structures. Consequently, it can be misleading when applied to companies with negative earnings – this way the P/E ratio is not meaningful, as well as when applied to companies with increasing debt levels, since P/E ratio increases with leverage. A plausible alternative is the usage of enterprise value to EBITDA multiple, since it is less susceptible to changes in the capital structure. However, this may also be misleading if a change on capital structure lowers the cost of capital, which consequently increases the multiple.

Moreover, some multiples display a trend. On their empirical study, Liu et al (2002) concluded that forward earnings measures are the ones that perform better, as opposite to book value of equity and sales that perform worst according to their rank. This way authors concluded that forward looking multiples perform greater in relative terms than others which, according to them, is explained by the stronger predictability power of future cash flows they have compared to historical ones.

³ Foushee, S., Koller, T. and Mehta, A. (2012), “Why bad multiples happen to good companies?”, corporate finance practice.

Lastly, it is important to notify that multiples may ignore risk factors and companies' potential growth. Also, it is possible that the market is “wrong”, and so analysts have to be critical, reasonable and sensible to arrive at an accurate valuation.

2.3. Peer Group

A peer group of a company can be defined as a group of companies that share some characteristics with the company analyzed, being therefore acceptable to use them as comparative companies for valuation purposes.

Even though there are several approaches to estimate the peer group, in this study is adopted the clusters analysis. This approach was developed by MacQueen (1967), being thenceforward been applied in researches of several fields of study. It is a useful tool to create a more accurate peer group, consisting in minimizing the Euclidean distance of the observations considered to the centroids.

In order to do so, one starts by defining the number of clusters desired. Then, after establishing the variables to be used as criteria to define the peer group, they are standardized with the purpose of minimize the distance to the centroids. This results in new centroids with the average values for the observations of each cluster. New clusters are then pointed to the observations, being this step repeated until observations get constantly associated to the same cluster, getting therefore stable.

2.4. Discounted Cash Flows Model

As mentioned above, the valuation process of a company can be based on several methods which are considered or not according to the companies' characteristics, information required and demanded results. However, the Discounted Cash Flows (DCF) model appears as the most popular method, described as “the most accurate and flexible method for valuing projects, divisions, and companies”⁴.

The model consists in forecasting future cash flows to the company, discounted at an appropriate rate that reflects its risk. Moreover, this method can be applied based both on the Free Cash Flows to the Firm (FCFF), which displays all sources of capital to the company, or on the Free Cash Flows for the Equity (FCFE), which displays solely the cash flows available for the company's shareholders.

⁴ Goedhart, Marc, Timothy Koller, and David Wessels. "The right role for multiples in valuation." McKinsey on Finance 15 (2005): 7-11.

In order to obtain the FCFF, one has to forecast the future cash flows of the company. A problematic approach may appear when establishing the time period to be used on this forecasting exercise. Usually, analysts use a period ranging from 5 to 10 years. However, if a company is already performing on its steady state, it should not be required such a long period. So, by adding to the after tax income of each period the depreciations and amortizations, and subtracting the capital expenditures and increments on working capital, the FCFF of each period is obtained, which are then discounted at an interest rate that represents both the company's cost of debt and equity – weighted average cost of capital (WACC). The firm value is then obtained by:

$$\text{Enterprise Value} = \sum_{t=1}^N \frac{\text{FCFF}_t}{(1+\text{WACC})^t}$$

On the other hand, to achieve the FCFE, one should forecast the cash flows from operations, add the company's new debt, and subtract capital expenditures and principal repayments to debtholders. In this case, the cash flows obtained should be discounted at the cost of equity (R_e) since, as it is considered the cash flows that derive for shareholders, the discount rate should represent their opportunity cost. Therefore, the company's equity value is calculated as:

$$\text{Equity Value} = \sum_{t=1}^N \frac{\text{FCFE}_t}{(1+R_e)^t}$$

Despite being calculated on different ways, if the assumptions made are coherent and consistent over the two methods, the same valuation should be achieved independently the one used, since they are related as follows:

$$\text{FCFE} = \text{FCFF} - \text{Interest Payments} * (1-T) - \text{Principal Repayments} + \text{New Debt}$$

The choice of the cash flow used is strongly related to the capital structure of the company. According to Pinto et al (2010), the FCFF is often choose if the company is levered, either having a negative FCFE or a changing capital structure. The authors argue this based on the fact that the cost of equity may be more sensible in changes on capital structure, and so the WACC approach should be adopted.

One of the risks associated to the DCF model is the incorrect cash flows forecast. Since it is tried to “predict the future”, one should always be conscious that the values achieved may be unreliable. Consequently, as the forecasting time period increases, the risk of failing increases as well, diminishing the accuracy of the valuation. Therefore,

after perform the estimations for the explicit period, one calculates the terminal value – value of the firm after the explicit period. This notion is going to be developed below, but one may already consider it in the DCF formula as follows:

$$\text{DCF Valuation} = \sum_{t=1}^N \frac{\text{Cash Flow}_t}{(1+R)^t} + \frac{\text{Terminal Value}_N}{(1+R)^N}$$

Despite being the preferred method to evaluate a company, DCF does not provide the same information as other models. For instance, it does not discriminate the tax shields advantages nor the distress costs of a company. A solution to these issues is introduced later in this section with the Adjusted Present Value model.

2.5. Terminal Value

The terminal value of a company is its anticipated value on a certain date in the future. In fact, it is a quite powerful tool to project cash flows for a several-year period, since it allows one to deduce the value of a company over that time period without doing all the detailed computations required, as happens in the explicit period. It appears this way as a solution for the forecasting problem, since “cash flows cannot be projected forever”⁵.

It is one of the most important instruments when performing a valuation exercise through the DCF model, since it is “responsible” for a large proportion on the company’s valuation, as it represents its value on perpetuity. Its usage is only reasonable if, from the time period considered on, the company is not going to be very different from the last years of the explicit period – the company is performing on its steady state. The steady state is translated into the stability of the company financial ratios (i.e. EBITDA margin), revenue and cost of sales’ growth, etcetera.

According to Damodaran (2013) there are three different methods to estimate the terminal value: liquidation method, market multiples and stable growth model.

The liquidation method assumes that the company will be liquidated at a certain point in time, selling all its assets and paying its debts. This way, the value that the company will come up after this is the liquidation value, estimated based on the company assets book value. Even though it “always represents the company’s minimum value as a

⁵ Damodaran, Aswath.2013.”Chapter 10 – Value Enhancement and Cash-Driven Valuation Models”. In CFA Institute Investment Books, 223-226.

company's value"⁶, Damodaran states that it does not represent the potential earning power of the assets.

The second method is the market multiples, in which the value of a company is estimated by applying the multiples approach to the firm's earnings or sales revenues in that year. Damodaran notifies that if the multiples are projected from comparable firms, it may result in a dangerous mix between relative and Discounted Cash Flow valuations. The last method is the stable growth model. In opposition to the liquidation approach, this method presupposes that the company will reinvest some of its cash flows into new assets, continuing to operate. As said previously, it is assumed that a company is in its steady state when the terminal value is computed. If one considers the perpetual reinvestment of its cash flows, then the company is assumed to grow at a constant rate (g) in perpetuity. Therefore, the terminal value is computed as:

$$\text{Terminal Value}_t = \frac{\text{Cash Flow}_{t+1}}{R - g}$$

As any method, stable growth model has some limitations. Damodaran states that "since no firm can grow forever at a rate higher than the growth rate of the economy in which it operates, the constant growth rate cannot be greater than the overall growth rate of the economy"⁷. Still, the author refers that if the company considered is a multi-national, then the growth rate in the global economy will be its limiting value.

2.6. Discount Rate

The discount rate is the interest rate at which cash flows should be discounted in order to reflect the opportunity cost and risk of a company, therefore being used to determine their present value. As mentioned, the cost of capital will depend on the risk associated to the company, but also on its capital structure. The Weighted Average Cost of Capital (WACC) has been considered the preferred rate to discount cash flows on valuation exercises, due to its calculation easiness but also, according to Luehrman (1997), because of its ability to consider the tax advantage from the company's borrowings. Its formula is given as follows:

$$\text{WACC} = \frac{D}{D + E + P} * R_d * (1-T) + \frac{E}{D + E + P} * R_e + \frac{P}{D + E + P} * R_p$$

⁶ Fernández, Pablo. "Company valuation methods. The most common errors in valuations." Research Paper no 449 (2007).

⁷ Damodaran, Aswath. Valuation approaches and metrics: A survey of the theory and evidence. Now Publishers Inc, 2005.

Plus, Luerhman states that WACC is the appropriate rate to use only in case the considered company has a simple capital structure. Otherwise, one has to adjust WACC for tax shields, issue costs or exotic debt securities in cases of a more complex capital structure.

Nevertheless one should be aware that there are several foundations to compute the WACC, being the first the known as risk-free rate. In order to compute a correct risk-free rate, it is important to be sure that the rate used is the long-term government bond instead of the short-term one, since the riskless of short-term government bond may be due to its short time period. Besides that, as Fernandez (2004) states, the risk-free rate that should be used is the government bond verified at the time the company is evaluated, and therefore the usage of any historical average of it is a serious mistake.

The risk-free rate is a required component to compute the cost of equity, but also to obtain both the levered beta of the company and the market risk premium.

Beta is a tool used to measure the market risk of an asset, that is, the correlation of the asset's value with the market.

There are several ways to obtain or calculate the beta of a company. In this study the methodology adopted is the one suggested by Damodaran. Such method consists in regressing the company's stock returns on the returns of the benchmark considered. By performing the following relationship, it is possible to deduce the beta demanded.

$$R_i = \alpha + \beta * R_m$$

However, Damodaran points two issues that should be dealt carefully in this approach. The first concern is related to the time period in which the beta is regressed. Even though that a larger time frame allows obtaining more observations, one should pay attention to the fact that it can capture periods in which the company's characteristics were different, which can bias the beta estimation. The other concern is connected to the return intervals used. Again, a smaller return intervals lead to more observations, but may lead to biased results.

Still, one should realize that the beta used to compute the cost of equity is the known as levered beta. It arises in case the company has debt, and therefore the incremental risk from the leverage has to be considered. It is computed as:

$$\beta_L = \beta_U * [1 + (1-T) * D/E]$$

Lastly, to compute the cost of equity one also needs the market risk premium, which is defined as the difference between the returns of a market index and the returns of the

risk-free rate. In order to obtain it, it is computed the market returns, and then the market risk premium is calculated as the difference between the obtained market returns and the risk-free rate. Finally, the market risk premium is computed as the average of its historical values. Damodaran states that this method to obtain the market risk premium may not be the most accurate for markets with short and volatile industries, as well as for European markets.

Having all the required variables to compute the cost of equity, it is estimated based on Capital Asset Pricing Model approach as:

$$R_e = R_F + \beta_L * [E(R_M) - R_F]$$

Thereafter one is able to compute the Weighted Average Cost of Capital, by including also the cost of debt and the tax rate.

2.7. Adjusted Present Value

The Adjusted Present Value model consists in valuing a company as if it was financed solely by equity, taking into account its interest tax shields (ITS) and bankruptcy costs. The model can be described as the “application of the basic DCF relationship to each of a business’s various kinds of cash flow and then add up the present values”⁸.

According to Luehrman (1997), the APV model is less sensible to mistakes than the WACC approach, and is able to unbundle the value of the different components that constitute it.

The methodology of this model is reasonably easy in theory, but in can be delicate in practical terms. It shares the first step with the DCF model, consisting in forecast the cash flows across the time. Then, while in the DCF model the cash flows are discounted at the WACC, in the APV they are discounted at the cost of equity, since it is assumed that the company is all financed by equity. Then attentions are turned to the “real” debt of the company, whereas one has to forecast the debt repayments to the debtholders of the company across the time, as well as its interest expenses. Consequently, it is in this step that the interest tax shields are estimated, being then discounted to the present value. Since there are different approaches to compute the present value of the interest tax shields, the methodology of each of them is presented later in this section.

In addition to the interest tax shields, the bankruptcy costs of the company are the other foundation in the APV model. Bankruptcy costs can be defined as all costs associated to

⁸ Luehrman, Timothy A.1997. “What’s it worth? - A General Manager’s Guide to Valuation”. Harvard Business Review, pp.132-142.

a company when it is unable to repay its outstanding debts. Their estimation is considered the most intricate step in this valuation model since there is not an explicit method to do it and, as they are accounted for the company valuation, its incorrect estimation may lead to a misleading valuation. Still, the general formula of the expected bankruptcy costs (EBC) is provided as follows:

$$\text{EBC} = \text{Probability of Default} * \text{Bankruptcy Costs}$$

The problem related with this formula is that, while there is a too vague proxy to determine the probability of default, to estimate a company bankruptcy costs there is no proxy at all.

The approach to be used to estimate the probability of default is based on the traded bond rating of a company. Damodaran provides a table with interest coverage ratios, and then attributes to each of them a rating and its associated spread. Therefore, one needs to determine the company's interest coverage ratio, and then verify to which spread it is associated. The spread obtained for a company will be representative of the company probability of default.

The estimation process of expected bankruptcy costs turns more difficult when one tries to predict the bankruptcy costs. While direct bankruptcy costs may be simpler to estimate, the indirect ones are quite more difficult. Yet, Altman (1984) states that indirect bankruptcy costs should not be measured, as they represent unexpected losses. After all this variables have been identified and the expected bankruptcy costs calculated, the value of a company through the APV is given by:

$$V_L = V_U + \text{PV}(\text{ITS}) - \text{EBC}$$

As one can conclude from the formula, the value of a company calculated through the APV model is a function of the value of the company “unlevered”, its interest tax shield and expected bankruptcy costs.

2.8. Present Value of Interest Tax Shields

It is a very common mistake people think that an all equity financed company worth more than the same company but with debt. Indeed a company with debt has obligations and scheduled repayments, but also has interest tax shields (ITS) – reduction in income taxes that results from taking an allowable deduction from taxable income. This effect happens because debt is a tax-deductible expense, and so it is a way for the company to save cash flows, therefore increasing its value. However, debt only increases the value

of a company until a certain level – optimal debt-to-equity ratio. This is because the increase of the debt level also increases the distress costs the company is subject to, and so if the debt-to-equity ratio is higher than the optimal one, the company has more expenses with distress costs than advantages from the tax shields.

The interest tax shields are one of the biggest differences between the DCF and the APV models, as the last one discriminates their value, while DCF model accounts it directly on the WACC approach. However there is not a single and coherent way to compute the present value of the interest tax shields. Fernandez (2006) states that in case a company does not have a constant debt level, anticipating its increase, the formula that should be applied is:

$$PV(ITS) = \frac{D * R_D * T}{(1 + R_D)^t}$$

In the other hand, Cooper and Nyborg (2006) suggest the formula as follows:

$$PV(ITS) = \frac{D * R_D * T}{(1 + R_e)^t}$$

This approach differs from the one of Fernandez (2006) in the rate used to discount the tax shields. Fernandez affirmed that the formula could be accepted if the company maintains its debt levels, otherwise its risk would change, as the discount rate.

2.9. Dividend Discount Model

The Dividend Discount Model is a valuation model that requires different inputs than the other mentioned models. In fact, it is based on the theory that a company's stock is worth the sum of all its future dividend payments, discounted to their present value.

The DDM can be split into two separate models: the Gordon Model and the two-stage Dividend Discount Model.

According to Damodaran (2006), the Gordon Model assumes that the value of a company results from its expected dividends in the next period, its cost of equity and its expected growth rate in dividends in perpetuity. This relationship is given as follows:

$$\text{Value of Stock} = \frac{E(\text{Div}_{t+1})}{R_e - g}$$

The model is simple to perform, but may be misleading if not used properly. Actually, the Gordon Model is hyper-sensitive to changes in the expected growth rate, since it represents the growth in perpetuity. Consequently, if the correct rate is not applied, the value of stock achieved may be hugely incorrect. Moreover, assuming that a company

does not pay dividends periodically, neither at a constant growth rate, the application of this model may be difficult and unadvised.

The second model is the two-stage Dividend Discount Model, which aims to fill the gap of a constant growth rate indicated in the Gordon Model. In this model there is an initial phase in which the dividend growth rate is not stable, and then at the steady state it turns stable and constant in perpetuity. However, Damodaran criticizes this model in the sense that it is difficult to determine the duration of the time period in which dividends grow at non-stable rates. Further, the author states that the move from the initial phase to the second is done suddenly – from one time period to the other, which is not likely to happen.

This model is reasonable if applied on companies that fill certain characteristics and perform on determined sectors. Otherwise, its application can be non-sense.

2.10. Economic Value Added

The Economic Value Added is a valuation method focused on measuring the surplus value created by an investment. Its formula is given as:

$$\text{EVA} = (\text{Return on Invested Capital} - \text{Cost of Capital}) * \text{Capital Invested}$$

Damodaran defines the return on capital as the “true” cash flow return on capital gained on an investment, while the cost of capital results from the weighted average cost of capital of the different financing instruments used in an investment. The author alerts that both should be on market values, as is a common mistake from practitioners to use book values. Moreover, the author identifies the capital invested as the capital invested both in assets-in-place and on future growth.

The EVA model is not one of the most famous models used on valuation exercises, but it is strongly related with the DCF model. According to Damodaran, the value of a firm can be written in terms of the economic value added of projects in place and the present value of economic value added of future projects, which can be seen as a decomposition of the DCF model.

The model is seen as a Net Present Value (NPV) since it cares about the value added of companies. However, unlike NPV theory, not always the companies with the superior EVA are the best, since in this model the focus point is changes on EVA and not its absolute value. Consequently, when choosing between a “below-expectation” EVA company and one with no EVA at all, the one without EVA should be chosen as expectations are the driver of stock price.

Finally, Damodaran suggests that all investment strategies based on EVA should be cautiously defined, highlighting the ones done on firms where expectations are built over prices of “high” surplus returns, since those expectations can be misleading.

2.11. Conclusion

After study all the methods explained in this section, it was decided to perform Walt Disney valuation through relative valuation, the Economic Value Added and Discounted Cash Flows models.

The relative valuation is coherent across practitioners as a good second-stage valuation due to its simplicity and easy interpretation. Also, it allows evaluate the company based on its comparable companies, therefore turning possible to understand the position that Walt Disney has in the market. The multiples approach is done based on the Enterprise Value-to-EBITDA, Enterprise Value-to-EBIT, Enterprise Value-to-Sales and Price-to-EBITDA ratios. The criterion for this selection was the complementarity. Three of the mentioned ratios provide as output the enterprise value of a company. So, it was chosen to compute it on several different ways in order to have a notion of the sensibility and variation the output can have according to the value driver used.

The price based multiple is also considered due to its acceptability and easiness to understand. Plus, the Price-to-EBITDA mixes a metric that is capital structure neutral (EBITDA) with another which is not, and therefore a different approach to the company valuation can be obtained through this ratio. It is believed that this whole group of ratios can give a more accurate valuation of Walt Disney, as jointly they solve some limitations of relative valuation.

Another valuation method that was chosen to be used in this valuation exercise is the Economic Value Added. Even though this one is not one of the most appreciated models, it is believed that it provides interesting hints about the company's profitability, which is understood as an important add-in to a valuation exercise.

The last valuation method selected was the Discounted Cash Flows model, based on the WACC approach. Walt Disney has been exhibiting a stable capital structure in relative terms, being therefore reasonably acceptable that this capital structure will keep on the following years. Therefore, as the capital structure is expected to keep stable, the WACC and the levered beta are also expected to maintain their levels when forecasting the cash flows, which support a more accurate valuation through DCF model based on the WACC approach.

When comparing the APV model with the DCF one, the last was chosen because the company has a stable capital structure as referred above. Also, the uncertainty derived from mainly the estimation of bankruptcy costs which, in the absence of an accurate model, may lead to a misleading valuation, was strongly taken into consideration in this choice.

Lastly, it was not considered the Dividend Discount Model. Despite its simplicity, the model is not believed to be the most accurate method to evaluate Walt Disney, as the company has not a clearly defined dividend policy.

3. Industry Overview

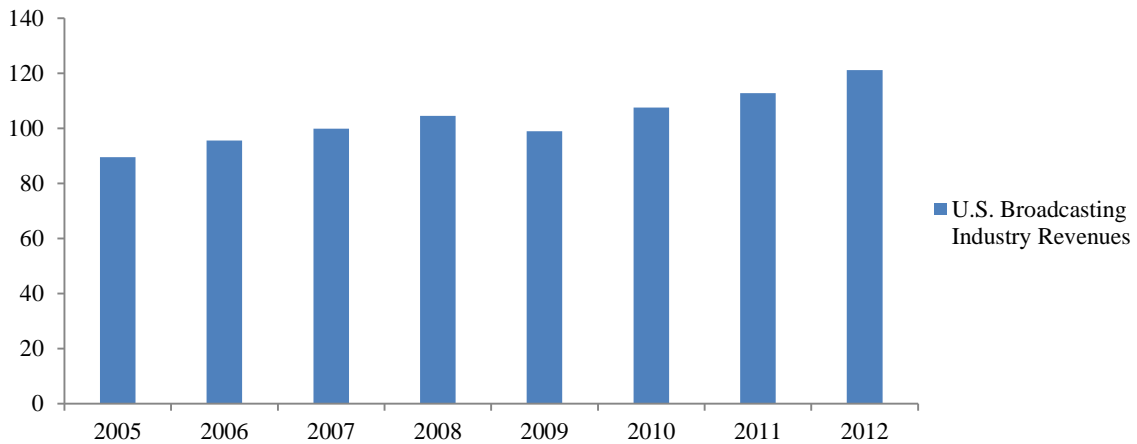
Walt Disney, as a diversified multinational company, is inserted in several market sectors all over the world. In this section is given an outlook about the sectors in which it operates: TV broadcasting, filmed entertainment, video game, tourism and hotel, and consumer products sectors.

3.1. TV Broadcasting Sector

Over the last years it has been verified a tremendous change over media content and, most important, its distribution. This resulted in the emerging of several opportunities for companies, especially to those linked to the distribution and consumption of digital content.

The easiness of access to all kind of content, especially through mobile devices, turned the sector more competitive, as consumers can choose what they want to see and when. Therefore companies have to adjust their strategies in order to satisfy their target customers. In fact, this adaptation process already displayed results, as nowadays companies' products supply consists in multi-platform ones, in order to answer to the demand that *new* selective customers make.

The emergence of opportunities for distribution of digital companies supported the sector's growth, as can be seen in graph 1.



Graph 1 - U.S. broadcasting industry revenues from 2005 to 2012. Values are expressed in USD billion. Data source: Statista.

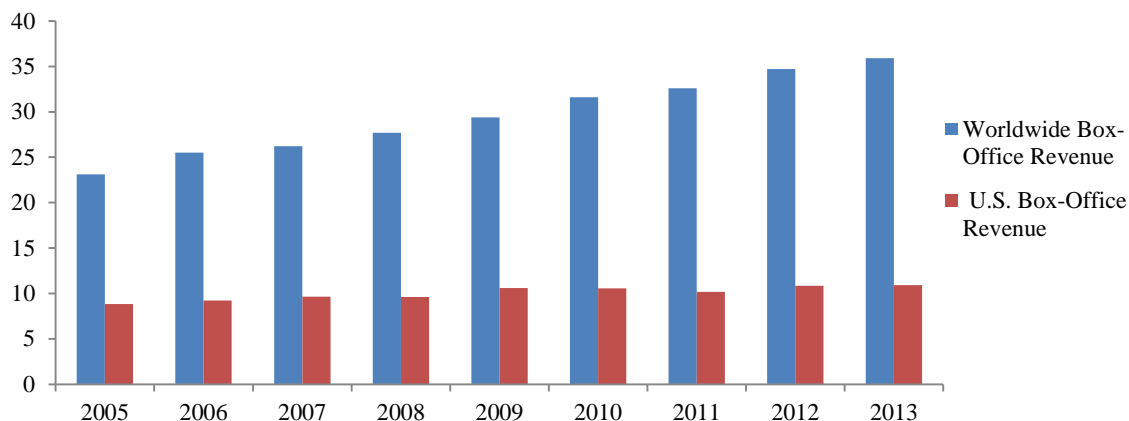
The revolution in the sector displays several opportunities for companies, as they can expand and compete for target customers that previously were out of their sight, but can also raise risks for the ambitious ones. The most important risk is the one related to the investment required to make part of this new trend, as delivering content for a variety of platforms imply huge costs with manufacturing and operating systems, digital content distributors, telecom service providers and intellectual property managers.

Nevertheless, as one can see, there has been a big increase in the revenues generated by the industry since 2009. This is due to the distribution revolution already mentioned, but also to the range of options that customers demand nowadays, therefore giving opportunities to specialized companies to arise and compete for their target customers.

3.2. Filmed Entertainment Sector

Associated to the filmed entertainment sector since it appeared, U.S. has one of the oldest film industries, highlighted by Hollywood, which supported the spread of the industry worldwide.

In graph 2 can be seen the evolution of revenues generated from the box-office both in the U.S. and worldwide. As one can realize, the industry increased considerably over the last years, growing worldwide approximately 55% from 2005 to 2013. This growth is due to the growing demand in emerging markets, namely China, but also to the constant growth of mature markets, as of U.S. and Japan.



Graph 2 – Worldwide and U.S. box-office revenue generated from 2005 to 2013. Values are expressed in USD billion. Data source: Bloomberg.

Moreover, in the table below can be seen the domain that U.S., jointly with Canada, have over this industry, whereas its box-office revenue represents approximately 30% of the worldwide revenues. Plus, it can be verify the presence of emerging markets in the top-10, as of India and South Korea.

Country	Box-Office Revenue	Worldwide %
U.S. & Canada	10.900	30,36
China	3.600	10,03
Japan	2.400	6,69
United Kingdom	1.700	4,74
France	1.600	4,46
India	1.500	4,18
South Korea	1.400	3,90
Russia	1.400	3,90
Germany	1.300	3,62
Australia	1.100	3,06
Worldwide Industry	35.900	-

Table 1 - Top 10 box-office revenue generating countries worldwide in 2013. Values are expressed in USD million. Data source: Bloomberg.

Besides the increase of the industry’s demand and supply, the entertainment industry has been growing over the last years also due to the innovation that has affected it, leading to changes of traditional processes. In fact, the delivery mechanisms typically used for movies’ distribution – i.e. physical home video, as DVD and Blu-ray, are changing. Nowadays, consumers tend to use more streaming and broadcasting services and, according to PwC Global entertainment and media outlook report, the revenues generated by this modern delivery system will overtake the ones generated by the traditional one.

The growth that the industry has been displaying and the changes caused by innovative processes, as the delivery mechanisms, support the potential that the industry has. In figure 1 can be seen the growth potential of the industry geographically. As was perceptible by the analysis of the sector, emerging markets as Argentina, Brazil, Russia, Mexico and India, jointly with China and United States, are some that are expected to keep increasing over the next years, supporting the growth of the industry. The expectations about China should be highlighted, as its forecasted revenues are expected to go from \$3,6 billion in 2013 to \$7,0 billion in 2018. Lastly, United States’ revenues generated by this sector are still expected to domain at a worldwide level, even though they are estimated to increase at a lower rate, forecasted to reach \$13,7 billion in 2018.

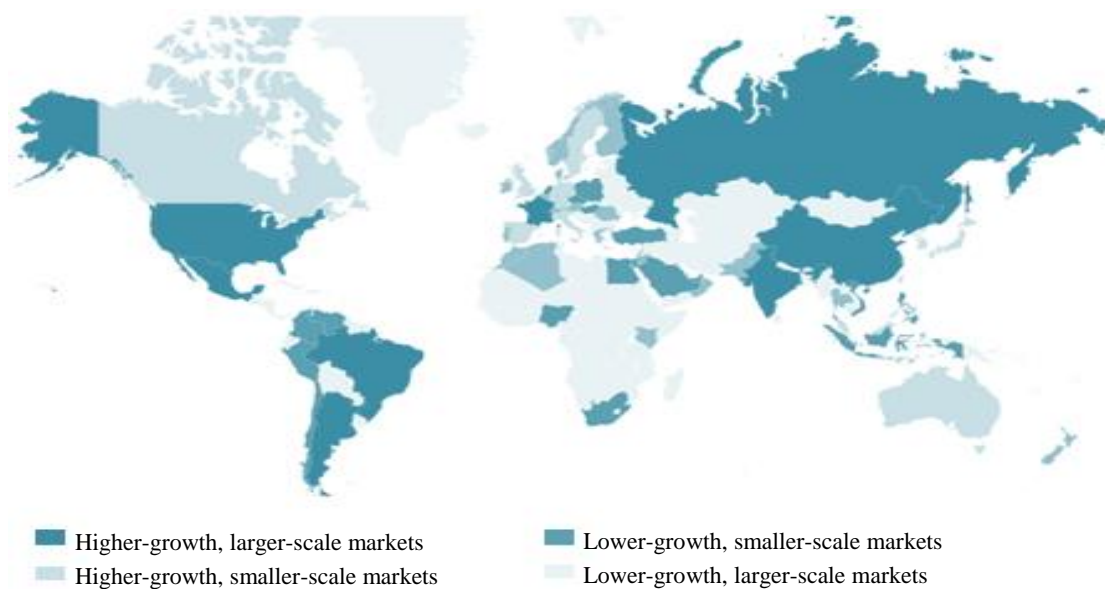


Figure 1 - Filmed entertainment sector forecasted rate of growth and scale, from 2013 to 2018, for each country. Source: Global entertainment and media outlook 2014–2018, PwC, Informa Telecoms & Media.

3.3. Video Game Sector

Focused in the production of video games, the sector has been increasing over the last years, due to the global mobile games and online console game stores. Graph 3 illustrates the evolution of the revenues generated by the sector worldwide. The biggest contribution for the revenues generated in the last years comes from Japan, which generated \$22,29 billion in 2013.



Graph 3 – Worldwide and U.S. video game sector generated revenue from 2005 to 2013. Values are expressed in USD billion. Data source: Video Game Sales Wiki.

The industry has been developing itself, with the introduction of social and casual gaming and the regularization of online games which were considered lost to “piracy”. Plus, there has been an expansion of console gaming companies on emerging markets, mainly in India and Brazil, whereas in the later one the opening of a manufacturing plant by Sony represents a clear shot to drive growth.

In figure 2 one can see the growth potential of each market by geographical area, from which can be conclude that Brazil, Mexico, Russia and India are the countries where the sector is expected to boost. In the U.S. the growth is expected to be slow, besides being a large-scale market, while in the African countries the expectations are very low, as it is a continent with difficult access to this technology.

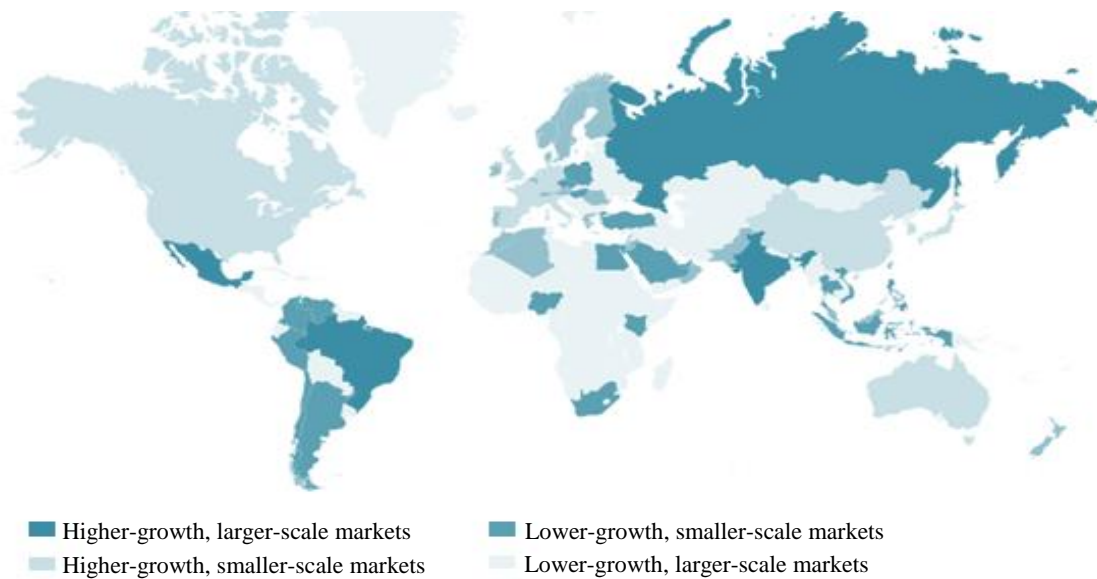


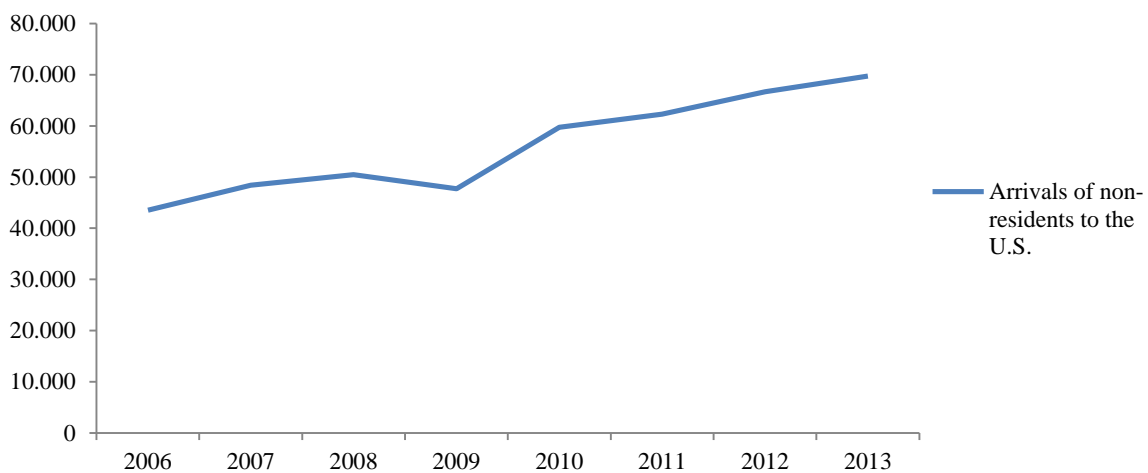
Figure 2 - Global video games market forecasted rate of growth and scale, from 2014 to 2018, for each country. Source: Global entertainment and media outlook 2014–2018, PwC, Informa Telecoms & Media.

3.4. The Tourism and Hotel Sector

Being one of the biggest sectors worldwide, the tourism and hotel sector is actually the fifth largest employer in the U.S., and one of the most important economy drivers.

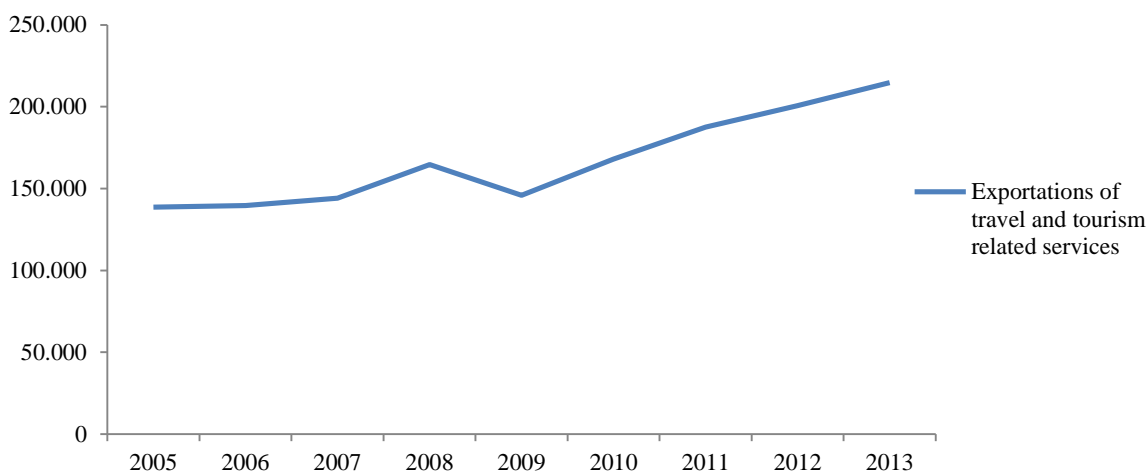
The promotion of travel and tourism as a top creating priority for the U.S. government supported the generation of several strategies that led the industry to grow considerably. The most important one is the destruction of barriers to trade in travel services in order to increase travel flows, by engaging with international partners and by keeping the aviation liberalization. The streamline of the visa application process is also being performed in several countries, namely China and Brazil. Plus, the White House established an overarching goal of increasing American jobs by attracting 100 million international visitors, which are estimated to spend \$250 billion per year, by the end of 2021. Moreover, it has been intended to encourage Americans to travel within the American territory. Promoting the U.S., enabling travel and tourism to and within itself, providing world-class customer service and visitor experience, and coordinating federal agencies with public and private partners are some strategies adopted to maximize the potential of the sector.

By analyzing graph 4, one can realize that there has been a constant increase in the arrivals since 2009, being registered in 2013 a historical record in U.S.



Graph 4 – Total arrivals to U.S. from non-residents. Values are expressed in thousands. Data source: ITA – Office of travel & tourism industries.

The performance of the sector is reinforced by the analysis of the value generated by exportations of travel and tourism related services, as can be seen in the graph below.



Graph 5 – Amount generated by exportations of travel and tourism related services in U.S. All values are expressed in USD million. Data source: Bloomberg.

Revenues generated by exportations of the sector have been increasing considerably, displaying a growth rate of 7% over the last two years, registering \$215 billion in 2013.

3.5. The Consumer Products sector

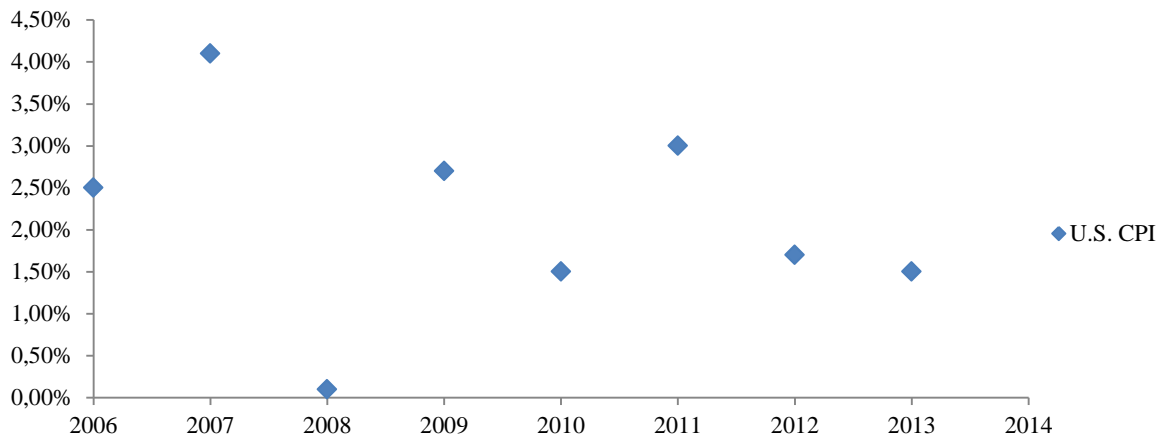
After the fall this sector had during the financial crisis of 2008, it has been recovering and reaching the growth levels it displayed before the crisis. This idea is reinforced by Pat Conroy, U.S. Consumer Products leader at Deloitte LLP, which states that the embracement of technology to shop can boost the sector, even though several companies already have that facility.

As the economic environment worldwide has been improving, the purchasing power of consumer for this sector is increasing as well. Furthermore, the incorporation of technology on consumer shopping facilitates the interaction of consumers within the sector and can support the growth of companies' sales. Still, Pat Conroy states that the digital influence can be a disadvantage for several companies, as it allows consumers to compare the different prices charged by them, and choose the ones that best suits to them.

An important factor for the development of this sector is the growth it will have in emerging markets. Despite the fact that these ones are seen as a source of opportunities to drive growth by several consumer product companies, since emerging market economies are growing faster than developed ones, the pace of their growth has reduced substantially in the later years. Therefore, a weaker demand for consumer product than what is expected may be verified in the short-term, which may lead to a slower

expansion of those companies over new markets. Nevertheless, the trend that has been verified over the last years give insights that the sector will keep increasing.

By analyzing graph 6, one can verify the behavior of the U.S. consumer price index (CPI). Even though it can be observed that the price level changes have been always positive, its scale has been decreasing over the last years, and therefore consumers have a higher purchasing power compared to past years, whereas the increase of price levels was higher, *ceteris paribus*.



Graph 6 – Consumer Price Index of U.S. Data source: Bloomberg.

The decrease of the consumer price index over the last years, compared to previous ones, can be due to the stronger competition in the sector, but also to the introduction of digital technologies. In fact, as consumers nowadays can consult the product's prices through apps or companies' websites, companies have to adjust their selling strategy in order to do not lose their target customers to their competitors.

4. Walt Disney Company

4.1. Company History

“If you can dream it, you can do it. Remember that this whole thing started with a dream and a mouse”

Founded in October 16, 1923, by Walt Disney and Roy Disney, the Walt Disney Company was created to give life to dreams. The company started producing some short films and cartoon series which did not provide wealthy financial results. So, in order to change the situation of the company emerged the idea of creating cartoons of a mouse character, *Mickey Mouse*, which ended to turn to be Walt Disney image. Its first cartoon release was an immediate smash hit, and allowed the company to push the boundaries of

animation further. As a result of that goal, it was produced the first feature-length animated film, *Snow White and the Seven Dwarfs*, which became the highest-grossing film of that time by 1939. With the profits generated by this animated film, Walt Disney was able to construct a studio complex in California, the *Walt Disney Studios*, in which the company is headquartered to this day. In order to be able to keep growing and take advantage of the unexplored market at the time, the company had its initial public offering in April 2, 1940. Popular animated films were produced, as *Pinocchio* (1940), *Dumbo* (1941), and *Bambi* (1942), but the World War II forced the company to discover other ways to grow.

In fact, the World War II obliged several Disney's animators to go to the armed forces, which limited the company's staff and consequently decreased its operating capital. So in October 1954, the ABC network launched Disney's first regular television series, which ended to become one of the longest-running primetime series of all time. It allowed Walt Disney to introduce new projects and broadcast older ones, representing the company's first entry in the broadcast television market. Later, ABC became partner of the company in the financing of its next venture located in the middle of California.

The *Disneyland* series would lead the company to another expansion. On July 18, 1955, in Anaheim, California, Walt Disney opened *Disneyland Park* to the general public. This represented the beginning of the company's expansion through a new market, with the goal of provide to families a place where they could fun all together. Meanwhile, plans were being made in order to build a second Disney theme park, being announced in November 1965 as *Disney World*, which later ended to be known as *Walt Disney World*. This announcement included plans for theme parks, hotels, and even a model city outside Orlando, Florida.

Years later, in 1979, in order to achieve a higher film production level, Walt Disney entered a joint venture with Paramount Pictures, marked as the first time Disney collaborated with another studio. At the same time, it was being prepared the launch of the *Disney Channel*, a subscription-level channel on cable systems, which ended to happen in April 18, 1983.

The next years were highlighted by the *Walt Disney World*. In 1978, the plans for a second *Walt Disney World* were announced, which would open in October 1982 by the name of *EPCOT Center*. Plus, jointly with the Oriental Land Company, Walt Disney built its first theme park outside United States in April 1983, in Japan, called *Tokyo Disneyland*.

Despite the success of the company's theme parks, the financial position of Walt Disney was vulnerable. Therefore, a new CEO and president were announced for the company, in order to turn it more profitable and sustainable. While the first were brought from Paramount Pictures, the second one was from Warner Bros. with the main goal of boosting the company's animation studio. The results ended to be a huge success, with the productions of *The Little Mermaid* (1989), *Beauty and the Beast* (1991), and *The Lion King* (1994). Disney moved to the first place in box office receipts, and had its revenues increasing by 20% every year.

By the time, Walt Disney started expanding by acquiring and investing in several entities in order to enlarge its brand, as for Anaheim Angels (a baseball team), media sources (including a merger with Capital Cities/ABC, which brought broadcast network ABC and ESPN networks), and Starwave. This last one represented the company's first move into the internet field, which was reinforced by the acquisition of Infoseek in 1999. This year was also important due to the launch of Walt Disney cruise line, with the production of *Disney Magic* and *Disney Wonder*, the company's first ships.

The year of 2005, marked by the appointment of a new director and a new CEO, was a memorable one for the company, with the opening of *Hong Kong Disneyland* and the production of the first film using 3-D animation, *Chicken Little*.

The studio entertainment segment of Walt Disney had a huge increase with the purchase of Pixar Animation Studios for \$7,4 billion in 2006, the addition of The Muppets Studio in 2007, and later the purchase of Marvel Entertainment, Inc for \$4,2 billion in 2009.

In 2007, Walt Disney renamed *Buena Vista Games* to *Disney Interactive Studios*, creating this way a new segment of activity for the company. *Buena Vista Games* was initially spun out of Walt Disney for strategic reasons, but then it was believed that it should return to be part of the company, representing a growing new segment for it.

The last years have been grateful for the company. In 2011 the company inaugurated the *Shanghai Disney Resort*; in 2012 it acquired UTV Software Communications, aiming to expand their market to India and Asia, and in December 12 it acquired Lucasfilm for \$4,06 billion.

The current year has been associated to more acquisitions, namely Marker Studios, a YouTube company, but also involved the announcement of 11 startups that would be in the company's accelerator program, which aims to develop technology for new media and entertainment.

4.2. Company Segments

Walt Disney, a company that started with the purpose of producing entertainment films, is nowadays one of the most diversified worldwide entertainment companies. Together with its subsidiaries, the company has operations in five different business segments: Media Networks, Parks & Resorts, Studio Entertainment, Consumer Products, and Interactive Media.

4.2.1. Media Networks

The media networks segment, the most profitable one from Walt Disney, includes broadcasting services and all kind of television services, as cable television networks, television distribution, radio networks and domestic television stations.

The segment main revenues are provided from the fees charged to satellite, cable and telecommunications service providers, from the sale of advertising time in programs for commercial announcements, and from television stations affiliated to its broadcast television network. Consequently, its highest expenses include production and programming costs, technical support and operating labor.

The segment can be split into two service lines. The first one, cable networks, produces programs and acquires rights from third-parties to air programs on Walt Disney networks. It includes ESPN, ABC family, SOAPnet, A&E Television Networks, and Disney Channels Worldwide. Its revenues are derived mainly from fees charged for the right to deliver programming, and regarding ESPN and ABC family, revenues are also obtained from the sale of time in network programs to advertisers, for commercial announcements. The second service line, the broadcasting services, includes a domestic broadcast network, the television production and distribution operations, and 8 owned domestic television stations. Besides, Walt Disney has interest in a joint venture, Hulu LLC, which distributes film and television content on the internet. The biggest resource the segment has is the ABC Television Networks, which accounts for more than 240 affiliation agreements with local television stations.

4.2.2. Parks & Resorts

Walt Disney owns and operates several amusement structures all over the world, while owns ownership interests in many others. The company owns the Walt Disney World Resort in Florida, Disneyland Resort in California, Aulani Resort and Spa in Hawaii, some Disney Vacations clubs, and the Disney Cruise Line and Adventures. In the other

hand, it manages and has effective ownership interest in Disneyland Paris, Hong Kong Disneyland Resort and Shanghai Disney Resort, while licenses the operations of the Tokyo Disney Resort in Japan.

Revenues associated to this segment are mainly generated from the sale of admissions to theme parks, the sales of cruise vacation packages, the room nights at hotels, and the rental of vacation club properties. Consequentially, its main costs include labor expenses, depreciations, marketing, and maintenance of the infrastructures.

Walt Disney World Resort has to be highlighted, as it is the company's biggest resort, which includes several theme parks, hotels, dining, entertainment and sport complexes, and golf courses. The Resort possesses the "home" of Cirque du Soleil, and has several attractions and restaurants sponsored by other corporations.

Moreover, by having 51% effective ownership interest in Disneyland Paris, 48% interest in Hong Kong Disneyland Resort, 70% interest in Shanghai Disney Resort (the resort will only open in 2015, but proposals and contract details are already agreed), and by managing the Tokyo Disney Resort, in which it owns royalties on its generated revenues, Walt Disney can strategically position itself worldwide among the best entertainment companies in the most notorious countries.

4.2.3. Studio Entertainment

The studio entertainment segment is the most popular one from Walt Disney. This segment produces and acquires live-action and animated motion pictures, direct-to-video content, musical recordings and live stage plays. It generates revenues mainly from the distribution of films in all markets, including theatrical, home entertainment and television ones, under the Walt Disney Pictures, Pixar, Marvel, Touchstone and Lucasfilm banners.

Walt Disney has been trying to expand its scope for the films distribution, which is supported by the acquisition of 99% interest of India's UTV, one of the leading film production studios and film distributors in India. This movement represents the strategic approach the company aims to perform, in order to reach not overcrowded markets.

Regarding the theatrical market, the company produces and distributes both live-action films and full-length animated films, accounting for 991 and 98 releases as of August 2014, respectively. The company usually distributes and markets its own filmed products directly in both domestic and most international markets, while in some they are distributed by independent distribution companies

The television market consists in home entertainment distribution through several mechanisms, as through pay-per-view, pay television, or cable network. This is a way the company has to explore its theatrical films releases and, at the same time, reclaim the older ones.

Per last, the segment is also exploring the music and theatrical production, through the Disney Music Group and Disney Theatrical Productions. While the first consists in producing concerts, distribute recorded music and license its music properties throughout the world, the second one is based in producing live entertainment events, as Broadway musicals.

4.2.4. Consumer Products

This segment engrosses mainly retailers, but also licensees and publishers, throughout the world to develop, publish, and sell the wide diversity of products based on Walt Disney's intellectual property, as its successful movies and live-action television programming, through merchandise licensing and retail business.

The segment generates royalty revenues by licensing the characters from its studio productions to third parties to use on consumer merchandise. The royalties established are typically based on a fixed percentage of the retail selling price of the products. The merchandising covers a varied range of products, as toys, furnishings, food, footwear, and consumer electronics.

The most significant costs associated to this segment are related to the costs of goods sold, distribution expenses and the retail occupancy costs. Regarding the last one, the costs are supported by the several stores that Walt Disney possesses to spread its brand, whereas 214 are in North America, 88 in Europe and 46 in Japan.

4.2.5. Interactive Media

As the “youngest” segment, the interactive media segment consists in creating and delivering branded entertainment across interactive media platforms. Its main output are the interactive games and the interactive media, whereas the first consists in producing multi-platform games for distribution, and the second in developing branded online services.

The revenues from this segment are generated from the sale of multi-platform console games, subscriptions for online and mobile games, online advertising and sponsorships. It also generates fees from the licensing to third-party game publishers.

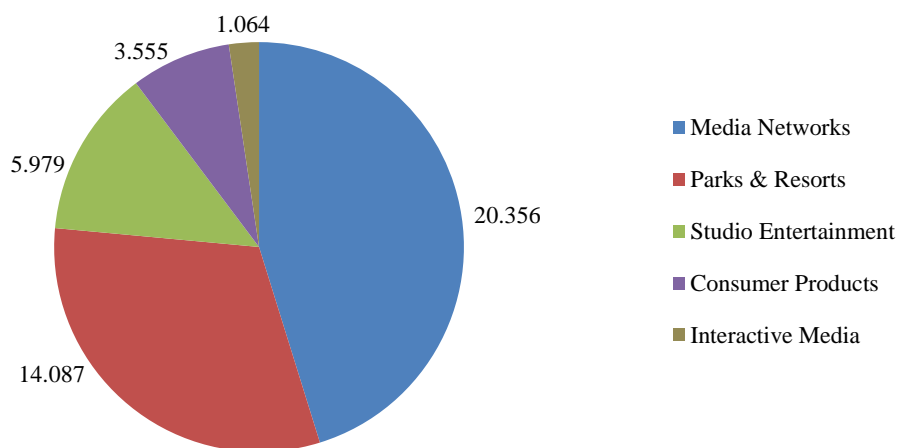
The segment aims to reach all the possible markets for interactive games, and so nowadays the company develops console, mobile, social, and virtual games on a worldwide basis. Plus, the interactive media segment also focus in developing, publishing and distributing interactive content through several platforms (i.e. Disney on YouTube), and develop applications for families.

5. Valuation Overview

In order to achieve Walt Disney valuation accurately, several assumptions have to be made in order to forecast the performance of the company over the explicit period, from 2015 to 2017. Therefore in this section is introduced the estimation process of the most important inputs for the valuation model that ends to be considered the main one for this valuation exercise – the Discounted Cash Flows model.

5.1. Estimation of Revenues

After the decrease of Walt Disney revenues in 2009, due mainly to the worldwide financial crisis, the company revenues have been growing yearly at an average of 5,66%, reaching the highest growth rate of 7,44% in 2011.

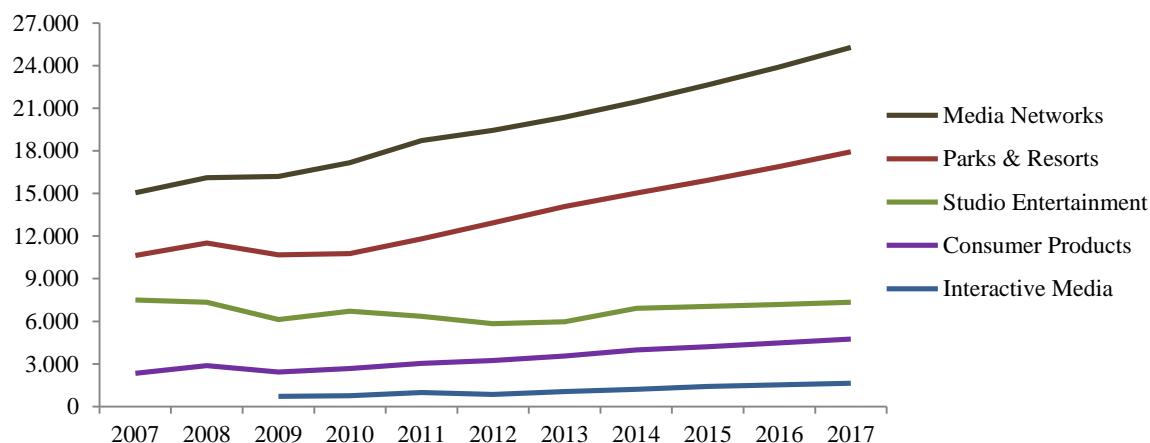


Graph 7 – Walt Disney revenues by segment, in 2013. Values are expressed in USD million. Data source: Walt Disney Company annual financial report 2013.

Based on the industry overview section, one can be optimistic about the company's future, as all sectors in which it operates are expected to grow. Moreover, according to Robert A. Iger, Chairman and C.E.O. of Walt Disney Company, "Fiscal 2013 was yet another exciting year for Disney, as the company delivered our third consecutive year of

record”⁹. This quote reinforced the belief and potential that the company has to keep increasing over the next years.

Walt Disney segment revenues, historical and forecasted ones, can be seen in annex 1 and in the graph below.



Graph 8 – Walt Disney revenues, historical and forecasted ones, by segment. Values are expressed in USD million. Data source: Walt Disney Company annual financial reports and own estimations.

5.1.1. Estimation of Media Networks Revenues

The media networks segment is the main driver of Walt Disney revenues, displaying a CAGR of 4,41% from 2007 to 2013. Being a competitive and expensive sector, Walt Disney is currently the second largest U.S. broadcasting and cable company in revenue terms, only surpassed by Comcast. The high growth rate that revenues have been growing at is expected to keep due to the big increase that social media advertising revenues are expected to display - projected CAGR of 24% in the U.S. by 2018; the entrance in the Indian market in which the TV-industry is expected to grow at 11% CAGR by 2018; the historical growth of the broadcasting sector in U.S. - CAGR of 3,85%; and the expectation of the U.S. cable networks market to increase at a CAGR of 5,2% from 2012 to 2017.

The predictions indicated above demonstrate that this sector is expected to grow over the next years. Still, as Walt Disney is one of the main companies within it, one may expect its growth to be more notorious, as this industry implies costs that most companies cannot support, therefore displaying several growth opportunities for the biggest ones.

⁹The Walt Disney Company – Fiscal Year 2013 Annual Financial Report And Shareholder Letter: page 1.

Concluding, in this valuation exercise the revenues from Walt Disney media networks segment are expected to grow at a CAGR of 4,43% from 2013 to 2017.

5.1.2. Estimation of Parks & Resorts Revenues

The Parks & Resorts segment is the second most contributive sector from Walt Disney, whereas its revenues display a historical CAGR of 4,11% from 2007 to 2013. In order to forecast the revenues of the segment for the next years, it is estimated separately its domestic and international ones.

In the domestic market, it is forecasted the growth of customer attendance and their per capita guest spending for parks, while for hotels it is forecasted their occupancy rate and per room guest spending. The growth of these ones is based on the expectations over the real GDP, the consumer price index, the unemployment rate and the interest rates. Therefore, it is expected that revenues generated in the national market grow by 4,94% CAGR by 2017.

Regarding the international market, it is considered that this would keep growing at a CAGR of 4,03% by 2017, lower than the one it registered from 2009 to 2013 – CAGR of 5,07%.

Comparing the CAGR displayed by the segment from 2007 to 2013, to the one of the explicit period, one can realize that the segment's growth is expected to remain considerably stable. Even though one may believe that this estimation is too optimistic, it should be taken into consideration that the revenues generated by the exportations of travel and tourism related services grew at a CAGR of 14,20% from 2007 to 2013 worldwide. Plus, as stated in the industry overview, several strategies are in progress to increase the U.S. tourism segment, which helps to support the growth rate achieved.

Concluding, in this valuation exercise the revenues from Walt Disney parks & resorts segment are expected to grow at a CAGR of 4,94% from 2013 to 2017.

5.1.3. Estimation of Studio Entertainment Revenues

The studio entertainment segment is the iconic one of Walt Disney. Besides being a mature segment, and therefore expected to display stable growth rates, it was strongly affected by the financial crisis of 2008, whereas its generated revenues decreased. Nevertheless, due to the announced future productions of the company, the segment is expected to grow over the next years.

In order to forecast its revenues, it is considered the global filmed entertainment market outlook, and the historical growth rates of the segment itself and the worldwide box-office revenues. While the segment revenues CAGR is -3,17% from 2007 to 2013, the sector worldwide displays a CAGR of 4,60% for the same period. Moreover, the global filmed entertainment market outlook predicts a CAGR of 4,70% for the U.S. from 2013 to 2018 and forecasts for China a CAGR of 13,00% for the same period, which is a sight of the sector's growth expectations over the next years.

In this study the forecast for studio entertainment segment displays a CAGR of 4,17% from 2013 to 2017, which includes a simple growth rate of 16,00% from 2013 to 2014 due to the revenues generated in 2014 until today. As one can realize, the growth rate is moderate considering the expectations over the sector for the next years.

5.1.4. Estimation of Consumer Products Revenues

The consumer products segment is one of the oldest of Walt Disney, being inserted in a very competitive market. Nevertheless, the expected growth of the consumer products sector is not considered for forecast purposes, as the segment consists in selling goods associated to Walt Disney productions, and comparing it to the expected sales of most products involved in the consumer products sector could bias the forecast.

As the segment is a mature one, its growth rate has been considerably stable over the last years, displaying a growth of 7,85% from 2008 to 2013. Moreover, the performance of this segment is mostly affected by the company's productions and the growth of the real GDP worldwide, and so the forecast of the segment's revenue is based on the growth of these two rates. While the real GDP worldwide is expected to increase at an yearly average rate of 2,81% until 2017, the productions of Walt Disney brand are believed to increase over the next years, as stated previously. Therefore, the revenues are forecasted to grow 12% in 2014, as consequence of the huge success that *Frozen* had been displaying over this segment in this year, and then at 6,00% until 2017. This forecast displays a CAGR of 5,93% from 2013 to 2017, close to the CAGR registered from 2007 to 2013 of 6,11%, therefore assuming that the segment will grow similarly to the last years.

5.1.5. Estimation of Interactive Media Revenues

The interactive media segment started its activity in 2009, representing the smallest segment of Walt Disney. Nevertheless, it is expected that this segment will keep

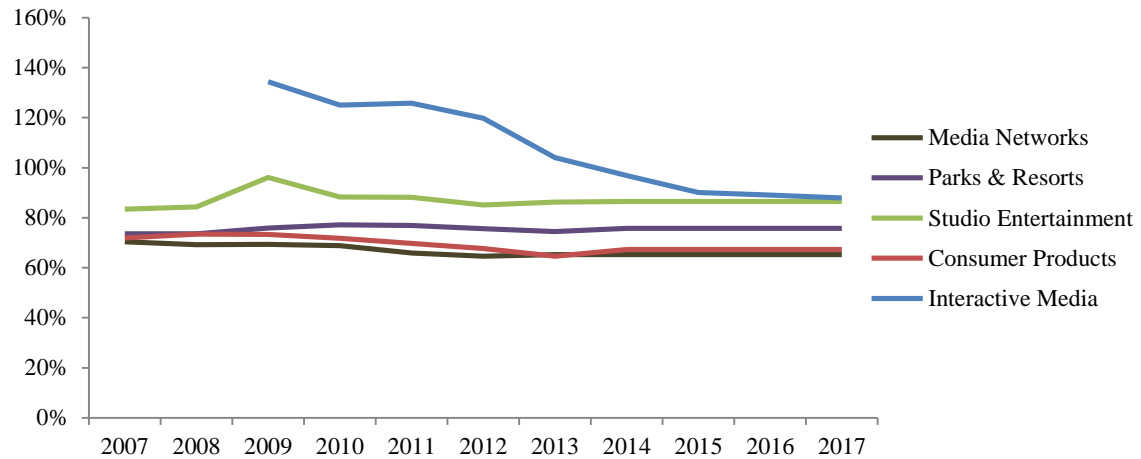
growing, as the company reserves all the rights of its products to develop into interactive media by itself.

The revenues' growth estimation for this segment is supported by the historical growth of video games sector revenues, and the estimated growth rate for the global video games markets worldwide. While the sector revenues grew at a CAGR of 8,33% from 2005 to 2013, the outlook of the market displays CAGRs ranging from 5,2% to 16,7%, over the countries analyzed, from 2013 to 2018. Consequently, it is estimated that the segment revenues will grow at a CAGR of 9,20% from 2013 to 2017, being the growth of 15% in the first two years due to the high expectations over Walt Disney products, growing then at a rate of 8,37%, tending to the growth levels the segment displayed until 2013.

5.2. Estimation of Cost of Sales

The cost of sales of each segment consists in its operating expenses and selling, general and administrative costs associated to its production. Its estimation is based on a statistical mechanism, whereas the historical percentage these expenses have compared to the segment's revenues is considered, except for the interactive media and corporate segments, being the reasoning explained below. Even though one may believe that fixed and variable costs should be considered differently, which seems reasonable if one thinks about Parks & Resorts segment in which fixed costs are expected to be considerable high compared to the segment revenues, Walt Disney financial reports do not disclose this different costs. Therefore, in order to avoid making an unfounded estimative, as there is no access to this kind of information, this statistical mechanism is adopted.

In order to estimate the total cost of sales for each segment, it is obtained the historical weight that they have over the segments' revenues. The time period used for this estimation ranges from 2011 to 2013. This time period is chosen because, prior to 2011, the cost of sales percentage over sales was somewhat different from the ones registered in more recent years, as consequence of the financial crisis that was still notorious. As the "new trend" is believed to keep, the shorter time period was chosen.



Graph 9 – Walt Disney segments' cost of sales as percentage of revenues, historical and forecasted ones, by segment. Data source: Walt Disney Company annual financial reports and own estimations.

From the weights obtained from 2011 to 2013, it was computed their simple average, and consequently applied on the explicit period. Therefore, according to this approach, it was obtained a cost of sales estimation of 65,26% for media networks segment; 75,72% for parks & resorts segment; 86,54% for studio entertainment segment; and 67,35% for consumer products segment.

Still, as stated above, this approach is not adopted for interactive media segment, as the segment is recent and its cost of sales had been higher than its revenues, and so this mechanism would bias the segment estimation. Therefore, its cost of sales is estimated to keep growing at the growth rate it has been growing. Again, it is used the growth rates from 2011 to 2013 in order to align this estimation to the other segments' ones. Consequently, it is obtained an average yearly growth rate of 7,03% for the cost of sales of this segment.

The estimation process differs to the corporate segment as well, as it does not generate any revenue for the company. Therefore, it is assumed to keep increasing at the same rate it has been growing over the last four years, displaying an average yearly growth rate of 12,12%.

Consequently, the cost of sales estimation for the explicit period was obtained by applying these estimated percentages to the segment's respective revenues over the explicit period.

One can realize that, logically, there is a positive correlation between segment's revenues and its cost of sales and so, as it is expected that sales will grow, the same is expected for the cost of sales.

Walt Disney cost of sales over the explicit period by segment can be seen in annex 1.

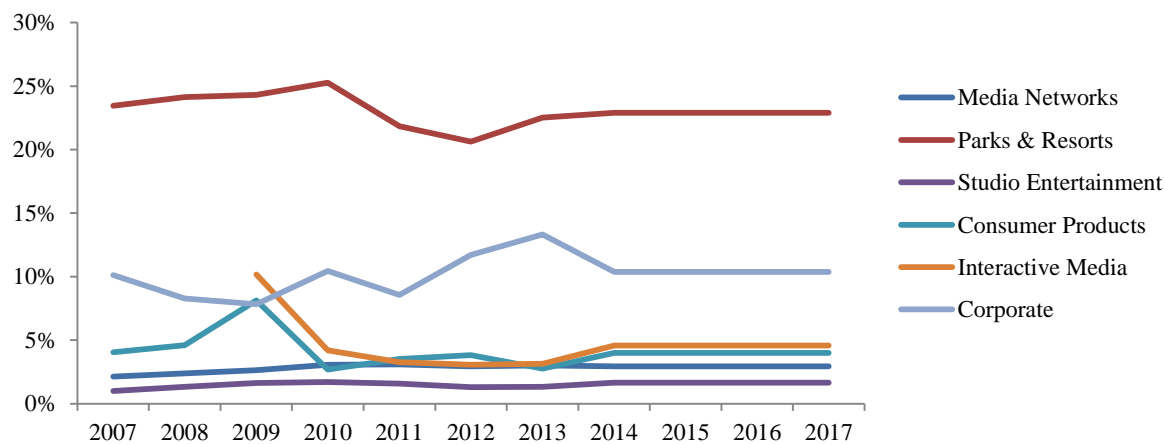
5.3. Estimation of Depreciation and Amortization

The estimation of depreciation and amortization of the company’s assets over the explicit period is based on the company’s total assets and parks, resorts and other property.

Firstly, it is estimated the allocation of parks, resorts and other property value to each segment, since it is not disclosed by the company. This is done by applying the weight that each segment’s total assets have over the company’s total ones, and then applying the obtained weight over the company’s total value of parks, resorts and other property. Then the value over the explicit period of the property, plant and equipment for each segment is obtained by applying the growth rate it displayed from 2009 on for each segment.

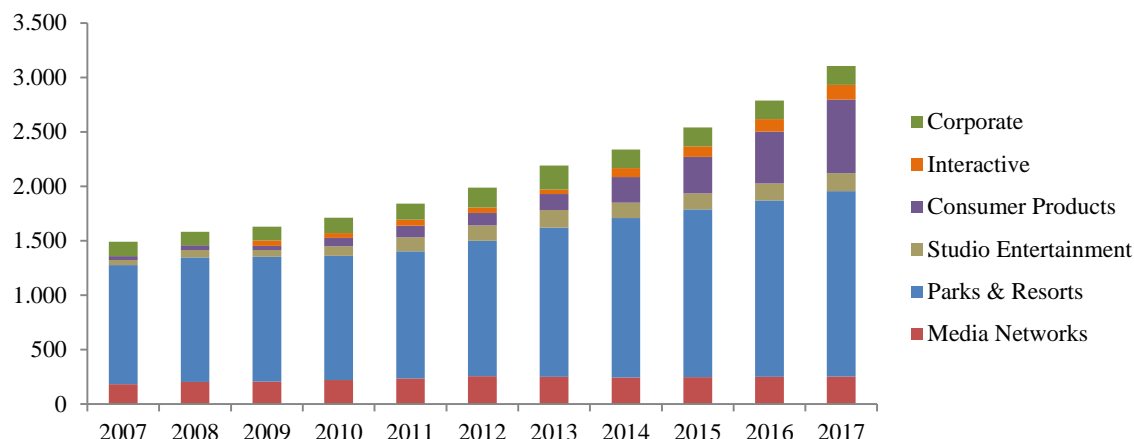
Furthermore, it is computed the ratio of each segment’s depreciation and amortization over its parks, resorts and other property value. From this ratio’s historical average, from 2009 to 2013, it is achieved the depreciation and amortization value for each segment, as the value of parks, resorts and other property per segment is already disclosed.

Lastly, in order to obtain separately the value of depreciation and amortization for each segment, it is computed the historical average weight of each over the company’s depreciation and amortization total value, from 2009 to 2013. Then, from the weights obtained and from the depreciation and amortization total values of each segment, it is estimated separately values of depreciation and amortization of each segment for the explicit period.



Graph 10 – Percentage of Walt Disney segments’ depreciation against its Parks, Resorts and Other Property value, historical and forecasted ones. Data source: Walt Disney Company annual financial reports and own estimations.

The Walt Disney depreciation and amortization expenses over the explicit period can be seen in annex 5.



Graph 11 – Walt Disney segments’ depreciation and amortization, historical and forecasted ones, by segment. All values are expressed in USD million. Data source: Walt Disney Company annual financial reports and own estimations.

5.4. Estimation of Other Non-Cash Adjustments

The other non-cash adjustments encompass cash flows that are not related to the company main business activity, but that generate gains and losses considered for the fiscal periods. It consists mainly in accounts that are able to generate cash flows for the company, i.e. the sale of assets, being most of them registered in the cash flow statement.

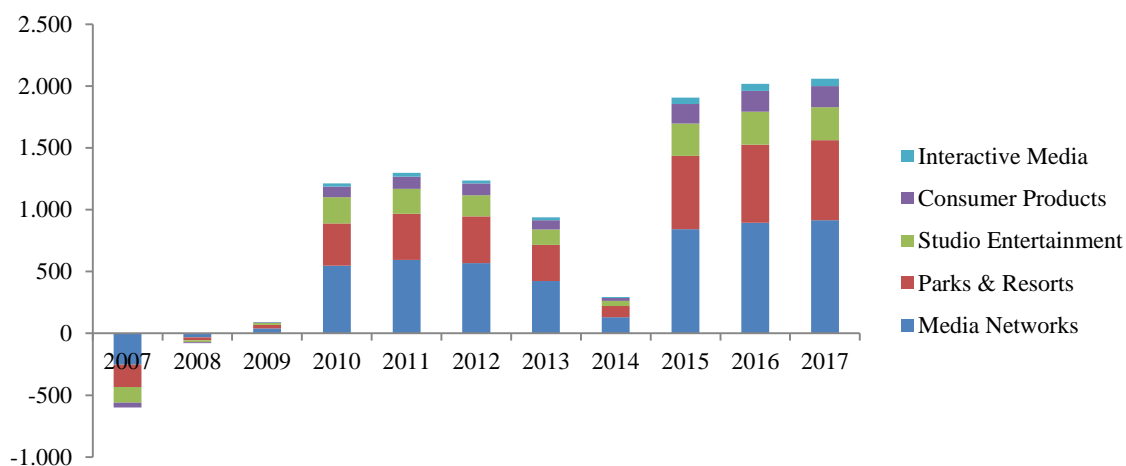
As it may not be accurate to estimate the behavior of this accounting components by trying to “predict the future”, as they depend strongly on the policy and situation of the company in each year, they are assumed to keep displaying the behavior of the later years.

So, while the deferred income taxes and stock based compensation are estimated to be the average value of the last 7 years, the minority interests, impairment charges and disposal/sale of assets are estimated to be null, as there is no support to do a prediction exercise for this accounting components behavior. Regarding the equity in earnings of affiliates/JV-CF, it is forecasted to be null as well, since it is assumed that all cash received from equity investees are distributed, consequently annulling the equity in the income of investees. Then, while the net income – CF is according the estimated one in the income statement, the cumulative net income results in the net income of the period, subtracting the net income attributable to noncontrolling interests, which is estimated as the historical percentage over the net income of the fiscal periods. The change in other

assets is a consequence of the yearly change of the other assets accounting component registered in the balance sheet, which is estimated based on the past year value, and the yearly acquisitions, proceeds from dispositions and others, being this last ones registered in the cash flow statement. Lastly, the non-cash items are estimated as the average of the last 4 years.

Then, in order to allocate this adjustments over Walt Disney segments, as they have to be considered in the Discounted Cash Flows model, it is used a statistical mechanism based on the segment’s revenues. In fact, it is computed the weight that each segment has over the company’s total revenues, and then is applied the obtained percentage over the other non-cash adjustments value, obtaining therefore the segment’s value.

The Walt Disney other non-cash adjustments over the explicit period, as well as the adjustments per segment, can be seen in annex 6.



Graph 12 – Walt Disney segments’ other non-cash adjustments, historical and forecasted ones, by segment. All values are expressed in USD million. Data source: Walt Disney Company annual financial reports and own estimations.

5.5. Estimation of Capital Expenditure

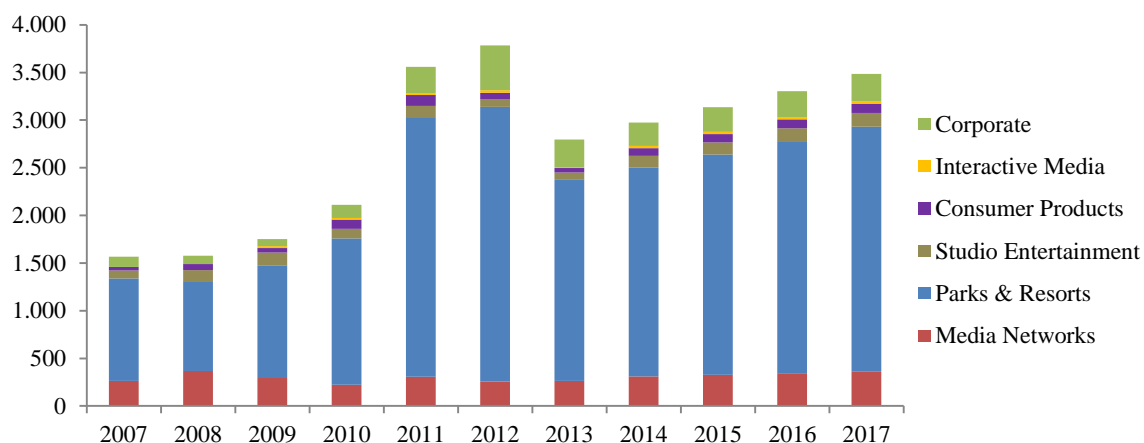
Capital Expenditures consist in funds used by the company to acquire or improve its physical assets, in order to maintain or increase its operations’ scope.

For Walt Disney, the capital expenditures are mostly for the parks & resorts segment, as it is the segment that depends more on physical assets. They have been increasing over the last years, registering a big increase in 2011 and 2012 due to the final payment of the company’s new cruise line and several theme parks’ expansion. Still, in 2013 these expenses decreased, again mainly due to the decrease of CAPEX in the Parks & Resorts segment. Nevertheless, the company expects it to keep increasing, because of its planned expansion in several theme parks.

The capital expenditures estimation process consists in a statistical mechanism, based on the historical percentage it has over the company revenues. It is computed the historical average weight of CAPEX over revenues from 2007 to 2013, achieving an average of 6,12%. Therefore, it is expected the capital expenditures of the company to increase at this rate over the explicit period.

The allocation process for the company's capital expenditures among its segments is based on the weight that each segment's CAPEX had over the company's total one, from 2009 to 2013. This approach is chosen because over the last years these weights have been constant, and so it is believed to be an acceptable approach.

The Walt Disney capital expenditures over the explicit period, as well as the expenditures per segment, can be seen in annex 7.



Graph 13 – Walt Disney segments' capital expenditures, historical and forecasted ones, by segment. All values are expressed in USD million. Data source: Walt Disney Company annual financial reports and own estimations.

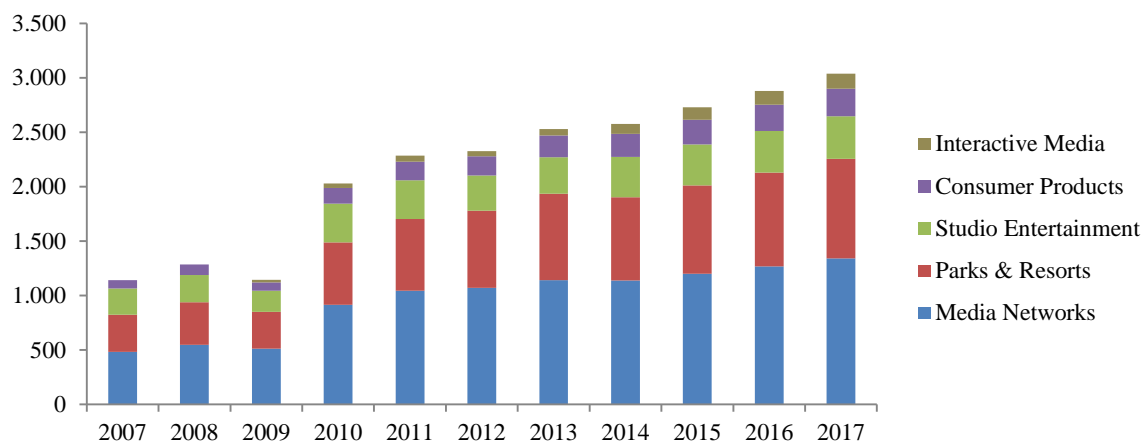
5.6. Estimation of Working Capital

The working capital is a metric used to display the operating liquidity available to a company's business. It is computed as the sum of the company's current receivables and inventories minus the accounts payable and other accrued liabilities.

The estimation of this three accounting components is based on the days sale outstanding (DSO), days payable outstanding (DPO), and days sales of inventory (DSI). The days associated to each accounting component can be seen in annex 8. As it is not disclosed by Walt Disney the intention to change this statistics, for the explicit period they are assumed to be the simple average of the values registered from 2009 to 2013. Therefore, on average, the DSO are 43 days, the DPO are 48 days, and DSI are 11 days.

In order to estimate the behavior of the accounting components in the explicit period, it is used the revenues for the current receivables, and the cost of good sales for inventories and accounts payable and other accrued liabilities. By applying the days-measure “tool” to this, it is estimated the working capital components over the explicit period per segment.

The Walt Disney working capital and net working capital over the explicit period can be seen in annex 8. As one can realize, the estimation performed tends to follow the trend that the working capital had been displaying over the last years.



Graph 14 – Walt Disney segments’ working capital, historical and forecasted ones, by segment. All values are expressed in USD million. Data source: Walt Disney Company annual financial reports and own calculations.

6. The Weighted Average Cost of Capital

The weighted average cost of capital (WACC), as stated in the literature review section, consists in the cost for the company to generate the cash flows during the considered period. Moreover, it is the rate at which the free cash flows to the firm are discounted in the DCF model.

In this section it is computed and disclosed its components, ending with the calculation of Walt Disney cost of capital.

6.1. Risk-Free Rate & Market Risk Premium

The risk-free rate and the market risk premium are key concepts to compute Walt Disney cost of equity, being therefore its scheming analyzed. As Walt Disney is an American company, and since big part of its activity is developed within the country, the proxy for the risk-free rate used is the US government bonds with a 10-year maturity (USGG10YR Index). As stated in the literature review section, the risk-free rate should

consist in the verified rate at a certain point. Therefore, and knowing that the collected data is on a weekly basis, the rate used in this study is the weekly one verified on the 1st August 2014, in order to be coherent with the valuation date. It is achieved an annualized value for the risk-free rate of 2,49%.

Regarding the market risk premium, and following the methodology indicated in the literature review section, it was obtained the market returns of a representative index. In order to do so, and since Walt Disney is listed in the S&P500 Index, this index is the selected one to be used as a proxy of the market index. To maintain the consistency of the procedures on the risk-free rate computation, the data is on a weekly basis, ranging from October 2008 to August 2014. The market risk premium is then computed as the simple average of the historical market risk premium verified during the considered period. Annualizing the value obtained, the market risk premium rate obtained for cost of equity computation purposes is 7,71%. Even though this value is higher than the ones that several authors consider appropriate, which should be between 4% and 6%, one should realize that the time frame considered includes the peak of the financial crisis from 2008, which may be an explanation for this higher value. Still, the time period considered should be careful supported, since it has a huge impact on the cost of equity estimation. In fact, the time period considered includes the 10th October 2008, date in which the S&P500 Index decreased 20%, and so the inclusion of this date has a significant impact on the market risk premium estimation. However, if the time period used to estimate the market risk premium starts after October 2008, and so does not include the S&P500 Index huge decrease, the obtained rate for the market risk premium would increase considerably, yielding above 10%. In the other hand, if the time period used starts before October 2008, the obtained rate would be substantially lower than the obtained one, below 4%. So, in order to achieve a value that authors consider to be more appropriate, and also to include both times of financial crisis and market recovery, the period considered ranges from October 2008 to August 2014 and has an annualized yield of 7,71%.

6.2. Cost of Equity

The Walt Disney cost of equity results from the combination of the risk-free rate, the market risk premium, and the beta of the company which, through the Capital Asset Pricing Model (CAPM), is given as:

$$R_e = R_F + \beta_L * [E(R_M) - R_F]$$

In order to obtain the beta of Walt Disney, it is used weekly data from August 2008 to August 2014 of both market risk premium and Walt Disney equity risk premium. The equity risk premium is regressed into the market risk premium, being obtained a beta for Walt Disney of 1,12. In this case, the time period considered does not affect the beta estimation significantly, as independently of the time period considered the beta estimation is always around 1,12. So, in order to be coherent with the time period considered for the market risk premium estimation, the time period from October 2008 to August 2014 is used.

The beta represents the volatility of a company against the market index. Therefore, one can conclude that as Walt Disney beta is close to 1 (the beta of the market index), the movements of the company stock returns tend to follow the ones of the market on a slightly higher scale.

Having all inputs available, the cost of equity of Walt Disney is estimated as 11,14%.

6.3. Cost of Debt

From the several estimation techniques for the cost of debt estimation suggested by authors, in this study is adopted the one that results from the yields associated with the company's issued bonds and obtained loans. This method is chosen because it allows estimating the cost of debt without doing any approximation, using solely the information displayed by the company regarding its debt.

As can be seen in annex 16, Walt Disney has issued 26 bonds that have not reached its maturity yet, as well as 3 unsecured loans which, comparing to the value associated with the bonds issued, represent a small fraction of the company's debt structure.

The estimation of Walt Disney cost of debt results from the weighting of the yields associated to both bonds and loans. Regarding the bonds issued, their yields are obtained for the 1st August 2014. In the other hand, the yields to maturity of loans are obtained from the ones of bonds. As the loans represent a very small fraction of the company's debt, it is assumed that their yields to maturity results from a simple average of the yields of bonds with similar maturity.

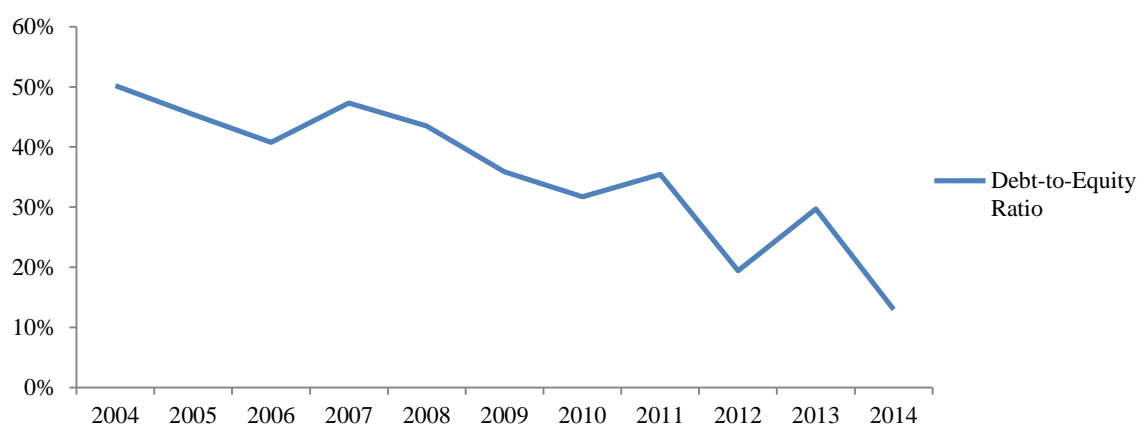
The cost of debt before taxes is obtained by computing a weighted average of the yields associated to each kind of debt instrument, and its amount. The resulted yield from this process is 1,99% which, since Walt Disney is given an A rating over any issued debt instrument, seems to be acceptable.

One should also pay attention to the after tax cost of debt, as that is the one used in the WACC calculation. For that purpose, and as can be seen in annex 4, the effective tax rate considered is 33,47%, which applied to the cost of debt yields an after tax cost of debt of 1,32%.

6.4. Capital Structure

The last step to compute the WACC consists in obtaining Walt Disney capital structure, and so it is needed to obtain the market value of both its equity and debt structure.

The market value of equity is computed by multiplying the Walt Disney shares outstanding by its closing price, which at the 1st August was of \$85,38, obtaining therefore an equity market value of \$147.865 billion. On the other hand, the market value of debt is obtained as the sum of the short and long term ones. Regarding the short-term debt, it is assumed to be the same as the current debt indicated in the balance sheet of \$4.695 billion. Moreover, the long-term debt is estimated by different ways concerning the bonds and loans. The bonds' market values are estimated by multiplying the amount outstanding by the respective asked price. For the loans, the market value is estimated by computing their net present value, where is considered their payments until the maturity and their yield to maturity as a proxy to their cost of debt. The sum of the market value of this two debt instruments is \$14.511 billion, which added to the short-term debt gives a total market value of debt of \$19.206 billion.

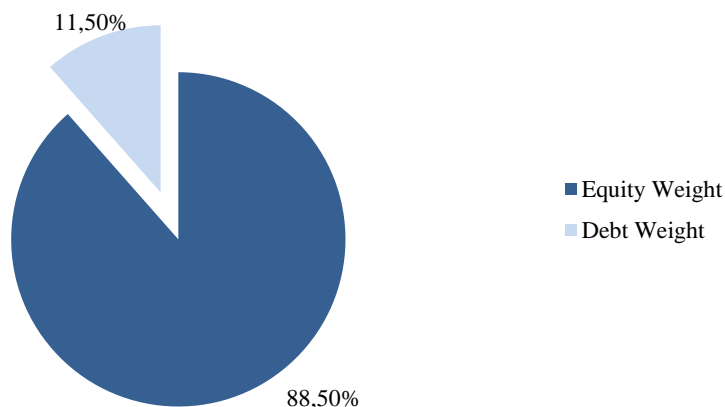


Graph 15 –Walt Disney debt-to-equity ratio. The ratio for 2014 is the one verified on the 1st August, assumed to be representative of the fiscal year end. Data source: Bloomberg

As one can conclude, the market value of equity is much higher than the market value of debt. It is consequence of a policy that Walt Disney has been trying to adopt, aiming to be a company supported by mainly equity. This can be observed in the graph above, whereas is possible to verify the trend to decrease the debt relative amount. The huge

gap between 2013 and 2014 is mainly due to the considerable increase of Walt Disney stock price and, consequently, its market value of equity.

The capital structure of Walt Disney is then achieved, as can be seen in graph 16, whereas equity represents 88,50% of the company's capital structure, while debt represents only 11,50%.



Graph 16 – Walt Disney capital structure composition in August 1st 2014. Data source: Own estimations.

6.6. Weighted Average Cost of Capital Estimation

This section ends with the computation of Walt Disney WACC. By applying the formula indicated in the literature review section, it is achieved a weighted average cost of capital of 10,01%. This value is consequence of the much higher cost that equity has compared to debt for Walt Disney which, accounting for the portion that equity represents in the capital structure, supports the obtained Walt Disney cost of capital.

7. Discounted Cash Flows Model

The DCF model is one of the most acceptable methods to perform a company valuation exercise, and therefore it is going to be used to in this study.

The usage of this method is linked with the company's capital structure, being more accurate for companies with a stable capital structure. Even though Walt Disney capital structure has been changing over the last years, it reached a level that the company aimed to, and therefore it is believed that the capital structure it has nowadays will maintain over the next years.

As Walt Disney activity can be split into several segments, it is chosen to measure the contribution of each segment through the DCF model, and then obtain the overall value of the company by combining them all.

7.1. Free Cash Flows to the Firm (FCFF)

The DCF model consists in discounting to the present value all the expected free cash flows to the firm of Walt Disney during the considered period. These FCFF are the estimated cash-flows from operations of the considered period, after taxes and before interest payments, adjusted to all investments. The formula to compute it is as follows:

$$\text{FCFF} = \text{EBIT} - \text{Tax expenses} + \text{Depreciation} + \text{Amortization} + \text{Other non-cash adjustments} - \Delta\text{NWC} - \text{CAPEX}$$

7.2. Terminal Value

The terminal value is a key concept when using the DCF model, as it provides the majority of the valuation obtained through the exercise. The formula used to compute it is presented in the literature review section.

Regarding the perpetual growth rate used for the terminal value computation, it is estimated differently according the Walt Disney segment considered. The idea behind this is that each segment has different expectations, market environment and different external facts that affect it. Therefore the same perpetual growth rate should not be applied to them all.

In order to estimate the different perpetual growth rates, some indices and factors were taken into account, aiming to better display the expectations about the future growth of the worldwide economy.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Real GDP Growth	-0,30%	-2,80%	2,50%	1,60%	2,30%	2,20%	1,70%	3,00%	3,00%	3,15%
Nominal GDP Growth	2,50%	-1,04%	5,02%	3,73%	3,31%	2,85%	3,37%	4,96%	4,81%	4,82%
CPI	3,85%	-0,35%	1,63%	3,17%	2,08%	1,48%	1,90%	2,20%	2,30%	2,35%
Unemployment Rate	5,80%	9,30%	9,60%	8,90%	8,10%	7,40%	6,20%	5,70%	5,40%	5,40%

Table 2 – Historical and forecasted worldwide indices: Real GDP Growth, Nominal GDP Growth, Consumer Price Index (CPI), and Unemployment rate. Data source: OECD – Organization for economic co-operation and development (OECD).

As one can see from the table above, the expectations about the economic environment worldwide are positive. While the GDP, both real and nominal ones, are expected to increase, the unemployment rate is expected to decrease, and the Consumer Price Index is believed to increase. These are all facts that allow one to assume that there is potential

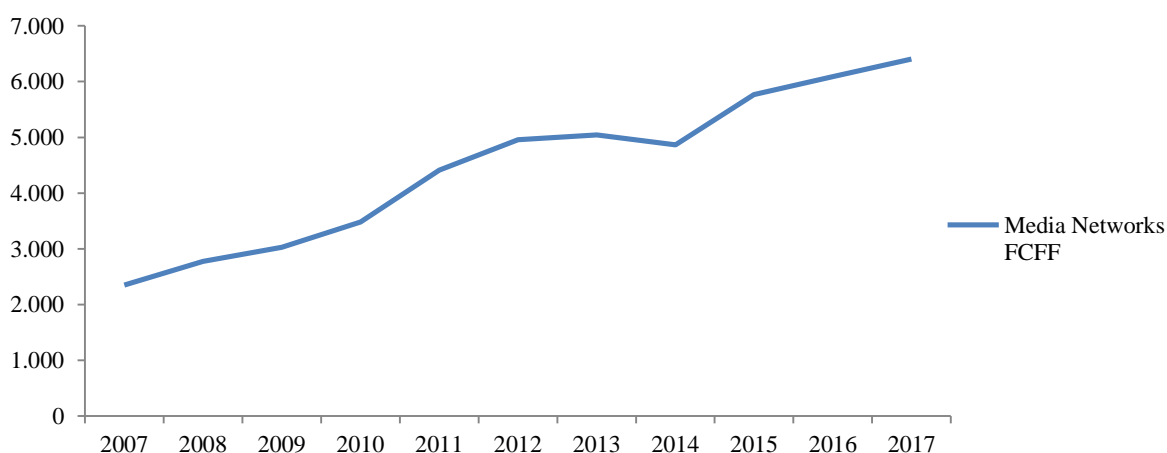
for the growth of Walt Disney, as the purchasing power of its customers may possibly increase.

The perpetual growth rate of each segment is displayed below in each segment analysis, as well as its fundamentals.

7.3. Media Networks

Media networks is the Walt Disney segment that provides more revenues to the company, and therefore it is reasonable to expect that it is also the segment that has the highest FCFF.

In graph 17 it is possible to see the evolution of the FCFF for the media networks segment during the explicit period, resulting from the DCF analysis.



Graph 17 – Historical and forecasted media networks segment FCFF. All values are expressed in USD million. Data source: own estimations.

As one can conclude, the FCFF of the segment are positive, and increasing from 2014 on. An explanation for this fact is the expected strong increase in its revenues which, added to the fact that the segment has been displaying a considerable EBITDA margin (around 35%) over the last years, allows one to anticipate increasing FCFF.

For this segment valuation is also considered a perpetual growth rate of 5% for the terminal valuation calculation. The reasoning behind this value is related with the high expectations under Walt Disney cable networks – i.e. ESPN and Disney channels. Plus, technology development over the broadcasting business makes one consider possible innovations of distribution processes, which added to the strong portfolio of television stations owned, turns perceptible the potential that Walt Disney still has in this segment.

By applying the indicated perpetual growth rate, it is obtained a discounted terminal value of \$100.741 million which, combined to the discounted FCFF of the explicit period, provides an estimated segment value of \$115.827 million.

7.3.1. Media Networks – Sensitivity Analysis

As the DCF model can be very sensible to changes in some variables, it is performed a sensitivity analysis contenting the considered most uncertain ones: WACC and the perpetual growth rate.

Media Networks Segment Valuation							
WACC g	3,50%	4,00%	4,50%	5,00%	5,50%	6,00%	6,50%
8,01%	132.186	147.336	166.798	192.717	228.945	283.162	373.189
8,51%	118.978	130.995	146.006	165.289	190.969	226.865	280.583
9,01%	108.166	117.913	129.821	144.694	163.800	189.246	224.813
9,51%	99.152	107.204	116.863	128.662	143.400	162.332	187.546
10,01%	91.521	98.276	106.256	115.827	127.519	142.123	160.884
10,51%	84.979	90.719	97.413	105.320	114.805	126.391	140.864
11,01%	79.308	84.239	89.927	96.560	104.397	113.797	125.279
11,51%	74.345	78.622	83.508	89.145	95.720	103.486	112.802
12,01%	69.964	73.705	77.944	82.788	88.374	94.890	102.587

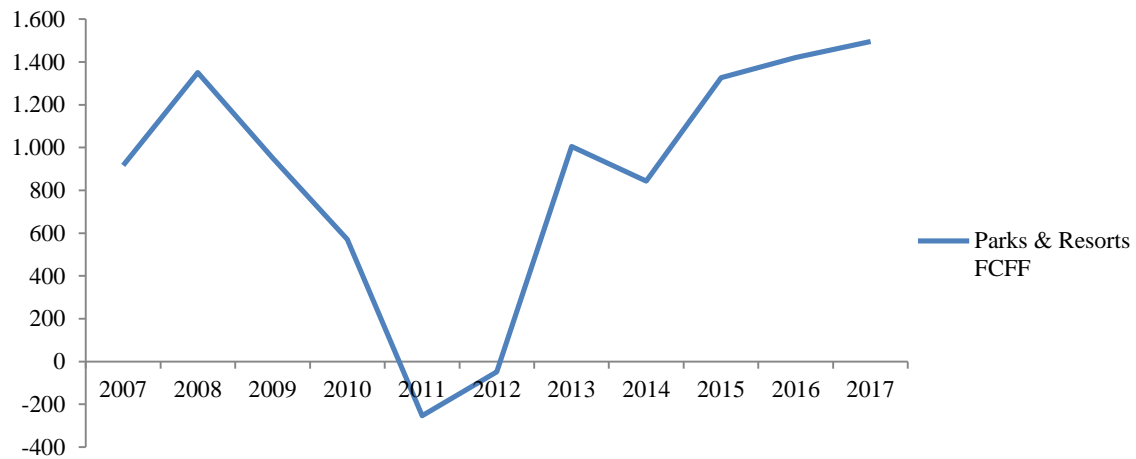
Table 3 – Media networks segment sensitivity analysis. All values are expressed in USD million. In light blue are indicated the more likely valuations for the segment. Data source: Own calculations.

The table above demonstrates the values that result from the sensitivity analysis performed for the Media Networks segment. One can realize that small changes in both WACC and perpetual growth rates lead to considerable changes in the segment valuation.

7.4. Parks & Resorts

The parks & resorts segment is expected to increase its revenues over the next three years, and the same is believed to happen with its FCFF. In graph 18 can be seen the evolution of the FCFF over the explicit period. As one can realize, the FCFF are substantially lower than the ones registered on the media networks segment. The main explanation for this is related with the cash outflows from depreciation and capital expenditures, as this segment is mainly based on the company's fixed assets. Plus, the expansion of the Magic Kingdom theme lands schedule to be completed in the end of 2014, the inauguration of the AVATAR-inspired land from the Disney's Animal

Kingdom in 2017, and the inauguration of a new themed area at the Hong Kong Disneyland Resort based on the Marvel’s Iron Man in 2016 are some examples of future investments from Walt Disney that creates big expectations for the Parks & Resorts segment for the explicit period.



Graph 18 – Historical and forecasted parks & resorts segment FCFF. All values are expressed in USD million. Data source: Own estimations.

Nevertheless, the segment is expected to keep increasing due to the expansions that Walt Disney will perform in several of its own parks in future years. This supports the estimated perpetuity growth rate of 4,49% for the terminal value, as Walt Disney has a big investment set for this segment.

The terminal value, discounted to the present value, results in \$21.523 million which, by adding the FCFF of the explicit period, ends with an estimated segment value of \$25.026 million.

7.4.1. Parks & Resorts – Sensitivity Analysis

One can see in the table below the sensitivity analysis for the parks & resorts segment for jointly changes in WACC and perpetuity growth rate.

Parks & Resorts Segment Valuation							
WACC g	3,06%	3,56%	4,06%	4,56%	5,06%	5,56%	6,06%
8,01%	28.307	31.208	34.841	39.524	45.791	54.606	67.923
8,51%	25.706	28.053	30.926	34.526	39.166	45.375	54.110
9,01%	23.540	25.476	27.802	30.649	34.216	38.814	44.966
9,51%	21.711	23.332	25.249	27.554	30.375	33.909	38.465
10,01%	20.144	21.519	23.125	25.026	27.309	30.105	33.607
10,51%	18.787	19.968	21.330	22.922	24.805	27.068	29.839
11,01%	17.601	18.624	19.794	21.144	22.721	24.588	26.830
11,51%	16.556	17.449	18.463	19.622	20.960	22.523	24.373
12,01%	15.627	16.413	17.299	18.304	19.452	20.779	22.328

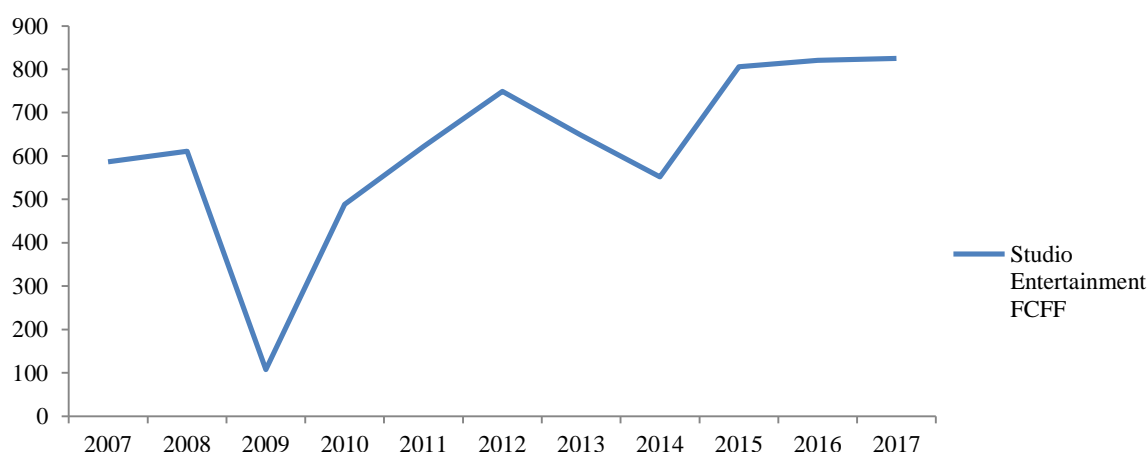
Table 4 – Parks & resorts segment sensitivity analysis. All values are expressed in USD million. In light blue are indicated the more likely valuations for the segment. Data source: Own calculations.

Contrarily to what happens in the sensitivity analysis for the Media Networks segment, for the parks & resorts segment small changes in both variables lead to low changes in the valuation.

7.5. Studio Entertainment

The segment was strongly affected by the financial crisis of 2008, but has been recovering since 2012, and the announced products from the segment that the company still has to release makes one believe that its revenues have potential to keep increasing in the following years.

The FCFF from the Studio Entertainment segment during the explicit period can be seen below in graph below.



Graph 19 – Historical and forecasted studio entertainment segment FCFF. All values are expressed in USD million. Data source: Own estimations.

As one can realize, the FCFF are expected to be positive and keep increasing at a modest rate. The low values obtained, compared to the revenues, are in part explained by the huge production costs that each Walt Disney movie requires to be produced, which is indicated by the low EBITDA margin that the segment historically displays – around 13%.

Regarding the terminal value, one should take into consideration that its estimation for the Studio Entertainment segment is the most difficult to obtain compared to the other Walt Disney segments. This is mainly due to the unpredictable excitement and acceptance that a released movie can have within the Walt Disney target customers.

Nevertheless, it is assumed a perpetuity growth rate of 3,15% since the segment has reached its steady state – even though its forecast can be unpredictable, its EBITDA margin and ratio FCFF over Revenues have been considerably constant over the last years. Therefore, by applying the indicated rate to the terminal value computation, it is obtained a discounted terminal value of \$9.327 million which, added to the FCFF obtained for the explicit period, provides a segment valuation of \$11.358 million.

7.5.1. Studio Entertainment – Sensitivity Analysis

As can be seen in table 5, the segment is not as sensible to changes in the considered variables as the other segments. Still, one can verify that it is more sensible to variations WACC than in the growth rate.

Studio Entertainment Segment Valuation							
WACC g	1,66%	2,16%	2,66%	3,16%	3,66%	4,16%	4,66%
8,01%	12.580	13.531	14.658	16.018	17.691	19.797	22.530
8,51%	11.664	12.468	13.410	14.527	15.875	17.532	19.618
9,01%	10.872	11.560	12.357	13.290	14.397	15.733	17.374
9,51%	10.181	10.776	11.458	12.248	13.172	14.270	15.593
10,01%	9.572	10.092	10.682	11.358	12.140	13.056	14.144
10,51%	9.032	9.489	10.004	10.588	11.258	12.034	12.942
11,01%	8.550	8.954	9.407	9.917	10.497	11.161	11.929
11,51%	8.117	8.477	8.878	9.326	9.832	10.406	11.064
12,01%	7.726	8.048	8.405	8.802	9.246	9.747	10.316

Table 5 – Studio entertainment segment sensitivity analysis. All values are expressed in USD million. In light blue are indicated the more likely valuations for the segment. Data source: Own calculations.

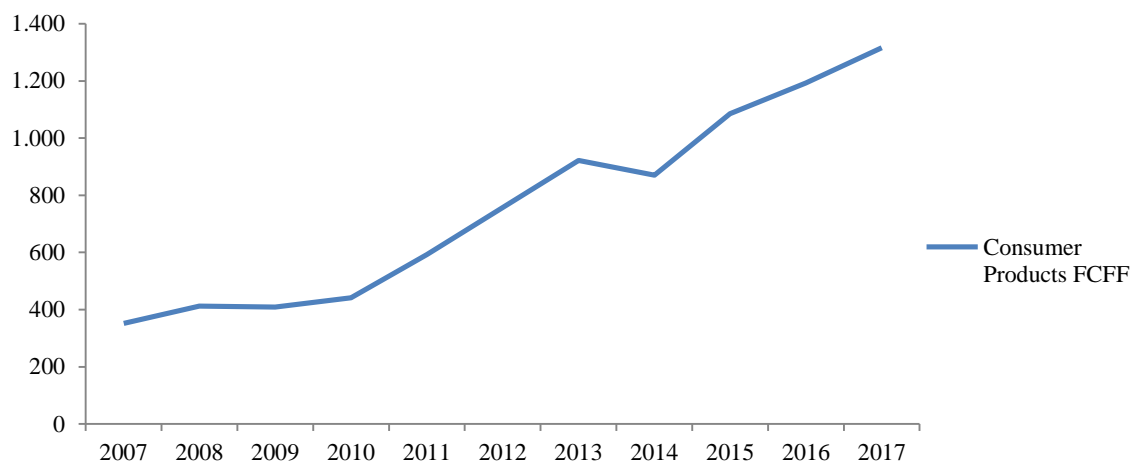
One should take into consideration that is plausible that the estimated growth rate ends to be lower than the one expected by analysts, as the purchase power worldwide is

expected to increase in the following years, and so products from this segment can be reachable to less financially favorable customers.

7.6. Consumer Products

Regarding the consumer products segment, it is expected that its FCFF increase over the time. In fact, the segment is quite correlated with the Walt Disney productions, mainly from the studio entertainment segment – i.e. theatrical films and television programming. As those segments are expected to expand over the following years, the same is expected to happen to this segment.

Through the DCF model, it is obtained the FCFF of the consumer products segment as displayed in the graph below.



Graph 20 – Historical and forecasted consumer products segment FCFF. All values are expressed in USD million. Data source: Own estimations.

From what can be seen from the graph presented above, the FCFF from the segment are expected to increase over the explicit period. Moreover, there are big expectations for this segment in the long run, which is represented by an estimated perpetuity growth rate of 5%. The reasoning behind this rate is the significant movies' release that will occur from 2017 on – Star Wars and Marvel movies have huge fans legion, and so a big demand for the products associated to this movies are expected.

By applying the indicated perpetuity growth rate on the terminal value estimation, it is obtained a discounted value of \$20.704 million. Then, considering also the FCFF over the explicit period, it is obtained a segment valuation of \$23.665 million.

7.6.1. Consumer Products – Sensitivity Analysis

Table 6 displays the studio entertainment segment sensitivity analysis, in which is possible to verify that this segment is as sensible to changes in the considered variables as the parks & resorts segment. Plus, one can conclude that the segment is as sensible to changes in the growth rate as to changes in the WACC.

For this segment, the most questionable variable is the perpetuity growth rate as consequence of the uncertainty of the performance of the studio entertainment segment. Nevertheless, the considered perpetuity growth rate is considerably lower than the growth rate the FCFF of the segment have been displaying, and so this assumption is assumed to be moderate but reasonable.

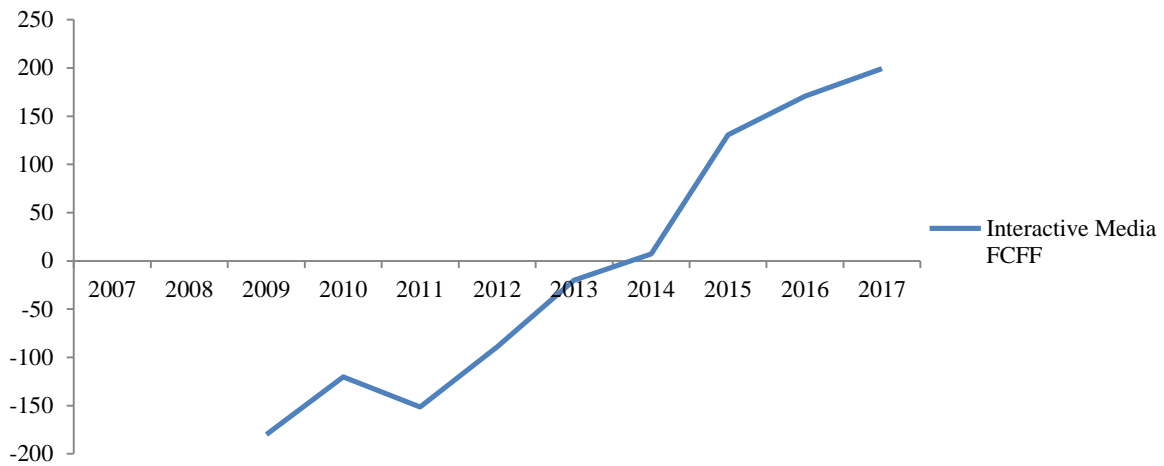
Consumer Products Segment Valuation							
WACC g	3,50%	4,00%	4,50%	5,00%	5,50%	6,00%	6,50%
8,01%	27.024	30.137	34.137	39.464	46.910	58.052	76.555
8,51%	24.310	26.780	29.865	33.828	39.106	46.483	57.523
9,01%	22.089	24.092	26.539	29.596	33.523	38.752	46.062
9,51%	20.237	21.892	23.877	26.302	29.331	33.222	38.404
10,01%	18.670	20.058	21.698	23.665	26.068	29.070	32.925
10,51%	17.326	18.506	19.882	21.507	23.456	25.837	28.812
11,01%	16.162	17.175	18.344	19.707	21.318	23.250	25.609
11,51%	15.142	16.021	17.026	18.184	19.535	21.131	23.046
12,01%	14.243	15.012	15.883	16.878	18.026	19.366	20.948

Table 6 – Consumer products segment sensitivity analysis. All values are expressed in USD million. In light blue are indicated the more likely valuations for the segment. Data source: Own calculations.

7.7. Interactive Media

The interactive media segment, besides being the less influent one over the Walt Disney valuation, is the most difficult to estimate. This is consequence from the fact that the segment is a recent one, and so its evolution depends hugely on how the company is able to develop the know-how for the segment production. Still, its FCFF are low but positive, and expected to increase – in one hand by the easiness that the company will eventually have in producing this kind of products (ex: developing or acquiring better software), and in the other hand by the concrete products the company will launch, i.e. Star Wars video-games.

The estimated FCFF over the explicit period for the Interactive Media segment can be seen in the graph below.



Graph 21 – Historical and forecasted interactive media segment FCFF. All values are expressed in USD million. Data source: Own estimations.

The Studio Entertainment segment is the one in which the FCFF are expected to increase at the highest rate. Still, they are very low compared to the ones from other segments, which is consequence from the low revenues it displays and from its short EBITDA margin, which is around 10%.

The potential that the interactive media segment has is displayed in its perpetual growth rate of 6%. In fact, it is expected that at a certain point in time Walt Disney will develop its production mechanism in this segment, which would decrease the operating expenses, increase the EBITDA margin and consequently the segment's FCFF, *ceteris paribus*.

Nonetheless, associated to the indicated perpetual growth rate, the discounted terminal value for the segment is \$3.955 million. Then, by discounting the FCFF indicated in graph 21 for the explicit period, it is achieved an estimated segment valuation of \$4.365 million.

7.7.1. Interactive Media – Sensitivity Analysis

As can be seen in table 7, the interactive media segment is not as sensible to changes in the considered variables as the other segments. Still, one can verify that it is more sensible to variations in the WACC than in the growth rate.

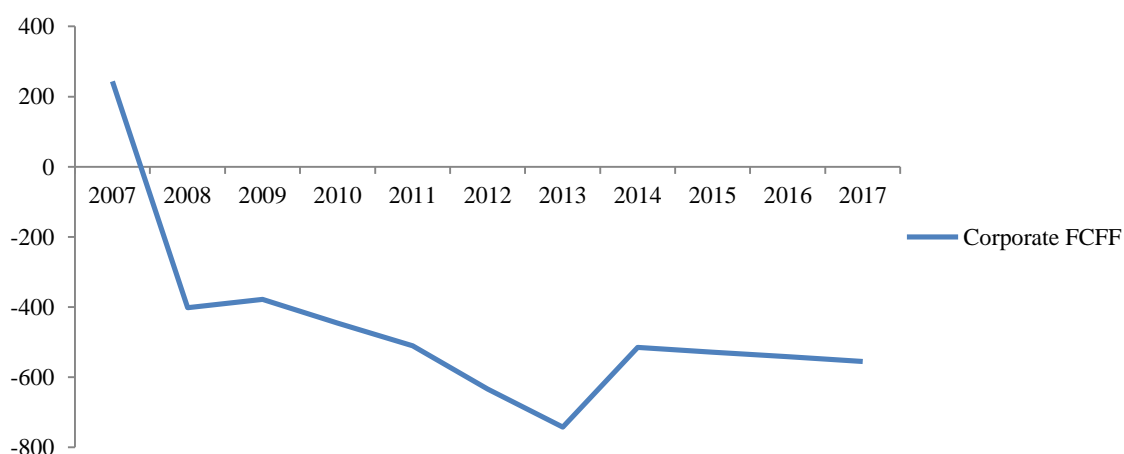
Interactive Media Segment Valuation							
WACC g	4,50%	5,00%	5,50%	6,00%	6,50%	7,00%	7,50%
8,01%	5.131	5.938	7.066	8.754	11.557	17.123	33.521
8,51%	4.484	5.085	5.884	7.002	8.674	11.451	16.967
9,01%	3.981	4.444	5.039	5.831	6.938	8.595	11.347
9,51%	3.578	3.945	4.404	4.993	5.778	6.875	8.517
10,01%	3.248	3.546	3.910	4.365	4.949	5.726	6.814
10,51%	2.973	3.219	3.514	3.875	4.326	4.904	5.675
11,01%	2.740	2.947	3.191	3.483	3.841	4.287	4.861
11,51%	2.541	2.716	2.921	3.163	3.453	3.807	4.249
12,01%	2.368	2.519	2.693	2.895	3.135	3.422	3.774

Table 7 – Interactive media segment sensitivity analysis. All values are expressed in USD million. In light blue are indicated the more likely valuations for the segment. Data source: Own calculations.

For this segment, the indicated perpetual growth rate may seem to be too optimistic, but as the segment is recent, it still has several expansion opportunities.

7.8. Corporate

Even though corporate is not a Walt Disney segment of activity, one can consider it as one for valuation purposes. Its FCFE estimation depends largely on the estimation of the “other income/expense” account, as it represents a large proportion of the NOPAT. In this study is assumed that the values registered in that account will keep the tendency exhibited over the last years, and so positive values are expected.



Graph 22 – Historical and forecasted corporate & other adjustments segment FCFE. All values are expressed in USD million. Data source: Own estimations.

As expected, the FCFE associated to this segment are negative, and tend to decrease, as it consists on mainly corporate, executive management and unallocated administrative support expenses.

Regarding its terminal value estimation, it is expected that the segment FCFE will keep behaving at the same rate displayed over the explicit period. Therefore, a perpetual growth rate of 3,30% is assumed, which provides a discounted estimated terminal value of -\$6.396 million.

By considering the terminal value obtained and the FCFE estimated for the explicit period, it is achieved a discounted segment valuation of -\$7.741 million.

7.8.1. Corporate – Sensitivity Analysis

By analyzing the sensitivity analysis of this segment, in table 8, one can realize that it is not very sensible to changes in the indicated variables, being equally sensible to changes in the WACC and to changes in the growth rate.

Corporate Segment Valuation							
WACC g	1,78%	2,28%	2,78%	3,28%	3,78%	4,28%	4,78%
8,01%	-8.588	-9.254	-10.047	-11.007	-12.194	-13.700	-15.671
8,51%	-7.949	-8.511	-9.171	-9.956	-10.908	-12.085	-13.576
9,01%	-7.399	-7.879	-8.435	-9.089	-9.868	-10.811	-11.976
9,51%	-6.920	-7.334	-7.809	-8.361	-9.008	-9.780	-10.714
10,01%	-6.499	-6.860	-7.270	-7.741	-8.287	-8.929	-9.693
10,51%	-6.127	-6.443	-6.800	-7.206	-7.673	-8.214	-8.850
11,01%	-5.795	-6.074	-6.387	-6.741	-7.144	-7.606	-8.143
11,51%	-5.496	-5.745	-6.022	-6.332	-6.683	-7.082	-7.540
12,01%	-5.227	-5.450	-5.696	-5.970	-6.278	-6.625	-7.021

Table 8 – Corporate segment sensitivity analysis. All values are expressed in USD million. In light blue are indicated the more likely valuations for the segment. Data source: Own calculations.

The estimation of the perpetual growth rate is difficult, as it depends on behavior of variables that are unpredictable. Therefore, assuming a constant behavior is a reasonable assumption.

7.9. Walt Disney Valuation

After performing the valuation exercise of each Walt Disney segments, it is then possible to obtain the valuation of the company as a whole. Still, some adjustments have to be done in order to reach the stock price of Walt Disney, namely to the company's market value of debt and to the shares outstanding.

The market value of debt estimation is explained in the WACC section, achieving a valuation of \$19.206 million. Consequently, by reducing to the enterprise value

obtained through the segment's valuation of \$172.500 million the market value of debt, it is achieved an equity value for Walt Disney of \$153.294 million.

Lastly, in order to reach Walt Disney stock price, it is split the equity value obtained by the total shares outstanding, which account to 1.732,844 million. So, the Walt Disney stock price obtained through the DCF model is \$88,52. Concluding, compared this valuation to the stock market price of \$85,38, it represents a buying opportunity for investors, since the share is undervalued.

8. Economic Value Added

As stated in the literature review section, the Economic Value Added (EVA) model is an equity valuation tool based on the measurement and quantification of the value created by a company in excess of its investors' required return.

In practical terms, the EVA model consists in discounting the surplus value of the invested capital of Walt Disney across the years. The economic value added of each year is computed according the following formula:

$$EVA = C * (ROIC - WACC),$$

where C represents the economic capital employed, consisting on the working capital and the net value of property, plant and equipment.

8.1. Explicit Period

To maintain the coherence with the DCF model, and as the data used is common to both models, the explicit period considered goes from 2015 to 2017.

Starting with the computation of the economic capital employed, it results from the sum of the Parks, Resorts and Other Property, net and the Working Capital, which can be consulted in annex 2 and annex 8, respectively. Plus, the WACC remains the same as indicated in the WACC section, since the assumptions made in order to calculate it are not expected to change, consisting so on 10,13%.

The ROIC is estimated as result from the net operating profit after tax that Walt Disney generates from its economic capital employed in the prior year, and is computed as:

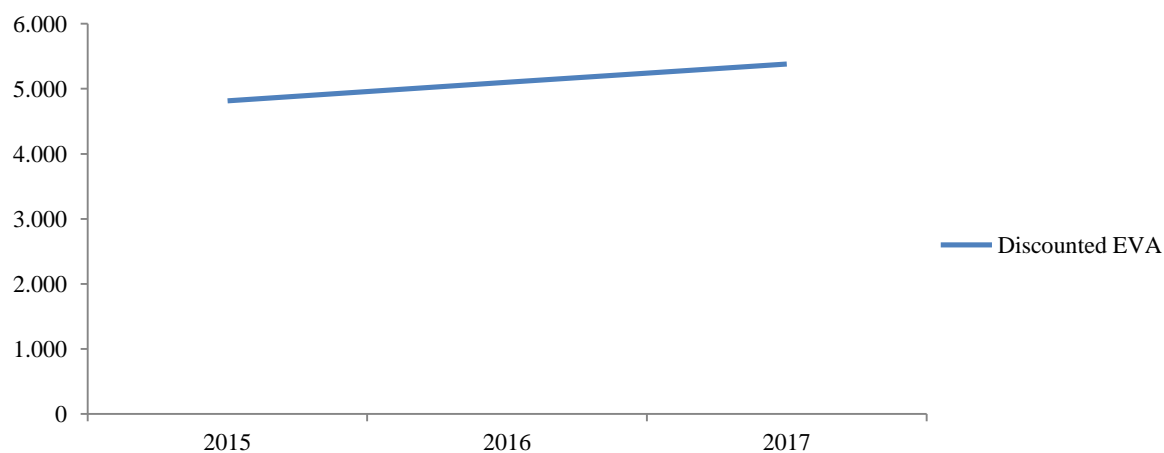
$$ROIC_t = \frac{NOPAT_t}{(\text{Parks, Resorts and Other Property, net}_{t-1} + WC_{t-1})}$$

The estimation of the EVA and its required variables over the explicit period can be seen in the table below.

	2015	2016	2017
Parks, Resorts and Other Property, net	23.584	24.239	24.907
Working Capital	2.729	2.878	3.037
Net Assets (C)	26.318	27.125	27.955
ROIC	28,42%	28,94%	29,37%
EVA	4.813	5.103	5.379

Table 9 – Economic Value Added model inputs estimation. All values are expressed in USD million, except ROIC. Data source: Own calculations.

As one can verify, it is expected that the Walt Disney ROIC will keep increasing over the years. This is consequence of the higher growth that the company’s operating profit is expected to have compared to the increase on its employed capital growth rate. As stated previously, there are big expectations about all Walt Disney segments for the next years, and as the Working Capital and the Parks, Resorts and Other Property, net are expected to keep increasing at a more conservative rate, the return the company will generate will outperform. The graph below illustrates the evolution of the yearly EVA, whereas its values are discounted to the present value.



Graph 23 – Economic Value Added of the valuation’s explicit period, discounted to the present value at 2014. All values are expressed in USD million. Data source: Own estimations.

8.2. Terminal Value

Regarding the terminal value estimation for the EVA model, some assumptions have to be made. From 2018 on, the ROIC is estimated to be 35%. This result from the fact that the operational profit is expected to increase at a higher rate than the employed capital, but also from the trend that the ROIC evolution has been showing.

Plus, the economic capital employed is estimated to increase at the same rate it has been growing during the explicit period, and so a valuation of \$28.809 million is achieved in 2018, as consequence of a growth rate of 3,06%.

Lastly, it is assumed a growth rate of the net assets of 5,50%. While the working capital has been displaying a higher growth rate during the explicit period than 5,50%, the Parks, Resorts and Other property, net has been growing at a lower rate – around 3%. Still, it is expected the growth rate of the last one to increase, as several expansions and new projects are expected to arise, which would increase the value of the company's fixed assets.

Finally, the terminal value estimation for the EVA model is \$154.860 million which, discounted to 2014, accounts to \$115.946 million.

8.3. EVA Valuation

The Walt Disney enterprise value, according the EVA model, results from the sum of its discounted valuation over the explicit period, its discounted terminal value, and the value of its invested capital at the valuation's year, as this last consists in a source of future return. As can be seen in annex 2 and annex 8, the value of Parks, Resorts and Other Property, net and Working Capital for the fiscal year of 2014 is \$22.961 million and \$2.579 million respectively, and so the economic capital employed for 2014 is \$25.540 million.

The enterprise value of Walt Disney is then achieved, with a valuation of \$154.091 million. By adjusting the enterprise valuation to the market value of debt, it is obtained an equity valuation of \$134.885 million. Then, by considering the number of shares outstanding, it is obtained a Walt Disney stock price of \$77,89.

One can realize that the value estimation of Walt Disney through the EVA model is much lower than its market price. A possible explanation for this is concerned with the limitations of the model, as its valuation focus is mainly over the company's fixed assets and profitability. The application of this limitation to a company like Walt Disney can clearly bias the results obtained, since most of its fixed assets are only related to one of its segments (Parks & Resorts). For instance, imagining that the parks & resorts segment would not exist, the fixed assets of the company would decrease hugely, compared to a only partially decrease in its profitability, as this segment has not a huge impact upon it. In this case, the company's ROIC would be much higher, as the fixed assets would decrease, leading to a higher company's valuation.

Also, the Parks, Resorts and other Property, net only represent around 27% of the company's total assets, and so the model is only considering part of the company's assets to generate profit which consequently may lead to a lower valuation.

9. Relative Valuation

The purpose of this section is to complete the valuation of Walt Disney through a model in which its competitors are considered. Therefore the company is valued based on the “environment” of its segments of activity, being therefore possible to understand how the company is valued compared to its competitors.

As mentioned in the literature review section, this process starts with the establishment of Walt Disney peer group. As the company has five different segments of activity, a peer group was obtained to each of them in order to get a more accurate valuation. Moreover, it is applied the cluster analysis mechanism to reduce the group of companies to a smaller one, whereas the remaining ones are considered the most similar ones to Walt Disney for valuation purposes. Therefore, the peer groups' composition of each segment can be seen in annex 16.

In order to perform the relative valuation method, it is obtained the enterprise value to sales (EV/Sales), the enterprise value to EBIT (EV/EBIT), the enterprise value to EBITDA (EV/EBITDA), and the price to EBITDA (Price/EBITDA) for Walt Disney and its peers, from Bloomberg. As the relative valuation is performed by segment, it is chosen to use multiples that are based on financial information that could be obtained in each segment, as the sales, EBITDA and EBIT. Under these circumstances, one can conclude that the usage of any multiple that includes the company's earning would not be possible.

The multiples obtained are from 2014, being then used to compute the value of Walt Disney both for 2014 and 2015, whereas the later one is computed in order to reflect the potential growth of the company – forward looking multiples, and so different conclusions are expected to arise. Important to state that the estimation of the forward looking multiples consider that the number of Walt Disney shares outstanding and its market value of debt keep similar to the ones registered in 2014. Per last, the multiples for each segment are computed using the harmonic mean instead of the simple one. This is supported by Liu et al (2002) that concluded that the usage of harmonic mean yields more accurate results than the simple one.

Contrary to what is common on relative valuations, in this process is not presented the actual multiples values used to compute the enterprise value of the company. This happens because the relative valuation is done by segment, and so the valuation of Walt Disney results in the sum of each segment's valuation, which cannot be translated in a single multiple. Nevertheless, it is computed and presented the average multiple, being a proxy for the multiple applied in this valuation. Its objective is solely to give a hint of the real value that the multiple applied would be, in case it “existed”.

Under the relative valuation method, the valuation of Walt Disney Company is as presented in the table below.

2013			
	Average Multiple*	Multiples Valuation	Share Price
EV/SALES	3,13	152.475	77,16
EV/EBITDA	13,31	145.071	73,05
EV/EBIT	14,63	147.978	74,66
P/EBITDA	10,26	123.527	61,08
Shares Outstanding			869,000
2014			
	Average Multiple*	Multiples Valuation	Share Price
EV/SALES	12,10	167.250	85,24
EV/EBITDA	15,28	155.643	78,48
EV/EBIT	3,28	158.156	79,94
P/EBITDA	17,23	138.743	68,73
Shares Outstanding			974,281
2015			
	Average Multiple*	Multiples Valuation	Share Price
EV/SALES	12,10	176.411	90,47
EV/EBITDA	15,28	165.144	83,96
EV/EBIT	3,28	167.518	85,33
P/EBITDA	17,23	147.088	73,54
Shares Outstanding			1.092,316

Table 10 – Walt Disney relative valuation outcome. Multiples valuation values are expressed in USD million; share price values are expressed in dollars; shares outstanding values are expressed in millions. Data source: Bloomberg and own calculations.

*Average Multiple is obtained by performing a simple average of all peers' multiples, and therefore it is not the concrete multiple value used to obtain the final valuation, but gives a hint of the actual one.

As one can realize, the company valuation varies considerably according to the multiples considered. By analyzing the values obtained for 2014, Walt Disney stock price is lower than its market price, and so considered overvalued. However, considering the forward looking multiples, the valuation tends to the market value, as it includes the yearly potential growth of the company. It goes according to what Liu et al.

(2002) concluded, as the forward looking multiples perform greater in relative terms than the others. Still, it can be observed that almost all multiples valuation both in 2014 and 2015 provide a lower valuation for Walt Disney compared to its market value. The exception is the EV/Sales for 2015, providing a stock price of \$90,47, which is above the market price. The valuation through forward looking multiples is always supportable, since it incorporates forecasted factors (i.e. EBITDA) that may differ among analysts according their expectations about the company.

One of the most crucial steps in relative valuation is the choice of the most appropriate multiple for the company considered. The first multiple presented, EV/Sales, is not going to be considered for this exercise. Liu et al. (2002) state that the price to sales multiple does not demonstrate the true profitability of the company considered, since expenses are not taken into consideration. The same reasoning can be applied to the enterprise value to sales multiple, and therefore its usage may be misleading, since the relation between enterprise value and the company's sales can be very different according the companies of the peer group, and so this multiple is not going to be considered.

Then, when choosing between the multiples that relate with the EBIT and EBITDA, one has to take into account the context of the company considered. As Walt Disney has considerable high expenses on depreciation and amortization (mainly in the first one, due to the Parks & Resorts segment), and knowing that in the peer groups obtained there are no companies with the same dimension as Walt Disney, neither are their depreciation and amortization with comparable values, the incorporation of depreciation expenses can bias the results obtained. Therefore, the EV/EBIT is not going to be used for this valuation.

By choosing between the EV/EBITDA and the Price/EBITDA, it is the first one that ends being selected for this valuation. The reasoning behind this decision is related to the clarity that it displays when compared to the other one. In other words, as the price multiples can be misleading, since they may be consequence from the market speculation, it was decided to opt by the EV/EBITDA. This decision goes against Liu et al. (2002) that state that the usage of price multiples are better performing than the enterprise ones, since the last ones reduce the company performance.

As consequence of the reasoning explained, the multiple considered in this relative valuation method is the EV/EBITDA. Furthermore, it is considered the forward looking multiple, as it displays the growth of Walt Disney Company, and therefore a more

accurate and clear valuation. Under this scenario, Walt Disney Company stock is valued at \$83,96. Under this method, and by comparing to its market price, one can conclude that the stock is overvalued, representing consequently a selling opportunity for stockholders.

10. The Value-at-Risk Analysis

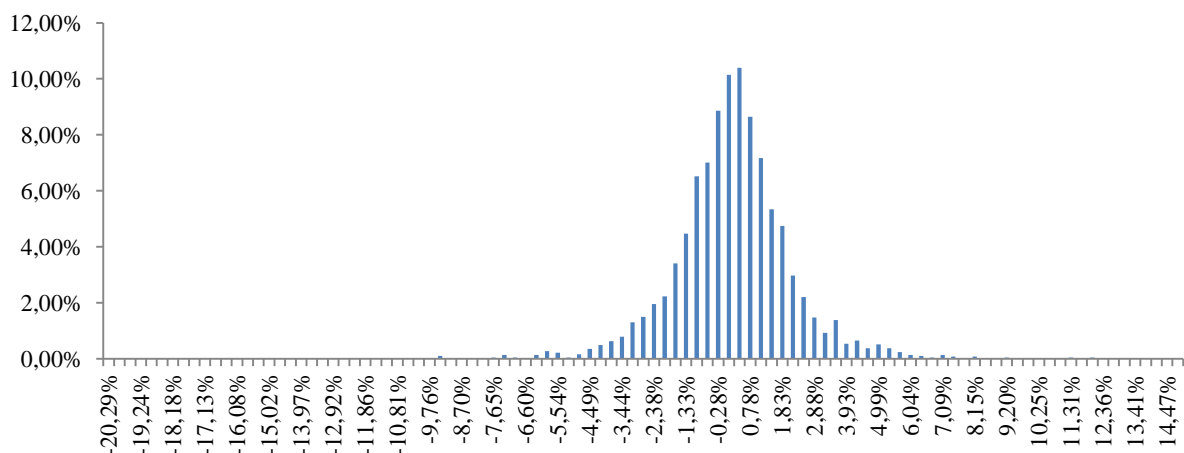
The Value-at-Risk (VaR) is a statistical tool used to quantify the financial risk level within a firm over a time frame. It is used by companies’ risk managers and investors with the objective to measure the risk that they are subject to when investing in a company. In this study, the application of the VaR aims to measure the potential loss for an investor, for a certain confidence level, when acquiring a Walt Disney stock.

From the several ways that the VaR can be computed – parametrical or non-parametrical, in this study is adopted the last one, more concretely the historical simulation and the Monte Carlo simulation.

10.1. Historical Simulation

The historical simulation is a very simplistic method to compute the VaR, but can provide investors a basic idea of what happened to the considered stock in the past, giving them some hints of what they can expect.

In order to do so, it was obtained the Walt Disney stock daily price returns from January 2010 to July 2014, being the histogram of its returns displayed in graph 24. As can be seen, the stock returns were mainly between a decrease of 1,33% and an increase of 1,83%, and only for very few occasions the stock suffered huge downward alterations.



Graph 24 – Walt Disney stock returns’ distribution histogram. Incorporates 3.666 observations. Data source: Bloomberg.

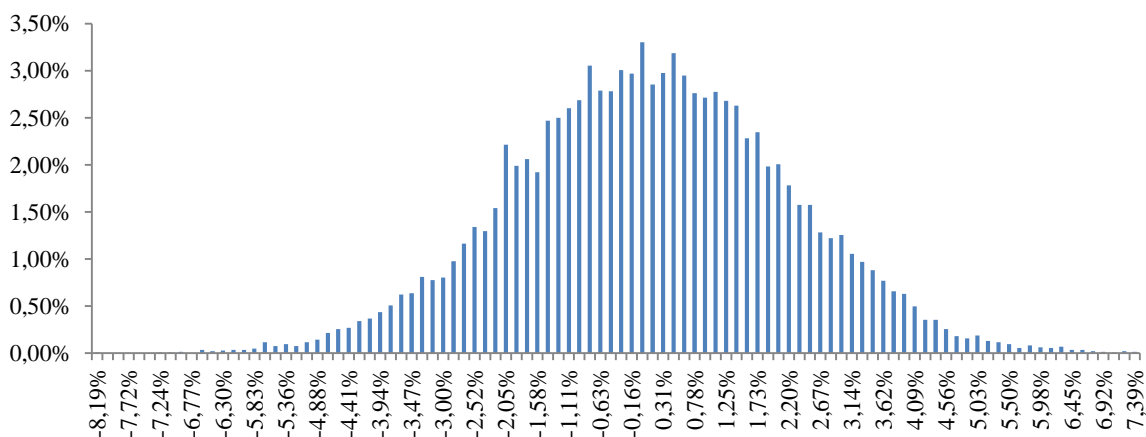
To obtain the VaR for each confidence level, the data was organized from the highest to the lowest values. Then, it was obtained the 90th, 95th and 99th percentile from the data, in order to get the minimum loss that historically happened for a confidence level of 90%, 95% and 99% respectively. It was achieved, for a 90% confidence level, a daily VaR of -2,12%; for a 95% confidence level, a daily VaR of -3,07%; and for a 99% confidence level, a daily VaR of -5,75%.

In this study the focus is on the 95% confidence level and so, according to the VaR analysis, an investor should expect higher losses than 3,07% for every 5% of the cases. By applying the VaR to the Walt Disney stock price obtained through the DCF Model one should expect, for a 95% confidence level, a decrease of at least \$2,72.

10.2. Monte Carlo Simulation

The Monte Carlo simulation consists in measure the possible losses for an investor based on a simulation of stock returns that display the same mean and standard deviation as the ones from a considered sample. Actually, this displays one of the biggest differences between the historical and the Monte Carlo simulations – while the historical one assumes that the “history will repeat itself”, the Monte Carlo simulation assumes new stock returns’ behavior.

As for the historical simulation, the data used in the Monte Carlo simulation consists in the Walt Disney stock returns from January 2010 to July 2014. From this sample is obtained the simple mean of 0,03% and a standard deviation of 2,05%. Then, through a normal random generator tool, it was obtained 15.000 simulations for Walt Disney stock returns, with the same simple mean and standard deviation as the sample. This process is done because the Monte Carlo simulation is based on the normality of the input data. The graph below displays the distribution of the 15.000 generated returns.



Graph 25 – Walt Disney stock returns’ distribution histogram. Incorporates 15.000 observations. Data source: Own estimations and calculations.

By applying the Jarque-Bera test to the simulated returns, one can conclude that the normality hypothesis cannot be rejected. In fact, it was obtained a Jarque-Bera test value of 0,97 which, compared to the critical value of a chi-squared with a 95% confidence level and two degrees of freedom (5,99), induces the normality hypothesis for the simulated returns, and so this VaR method is adequate to be applied.

The Monte Carlo simulation results are more pessimistic for investors than the ones from the historical simulation for the considered confidence level. For a 95% confidence level, the VaR for Walt Disney stock is -3,37% which, applied to the Walt Disney stock price obtained through the DCF Model would represent a loss of \$2,98.

Still, investors concern a lot with the “worst case” scenario. So, for a 99% confidence level, it is expected that Walt Disney stock price decrease at least 4,76%, representing a minimum loss of \$4,21. In other words, according the Monte Carlo simulation and for a 1% probability, investors may expect the stock price to fall more than \$4,21 in a single day.

11. Valuation Conclusion

As it is known, and as one can verify in this valuation exercise, different valuation models derive different valuations based on the details that each of them highlight. Still, in order to obtain the most accurate valuation, it is needed to contextualize the model to the company, and all the particularities the company displays and, consequently, the impact these can have in the model applied.

In this dissertation are developed three different valuation methods: DCF model, relative valuation and EVA model for which, in the literature valuation section, can be disclosed the advantages and disadvantages each of them contains.

In the case of Walt Disney, some considerations have to be taken into consideration. The company has five different segments of activity, all with different characteristics. In fact, one can realize that the media networks segment generates considerably higher revenues than most of the others; the parks & resorts segment incurs in much higher capital expenditures than the others; the studio entertainment segment is the most mature one, and consequently is not expected to increase at a similar rate as the other segments; the consumer products segment behaves as consequence of the other segments; and the interactive media segment is a too “young segment” to derive accurate conclusions on a simple way.

As a first decision, the relative valuation is not going to be the final valuation of this dissertation. This method generalizes the same characteristics to all segments which, as stated above, is inappropriate. Moreover, the companies from the peer group obtained are in a much lower financial level than Walt Disney, and so this could bias valuation obtained. Consequently, this model is not selected.

Then, between the EVA model and the DCF one, the choice falls over the later one. The DCF model covers more and more deeply details that each segment has, unlike the EVA model that just takes into consideration the relation between the company's return and its capital expenditures. In this dissertation is believed that the relationship between the capital expenditures and the company's return is not enough to achieve an accurate valuation, so a more complex and deep analysis is adopted through the DCF model. Therefore, the Walt Disney share price for this dissertation is \$88,52, obtained through the discounted cash flows model.

12. Valuation Comparison - Analyst

As stated in the abstract section, this report ends with the comparison of this valuation exercise with one published by J.P. Morgan in the 6th May 2014. One should take into consideration that the J.P. Morgan report only performs the forecast exercise until 2015, but still allows a comparison exercise. Moreover, the analysis report is much less detailed than this valuation study, and also the valuation methods are different. Therefore the core comparisons made are between the financial indicators and the reasons that led to their difference.

Valuations data		
	Valuation Exercise	J.P.Morgan Report
Valuation period	2015 - 2017	2014 - 2015
Valuation method	DCF model	Relative valuation
Estimated price	\$88,52	\$90,00
Recommendation	Buy	Buy

As one can realize, even though the recommendation is the same according the two reports, the estimated price is higher in the analyst report. This difference can be justified by several reasons, as the methodology applied, or the valuation period considered. Nevertheless, the main conclusions are analyzed below.

12.1. Financial key data comparison

Even though the valuation methodology differs among the studies, there are comparable financial indicators that can display the expectations that the authors have about Walt Disney.

For the comparable period, consisting in 2014 and 2015, one can realize that the valuation study estimates higher generated revenues, displaying an average growth rate of 6,21% against the 6,06% estimated on the analysis report. In the other hand, one can conclude that the EBITDA estimated in this study is lower than the one obtained in the analysis report. In fact, in the last year of the comparable period, while in this valuation study the EBITDA obtained is \$13.415 million, in the analyst report it is \$15.289 million, representing a difference of 14%. This indicates that in this study the analysis was more conservative regarding the company's operating costs and other expenses.

Regarding depreciation and amortization, these are estimated very similarly, being on average 3% higher in this study. Plus, the effective tax rate used in this study is minimally lower than the one used in the analysis report, being the difference of 0,57%.

Lastly, as can be perceived by the more optimistic analysis performed by the analysis report, the net income is on average 12% higher than the one achieved in this study. By comparing the two analyses, one can realize that the main driver of this difference is linked to the estimation of the costs of sales and other expenses.

There are some others estimations that, even though they are not considering for valuation purposes in the J.P. Morgan report, may be interest to compare in order to analyze the reasonably of this study. The estimation of CAPEX is not very different overall, but its estimation is 21% higher for the analysis report in 2014, but 21% lower in 2015. Per last, there is a considerable difference regarding the estimation of change in working capital, but both analyses consider that there is the need of increasing the working capital.

12.2. Relative valuation comparison

Even though the valuation method used by J.P. Morgan is the relative valuation, and therefore believed to be comparable to the relative valuation performed in this study, this ends to not be true.

In the analysis report was used the forward EPS multiple to perform the valuation, without being disclosed the peer group considered for the valuation. In the relative

valuation of this valuation study, it is applied a forward multiple, but it is not considered that EPS is the most accurate one to apply in this company. Moreover, it is given to believe that the peer group used in the report is composed by diversified media peers. One should take in consideration that Walt Disney is a diversified company, and so consider only media companies can bias the results obtained.

Still, concluding, the different methodologies applied in these two analyses lead to the same recommendation, which give a hint that Walt Disney expectations are not completely reflected in its stock price.

13. Conclusion

The execution of this valuation study allows one to realize that there are several valuation models that can be used to value a company. As stated in this study, a model should be chosen according to the company's characteristics and its industry. Still, no valuation model is more accurate than another, just by itself. Plus, as could be seen in this study, different valuation models can yield different results.

The DCF model, the chosen one to represent this valuation exercise, yields a valuation of \$88,52 for Walt Disney, representing therefore an opportunity for potential investors. While back in the days Walt Disney was an “ordinary” company focused in spreading a message and teaching values nowadays, besides being one of the top companies in its main sector, it also has the component of being a corporation that displays investment opportunities, as can be concluded from this study.

14. Annex

14.1. Annex 1 – Walt Disney Income Statement

<i>in millions (\$)</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Revenues	35.510	37.843	36.149	38.063	40.893	42.278	45.041	48.597	51.251	54.002	56.937
Media Networks	15.046	16.116	16.209	17.162	18.714	19.436	20.356	21.456	22.639	23.912	25.281
Parks & Resorts	10.626	11.504	10.667	10.761	11.797	12.920	14.087	15.025	15.935	16.901	17.927
Studio Entertainment	7.491	7.348	6.136	6.701	6.351	5.825	5.979	6.911	7.049	7.190	7.334
Consumer Products	2.347	2.875	2.425	2.678	3.049	3.252	3.555	3.982	4.220	4.474	4.742
Interactive Media	-	-	712	761	982	845	1.064	1.224	1.407	1.525	1.652
Cost and expenses	28.655	30.400	30.452	31.337	33.112	33.415	35.591	38.539	40.682	43.008	45.544
Restructuring and impairment charges	26	39	492	270	55	100	214	171	172	172	172
Other income / (expense), net	1.004	-59	342	140	75	239	-69	-222	-222	-222	-222
Net interest expense	593	524	466	409	343	369	235	466	490	518	555
Equity in the income of investees	485	581	577	440	585	627	688	715	754	797	842
Income before income taxes	7.725	7.402	5.658	6.627	8.043	9.260	9.620	9.913	10.438	10.879	11.287
Income taxes	2.874	2.673	2.049	2.314	2.785	3.087	2.984	3.318	3.494	3.642	3.778
Net income	4.851	4.729	3.609	4.313	5.258	6.173	6.636	6.594	6.944	7.237	7.508
Net income attributable to noncontrolling interests	177	302	302	350	451	491	500	477	502	523	543
Discounted Operations, net of tax	13	0	0	0	0	0	0	0	0	0	0
Net income attributable to The Walt Disney Company (Disney)	4.661	4.427	3.307	3.963	4.807	5.682	6.136	6.118	6.442	6.714	6.966

14.2. Annex 2 – Walt Disney Balance Sheet

<i>in millions (\$)</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<u>ASSETS</u>											
Cash and Equivalents	3.670	3.001	3.417	2.722	3.185	3.387	3.931	3.512	3.083	3.110	3.852
Accounts Receivable	5.032	5.373	4.854	5.784	6.182	6.540	6.967	7.258	7.655	8.066	8.504
Inventories	641	1.124	1.271	1.442	1.595	1.537	1.487	1.724	1.815	1.911	2.014
Television Costs and Advances	0	541	631	678	674	676	634	651	668	686	705
Deferred Income Tax Asset (Short-Term)	862	1.024	1.140	1.018	1.487	765	485	485	485	485	485
Other Current Assets	1.109	603	576	581	634	804	605	770	812	856	902
Total Current Assets	11.314	11.666	11.889	12.225	13.757	13.709	14.109	14.400	14.518	15.114	16.463
Film and Television Costs	5.123	5.394	5.125	4.773	4.357	4.541	4.783	5.011	5.251	5.502	5.764
Long Term Investments	995	2.249	2.554	2.513	2.435	2.723	2.849	2.964	3.083	3.207	3.336
Parks, Resorts and Other Property											
Attractions, Buildings and Equipment	30.260	31.493	32.475	32.875	35.515	38.582	41.192	43.379	45.682	48.107	50.662
Accumulated Depreciation	15.145	16.310	17.395	18.373	19.572	20.687	22.459	24.551	26.782	29.176	31.769
	15.115	15.183	15.080	14.502	15.943	17.895	18.733	18.828	18.900	18.932	18.892
Projects in progress	1.147	1.169	1.350	2.180	2.625	2.453	2.476	2.806	3.180	3.603	4.084
Land	1.171	1.180	1.167	1.124	1.127	1.164	1.171	1.327	1.504	1.704	1.931
	17.433	17.532	17.597	17.806	19.695	21.512	22.380	22.961	23.584	24.239	24.907
Intangible Assets, net	2.494	2.428	2.247	5.081	5.121	5.015	7.370	8.621	10.065	11.717	13.587
Goodwill	22.085	21.465	21.683	24.100	24.145	25.110	27.324	27.324	27.324	27.324	27.324
Other Assets	1.484	1.763	2.022	2.708	2.614	2.288	2.426	2.040	2.891	3.794	4.748
Total Non-Current Assets	49.614	50.831	51.228	56.981	58.367	61.189	67.132	68.921	72.198	75.782	79.665
Total Assets	60.928	62.497	63.117	69.206	72.124	74.898	81.241	83.321	86.716	90.896	96.128
<u>LIABILITIES & EQUITY</u>											
Accounts payable and other accrued liabilities	5.949	5.980	5.616	6.109	6.362	6.393	6.803	7.353	7.740	8.152	8.591
Current portion of borrowings	3.280	3.529	1.206	2.350	3.055	3.614	1.512	1.512	1.512	1.512	1.512
Unearned royalties and other advances	2.162	2.082	2.112	2.541	2.671	2.806	3.389	3.676	3.987	4.324	4.690
Total Current Liabilities	11.391	11.591	8.934	11.000	12.088	12.813	11.704	12.541	13.238	13.987	14.793
Long Term Debt	11.892	11.110	11.495	10.130	10.922	10.697	12.776	13.952	14.738	15.648	16.876
Deferred Income Taxes	2.573	2.350	1.819	2.630	2.866	2.251	4.050	2.648	2.659	2.703	2.830
Other Long Term Liabilities	3.024	3.779	5.444	6.104	6.795	7.179	4.561	8.665	12.105	15.900	19.993
Total Non-Current Liabilities	17.489	17.239	18.758	18.864	20.583	20.127	21.387	25.266	29.502	34.251	39.698
Total Liabilities	28.880	28.830	27.692	29.864	32.671	32.940	33.091	37.806	42.740	48.239	54.490
Common Stock	24.207	26.546	27.038	28.736	30.296	31.731	33.440	34.752	36.115	37.532	39.004
Retained Earnings	24.805	28.413	31.033	34.327	38.375	42.965	47.758	52.406	57.216	62.119	67.074
Accumulated Other Comprehensive Income	-157	-81	-1.644	-1.881	-2.630	-3.266	-1.187	-2.122	-2.217	-2.284	-2.215
Treasury Stock	-18.102	-22.555	-22.693	-23.663	-28.656	-31.671	-34.582	-42.582	-50.582	-58.582	-66.582
Non-Controlling Interests	1.294	1.343	1.691	1.823	2.067	2.198	2.721	3.061	3.443	3.873	4.357
Total Equity	32.047	33.666	35.425	39.342	39.452	41.957	48.150	45.515	43.976	42.658	41.637
Total Liabilities & Equity	60.927	62.496	63.117	69.206	72.123	74.897	81.241	83.321	86.716	90.896	96.128

14.3. Annex 3 – Walt Disney Cash Flow Statement

<i>in millions (\$)</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<u>OPERATING ACTIVITIES</u>											
Net Income	4.687	4.427	3.307	4.313	5.258	6.173	6.636	6.594	6.944	7.237	7.508
Income from discontinued operations	-13	0	0	0	0	0	0	0	0	0	0
Depreciation and Amortization	1.491	1.582	1.631	1.713	1.841	1.987	2.192	2.339	2.539	2.789	3.105
Gains on dispositions and acquisitions	-1.052	-14	-342	-118	-75	-184	-252	-280	0	0	0
Deferred Income Taxes	-137	-128	323	133	127	472	92	126	164	205	188
Equity in the income of investees	-485	-581	-577	-438	-584	-627	-742	-715	-754	-797	-842
Cash distributions received from equity investees	420	476	505	473	608	663	694	715	754	797	842
Minority interests	177	302	302	0	0	0	0	0	0	0	0
Net change in film costs and advances	115	-301	-43	238	332	-52	-49	-245	-257	-269	-281
Equity-based compensation	419	402	457	391	423	408	402	415	414	416	410
Impairment Charges	26	39	279	132	0	0	0	0	0	0	0
Other	-91	-209	-247	9	204	217	322	188	233	240	246
Changes in operating assets and liabilities:											
Receivables	-355	-594	468	-686	-518	-108	-374	361	448	465	496
Inventories	52	-329	-117	-127	-199	18	51	237	91	97	103
Other assets	9	-64	-565	42	-189	-151	-30	-386	851	903	954
Accounts payable and other accrued liabilities	77	488	-325	649	-367	-608	367	550	387	412	439
Income taxes	58	-50	8	-144	134	-242	89	-21	-32	-30	-35
Cash provided by operations	5.398	5.446	5.064	6.580	6.995	7.966	9.398	9.877	11.782	12.464	13.133
<u>INVESTING ACTIVITIES</u>											
Investments in parks, resorts and other property	-1.566	-1.578	-1.753	-2.110	-3.559	-3.784	-2.796	-2.974	-3.136	-3.304	-3.484
Sales of Investments	5	70	46	0	0	0	0	0	0	0	0
Proceeds from dispositions	1.530	14	185	170	564	15	397	366	0	0	0
Acquisitions	-608	-660	-517	-2.493	-184	-1.088	-2.443	-146	-1.017	-1.069	-1.120
Other	21	-8	-57	-90	-107	98	166	166	166	166	166
Cash used in investing activities	-618	-2.162	-2.096	-4.523	-3.286	-4.759	-4.676	-2.588	-3.987	-4.207	-4.438
<u>FINANCING ACTIVITIES</u>											
Commercial paper borrowings, net	1.847	-701	-1.985	1.190	393	467	-2.050	-120	-401	-358	-126
Borrowings	3.143	1.706	1.750	0	2.350	3.779	3.931	2.380	2.271	2.352	2.437
Reduction of borrowings	-2.294	-477	-1.617	-1.371	-1.096	-3.822	-1.502	-1.084	-1.084	-1.084	-1.084
Dividends	-637	-664	-648	-653	-756	-1.076	-1.324	-1.470	-1.632	-1.812	-2.011
Repurchase of common stock	-6.923	-4.453	-138	-2.669	-4.993	-3.015	-4.087	-8.000	-8.000	-8.000	-8.000
Proceeds from exercise of stock options	1.245	636	86	1.133	1.128	1.008	587	832	773	792	893
Other	0	0	0	-293	-259	-326	231	-162	-129	-96	-39
Cash used in financing activities	-3.619	-3.953	-2.552	-2.663	-3.233	-2.985	-4.214	-7.624	-8.202	-8.206	-7.929
Impact of exchange rates on cash and cash equivalents	0	0	0	-87	-12	-20	-18	-34	-21	-23	-24
Cash Flow of Discounted Operations	98	0	0	0	0	0	0	0	0	0	0
Increase in cash and cash equivalents	1.259	-669	416	-693	464	202	490	-368	-429	28	742
Cash and cash equivalents, beginning of year	2.411	3.670	3.001	3.417	2.724	3.188	3.390	3.880	3.512	3.083	3.110
Cash and cash equivalents, end of year	3.670	3.001	3.417	2.724	3.188	3.390	3.880	3.512	3.083	3.110	3.852

14.4. Annex 4 – Walt Disney Effective Tax Rate

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Effective Tax Rate	37,20%	36,11%	36,21%	34,92%	34,63%	33,34%	31,02%	33,47%	33,47%	33,47%	33,47%

14.5. Annex 5 – Walt Disney Depreciation and Amortization

<i>in millions (\$)</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Media Networks	184	203	206	222	237	258	251	246	248	251	253
Depreciation	168	179	197	213	229	241	238	234	236	239	241
Amortization	16	24	9	9	8	17	13	12	12	12	12
Parks & Resorts	1.094	1.145	1.148	1.139	1.165	1.241	1.370	1.464	1.540	1.619	1.703
Depreciation	1.094	1.145	1.148	1.139	1.165	1.241	1.368	1.464	1.539	1.619	1.702
Amortization	0	0	0	0	0	0	2	0	0	0	0
Studio Entertainment	46	67	60	89	132	142	161	141	149	157	166
Depreciation	31	41	50	56	53	48	54	71	75	80	84
Amortization	15	26	10	33	79	94	107	69	73	77	82
Consumer Products	35	44	39	78	105	115	146	235	334	475	676
Depreciation	18	18	29	33	48	55	57	117	167	237	337
Amortization	17	26	10	45	57	60	89	118	168	238	339
Interactive Media	-	-	50	43	54	49	44	82	97	115	135
Depreciation	-	-	28	19	16	17	20	34	41	48	57
Amortization	-	-	22	24	38	32	24	48	56	66	79
Corporate	132	123	128	142	148	182	220	171	172	172	172
Depreciation	132	123	128	142	148	182	220	171	172	172	172
Amortization	0	0	0	0	0	0	0	0	0	0	0
Total Depreciation & Amortization	1.491	1.582	1.631	1.713	1.841	1.987	2.192	2.339	2.539	2.789	3.105

14.6. Annex 6 – Walt Disney Other Non-Cash Adjustments

<i>in millions (\$)</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Deferred Income Taxes	-137	-128	323	133	127	472	92	126	164	205	188
Disposal/Sale of Assets	-1.052	-14	-342	-118	-75	-184	-252	-280	0	0	0
Stock Based Compensation	419	402	457	391	423	408	402	415	414	416	410
Equity in Earnings of Affiliates/ JV-CF	-65	-105	-72	35	24	36	-48	0	0	0	0
Other Non-Cash Items	24	-510	-290	247	536	165	273	-57	-24	-29	-35
Change in Other Assets	9	-64	-565	42	-189	-151	-30	-386	851	903	954
Net Income - CF	4.687	4.427	3.307	4.313	5.258	6.173	6.636	6.594	6.944	7.237	7.508
Cumulative Net Income	4.687	4.427	3.307	3.963	4.807	5.682	6.136	6.118	6.442	6.714	6.966
Minority interests	177	302	302	0	0	0	0	0	0	0	0
Impairment Charges	26	39	279	132	0	0	0	0	0	0	0
Total Other Non-Cash Adjustments	-599	-78	92	1.212	1.297	1.237	937	294	1.907	2.018	2.059

<i>in millions (\$)</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Media Networks	-254	-33	41	546	594	569	423	130	842	893	914
Parks & Resorts	-179	-24	27	343	374	378	293	91	593	631	648
Studio Entertainment	-126	-15	16	213	201	170	124	42	262	269	265
Consumer Products	-40	-6	6	85	97	95	74	24	157	167	171
Interactive Media	0	0	2	24	31	25	22	7	52	57	60
Total Other Non-Cash Adjustments	-599	-78	92	1.212	1.297	1.237	937	294	1.907	2.018	2.059

14.7. Annex 7 – Walt Disney Capital Expenditures

<i>in millions (\$)</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Media Networks	265	367	294	224	307	255	263	310	327	345	363
Parks & Resorts	1.072	933	1.182	1.533	2.723	2.883	2.110	2.190	2.310	2.434	2.566
Studio Entertainment	85	126	135	102	118	79	78	123	130	137	144
Consumer Products	36	62	46	97	115	69	45	83	87	92	97
Interactive Media	-	-	21	17	21	27	13	22	24	25	26
Corporate	108	90	75	137	275	471	287	245	258	272	287
Total Capital Expenditures	1.566	1.578	1.753	2.110	3.559	3.784	2.796	2.974	3.136	3.304	3.484

14.8. Annex 8 – Walt Disney Working Capital

<i>in millions (\$)</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Current Receivables	6.449	6.142	5.490	6.695	7.051	7.183	7.845	8.206	8.654	9.118	9.614
Accounts receivable	5.032	5.373	4.854	5.784	6.182	6.540	6.967	7.258	7.655	8.066	8.504
Other	424	414	396	656	496	0	428	468	494	520	549
Allowance for doubtful accounts	-116	-248	-336	-326	-261	-161	-155	-290	-306	-322	-340
Other Current Assets	1.109	603	576	581	634	804	605	769	811	855	901
Prepaid expenses	446	478	464	446	449	469	443	527	555	585	617
Other	663	125	112	135	185	335	162	243	256	270	284
Inventories	641	1.124	1.271	1.442	1.595	1.537	1.487	1.724	1.815	1.911	2.014
Inventories	641	1.124	1.271	1.442	1.595	1.537	1.487	1.724	1.815	1.911	2.014
Accounts payable and other accrued liabilities	5.949	5.980	5.616	6.109	6.362	6.393	6.803	7.353	7.740	8.152	8.591
Accounts payable	3.996	4.355	4.002	4.413	4.546	4.619	4.899	5.244	5.520	5.813	6.127
Payroll and employee benefits	1.290	1.376	1.259	1.484	1.468	1.521	1.628	1.704	1.793	1.889	1.991
Other	663	249	355	212	348	253	276	405	427	449	474
Working Capital	1.141	1.286	1.145	2.028	2.284	2.327	2.529	2.577	2.729	2.878	3.037

<i>in millions (\$)</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Media Networks	483	548	513	914	1.045	1.070	1.143	1.139	1.202	1.269	1.342
Parks & Resorts	341	391	338	573	659	711	791	765	811	861	913
Studio Entertainment	241	250	194	357	355	321	336	368	376	383	391
Consumer Products	75	98	77	143	170	179	200	214	227	241	255
Interactive	-	-	23	41	55	47	60	91	113	125	137
Total Working Capital	1.141	1.286	1.145	2.028	2.284	2.327	2.529	2.577	2.729	2.878	3.037
Δ Working Capital	-	145	-141	883	256	43	202	48	152	149	159

<i>in millions (\$)</i>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<u>CURRENT RECEIVABLES</u>	6.449	6.142	5.490	6.695	7.051	7.183	7.845	8.206	8.654	9.118	9.614
Media Networks	2.733	2.616	2.462	3.019	3.227	3.302	3.546	3.623	3.823	4.038	4.269
<i>DSO</i>	46	41	38	44	43	43	44	43	43	43	43
Parks & Resorts	1.930	1.867	1.620	1.893	2.034	2.195	2.454	2.537	2.691	2.854	3.027
<i>DSO</i>	46	41	38	44	43	43	44	43	43	43	43
Studio Entertainment	1.360	1.193	932	1.179	1.095	990	1.041	1.167	1.190	1.214	1.238
<i>DSO</i>	46	41	38	44	43	43	44	43	43	43	43
Consumer Products	426	467	368	471	526	553	619	672	713	755	801
<i>DSO</i>	46	41	38	44	43	43	44	43	43	43	43
Interactive	-	-	108	134	169	144	185	207	238	257	279
<i>DSO</i>	-	-	38	44	43	43	44	43	43	43	43
<u>INVENTORIES</u>	641	1.124	1.271	1.442	1.595	1.537	1.487	1.724	1.815	1.911	2.014
Media Networks	272	479	570	650	730	707	672	761	803	848	897
<i>DCI</i>	6	11	13	14	15	14	13	14	14	14	14
Parks & Resorts	192	342	375	408	460	470	465	542	575	610	647
<i>DCI</i>	6	10	12	12	13	12	11	12	12	12	12
Studio Entertainment	135	218	216	254	248	212	197	245	250	255	260
<i>DCI</i>	5	9	9	11	11	11	10	10	10	10	10
Consumer Products	42	85	85	101	119	118	117	140	149	158	167
<i>DCI</i>	6	10	12	13	14	14	13	13	13	13	13
Interactive	-	-	25	29	38	31	35	35	38	41	43
<i>DCI</i>	-	-	7	8	8	8	8	8	8	8	8
<u>ACCOUNTS PAYABLE AND OTHER ACCRUED LIABILITIES</u>	5.949	5.980	5.616	6.109	6.362	6.393	6.803	7.353	7.740	8.152	8.591
Media Networks	2.521	2.547	2.518	2.754	2.911	2.939	3.075	3.245	3.424	3.617	3.824
<i>DPO</i>	60	58	56	59	59	59	58	58	58	58	58
Parks & Resorts	1.780	1.818	1.657	1.727	1.835	1.954	2.128	2.314	2.455	2.603	2.762
<i>DPO</i>	57	54	52	52	51	50	51	51	51	51	51
Studio Entertainment	1.255	1.161	953	1.075	988	881	903	1.043	1.064	1.086	1.107
<i>DPO</i>	51	47	41	46	44	45	44	44	44	44	44
Consumer Products	393	454	377	430	474	492	537	598	634	672	713
<i>DPO</i>	59	54	53	56	56	56	59	56	56	56	56
Interactive	-	-	111	122	153	128	161	151	162	173	186
<i>DPO</i>	-	-	29	32	31	32	37	32	32	32	32

14.9. Annex 9 – Walt Disney Media Networks Segment: DCF Valuation

<i>in millions (\$)</i>	2010	2011	2012	2013	2014	2015	2016	2017
+ Revenues	17.162	18.714	19.436	20.356	21.456	22.639	23.912	25.281
- Cost of goods sold	9.888	10.282	10.535	11.261	11.763	12.412	13.109	13.860
Gross Profit	7.274	8.432	8.901	9.095	9.693	10.228	10.803	11.421
- Selling, general and administrative expenses	2.358	2.633	2.651	2.768	2.954	3.117	3.292	3.481
+ Equity in the income of investees	438	584	627	742	715	754	797	842
EBITDA	5.354	6.383	6.877	7.069	7.454	7.865	8.307	8.783
- Depreciation	213	229	241	238	234	236	239	241
- Amortization	9	8	17	13	12	12	12	12
EBIT	5.132	6.146	6.619	6.818	7.208	7.617	8.056	8.530
- Tax Expenses	1.792	2.128	2.207	2.115	2.413	2.550	2.697	2.855
NOPAT	3.340	4.018	4.412	4.703	4.795	5.067	5.360	5.674
+ Depreciation	213	229	241	238	234	236	239	241
+ Amortization	9	8	17	13	12	12	12	12
+ Other Non-Cash Adjustments	546	594	569	423	130	842	893	914
Cash Flow from Operations	4.108	4.848	5.239	5.378	5.170	6.157	6.504	6.842
- Capital Expenditures	224	307	255	263	310	327	345	363
- Δ Working Capital	401	131	25	73	-4	63	68	73
Free Cash Flows to the Firm (FCFF)	3.484	4.411	4.960	5.041	4.865	5.767	6.091	6.405
						Terminal Value	134.138	
Present value of the FCFF (FY 2014)						5.242	5.033	4.811
Present value of Terminal Value (FY 2014)								100.741
						Net Present Value		115.827

The FCFF of this segment are obtained by reducing to the earnings before interest taxes (EBIT) the tax expenses, obtaining therefore the net operating profit after taxes. Then it is added the value of depreciations, amortizations and other non-cash adjustments, achieving this way the cash flow from operations. Per last, it is subtracted the capital expenditures and variations of working capital, obtaining the Free Cash Flows to the Firm of the segment. In the table can be seen, in the first half, the values of the segment FCFF obtained for the considered years, as well as its terminal value as of 2017. In the second half is disclosed the present value of FCFF and terminal value for 2014. The Net Present Value displays the segment value.

14.10. Annex 10 – Walt Disney Parks & Resorts Segment: DCF Valuation

<i>in millions (\$)</i>	2010	2011	2012	2013	2014	2015	2016	2017
+ Revenues	10.761	11.797	12.920	14.087	15.025	15.935	16.901	17.927
- Cost of goods sold	6.787	7.383	7.928	8.537	9.243	9.802	10.397	11.028
Gross Profit	3.974	4.414	4.992	5.550	5.782	6.132	6.504	6.899
- Selling, general and administrative expenses	1.517	1.696	1.849	1.960	2.134	2.263	2.400	2.546
EBITDA	2.457	2.718	3.143	3.590	3.649	3.870	4.104	4.353
- Depreciation	1.139	1.165	1.241	1.368	1.464	1.539	1.619	1.702
- Amortization	0	0	0	2	0	0	0	0
EBIT	1.318	1.553	1.902	2.220	2.185	2.330	2.485	2.651
- Tax Expenses	460	538	634	689	731	780	832	887
NOPAT	858	1.015	1.268	1.531	1.453	1.550	1.653	1.763
+ Depreciation	1.139	1.165	1.241	1.368	1.464	1.539	1.619	1.702
+ Amortization	0	0	0	2	0	0	0	0
+ Other Non-Cash Adjustments	343	374	378	293	91	593	631	648
Cash Flow from Operations	2.339	2.554	2.887	3.194	3.008	3.682	3.904	4.114
- Capital Expenditures	1.533	2.723	2.883	2.110	2.190	2.310	2.434	2.566
- Δ Working Capital	235	86	52	80	-26	46	49	52
Free Cash Flows to the Firm (FCFF)	571	-254	-48	1.005	844	1.326	1.421	1.496
							Terminal Value	28.657
Present value of the FCFF (FY 2014)						1.206	1.174	1.124
Present value of Terminal Value (FY 2014)								21.523
						Net Present Value		25.026

The FCFF of this segment are obtained by reducing to the earnings before interest taxes (EBIT) the tax expenses, obtaining therefore the net operating profit after taxes. Then it is added the value of depreciations, amortizations and other non-cash adjustments, achieving this way the cash flow from operations. Per last, it is subtracted the capital expenditures and variations of working capital, obtaining the Free Cash Flows to the Firm of the segment. In the table can be seen, in the first half, the values of the segment FCFF obtained for the considered years, as well as its terminal value as of 2017. In the second half is disclosed the present value of FCFF and terminal value for 2014. The Net Present Value displays the segment value.

14.11. Annex 11 – Walt Disney Studio Entertainment Segment: DCF Valuation

<i>in millions (\$)</i>	2010	2011	2012	2013	2014	2015	2016	2017
+ Revenues	6.701	6.351	5.825	5.979	6.911	7.049	7.190	7.334
- Cost of goods sold	3.469	3.253	2.908	3.012	3.491	3.560	3.632	3.704
Gross Profit	3.232	3.098	2.917	2.967	3.420	3.489	3.558	3.630
- Selling, general and administrative expenses	2.450	2.348	2.053	2.145	2.490	2.540	2.590	2.642
EBITDA	782	750	864	822	930	949	968	987
- Depreciation	56	53	48	54	71	75	80	84
- Amortization	33	79	94	107	69	73	77	82
EBIT	693	618	722	661	790	800	811	822
- Tax Expenses	242	214	241	205	264	268	272	275
NOPAT	451	404	481	456	525	533	540	547
+ Depreciation	56	53	48	54	71	75	80	84
+ Amortization	33	79	94	107	69	73	77	82
+ Other Non-Cash Adjustments	213	201	170	124	42	262	269	265
Cash Flow from Operations	753	737	794	741	708	943	965	977
- Capital Expenditures	102	118	79	78	123	130	137	144
- Δ Working Capital	163	-2	-34	15	33	7	8	8
Free Cash Flows to the Firm (FCFF)	489	622	749	648	552	806	821	825
						Terminal Value		12.419
Present value of the FCFF (FY 2014)						733	678	620
Present value of Terminal Value (FY 2014)								9.327
						Net Present Value		11.358

The FCFF of this segment are obtained by reducing to the earnings before interest taxes (EBIT) the tax expenses, obtaining therefore the net operating profit after taxes. Then it is added the value of depreciations, amortizations and other non-cash adjustments, achieving this way the cash flow from operations. Per last, it is subtracted the capital expenditures and variations of working capital, obtaining the Free Cash Flows to the Firm of the segment. In the table can be seen, in the first half, the values of the segment FCFF obtained for the considered years, as well as its terminal value as of 2017. In the second half is disclosed the present value of FCFF and terminal value for 2014. The Net Present Value displays the segment value.

14.12. Annex 12 – Walt Disney Consumer Products Segment: DCF Valuation

<i>in millions (\$)</i>	2010	2011	2012	2013	2014	2015	2016	2017
+ Revenues	2.678	3.049	3.252	3.555	3.982	4.220	4.474	4.742
- Cost of goods sold	1.236	1.452	1.514	1.566	1.835	1.945	2.061	2.185
Gross Profit	1.442	1.597	1.738	1.989	2.147	2.276	2.412	2.557
- Selling, general and administrative expenses	687	676	686	731	847	898	952	1.009
EBITDA	755	921	1.052	1.258	1.300	1.378	1.461	1.548
- Depreciation	33	48	55	57	117	167	237	337
- Amortization	45	57	60	89	118	168	238	339
EBIT	677	816	937	1.112	1.065	1.043	985	872
- Tax Expenses	236	283	312	345	356	349	330	292
NOPAT	441	533	625	767	708	694	655	580
+ Depreciation	33	48	55	57	117	167	237	337
+ Amortization	45	57	60	89	118	168	238	339
+ Other Non-Cash Adjustments	85	97	95	74	24	157	167	171
Cash Flow from Operations	604	735	835	987	968	1.186	1.298	1.428
- Capital Expenditures	97	115	69	45	83	87	92	97
- Δ Working Capital	66	28	9	21	15	13	14	14
Free Cash Flows to the Firm (FCFF)	441	593	757	921	870	1.086	1.193	1.316
						Terminal Value		27.568
Present value of the FCFF (FY 2014)						987	985	989
Present value of Terminal Value (FY 2014)								20.704
						Net Present Value		23.665

The FCFF of this segment are obtained by reducing to the earnings before interest taxes (EBIT) the tax expenses, obtaining therefore the net operating profit after taxes. Then it is added the value of depreciations, amortizations and other non-cash adjustments, achieving this way the cash flow from operations. Per last, it is subtracted the capital expenditures and variations of working capital, obtaining the Free Cash Flows to the Firm of the segment. In the table can be seen, in the first half, the values of the segment FCFF obtained for the considered years, as well as its terminal value as of 2017. In the second half is disclosed the present value of FCFF and terminal value for 2014. The Net Present Value displays the segment value.

14.13. Annex 13 – Walt Disney Interactive Media Segment: DCF Valuation

<i>in millions (\$)</i>	2010	2011	2012	2013	2014	2015	2016	2017
+ Revenues	761	982	845	1.064	1.224	1.407	1.525	1.652
- Cost of goods sold	581	675	583	658	678	726	777	831
Gross Profit	180	307	262	406	546	681	748	821
- Selling, general and administrative expenses	371	561	429	449	507	543	581	622
EBITDA	-191	-254	-167	-43	39	139	168	200
- Depreciation	19	16	17	20	34	41	48	57
- Amortization	24	38	32	24	48	56	66	79
EBIT	-234	-308	-216	-87	-43	42	53	64
- Tax Expenses	-82	-107	-72	-27	-14	14	18	21
NOPAT	-152	-201	-144	-60	-29	28	35	43
+ Depreciation	19	16	17	20	34	41	48	57
+ Amortization	24	38	32	24	48	56	66	79
+ Other Non-Cash Adjustments	24	31	25	22	7	52	57	60
Cash Flow from Operations	-85	-116	-70	6	61	177	207	238
- Capital Expenditures	17	21	27	13	22	24	25	26
- Δ Working Capital	18	14	-8	13	31	23	11	12
Free Cash Flows to the Firm (FCFF)	-120	-152	-89	-20	7	131	171	199
						Terminal Value		5.266
Present value of the FCFF (FY 2014)						119	141	150
Present value of Terminal Value (FY 2014)								3.955
						Net Present Value		4.365

The FCFF of this segment are obtained by reducing to the earnings before interest taxes (EBIT) the tax expenses, obtaining therefore the net operating profit after taxes. Then it is added the value of depreciations, amortizations and other non-cash adjustments, achieving this way the cash flow from operations. Per last, it is subtracted the capital expenditures and variations of working capital, obtaining the Free Cash Flows to the Firm of the segment. In the table can be seen, in the first half, the values of the segment FCFF obtained for the considered years, as well as its terminal value as of 2017. In the second half is disclosed the present value of FCFF and terminal value for 2014. The Net Present Value displays the segment value.

14.14. Annex 14 – Walt Disney Corporate & Other Adjustments Segment: DCF Valuation

<i>in millions (\$)</i>	2010	2011	2012	2013	2014	2015	2016	2017
- Corporate and unallocated shared expenses	420	459	474	531	536	541	546	551
- Restructuring and impairment charges	270	55	100	214	218	244	274	307
+ Other income / (Expense), net	140	75	239	-69	261	293	329	368
+ Hulu Equity Redemption charge	0	0	0	55	0	0	0	0
EBITDA	-550	-439	-335	-759	-492	-492	-491	-490
- Depreciation	142	148	182	220	171	172	172	172
EBIT	-692	-587	-517	-979	-664	-664	-663	-662
- Tax Expenses	-242	-203	-172	-304	-222	-222	-222	-222
NOPAT	-450	-384	-345	-675	-442	-442	-441	-441
+ Depreciation	142	148	182	220	171	172	172	172
Cash Flow from Operations	-308	-236	-163	-455	-270	-270	-269	-268
- Capital Expenditures	137	275	471	287	245	258	272	287
- Δ Working Capital	0	0	0	55	0	0	0	0
Free Cash Flows to the Firm (FCFF)	-445	-511	-634	-797	-515	-528	-542	-555
							Terminal Value	-8.516
Present value of the FCFF (FY 2014)						-480	-447	-417
Present value of Terminal Value (FY 2014)								-6.396
							Net Present Value	-7.741

The FCFF of this segment are obtained by reducing to the earnings before interest taxes (EBIT) the tax expenses, obtaining therefore the net operating profit after taxes. Then it is added the value of depreciations, amortizations and other non-cash adjustments, achieving this way the cash flow from operations. Per last, it is subtracted the capital expenditures and variations of working capital, obtaining the Free Cash Flows to the Firm of the segment. In the table can be seen, in the first half, the values of the segment FCFF obtained for the considered years, as well as its terminal value as of 2017. In the second half is disclosed the present value of FCFF and terminal value for 2014. The Net Present Value displays the segment value.

14.15. Annex 15 – Walt Disney DCF Valuation

<i>in millions (\$)</i>	2015 ⁽¹⁾	2016 ⁽¹⁾	2017 ⁽¹⁾	Terminal Value ⁽²⁾	NPV ⁽³⁾
Media Networks	5.242	5.033	4.811	100.741	115.827
Parks & Resorts	1.206	1.174	1.124	21.523	25.026
Studio Entertainment	733	678	620	9.327	11.358
Consumer Products	987	985	989	20.704	23.665
Interactive Media	119	141	150	3.955	4.365
Corporate	-480	-447	-417	-6.396	-7.741
Total NPV for the FY	7.806	7.564	7.276	149.854	172.500
MV of Total Debt					19.206
MV of Total Equity					153.294
# Shares Outstanding					1.732
DIS US Equity stock price⁽⁴⁾					88,52

Note (1): Values indicated in the column correspond to the FCFF generated in the respective year, discounted to 2014.

Note (2): Values indicated in the column correspond to the terminal values discounted to 2014.

Note (3): NPVs indicated correspond to the sum of the discounted FCFF and terminal value of the respective segment, representing therefore the segment's valuation.

Note (4): DIS US Equity stock price is expressed in dollars.

14.16. Annex 16 – Walt Disney Debt Composition

Issued Bonds						
Issuer Name	Ticker	Coupon (%)	Maturity	YTM (%)	Amount Outstanding⁽¹⁾	
Walt Disney Co/The	DIS	0,88	01-12-2014	0,37	500.000.000	
Walt Disney Co/The	DIS	0,21	11-02-2015	0,19	1.000.000.000	
Walt Disney Co/The	DIS	0,45	01-12-2015	0,47	500.000.000	
Walt Disney Co/The	DIS	1,35	16-08-2016	0,66	1.000.000.000	
Walt Disney Co/The	DIS	5,63	15-09-2016	0,80	1.000.000.000	
Walt Disney Co/The	DIS	1,13	15-02-2017	1,04	1.000.000.000	
Walt Disney Co/The	DIS	0,88	30-05-2017	1,06	500.000.000	
Walt Disney Co/The	DIS	6,00	17-07-2017	1,43	350.000.000	
Walt Disney Co/The	DIS	1,10	01-12-2017	1,34	1.000.000.000	
Walt Disney Co/The	DIS	5,88	15-12-2017	1,34	1.000.000.000	
Walt Disney Co/The	DIS	5,50	15-03-2019	2,01	1.000.000.000	
Walt Disney Co/The	DIS	1,85	30-05-2019	2,02	111.000.000	
Walt Disney Co/The	DIS	0,54	30-05-2019	0,52	111.000.000	
Walt Disney Co/The	DIS	3,75	01-06-2021	2,65	500.000.000	
ABC Inc	DIS	8,75	15-08-2021	4,00	1.000.000.000	
ABC Inc	DIS	8,75	15-08-2021	4,00	1.000.000.000	
Walt Disney Co/The	DIS	2,75	16-08-2021	2,61	750.000.000	
Walt Disney Co/The	DIS	2,55	15-02-2022	2,85	1.000.000.000	
Walt Disney Co/The	DIS	2,35	01-12-2022	2,92	1.000.000.000	
Walt Disney Co/The	DIS	7,00	01-03-2032	3,93	500.000.000	
Walt Disney Co/The	DIS	0,00	01-04-2039	0,05	500.000.000	
Walt Disney Co/The	DIS	4,38	16-08-2041	4,16	750.000.000	
Walt Disney Co/The	DIS	4,13	01-12-2041	4,21	1.000.000.000	
Walt Disney Co/The	DIS	3,70	01-12-2042	4,01	1.000.000.000	
Walt Disney Co/The	DIS	4,13	01-06-2044	4,23	500.000.000	
Walt Disney Co/The	DIS	7,55	15-07-2093	5,98	1.000.000.000	
Obtained Loans						
Issuer	Rank	Issue Date	Maturity	YTM (%)	Amount Outstanding⁽¹⁾	
Walt Disney Co/The	Unsecured Loan	14-03-2014	13-03-2015	0,00	1.500.000	
Walt Disney Co/The	Unsecured Loan	08-06-2012	08-06-2017	1,24	2.250.000	
Walt Disney Co/The	Unsecured Loan	14-03-2014	14-03-2019	2,14	2.250.000	

Note (1): Values indicated in the column are expressed in U.S. dollars.

14.17. Annex 17 – Walt Disney Peer Group Composition

Segment - Media Network					
Company ticker	Company name	Sub-Industry	Main Services	Industry revenue ⁽¹⁾	% Revenues
CMCSA US Equity	COMCAST CORP-A	Cable & Satellite	Cable television; Broadband internet; Theme parks	12.018	25%
TWX US Equity	TIME WARNER INC	Entertainment content	Film; Television; Entertainment	11.197	49%
DISCA US Equity	DISCOVERY COMM-A	Entertainment content	Broadcasting; Cable television; Radio; Internet	4.081	98%
TLEVICPO MM Equity	GRUPO TELEV-CPO	Publishing & Broadcasting	Broadcasting; Publishing	2.950	68%
CBS US Equity	CBS CORP-B	Entertainment content	Broadcasting; Publishing; Television; Billboards	2.642	23%
PSM GR Equity	PROSIE SAT.1-REG	Entertainment content	Cable television; Broadcasting	2.605	100%
Segment - Parks & Resorts					
Company ticker	Company name	Sub-Industry	Main Services	Industry revenue ⁽¹⁾	% Revenues
CMCSA US Equity	COMCAST CORP-A	Cable & Satellite	Cable television; Broadband internet; Theme parks	1.683	3%
MERL LN Equity	MERLIN	Entertainment facilities	Theme parks; Sea life centers	1.301	100%
4661 JP Equity	ORIENTAL LAND CO	Entertainment facilities	Theme parks	1.271	36%
SIX US Equity	SIX FLAGS ENTERT	Entertainment facilities	Theme parks; Family entertainment centers	836	100%
2255 HK Equity	HAICHANG HLDS	Entertainment facilities	Theme parks	137	100%
300144 CH Equity	SONGCHENG PERF-A	Entertainment facilities	Theme parks	78	100%
8136 JP Equity	SANRIO CO LTD	Entertainment facilities	Theme parks; Entertainment; Fashion	46	8%
Segment - Studio Entertainment					
Company ticker	Company name	Sub-Industry	Main Services	Industry revenue ⁽¹⁾	% Revenues
TWX US Equity	TIME WARNER INC	Entertainment content	Film; Television; Entertainment	9.269	40%
FOXA US Equity	TWENTY-FIRST C-A	Entertainment content	Film; Television; Entertainment	6.680	31%
CBS US Equity	CBS CORP-B	Entertainment content	Broadcasting; Publishing; Television; Billboards	6.508	56%
VIAB US Equity	VIACOM INC-B	Entertainment content	Broadcasting; Cable television; Radio; Publishing; Movies	3.263	31%
RTL LX Equity	RTL GROUP	Entertainment content	Broadcasting; Cable television; Radio & Content production	1.371	23%
STRZA US Equity	STARZ - A	Entertainment content	Cable & Satellite television network	1.340	100%
ITV LN Equity	ITV PLC	Publishing & Broadcasting	Broadcasting	1.009	31%
9602 JP Equity	TOHO CO LTD	Entertainment content	Film; Distribution	942	63%
Segment - Consumer Products					
Company ticker	Company name	Sub-Industry	Main Services	Industry revenue ⁽¹⁾	% Revenues
VIAB US Equity	VIACOM INC-B	Entertainment content	Broadcasting; Cable television; Radio; Publishing; Movies	424	4%
4816 JP Equity	TOEI ANIMATION	Entertainment content	Animation movies; Entertainment	108	34%
3711 JP Equity	SOTSU CO LTD	Advertising & Marketing	Television; Video games; Toys; Anime	41	24%
122870 KS Equity	YG ENTERTAINMENT	Entertainment content	Concerts; Gifts	23	29%
4301 JP Equity	AMUSE INC	Entertainment content	Television & Radio programs; Commercial films; Gifts	20	7%
3791 JP Equity	IG PORT INC	Entertainment content	Anime; Manga; Video games	13	22%
9728 JP Equity	NIPPON KANZAI	Real estate services	Building management; Real estate fund management	12	0%
Segment - Interactive Media					
Company ticker	Company name	Sub-Industry	Main Services	Industry revenue ⁽¹⁾	% Revenues
GME US Equity	GAMESTOP CORP-A	Other spec retail - Discr	Video games; Consoles; Accessories	6.791	100%
3344 JP Equity	WONDERCORP	Other spec retail - Discr	Video games; Consumer electronics	310	51%
3048 JP Equity	BIC CAMERA INC	Consumer Electronic	Electronic products	231	3%
5286 TT Equity	CUBE MAGIC INC	Application Software	Applications; Software production	22	100%
PLAIS GA Equity	PLAISIO COMPUTER	Consumer Elec & Apple Stores	Computer, technology, and office equipment	3	1%
9425 JP Equity	NIPPON TELEPHONE	Consumer Elec & Apple Stores	Broadband and fixed-line internet services; Digital television	1	1%

Note (1): Values indicated in the column are expressed in USD million.

15. Bibliography

15.1. Articles

Demirakos, E. G., Strong, N. C., & Walker, M. (2010). Does valuation model choice affect target price accuracy?. *European Accounting Review*, 19(1), 35-72.

Fernández, P. (2001). Valuing real options: frequently made errors. *Journal of Financial Economics*.

Fernandez, P. (2001). Valuation using multiples. How do analysts reach their conclusions?. IESE Business School.

Fernández, P. (2004). "80 common errors in company valuation", IESE Business School.

Fernández, P. (2005). Discounted cash flow valuation methods: Examples of perpetuities, constant growth and general case (No. D/604). IESE Business School.

Fernández, P. (2007). Company valuation methods. The most common errors in valuations. Research Paper no, 449.

Fernandez, P. (2007). Valuing companies by cash flow discounting: ten methods and nine theories. *Managerial Finance*, 33(11), 853-876.

Fernandez, P. (2008). Levered and unlevered beta. University of Navarra IESE Business School Working Paper, 488.

Foushee, S., Koller, T. and Mehta, A. (2012), "Why bad multiples happen to good companies?", *Corporate finance practice*.

Goedhart, M., Koller, T., & Wessels, D. (2005). The right role for multiples in valuation. *McKinsey on Finance*, 15, 7-11.

Kaplan, S. N., & Ruback, R. S. (1996). The market pricing of cash flow forecasts: Discounted cash flow vs. the method of "comparables". *Journal of Applied Corporate Finance*, 8(4), 45-60.

Liu, J., Nissim, D., & Thomas, J. (2002). Equity valuation using multiples. *Journal of Accounting Research*, 40(1), 135-172.

Luehrman, Timothy A. 1997. "What's it worth? - A General Manager's Guide to Valuation". *Harvard Business Review*, pp.132-142

Luehrman, T. A. (1996). Using APV (adjusted present value): a better tool for valuing operations. *Harvard Business Review*, 75(3), 145-6.

Penman, S. H. (1998). A synthesis of equity valuation techniques and the terminal value calculation for the dividend discount model. *Review of Accounting Studies*, 2(4), 303-323.

Young, M., Sullivan, P., Nokhasteh, A., Holt, W., .1999. “All Roads Lead To Rome – An Integrated Approach to Valuation Models”. Goldman Sachs Investment Research, pp.1-32.

15.2. Books

Damodaran, Aswath.2013.”Chapter 10 – Value Enhancement and Cash-Driven Valuation Models”. In CFA Institute Investment Books, 223-226.

Damodaran, A. (2005). *Valuation approaches and metrics: A survey of the theory and evidence*. Now Publishers Inc.

Koller, T., Goedhart, M., & Wessels, D. (2010). *Valuation: measuring and managing the value of companies* (Vol. 499). John Wiley and Sons.

15.3. Websites

Damodaran, A.: <http://pages.stern.nyu.edu/~adamodar/>

North American Broadcasters Association: <http://www.nabanet.com/nabaweb/default.asp>

OTTI: <http://travel.trade.gov/about/overview.html>

The Walt Disney Company: <http://thewaltdisneycompany.com/>

U.S. Department of Commerce – Bureau of Economic Analysis: <http://www.bea.gov/>

15.4. Other Research

Deloitte, (2014), “2014 Consumer Products Outlook”

KPMG, (2014), “2014 Media and Telecommunications Industry Outlook Survey”

National Travel & Tourism Strategy (2012) – Task Force on Travel & Competitiveness

PwC, (2014), “Global Entertainment and Media Outlook 2014-2018”