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**MERGERS AND ACQUISITIONS:
THE CASE OF COMCAST AND TIME WARNER CABLE**

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ABSTRACT

Comcast and Time Warner Cable (TWC) merger has been a daily headline in the US business press since the merger announcement in last February 13th of 2014. Meanwhile many questions are raised about the transaction, either in terms of legal issues or in terms related to the strategy fit and financial accretive. These questions are motivated due to the size of both companies in industry where they operate, that leads to witness the largest merger in such industry and the emergence of a potential monopoly. Nevertheless, the constant increasing of the competition in communication, entertainment and media sector and technology, forces the companies to act strategically in order for them not to be behind the market trends as well as the US economy growth. In the meantime, the most common strategy found by companies to take advantage from the opportunities and threats that come from those factors is the merger approach.

This dissertation stresses the value created through the combination of both Comcast and Time Warner Cable using the firm valuation tools and regards M&A concepts. Thus, with regards to those tools and the companies' information, the conclusions indicated an unevaluated TWC's closing share price before the merger announcement. Additionally, the acquisition of TWC creates 6% of synergies for TWC shareholders and 3% of synergies for Comcast shareholders at a SVAR of 2%. In turn, an offer at 6% premium over TWC's market capitalization (February 12th) will be proposed with 100% in stock-for-stock.

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LIST OF ABBREVIATIONS

APV	Adjusted Present Value
β	Beta
β_L	Levered Beta
β_U	Unlevered Beta
CAGR	Compound Annual Growth Rate
CAPEX	Capital expenditures
CAPM	Capital Asset Pricing Model
D	Debt
DCF	Discount Cash Flow
DOJ	Department of Justice
E	Equity
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization
EV	Enterprise Value
FCC	Federal Communication Commission
FCF	Free Cash Flow
FCFF	Free Cash Flow to the Firm
g	Growth Rate
M&A	Merger and Acquisition
NASDAQ	National Association of Securities Dealers Automated Quotations
NBC	National Broadcasting Company
NOPLAT	Net Operating Profit Less Adjusted Taxes
NYSE	New York Stock Exchange
P/E	Price-to-Earnings Ratio
P/Sales	Price-to-Sales Ratio
R_d	Cost of Debt
R_e	Cost of Equity
R_f	Risk Free

Rm-Rf	Market Risk Premium
ROE	Return on Equity
ROIC	Return on Invested Capital
SVAR	Shareholders Value at Risk
Tc	Corporate Tax
TV	Television
TWC	Time Warner Cable
WACC	Weighted Average Cost of Capital

1. INTRODUCTION

This dissertation is guided under the M&A arena. Its aim is to examine the announced merger of Comcast and Time Warner Cable through a deep analysis of each firm on standalone basis and the output generated by the combination of both. However, to do so this work was split into several topics.

The first section is the literature review. This chapter analyses the methodology to be applied on valuation process taking into account the existing literature regarding the valuation approaches as well as the theories related to the M&A. Afterwards, will be given an overview about the industry, where the historical information about the performance of the two firms is reviewed. Based on this information the valuation of each firm will be performed in order to find the value of each other. Afterwards, the result of both companies on standalone basis are put together; hence will be assessed the value of combined firms with potential synergies and look to the value created for Comcast's shareholders and TWC's shareholders. Finally, the category of acquisition, method of payment and the proposal as well as some legal issues will be analysed.

2. LITERATURE REVIEW

There are several purposes of mergers and acquisitions. According to Wassertein (2001), regulatory and political reform, technological change, fluctuations in financial markets, the role of leadership, and the tension between scale and focus; are the main forces driving the merger process. Moreover, the general purposes of mergers and acquisitions are to generate value creation for the new built companies and to diversify their operational domains.

There are some controversies behind M&A, both in the academy and in the popular business press. Some argue that many deal ends up injuring the acquirer's shareholders (Sirower and Sahni, 2006).

The additional value that is generated by combining two firms that would not be available if these firms were operated independently is called synergy (Damodaran , 2005). Therefore, the values of the created synergy is evaluated through taking into consideration the stand alone value of the acquiring firm, value of target firm and compare these values with the value generated by the combined firm. The merger creates value for the shareholders if the value of the combined firm is higher than the value of the two firms separately.

Through this literature review we will strive to provide the relevant valuation tools in order to value both the acquirer firm and the target company and finally we will look at some issues related to the M&A transactions.

2.1. Valuation Methods

The profitability of M&A depends critically on our confidence in the methods and measures from which extract insights (Bruner, 2004). Meanwhile, there are several methods of valuation; the biggest challenge faced by analysts and managers is to choose the appropriate approach to do so. According to Luehrman (1997), the question of which valuation technique to use has always come down to a pragmatic comparison between several alternatives.

The key issue, related to the valuation methods is to estimate the value of the company. Nevertheless, how a company estimates value is a critical determinant of how it allocates resources (Luehrman, 1997). At the same time Luehrman argues that cash, timing and risk have been a function of fundamental factors in valuation.

According to Hitchner (2003), there are three lines to value any asset or business: the income approach, the market approach and the asset approach. We can find several methods related to each

approach. For instance, in income approach, we can use DCF method or a capitalized cash flow method. Under the market approach, we can use multiples derived from transactions both public and private. In asset approach, we must choose between valuing just each category of asset individually or as a collective group. Young, et al. (1999), considered that there are four main models: Dividend Model, Discount Cash Flow method, Economic Value Added and Dynamic ROE. In other words, these models consist in Cash-Flow approach, Return-Based approach and comparable (multiples). Therefore, when emerges a new business opportunity to invest on, the question underlying to the issue is to know which method makes sense. At the same logic, Luehrman (1997) argues that a simple option-pricing model could be regarded, whereas it handles simple contingencies better than standard DCF model.

Despite of numerous techniques available to value a company, the most used method around the world is the DCF model. According to Fernández (2013), the discount cash flow method is widely used because it is the only conceptually correct valuation method. On the other hand, Kaplan and Ruback (1996) found that the most reliable methods that estimate the value of the company were obtained by using the Discount Cash-Flow and the comparable methods together.

2.1.1. Discounted Cash Flow approach

The DCF approach has its foundation in the present value of future cash-flows generated by any asset. In discount cash flows model, we attempt to estimate the intrinsic value of an asset based on its fundamental value (Damodaran, 2012). According to Luehrman (1997), all discounted-cash-flows, require forecasting future cash-flow and then discounting them to their present value at a rate that reflects the respective risk.

The reliability of DCF valuation depends on the accuracy of the cash flow projections and risk measures, and on the realism of the assumptions used in computing an appropriate discount rate, including the historical measure of the risk premium (Ruback, 2004).

2.1.1.1. Estimation of Discount Rates

In order to have the cash-flows discounted to their present value, a plausible rate to do so is needed. Meanwhile this rate is called discount rate and is commonly called cost of capital, which is determined through using Capital Asset Pricing Model (CAPM) or the Average Cost of Capital (WACC). In fact, the discount rate must reflect the riskiness associated to those future cash-flows, (Luehrman, 1997).

2.1.1.1.1. Estimating the Cost of Capital

The DCF approach requires estimates of the cost of capital, the level of cash flow and investment (Young, et al., 1999). Furthermore, the cost of capital is regarded as an indispensable driver in DCF method, whereas it represents the opportunity cost that investors face for investing their money in a business instead of other with similar risk (Koller, et al., 2010). For a long time many business schools and researchers have argued that the value of a company also depends on its capital structure, which can differ from company to company. Meanwhile, when we are estimating the cost of capital it must reflect the Weighted Average Cost of Capital (WACC). Therefore, the value of the firm is obtained by discounting the FCF to the firm at the WACC, (Damodaran, 2012).

In fact, the WACC requires to be estimated from debt and equity by weighting the market-determined cost of debt and equity with the respective proportional claims of each. In addition, tax benefits of debt and the additional risk associated with debt are embedded in WACC (Damodaran, 2012).

(2.1)

$$WACC = R_e \times \frac{E}{D + E} + R_d \times \frac{D}{D + E} \times (1 - T_c)$$

Despite of the WACC being the most used discount rate, some controversial arguments have appeared. For instance, Luehrman (1997) argues that considering the weighted average cost of capital as a discount rate factor is obsolete due to its weak performance in valuation. In most common formulations, WACC addresses tax effect only very convincingly for simple capital structure (Luehrman, 1997).

2.1.1.1.1.1. Cost of Equity (R_e)

According to Sharp (1964), the investor achieves a higher expected rate of return only by incurring additional risk through the time of price and the price of risk. At the same time, Sharp (1964) and Lintner (1965) through the CAPM, demonstrated that the return of an asset corresponds to the sum of risk-free rate and the risk-premium, which is positively related to firm and industry betas (Kaplan and Ruback, 1996).

The CAPM becomes an important vehicle, widely used in applications, such as evaluating the performance of managed portfolios and estimating the cost of capital, which is the focus of this

chapter. In the same reasoning, Kaplan and Ruback (1996), argue that Cash flows are discounted to the present values using a market-based rate which is generally based on the Capital Asset Pricing Model (CAPM).

(2.2)

$$R_e = R_f + \beta(R_m - R_f)$$

We can conclude that the CAPM is lined by risk-free (R_f), risk premium (R_m) and beta (β). The beta will take two different terminologies, such as, levered beta (β_L) for levered firm and unlevered beta (β_U) unlevered firm.

2.1.1.1.1.1. Risk-Free Rate (R_f)

Risk free rate acts as the reference point for an asset returns. In fact, as a risk free rate of return it should be used as a measurement instrument of return on an asset whose return is completely without uncertainty (Vaihekoski, 2009).

The debate behind the issue is regarding the choosing of the right risk free rate to be considered in CAPM. For instance, Kaplan and Ruback (1996), thought to use as an appropriate risk free the long term Treasury bond with almost 20 years of maturity. Besides, Fernández (2004) sustains that the correct R_f is the Yield of long-term government bond at the time of calculating the cost of equity.

2.1.1.1.1.2. Beta (β)

Despite of others things, the cost of capital depend on the accuracy of the beta estimate (Kaplan and Peterson, 1998). In fact, the beta is the systematic risk of a security that represents the risk that the investment adds to a market portfolio and can be estimated through three approaches: One is using historical data on market prices for individual investments; the second is to estimate the betas from the fundamental characteristics of the investment; and the third is to use accounting data (Damodaran, 2012).

In the meantime, the conventional method to estimate this parameter through the first approach is a regression of returns on an investment against returns on a market index (Damodaran, 2012). For stocks that are less liquid, Pettit (1999), suggest that a beta could be estimated using an average of unlevered beta of a pure-play peers; and alternatively, a

beta could be built as the product of an industry portfolio correlation coefficient and a company-specific relative volatility coefficient. Furthermore, when there are no pure-play peers companies, a segment beta regression can be employed, (Pettit, 1999). Besides, Kaplan and Peterson (1998) found that the estimation of pure-play industry betas were upwardly biased, due to the lower full-information industry betas, comparing to the market-capitalization weighted pure-play beta. Meanwhile Kaplan and Peterson (1998) arguments, suggest that the noticeable betas for those firms who operate in more than one segment of business are weighted averagely on the unobservable beta of the individual operations.

Based on Hamada formula, Damodaran (2012) argues that if all firm's risk is borne by the stockholders, and debt has a tax benefit to the firms, the levered beta for equity in the firm is:

$$\beta_L = \beta_u[1 + (1 - t)(D/E)] \quad (2.3)$$

2.1.1.1.1.3. Market risk Premium ($R_m - R_f$)

When investors decide to invest in some business or project, they require the risk premium associated with their investment with the same level of systematic risk as the stock market (Kaplan and Ruback, 1996).

Kaplan and Ruback (1996) argue that it is reasonable to take into consideration the arithmetic average historical risk premium calculated from the arithmetic average return spread of an index (for example S&P 500) and long term treasury bonds.

2.1.1.1.1.2. Cost of Debt (R_d)

When a firm finances its project by borrowing funds, it incurs in costs of being financed. The rate at which the firm can borrow these funds, adjusted for any tax advantages of borrowing is the cost of debt (Damodaran, 2012). Additionally Damodaran argues that we can estimate the cost of debt by using the companies' ratings and associated default spreads that are normally given by independent rating agencies. On the other hand, to estimate the after-tax cost of debt, we need to consider that interest expenses are tax deductible.

(2.4)

After – tax cost of debt = Pretax cost of debt(1 – Tax rate)

2.1.1.2. Free Cash Flow to the Firm Model

Free cash flow is a company’s true operating cash flows (Copeland, et al., 2000). At the same time, Damodaran (2012) argues that the free cash flow to the firm implies the sum of the cash flow to all rights holders in the firm. Meanwhile, to achieve the free cash flow to the firm, we need to estimate the cash flow earlier to each of these rights and discount the obtained cash flow at the weighted average cost of capital (Damodaran, 2012).

(2.5)

$$Value\ of\ firm = \sum_{t=1}^{t=n} \frac{FCFF_t}{(1 + WACC_{hg})^t} + \frac{[FCFF_{n+1}/(WACC_{st} - g_n)]}{(1 + WACC_{hg})^n}$$

Behind the formula presented in (2.4), Damodaran (2012) contend that the value of free cash flows to the firm is estimated taking into consideration the following reasoning:

(2.6)

$$FCFF = EBIT(1 - Tax\ rate) + Depreciation - Capital\ expenditure - \Delta WC$$

In fact, the value of cash flow embodies the total after-tax cash flow generated by the company that is available to both creditors and shareholders (Copeland, T. et al., 2000). Besides, Kaplan and Ruback (1996), argues that the projection of Cash flows is typically for the next five years and implies a terminal value (Young, et al., 1999).

2.1.1.2.1. Expected Growth Rate and Terminal Value

In order to avoid forecast in detail the company’s cash flow over an extended period, we use the terminal value (Copeland, et al., 2000). The terminal value is obtained by computing a terminal cash flow and assuming that cash flow would grow at a constant nominal rate at perpetuity, (Kaplan and Ruback, 1996). At the same time, the bulk of capital expenditures should follow the depreciation and amortization amount proportionally (Kaplan and Ruback, 1996).

Thus, when we are using the enterprise DCF model to estimate the terminal value, Copeland, T.et al, (2000) recommend the formula below.

(2.7)

$$\text{Terminal Value} = \frac{\text{NOPLAT}_{T+1} \left(1 - \frac{g}{\text{ROIC}_I}\right)}{\text{WACC} - g}$$

Additionally, if we simply use the simple formula approach, the result will be the same by using the formula above.

(2.8)

$$\text{Terminal Value} = \frac{\text{FCF}_{T+1}}{\text{WACC} - g}$$

According to Damodaran (2012), if a firm has a stable growth, a perpetual model can be used to estimate the terminal value.

Copeland, et al., (2000) argue that the recommended estimate is the expected long-term rate whereas few companies can be expected to grow faster than the economy. Moreover, to understand how the growth rate affects the value estimates, sensitivity analysis is required to be done (Copeland, et al., 2000).

2.1.1.3. Adjusted Present Value (APV)

Given some disadvantages behind the WACC metric, Myers (1974), suggested the Adjusted Presented Value (APV) as a better approach to evaluate investments opportunities. In fact, APV, beyond evaluating how much an asset is worth, it can also help to understand where the value comes from (Luehrman, 1997).

According to Luehrman (1997), APV consists of analysing financial manoeuvres in parts, and add their value to the corresponding business. Meanwhile, APV approach, values a firm as a sum of two pieces (Kaplan and Ruback, 1996). The first one is related to the firm as an unlevered, which is calculated by discounting the expected cash flows that would accrue to an unlevered firm at appropriate, unlevered cost of capital. The second piece is the value added by a firm's choice of capital structure, which comes in the form of interest tax shield. Nonetheless, when APV technique is examined; we assume that the first benefit of borrowing is a tax benefit and the most relevant cost of borrowing is the added bankruptcy risk (Damodaran, 2012).

(2.9)

$$\text{Current firm value} = \text{Value of unlevered firm} + \text{Present value of tax benefits} - \text{Expected bankruptcy cost} \quad (2.10)$$

$$\text{Value of unlevered firm} = \text{Current firm value} - \text{Present value of tax benefits} + \text{Expected bankruptcy cost}$$

Notwithstanding, some limitations regarding the APV approach has been identified by different academics. For instance, Luehrman (1997) highlights two limitations that introduce consistent biases in analysis, such as: the income from stocks can be taxed in different ways when the investor records a personal tax return and the negligence of costs of financial distress and other interesting financial side effects as well.

Nevertheless, Luehrman (1997) says that APV is optionally transparent; hence; it is more informative; and believes that it will replace WACC as the DCF methodology of choice among generalists.

2.1.1.3. Relative Valuation (Multiples)

Valuation by multiples requires computing a specific comparable for a set of benchmark companies and then finding the implied value of the company (Lie and Lie, 2002). Indeed, the questions behind multiples are related on how to set the benchmark companies, which is the appropriate comparable and how can this be applied. Comparing a company's multiples with those outside of the company can help us to stress-test the accuracy of DCF valuation (Goedhart et al., 2005).

Goedhart et al. (2005) recommend four principles that could help companies to apply multiples correctly: the use of peers with similar ROIC and growth projections, forward-looking multiples, enterprise-value multiples and the adjustment of enterprise-value multiples for non-operating items.

The P/E ratio is widely used as a multiple. Nonetheless, its a huge usage, P/E multiples have flaws of being systematically affected by capital structure and the inclusion of several non-operating items that are incorporated in earnings (Goedhart et al., 2005). For this reason, Goedhart et al., (2005) suggest to use enterprise value (EV) to EBITDA multiple adjusted for non-operating items. In the meantime, Foushee et al. (2012) have found that EV multiples

either EV/EBIT or EV/EBITDA are more preferable because they are not burdened with the alterations that affect the earnings ratios.

To transform multiples into valuation estimates, we need to multiply the relevant financial trend or underlying profits by the average multiple (Young, M. et al, 1999) assuming that these values are constant. In fact, the precision and bias of value estimate, as well as the relative performance of multipliers, differ by company size, company profitability, and the magnitude of intangible value in the company (Lie and Lie, 2002).

2.2. M&A related issues

As we mentioned at the beginning, the main idea behind M&A is to create shareholders value over and above that of the sum of the two companies. Mergers and acquisitions often create winners and losers at different levels of both the acquiring companies and the target companies. But still play a significant role in the survival and vitalization of corporations today; therefore to make it happen, we need a reasonable understanding of all the processes involved in that operation. According to Very and Schwiger (2001) this process embody a delineation of an acquisition strategy; identifying, selecting, and analysing acquisitions candidates; arranging contact with target firm managers and owners; valuing and pricing targets; structuring deals and integrating acquisitions. In fact this process represents a factor of strategic fit that has an impact on the outcome (Risberg, 2003).

2.2.1. Acquisition Categories

Damodaran (2012) says that an acquisition can be achieved in the form of a merger, a consolidation, a tender offer, an acquisition of assets and finally through management buyout. In the merger a target firm is absorbed by the acquiring entity. In a consolidation both the acquiring firm and target firm lose their old entities through creating a new firm through stockholders approval from both entities. In a tender offer the target firm continues as an individual entity as long as some stockholders walk away from the deal. In the acquisition of assets, the acquiring firm buys the target firm's asset and at end the target firm is liquidated. In management buyout, a company is purchased by the management or outsider investors, commonly with tender offer. At end of the transaction the firm is, however, turned into a private business.

Moreover, in order to understand the merger economic function dependency, the purpose behind the transaction and the relation between the merging companies; Ross et al. (2003) indicate three types stated of acquisition: the vertical, horizontal and conglomerate acquisitions. In a vertical acquisition, the acquiring firm and target firm operate at different levels within an industry supply chain. Horizontal acquisition occurs when the companies operate in the same space as well as in the same industry. The conglomerate acquisition happens when two unrelated firms marry.

Furthermore, the mergers are generally friendly to the target firm while the tender offer tends to be characteristically hostile (Loughran & Vjih, 1997). Stahl and Voight, 2005 claim that for a high level of integration, the acculturation is crucial for M&A success. Finally Damodaran, 2012 argues that the acquisition procedure should be based on five elements: Specify the reasons for acquisitions select the target firm, value the target firm and lastly the method of payment.

2.2.3. Synergies

As stated in the beginning, synergy implies that the outcome resulting from the merger of two companies will be higher than the sum of outcome that would have been achieved separately. In fact, companies attempt to achieve those synergies through different ways, taking into consideration the strategic fit and financial engineering. Conferring Copeland et al. (2002) the worth of the acquiring firm and target firm depends on the type of synergy and who oversights it.

According to Bruner (2004) Synergies contain costs savings, revenue enhancement and financial synergies – Synergy matching principle (Sirower and Sahni, 2006). At the same time Damodaran (2005) summarises these synergies into two parts: Operating Synergy and Financial Synergy. Operating synergies enable firms to explore their operating income from existing asset through economies of scale (more cost efficiency and gainful), greater pricing power (higher margins and operating income), combination of different functional strengths and a higher growth in new or existing market (intensification in sale of products or services). In financial synergies the remuneration comes from either a combination of both higher cash flows and lower cost of capital or each one individually. The financial synergies can be reached through a combination of a firm with excess cash, or slack (higher value of

the new firm), increase the debt capacity (tax benefit and low cost of capital), ease of diversification and Tax benefits.

After having the synergies identified, the next step is to value them according to an appropriate method. Many books recommend the famous DCF as the appropriate approach. However, beforehand firms are valued separately and after we estimate the value of the combined firm without synergy. Finally we introduce the effect of synergies into combined firm without synergy to determine the value of united entities with synergies. The value of synergy will be the difference between the value of the combined with synergy and the combined firm without synergy (Damodaran, 2005). Furthermore the value of synergy can be an effective concept if it is based in reality (Weston et al., 1990).

2.2.4. Methods of Payment

For the acquisition, a firm can use pure cash, pure stock, or mix (cash with stock) as a method of payment (Loughran and Vijih, 1997). Nevertheless our debate in this session is to understand when the acquisition is done by each model and its impact on shareholders' value.

According to Burner (2004), when the payment is in cash, target shareholder return is slightly positive and in situations where the payment is in stock, acquirer shareholder return is significantly lower. Likewise in case of tender offers financed in cash, the returns to buyers are higher. However, when paid in stock the returns are lower. At the same time, Rappaport and Sirower (1999) contend that the trade-offs of cash versus stock is based on risk sharing. Nevertheless, in cash payment the shareholders of the acquiring firm bear all synergy risk, while in stock payment the risk is shared in the same dimension. Moreover Damodaran (2012) claim three factors to be taken into account before deciding cash or stock: the liquidity available, the perceived value of the stock and the tax factor. Additionally, Zenner et al. (2008) argues that acquirers tend to pay in cash instead of stock. On other hand, the target firm prefers payment in stock.

2.2.5. Return on M&A Transaction

Many academics and researchers argue that M&A often benefit the sellers and destroy the acquiring shareholders' value. Therefore, when their market capitalization changes are combined, there is 1% value created at announcement (Sirower and Sahni, 2006).

Since the private equity can increase shareholder value rather than public companies due to its own characteristics, Shivdasani and Zak (2007) suggest a replication of the private equity model for public companies, but without ignoring the pressure of public equity market.

Loughran and Vijh(1997) contend that the disciplining of target managers may cause an effect to the shareholder returns from the acquisition. On the other hand, the returns of shareholders' acquirer company depend on the expectations of the managers regarding the transactions (Sirower and Sahni, 2006). Besides, Eccles et al. (1999) state that the return for shareholders in M&A can depend on the systematic corporate governance processes created by companies.

The return of M&A depends roughly on the payment approach that is adopted. Loughran and Vijh (1997) found by evidence that the acquirer stock return is high when a tender offer is made and we use cash for payment. On the other hand, the acquirer stock return is low when a merger offer is made and stock is used for payment. Thus, tender offers yield higher wealth gains than mergers (Loughran and Viji, 1997). In order to set whether the deal is paid with cash or stock, Sirower and Sahni (2006) suggest a Shareholder Value at Risk (SVAR) calculation to judge the materiality of a deal.

(10)

$$SVAR = \frac{\text{Premium paid for the acquisition}}{\text{Market value of acquiring company before the announcement}}$$

In fact, the ratio SVAR will be used to assess the relative degree of synergy risk (Sirower and Sahni, 2006). When SVAR is too high it means that the risk is underestimated and acquiring shares can be overvalued; hence, the acquirer company will prefer use stock for payment. At the same time Sirower and Sahni (2006) recommend to design a "meet premium" line which reflects entirely possible combinations of synergies that would be good enough to justify the offer.

2.3. Conclusion

M&A have been driven by regulatory and political reforms, technological changes, fluctuations in financial markets, the role of leadership, and the tensions between scale and focus (Wassestein, 2001). Meanwhile, companies seek to take an advantage on these factors in order to create Shareholders value, but some studies shows that several M&A transactions ends up destroying

acquirer's shareholders value and generate value for the target firm as well as for the economy (Sirower and Sahni, 2006).

In spite of some pitfalls and limitations that have been found in firm valuation techniques, in order to know how much firms worth in M&A transaction, we need to evaluate them by using such techniques. In meantime, Damodaram (2012) recommends that managers should spend a huge time on it considering the positive and wealthy results for the participating firm's shareholders.

3. Industry and Company Analysis

The entertainment, media and communications sector face a greatest change in tech field, a product or service can move from concept to consumers in a little slight as six months or less. This situation brings high competitiveness in industry and force companies to consider in their strategies innovation and a reliable cost-effective supply chain in order to succeed or survive.

In this chapter we will exploit the US entertainment, media and communications sector and focus on the firms individually.

3.1. Overview of the US Entertainment, Media and Communications Sector

The entertainment, media and communications sector or simply EMC, has witnessed the largest volume of deal in the US. According to the PWC report EMC sector deals value increased roughly amounting to \$126.5 billion in 2013 to \$222.7 billion. The increase on this sector was boosted with strength returning to broadcast advertising and continued growth in generate revenues. These deals have been motivated by several factors such as the constant technology changes, the US economy growth, the increasing competition, etc., in order to pursue the operations efficiency enhancements.

According to the US entertainment and media outlook (2014-1018) presented by PWC, it will be holding major changes on how people watch and subscribe to TV due to the increased number of new players, subscriptions being reduced, and new devices. Furthermore, the outlook highlights, the disruption caused by over-the-top (OTT) players which has becomes accessible and causes pay-TV fall continuously. This impetus is caused

by younger audiences subscribing to digital platforms rather than pay-TV which is leading to a growth in M&A. Despite of these insights, US is expected to be the world’s biggest market for TV subscriptions and license fees revenues by the end of 2018. On the other hand, eMarketer outlooks for this year, an increase of 41.9% on digital video segment and 3.3% on TV advertising segment. Moreover, yet according to eMarket, 90% of digital video customers will be using connected TVs by the end of 2018.

3.2. Comcast Corporation

Comcast Corporation is one of the largest mass media and Communications Company in the world measured by revenues and the biggest cable company and home internet service provider for 40 states in the US. It was founded in 1963 and has its headquarters in Philadelphia and Pennsylvania. Traded in NASDAQ, the company’s IPO occurred on June, 1972, with a market capitalization of \$3,010,000. Before 2011 the company relied on the cable segment and programming segment but since the creation of NBC-Universal Holdings with General Eletric on January, 2011, Comcast starts providing a wide range of products and services through five segments (Cable communications, Cable Networks, Broadcast Television, Filmed Entertainment and Theme Parks segment) clustered into two categories of business: Comcast cable and NBC-Universal.

3.2.1. Comcast Cable

Comcast Cable business is the main source of revenues of the company. This business area is solely represented by Cable communications segment that generate more than 60% of consolidate revenue as well as more than 80% of EBITDA per year. In 2013 Comcast registered an increase of customers in cable communications segment of 2.5% to 74.4 million customers.

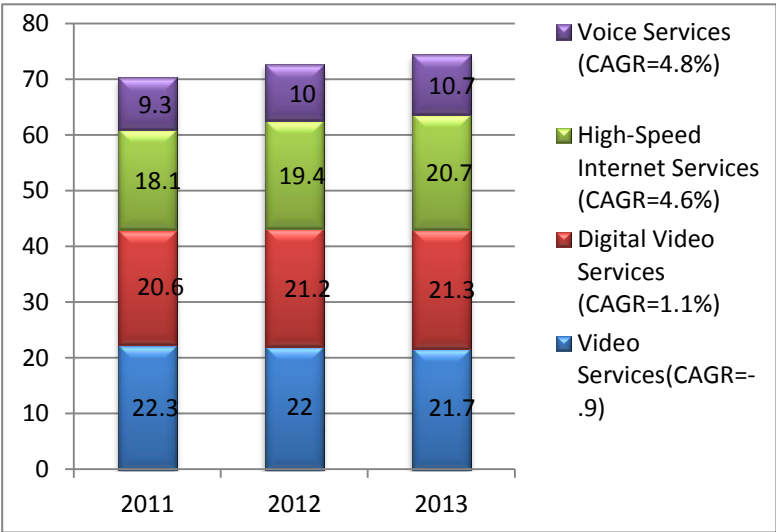


Figure 1: Breakdown of Cable Communications Customers in millions

are distributed by video services, high-speed internet services and voice service.

Video services

Comcast deliver a wide range of video services with access to hundreds of channels. Video services division and digital video services combined, representing more than half percent of the Cable segment customers (figure 1), though Video Services customers has decreased on average 1.4% in the previous three years. In Q1 of 2013, Comcast dominated this segment with 21.9 million customers (figure 2). The level of services was ranging from a limited basic service with an access between 20 and 40 channels of video programming to a full digital service with access to over 300 channels. Video services include programming provided by national and local broadcast networks by national and regional cable networks, as well as government and public access programming. On the other hand, digital video service includes access to over 40 music channels.

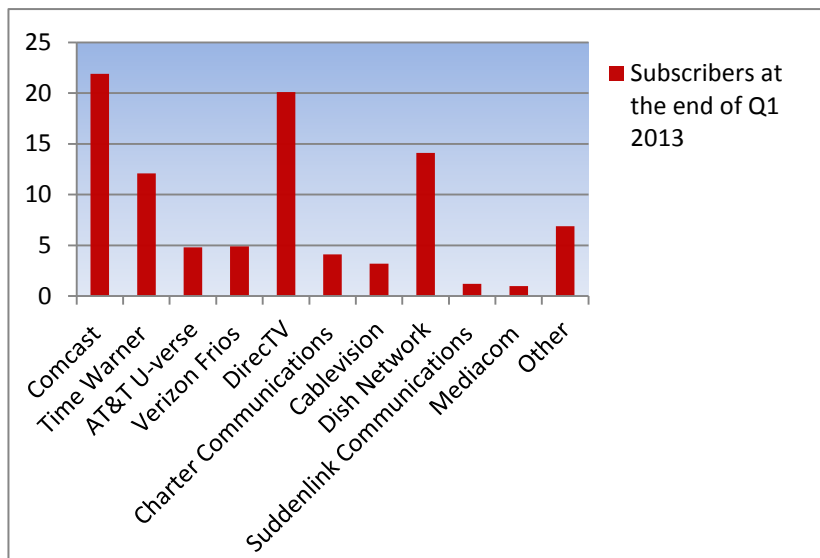


Figure 2: Multi-channel video providers

High-Speed Internet Services:

High-speed internet services allow Comcast to provide access to email, voice email, address book, online storage and online securities features through its portal, XFIXNITY.com. In terms of customers, High-Speed Internet Services registered a weight of 27.8% on Cable Communications segment in

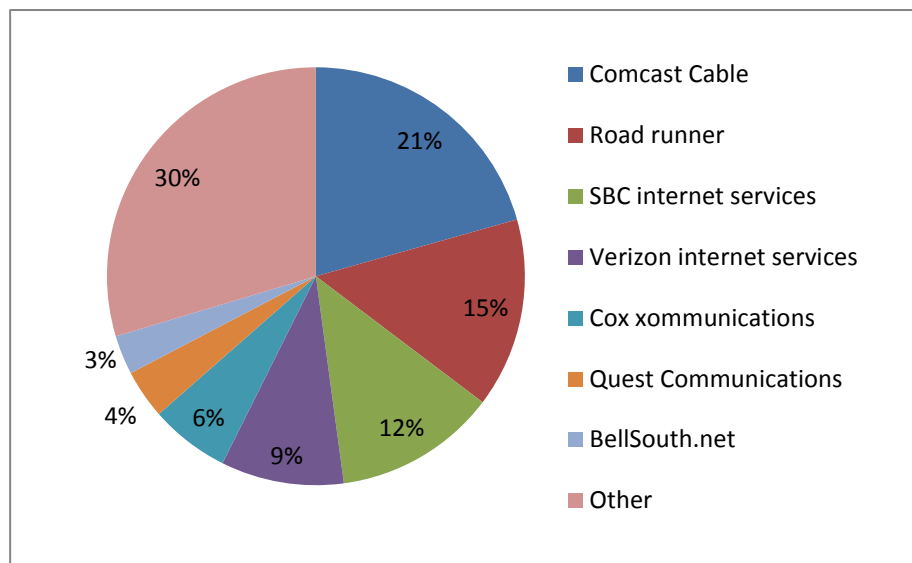
2013, which is slightly higher than the last two years; however, this growth is justified by a High-Speed Internet Services' compound annual growth of 1.1% from 2011 to 2013 as well as a decrease in Video Services as referred in previous paragraph. High-Speed Internet segment represents 21% of the US internet market share (Figure 3).

Voice Services: Through voice services Comcast provides voice plans using an interconnected voice over internet protocol technology. Moreover, for customers with Comcast's high-speed internet, voice services also include the ability to access and manage voicemail, text messaging and other account features through XFINITY.comcast.net or by using Comcast's mobile apps for smartphones

and tablets. Voice services division customers had an increase of 7% to 10.7 million customers in 2013 and represented 14.4% over cable segment customers (figure1) at the same period of time.

Business services: This division allows Comcast to offer cable services to small and medium-sized businesses. Business services include a website hosting service, that allows customers to share, coordinate and store documents online, hosted voice services using cloud network servers, a business directory listing, and the added capacity for multiple phone lines. On other hand, though business services Comcast also offer advanced voice services and Ethernet network services to medium-sized customers that connect multiple locations, as well as cellular backhaul services to mobile network operators to help them network bandwidth.

Figure 3: US Internet Market Share (2013)



3.2.2. NBC-Universal

As already mentioned, NBC-Universal is a part of NBC-Universal Holdings created in 2011 with GE where Comcast owned 51% of control. Therefore,

in 2013 the company acquired the remaining 49% common equity interest in NBC-Universal Holdings. This line of business includes cable networks segment, broadcast television segment, filmed entertainment segment and theme parks segment. These segments generate more than 34% of Comcast consolidate revenues and 19% of the EBITDA per year. For example in 2011; 2012 and 2013 represented 34%; 38% and 37% of Comcast consolidated revenue respectively.

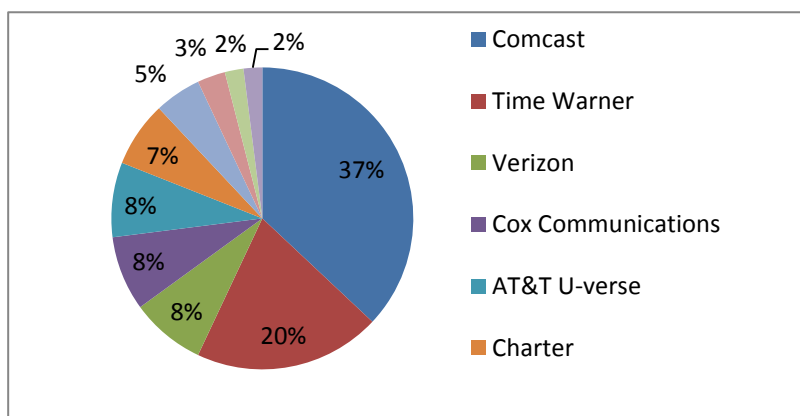


Figure 4: US Cable television Market Share

Cable Networks segment:

Consists essentially on 15 domestic cable television networks, 13 regional sports and news networks, more than 60

international cable networks, cable television production studio, and other related media proprieties. The number of subscribers in Network Comcast declined 0.45% to 1,099 million subscribers, but in 2013 this decrease was slightly compensated with introduction of children’s entertainment (Sprout) online platform attended by 57 million subscribers in 2013; which led an increase of 0.64% to 1,106 million customers in 2013 though Game Lifestyle (G4) has decreased 50% to 31 million subscribers in 2013. Furthermore Comcast detains 37% share of the US market cable networks segment (Figure 4).

Broadcast Television: Consists on NBC and Telemundo broadcast networks that are owned by local television stations, Comcast broadcast television production operations and other related digital media proprieties. Comcast own and operate 10 NBC affiliated domestic television stations that reaches nearly 31 million U.S. television households, which represents approximately 27% of U.S. television households. On the other hand Telemundo owned 14 domestic television and reach approximately 55% of U.S. Hispanic television households.

Filmed Entertainment: Consists of the operations of Universal Pictures, which produces, acquires, markets and distributes filmed entertainment and stage plays worldwide. Meanwhile this segment generates revenues from worldwide theatrical release of owned and acquired films, content licensing and home entertainment.

Theme Parks: Consists of the Universal theme parks in Orlando and Hollywood. This segment generates revenues from theme park attendance and per capita spending, management, as well as licensing and other fees. Per capita spending includes ticket price and in-park spending on food, beverage and merchandise.

3.2.3. Revenues

As already referred, Cable Communications segment is the biggest source of revenues for Comcast (Figure 5). In 2012 the segment registered an increase in revenue of 6.4% to \$39.6 billion and an increase in its operating income before depreciation and amortization of 6.3% to \$16.3 billion. In 2013 the revenue of

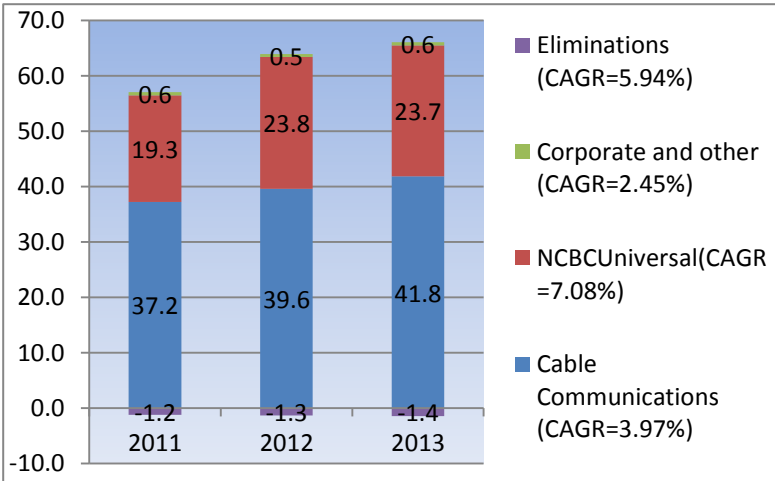


Figure 5: Breakdown of Revenues by division in \$b

cable communications segment rose 5.6% to \$41.8 billion and its EBITDA increased by 5.6% to \$41.8 billion. At the same time NBCUniversal recorded an increase in revenue of 12.7% to \$23.8 billion and the underlying EBITDA in this segment grew 9.0% to 4.1 billion.

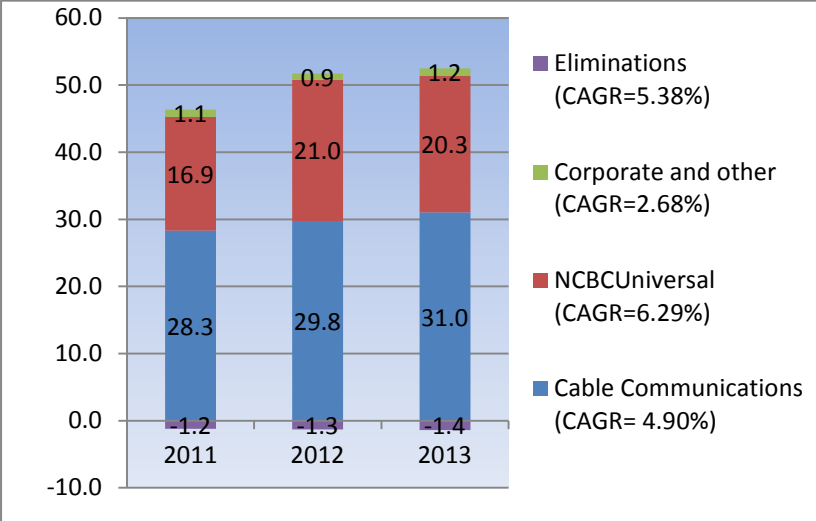
In 2013 NBCUniversal revenue decreased slightly 0.68% to \$23.7 billion; by contrast the segment EBITDA increased 15.2% to \$4.7 billion. Regarding Cable Communications segment growth, the revenues were driven by video division which had increase 2.5% and 2.9% in 2012 and 2013, respectively due the additional and higher levels of video service received by customers that implicated an increase of subscribers, as well as from rate adjustments; increase in High-Speed Internet revenue of 8.3% to \$10,344 million in 2013 with an CAGR in three years of 5.7% (2011 to 2013) explained by a higher rates from customers receiving higher levels of services and rate adjustment; increase in Voice revenue of 1.5% and 2.8% in 2012 and 2013 respectively due a growth in number of residential customers receiving services through discounted bundled offerings; increase in business services of 31.3% and 26.4% in 2012 and 2013, respectively due to higher number of business customers receiving cable services and at end an decrease of 4.2% to \$2,189 million in advertising , affected by the strength of advertising market and general economic conditions in 2013 .

NBC-Universal business has expanded through an increase in Cable Network Segment of 8.26% and 5.64% in 2012 and 2013 respectively, due to the upsurges in the contractual rates that Comcast charged under distribution agreements, higher prices and an increase in the volume of advertising units sold contributed to increases of 12.9% and 8.9% in 2012 and 2013 respectively and also increase in Content Licensing and other due to new licensing agreement celebrated in 2013; increase in Broadcast Television Segment of 37.8% in 2012 and a decrease of 13.17% in 2013 due to \$1.2 billion of advertising recorded in 2012 associated with broadcasts of the 2012 Super Bowl and the 2012 London Olympics game as well as a decrease in Content Licensing due to the timing of licencing agreements; Increase in Filmed Entertainment of 21.70% and 5.68% in 2012 and 2013 respectively due to strong performance of Ted, Dr. Seuss' The Lorax and Bourne Legacy in 2012 and due to the strong performance of Me 2 and Fast Furious 6 in 2013 as well as an increase in Content Licencing due to the international licencing of theatrical releases and from the licencing of Comcast theatrical releases to digital distributors in 2013 as well as because of the growth of the content licencing revenue due to a higher volume of owned and acquired films made available to releases and increase in the licencing of Comcast content to digital distributors in 2012; increase in Theme Parks segment of 11.26% and 7.19% in 2012 and 2013 respectively due to higher guest attendance and increase in per capita spending at Comcast Orlando and Hollywood theme parks as well as due to

success of The Wizarding World of Harry Potter attraction in Orlando and the Transformers attractions in Orlando and Hollywood in 2012 and 2013.

3.2.4. Costs and Expenses

Comcast incurred \$50.4 billion of total costs and expenses in 2012. This amount represents an



increase of 11.68%, in comparison with 2011, while in 2013 such amount increased 1.40% to \$51.1 billion.

Cable communications shows some consistency in terms of revenues versus costs, whereas this segment represents more than 55% of total Comcast costs. In fact

Figure 6: Breakdown of Costs and Expenses by division in \$b

cable communications costs and expenses have increased every year as shown on figure 6. In 2012 the costs increased by 5.02% to \$29.8 billion, while in 2013 there was a growth of 4.27% to \$31 billion. NCBUniversal represents 40% of total Comcast costs and expenses on average. In 2012 NCBUniversal costs increased 24.22% to 21 billion, while a decrease of 31.68% to 20.3 billion was registered in 2013. Cable communications, Broadcast Television, Filmed Entertainment and Theme Parks segment has accounted for substantially all of the increase in consolidated costs and expenses, excluding depreciation and amortization. Furthermore, in 2012 the increase in costs and expenses was due to broadcasts of 2012 Super Bowl and the 2012 London Olympics, however, in 2013 the decrease in operating costs and expenses in Broadcast Television segment served to partially offset the increase in all costs and expenses. On the other hand consolidate depreciation and amortizations had an slightly increase of 0.94% to \$7,871 million in 2013, by reason of the increases in capital spending in Cable Communications and Theme Parks Segments as well as depreciation associated with the acquisition of real estate properties by NCBUniversal on the same year.

3.2.5. Capital Expenditure

Comcast most noteworthy recurring investing activity has been the capital expenditure in cable communications segment, which embodies more than 80% of total Comcast capital expenditure each year as shown on figure 7. In 2012 cable communications segment capital expenditure

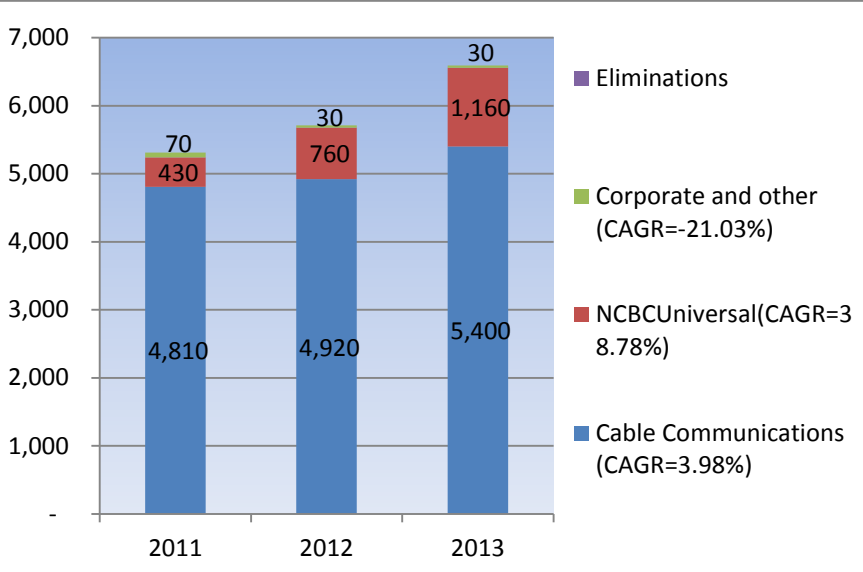


Figure 7: Breakdown of Capital Expenditure by divisions in \$ millions

increased slightly 2% to \$4,810 million, while in 2013 there was an increase of 9.8% to \$5,400 million, whose source is justified by the investment in Comcast IP and cloud-enable video platform, the deployment of wireless gateways in customer’s homes and continued investment in network infrastructure, as well as the expansion of business services and Comcast home security and automation services. At the same time, NCBCUniversal capital expenditure hugely amplified 75.7% to \$760 million in 2012 and an increase of 52% to \$1,160 million in 2013. This increase in NBC-Universal is due the continued investment in original programming and sports programming rights at both Comcast cable networks and broadcast networks and continued investment in new attractions at Universal theme parks, including the Transformers and Despicable Me attractions and the expansion of the Harry Potter attraction.

3.2.6. Net Income

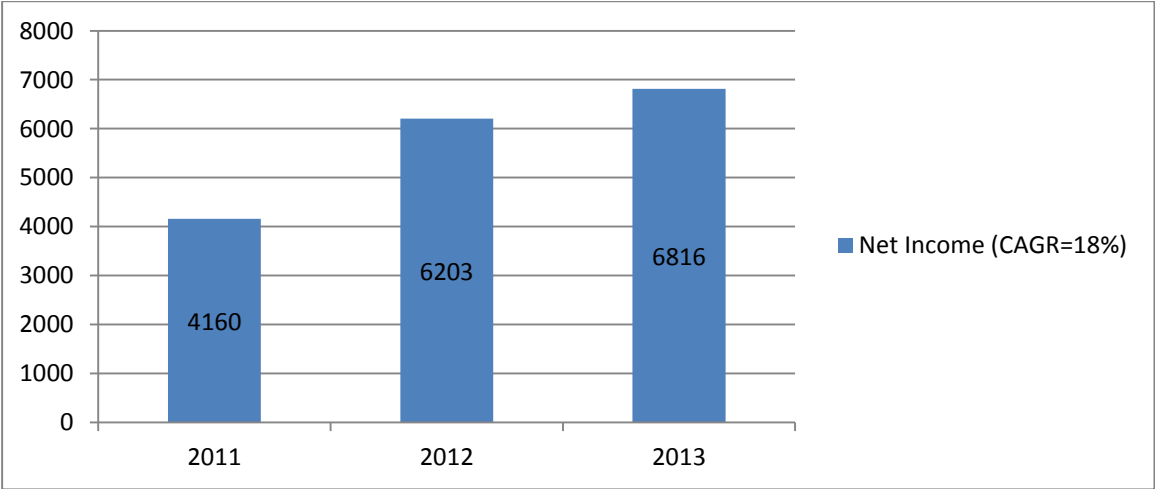


Figure 8: Net income (\$ millions)

Comcast's net income registered a huge increase of 49% to \$6,203 million in 2012 and an increase of 10% to \$6,816 million in 2013 due to high increase in Broadcast Television and Filmed and Entertainment segments revenues in 2012 because of the events already referred in the last paragraphs.

3.2.7. Free Cash Flow

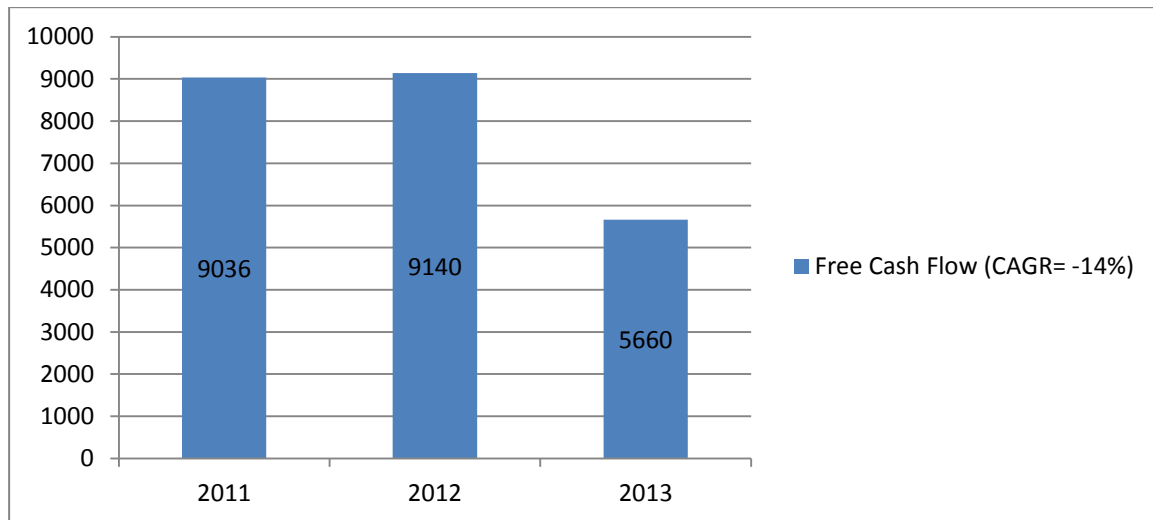


Figure 9: Free cash flows (\$ millions)

Comcast's free cash flow has dramatically decreased by 14% in the last three years (CAGR); moreover in 2012 a slight increase of 1% to \$9,140 million was registered, while the following year, free cash flow chart dropped significantly 38% to \$5,660 million due to the increase in capital expenditure.

3.3. Time Warner Cable Inc.

Time Warner Cable (TWC) is a public American cable telecommunications company that provides video, high-speed data and voice services in 29 US's states, well-clustered cable systems located in five geographic areas - New York City, the Carolinas, the Midwest, South California and Texas. Time Warner Cable with headquarter in New York City, is the second largest cable company in the US only behind Comcast. TWC was founded in 1990 as result of a merger between Time Warner Communications and Time Inc.'s cable television company. Traded in NYSE, the company's IPO occurred in March 2007. Therefore there are two main services where Time warner's revenue which are: Residential services and business services. Residential service allows offering video services, high speed- data and voice services, as well as the security and home management services to residential customers. Through business services TWC offers a wide range of products and services such as

business connectivity, video, high-speed data, voice, hosting and cloud computing services. Beyond these activities TWC relies on advertisements and other sources of revenues.

3.3.1. Residential Services

Through line of business Time Warner Cable retains 20% of US cable television market share (figure 5), being behind Comcast Corporation. Residential services represent 71% of the entire Time Warner subscribers. As stated in paragraph above, through this segment TWC offers video, speed data and voice services, as well as security services to residential customers.

Video Services: Also known as programming video segment, TWC’s video services provides over 300

channels and 18000 hours of video-on-demand programming. These offers include various tiers and bundles of video programming and music services ranging from a basic package with more than 20 channels to packages that include all programming services to which TWC has rights. Moreover, TWC’s video subscribers

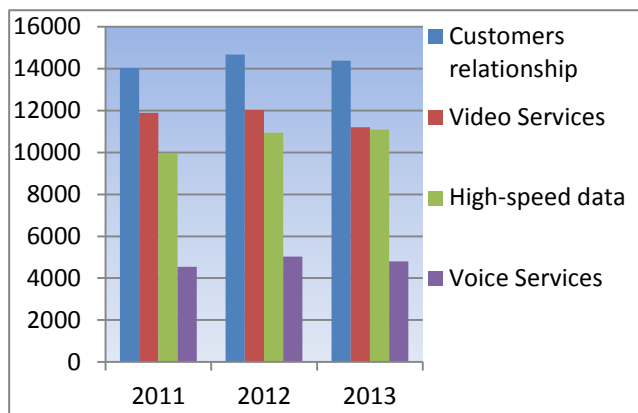


Figure 10: Breakdown of Residential Subscribers (in thousands)

pay a monthly fee based on the video programming tier or package they receive. On the other hand, for subscribers of specialized tiers and premium networks are charged with additional monthly fee. TWC’s video services tier represents nearly 27% of residential services, which is lower comparing with approximately 34% of customer relationship¹. Despite of the rising of 5.57% to 42,663 thousands residential subscribers in 2012, the course slightly changed negatively in 2013; whereas, this segment faces a decrease of 2.78% to 41,476 thousands subscribers (figure 8).

High-Speed Data Services: TWC offers a range of high-speed data services tiers, that provide a diversity of speed (from 2 to 100 megabits per second (“Mbps”) downstream), price and consumption (unlimited, 20 gigabyte and 5 gigabytes) levels and communication tools as well as personalized services, including email, PC security, parental controls and online radio for free. TWC has an agreement with a group of other US cable companies to offer each other’s high-speed data subscribers access to their respective WiFi networks in order to allow customers to have access to a nationwide network. 26.74% of residential services subscribers in 2013 are associated to High-speed Data. This segment has increased more than any other in the last three years (figure 8).

¹ Customer relationships represent the number of subscribers who buy at least one of the TWC’s services.

Voice Services: Through residential services segment, TWC offers a variety of unlimited local and long-distance calling throughout the US, Canada and Puerto Rico that include call waiting, call forwarding, distinctive ring and call ID on customer’s telephone, computer or television, for a fixed monthly fee. The weight of voice services subscribers on residential services was low in 2013 due to a decrease of 4.34% to 4,806 subscribers in 2013 (figure 8).

Security services (IntelligentHome): Is considered as the next-generation home automation and monitoring service, in all of its operating areas. Customers who intend to obtain the IntelligentHome service must subscribe to TWC’s high-speed data service at the standard tier or higher.

3.3.2. Business Services

Business services represent around 3% of all TWC subscribers. Time warner cable provides several products and services to business customers, such as business connectivity (data services, video and voice as well as hosting and cloud services ; at retail and wholesale², managed and unmanaged, and using its own network infrastructure and third party infrastructure.

Data services: data services offered by TWC include internet access, network services and wholesale transport services. With internet TWC provides asymmetrical broadband Internet access to small businesses with downstream speeds up to 15 Mbps and wideband Internet access with downstream speeds from 35 to 100 Mbps. Through Network services TWC offers Ethernet-based network services that support businesses to interconnect their geographically dispersed locations and local area networks in a private network. Whole

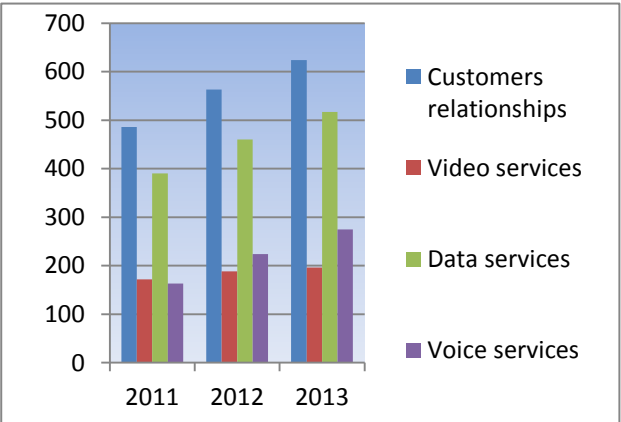


Figure 11: Breakdown of Business Services subscribers

transport services are offered to wireless telephone providers for cell tower backhaul and other service providers to connect customers that their own networks do not reach. Data services division represents 32% of business services subscribers, meanwhile this division has increased in last three years; for instance in 2013 registered an increase of 13.39% to 517 thousands subscribers (Figure 9).

² Retail customers range from small business with a single location to medium-sized an enterprise business with multiple locations as well as government, education and non-profit institutions. Wholesale customers are other services providers, such as telecommunication carries and network and managed services resellers.

Video Services: Video services enable TWC providing a wide range of video services which include a full broad of video programming ties and music services targeting business of different sizes and across key industries (hospitality, healthcare and education). Video services segment subscribers corresponded to 17% of business services subscribers. In addition, video services division increased in last three years (Figure 9).

Voice Services: Voice services division include both multi-line phone and trunk service. Multi-line phone allows TWC to offer a variety of calling plan options along with key business features, including call hunting, extensive call forwarding options, call restrictions and call transfer. Moreover TWC also provides a web-based customer portal, voice manager, which enable voice customers to customize and manage the underlying service features. TWC's trunk is related to the services offered either to a Primary Rate Interface (PRI) or a Session Initiation Protocol (SIP) handoff to the customers. Through PRI trunk service, TWC offers medium-sized and enterprise business customers a variety of packages with up to 23 simultaneous voice calls on each trunk line and set of voice usage plans. SIP trunk service allows TWC offering medium-sized and enterprise business customers a variety of packages with up to 60 simultaneous voice calls with a set of voice usage plans. The subscribers' weight of this division on Business services segment has increased in last three years; in 2013 represents 17.06% of total business subscribers, which is higher than 15.61% of subscribers in 2012 (Figure 9).

In general, TWC's subscribers had a growth of 1.15% (CAGR) in three years. In fact the number of subscribers enhance from 56,134 in 2011 to 58,096 in 2013. Around 25% of total TWC's subscribers are related to the single play subscribers, double play subscribers and triple play subscribers.

3.3.3. Revenues

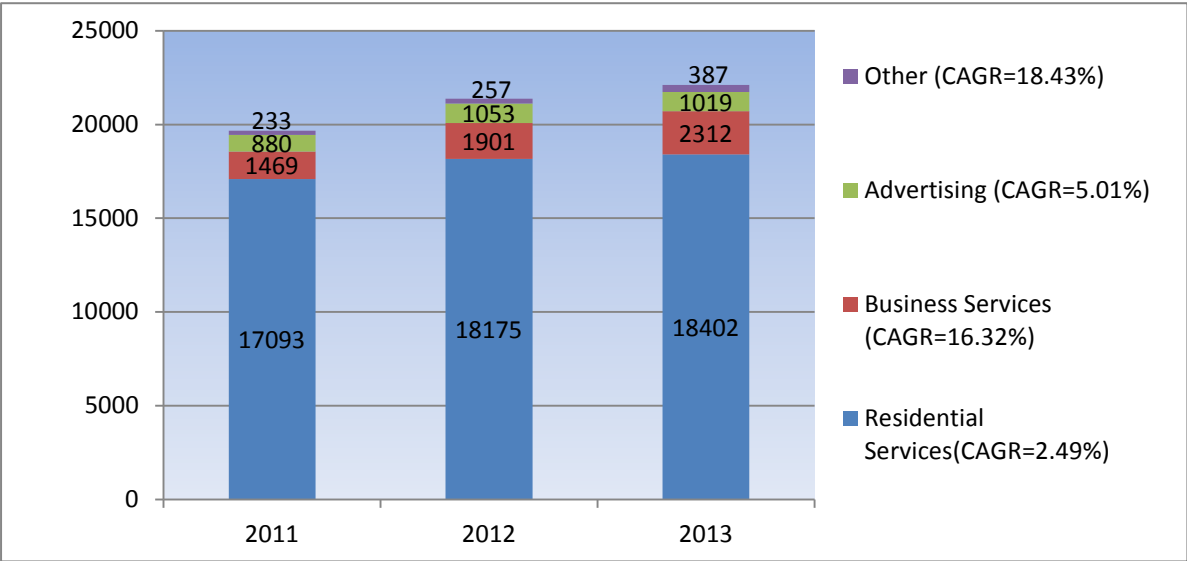


Figure 12: Breakdown of Revenues in \$ millions

In 2013 Time Warner Cable achieved total revenue of \$22.120 million, which corresponds to a Compound Annual Growth Rate (CAGR) of 3.98% in a range between 2011 and 2013. These revenues has been driven mainly by the Residential Services segment, whose weight in total TWC revenue maintained higher than 80% throughout the three last years. In contrast, Residential Services segment had a CAGR of 2.49% in the last three years, which is lower when compared with other sources of revenues (Figure 10). This weak CAGR in revenues is explained by a verified down in 2013 of 3.99% to \$10.481 million and 3.66% to \$2.027 of the Video Services and Voice Services respectively. Despite of the negative CAGR of 0.34% in Video Services division, High-speed Data has had an increase of 9.16% in last three years. On the other hand Business Services segment revenue registered an increase of 21.62% to \$2312 million in 2013. Meanwhile, a crucial element behind TWC’s Business Services is Voice Services division, which has an increase in revenues of 55.33% to \$306 million in 2012 and achieved the highest CAGR of 28.81% in 2013, whereas TWC obtained \$421 million of revenues from Voice Services. At the same time, High-Speed Data division has increased 14.77% in three last years, while Video Services division has increased 6.66% at the same period of time. Another source of TWC revenue has been advertising, even though advertising faces a decrease of 3.23% to \$1.019 million in 2013. Nevertheless, its CAGR over three past years remained positive (5.01%). Finally other sources of revenues from TWC have been increased each year (for example in 2012 other revenues increased 17.70% to \$1.310 million)³.

³ Other revenues include fees paid to TWC by the Advance/Newhouse partnership and insight for the ability to distribute TWC’s high-speed data service and the Advance/Newhouse Partnership for TWC’s management of

3.3.4. Costs and Expenses

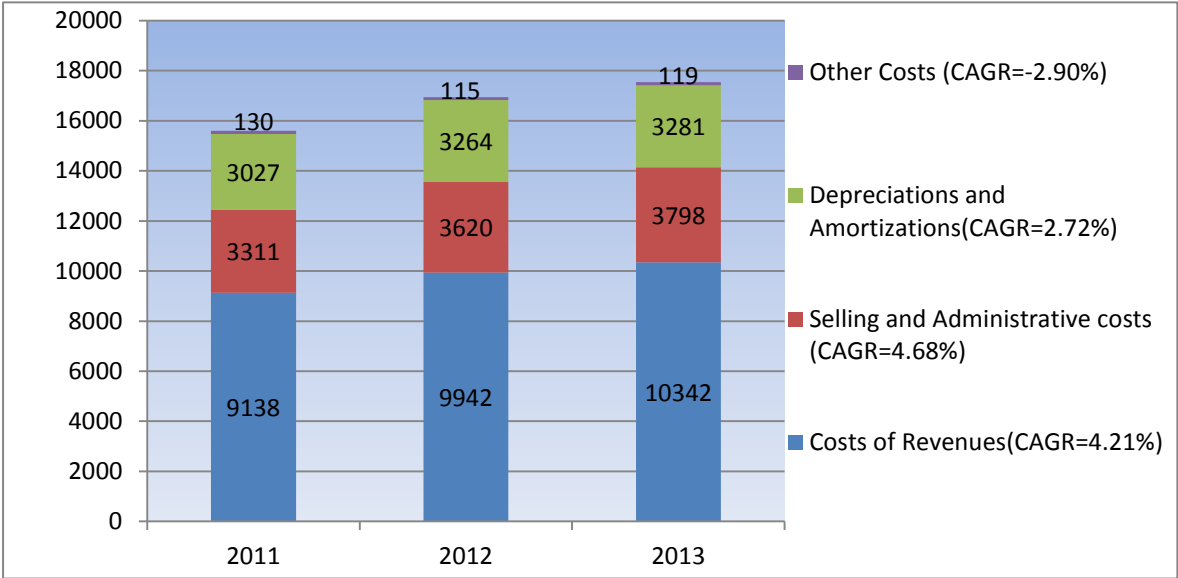


Figure 13: Breakdown of costs and expenses in \$ millions

TWC’s total costs and expenses had an increase of 3.54% to \$17,540 million in 2013. These costs and expenses reflect the costs of revenues, selling and administrative, depreciations and amortizations as well as merger-related and restructuring costs. Costs of revenues represent about 58.6% of total costs and expenses (Figure:13); however, cost of revenues include costs related with delivery of services to subscribers or the maintenance of company’s delivery costs such as video programming costs; high-speed data connectivity costs; voice network costs and other associated expenses, including non-administrative labour, franchise fees; and other related costs. Cost of revenues has increased 4.21% last long three years; even though voice network has had a negative CAGR of 2.35% other direct operating expenses had a growth of 15.29% to \$1312 million in 2013. In 2013 video programming services and workforce costs increased almost half less than in 2012. Regarding selling and administrative costs, TWC incurred \$3,798 million in 2013 while depreciations increased slightly 0.03% to \$3,155 million at the same period due an increase in shorter-lived distribution system and capitalized software assets as well as two additional months of Insight costs related with its property, plant and equipment.

3.3.5. Capital Expenditure

certain functions, including, among others programming and engineering; and by commissions earned on the sale of merchandise by shopping network.

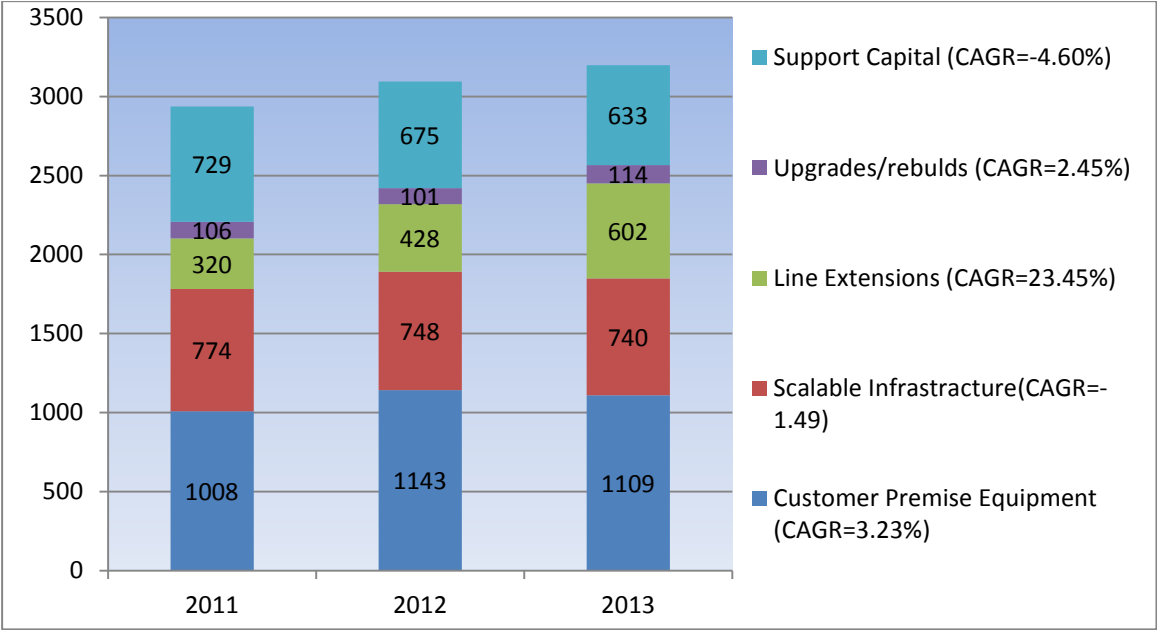


Figure 14: Breakdown of Capital Expenditure in \$ millions

TWC’s capital expenditure had a slight increase of 3.33% to \$3,198 million in 2013, but in terms of CAGR in the course of 2011 to 2013 TWC registered 2.88 percent. Capital expenditure has driven by customer premise equipment, scalable infrastructure, line extensions and upgrade/rebuilds as well as support capital. Customer premise equipment is associated with the costs incurred in the purchase and installation of equipment that consists at a customer’s home or business services, however, these costs weight almost 35% in total capital expenditure. Contrary to the increase of 13.39% to 1,143 million in the previous year, customers premise equipment expenditure had a decrease of 2.97% to 1,109 million in 2013. The costs incurred in the purchase and installation that control signal reception, processing and transmission throughout TWC’s distribution network, as well as controls and communicates with the equipment at a customer’s home or business (Scalable infrastructure) have decreased in the last three years (for example in 2012 had an decrease of 3.63% to \$740 million, while in 2013 it was verified that there was a slight decrease of 1.07% to \$740 million. Additionally, the costs incurred in line extensions have roughly increased along the last three years, while oppositely costs related with support capital has decreased at the same period (Figure:14) .

3.3.6. Net Income

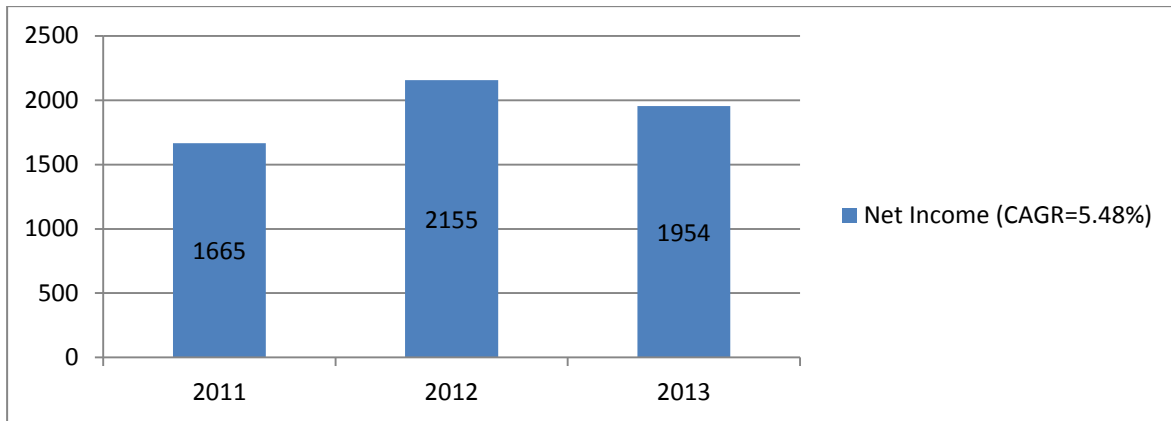


Figure 15: Net income in \$millions

TWC net income had a decrease of 9% to \$1,954 million in 2013, though it had a huge increase of 29% to \$2,155 million in 2012; however, in the last three years TWC registered a CAGR of 5.48% in terms of net income. Net income increased in 2012 due to the change in other income, and an increase in operating income, which was slightly offset because of the increasing in income tax provision and interest expense, while net income in 2013 decreased due to the increase in other income, partially offset by an increase in operating income and reduction in income tax provision and interest expense.

3.3.7. Free Cash Flow

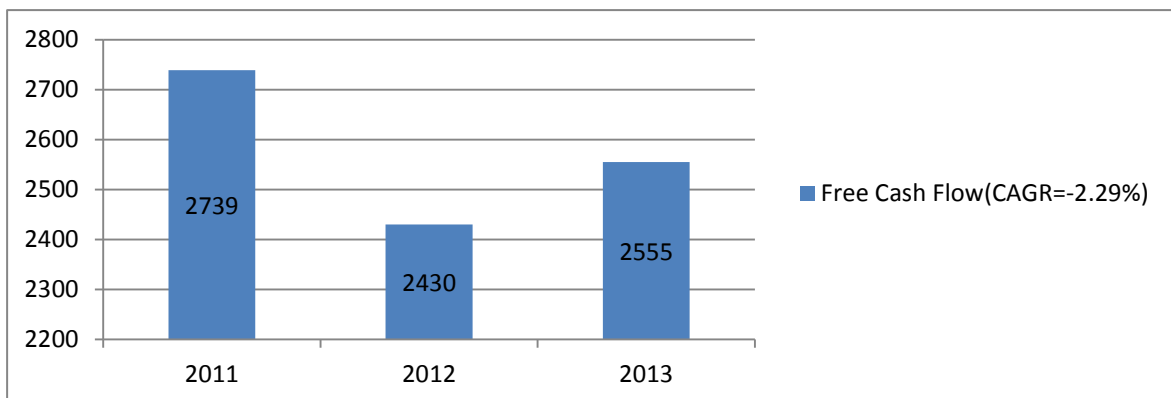


Figure 16: Free cash flows in \$millions

TWC free cash flows had a negative CAGR of 2, 29% in the last three years which reflects a high decrease of free cash flows of 11% to \$2,430 million in 2012. Nevertheless the 2012 damaging panorama changed positively in 2013, when free cash flows increased 5% to \$2,555 million. The decrease was dominated by the investment made on customers premise equipment which had an increase of 13.39% to \$1.143 million in 2012; as well as through a bulk of investment that has made in line extensions which has had a CAGR of 23.45% over the last three years.

4. Performance of both companies in the stock market

In 2013 Dow Jones industrial average and S&P500 experienced the biggest annual gains since the late 1990s. The Dow Jones was up to 26% while the S&P500 gained more than 29% and Nasdaq up to nearly 40% to highs not seen since 2000. This bull market has been the achievements of US government plan to recovery the US economy from the 2008 financial crisis. In the meantime, Comcast and TWC have not been far from this market trend and the US economy growth as shown in figure 14.

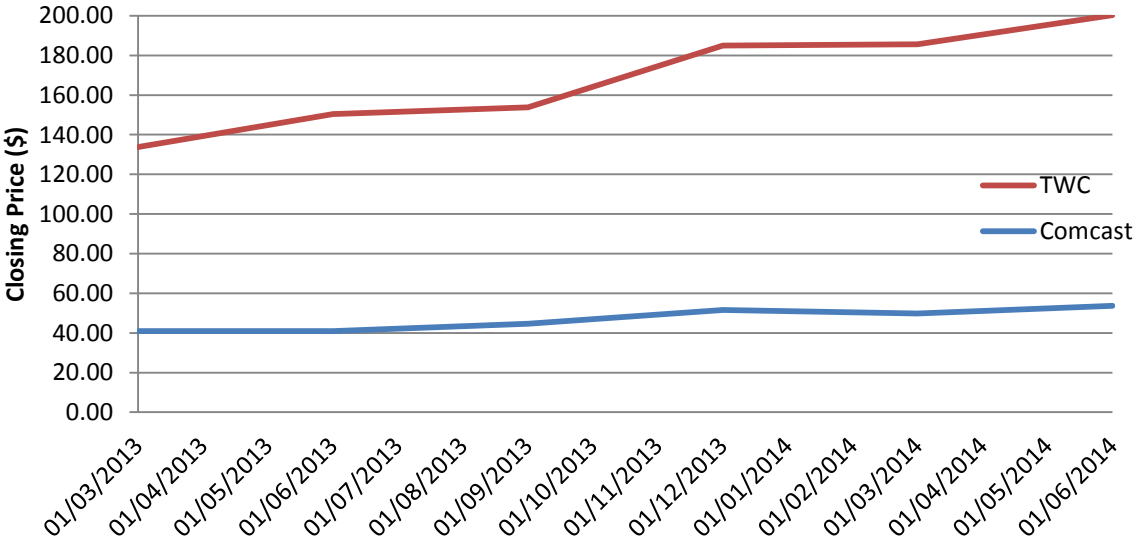


Figure 17: Historical Share price (Q1 of 2012 to Q2 of 2014)

TWC’s closing share price at beginning 2013 was \$95.12 per share which is 43.5% higher than the close price at the end of 2009 when TWC detached from Time Warner Inc. TWC’s share price has been driven by both the constant revenues growth rate and the increasing on number of investors interested to put their money to such green thumb business; for instance, the rumors of TWC’s acquisition by Charter and Comcast led TWC to close at \$133.38 per share in December 31st. On the other hand, Comcast’s share price increased 1.3% to \$51.51 per share if we look at the close share price of January 2nd and December 31st.

In spite of the constant conflicts in Asia and Ukraine as well as the geopolitical issues that involve Europe, Russia and United states, the US market do not felt yet any negative impact, whereas the firms keep escalating on stock market⁴.

⁴ Comcast’s stock price moved up from \$49.83 per share to \$53.68 per share, and TWC’s stock price rose from \$135.76 per share to \$146.55 per share.

5. Performance Forecast

As stated in literature review, in order to assess the value created by both Comcast Corp. and Time Warner Cable Inc., we need to evaluate them separately. Moreover, this valuation implies some assumptions about the company's future performance, whereas these companies face constant endogenous variables changes over time; that are in consonance with the dynamic of the Entertainment, Media and Communications Sector as well as other exogenous variables around them.

The performance forecasts will be based on the historical performance of the companies; what implies back to the range between the financial years ended in 2011 and 2013 respectively as well as future forecasts published by analysts and other information available on the company's and industry reports and other sources of information. Thereby, the forecasts will be performed in the next five years. In other words it will be done from 2014 to 2018.

In terms of valuation tools, we will take into account two different approaches in valuation of each company; discount cash flow method (using the WACC approach) and relative valuation method. As both methods are applied, it will allow the checking of consistency in assumptions made.

5.1. DCF Valuation

In order to calculate the value of the companies through DCF technique, the weighted average cost of capital method will be applied as a discount rate. In the meantime, by using WACC we are assuming that it has already included bankruptcy costs and tax shields.

The first step of starting with DCF valuation is to forecast all the future free cash flow of the company available to its investors and claimholders. It is crucial to highlight the future free cash flow drivers such as revenues and operating expenses due to the indispensable role that they play in DCF technique. Besides, others are not less important variables such as: depreciation and amortization, working capital expenditure, tax rate and financial leverage will be taken into account in this valuation. During the valuation process all values will be considered as nominal, which leads to have nominal cash flows, and discount them with nominal cost of capital. Additionally, the free cash flow to the firm will be computed for the next five years and discounted at an appropriate discount rate. Regarding the relative valuation, the firm's financial indicator will be multiplied by the average multiple value of the corresponding peer group.

5.1.1. Standalone Valuation

5.1.1.1. Comcast Corp

The forecast analysis will be done focusing in the evolution of Cable segment and NBC-Universal by taking into consideration the information from chapter 3 and other perspective about the technology, telecommunication and media US and world outlook 2014-2018 from different sources (PWC, Bloomberg and others).

5.1.1.1.1. Revenues

Comcast revenues are driven by the number of customers and penetration data for cable system operations as well as the number of subscribers. We apply the term customer for Cable communication segment while subscribers will be referred NBC-Universal segment.

The numbers of customers have increased a long the last three years (CAGR=1.91%), but this growth was not been followed in same proportion by all divisions that embodied into cable communication segment. For instance, the video customers faced a decrease of 0.91% (CAGR) at the same period. Looking at NBC-Universal segment we notice that there was a slight CAGR of 0.1% which has been boosted by an increase of 0.6% to 1,106 million customers in 2013. In spite of these derisive progresses Comcast has been continuously growing in terms of revenue.

Cable Communication segment

Cable segment as already referred contributes with more than 70% of Comcast revenues. This segment has grown at 4% of compound annual growth rate (CAGR) in the last three years; however, the growth is underlying the continue increase on the number of video, high-speed internet and voice services consumers which have been increasing every single year. During the past three years (2011- 2013) Comcast has added 217.3 million customers as shown below.

Table 1: Number of customers by segment

December 31 (In millions)			
Consumers	2013	2012	2011
Video	21.70	22	22.30
Digital Video	21.30	21.20	20.60
High-speed internet	20.70	19.40	18.10
Voice	10.7	10	9.30
Total	74.4	72.6	70.30

These figures, plus business services and advertising led Comcast achieving a CAGR of 4% in Cable communication segment.

Despite news entrants and strong competition in communication industry, we believe that with the recovery of US economy and the constant growth in telecommunication industry, Comcast will continue escalating in the cable communication segment. Meanwhile, video services revenues whose CAGR was of 2% in last three years will assume a constant rate of 2% in next 5 years due to the scepticism around video programming; while the high-speed internet will grow by 5% in 5 years. Regarding phone services, it was assumed a constant growth rate of 0.5% until 2018 due to the constant increased on communication applications software. Business services will continue growing as video consumers increase by assuming a constant growth rate of 5% in the next 5 years. At the same time, the advertising growth rate will continue declining at least 2% due to the strength of advertising market⁵. The cable communication segment is expected to have a compound annual growth rate of 3% (2014-2018).

NBC-Universal

NBC-Universal revenue has grown at a 7% of the compound annual growth rate (CAGR) over the last three years; though in 2013, it has recorded a decreased of 1% that reflects a decrease of 13% to \$7,120 million in Broadcast Television segment. Thus, we believe that with the continues investment which has been done in NBC-Universal, revenue from Cable Networks should grow more than 6% per year, but due to the constant decrease in advertising, it was assumed that it would be growing at 3% per year. Regarding Broadcast Television; notwithstanding, the strong competition in this market (for example, Netflix keep growing fast with its TV and movie platform), Comcast is attempting to improve XFINITY platform in order to retain its subscribers, and sequentially to survive in this segment. If Comcast's managers want to recover the past rhythm of growth on Broadcast Television

⁵ PWC's entertainment and media outlook (2014-2018), details the drivers of increase in advertising market.

segment, more efforts will be necessary to afford that target. In other words, Broadcast Television revenue will keep decreasing by 5% per year. Filmed Entertainment industry is expected to grow at a 3.4% CAGR (2013-2017)⁶ ; meanwhile, if we look at the past, Filmed Entertainment revenues has had a CAGR of 9% which when combined with other factors, it leads us to affirm that this segment will grow at a 4.2% per year over the next 5 years. Theme Parks segment will grow at a constant annual rate of 3%, which is close to the Filmed entertainment industry trend. In terms of Headquarters and other and eliminations, we assume the same losses from 2013 for the next 5 years. In terms of other revenues related to the corporate and eliminations was assumed that it will grow at annual rate of 2% and 6% respectively until 2018. At the end of 2018, total Comcast revenues will have a compound annual growth rate of 3% (CAGR of 5 years).

5.1.1.1.2. Operating Expenses

Regardless of the tendencies of the US economy as well as the evolution of markets in terms of raw material suppliers and Comcast geographic expansion, Comcast's operating expenses weight on revenues have changed between 79% and 81% during 2011 to 2013. It seems reasonable to take this approach to forecast the operating expenses by assuming 83% of revenues per year during the forecasted period.

5.1.1.1.3. Tax Rate

The US marginal corporate tax is 15% and 35%⁷ but in terms of effective tax it will depend on the bulk of profit generated by the company during the fiscal year; however, for Comcast effective income tax was based at the results of past years, the effective income tax rate in Comcast was 35.1% on average; thus, it will be applied to an effective income tax rate of 35% for the next period of time.

5.1.1.1.4. Depreciation and Amortization

Comcast depreciation and amortization were almost stable over the last three years, while the depreciation has grown at a constant annual growth rate of 2%; the amortization has slightly grown at a 0.44% of compound annual growth rate (CAGR) at the same time. In fact, property plant and equipment which is the main drive of depreciation, though it had an increase of 10% to \$29,770

⁶ <http://www.marketingcharts.com/wp/television/us-traditional-media-outlook-2013-2017-30129/>

⁷ <http://www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-tax-corporate-tax-rates-2014.pdf>

million in 2013, justified mainly with the investment made in NBC-Universal segment, has grown at a 3% of CAGR over the last three years. We thus forecast depreciations as a percentage of PPE based on the percentages of last years ⁸ by assuming that PPE will reach the same CAGR of 3% and represents 69% of revenues. On the other hand, amortizations had a constant rate of 2% of intangible assets, which will remain for the following years.

5.1.1.1.5. Capital Expenditure

Comcast has been challenged with non-stop improvement in both Cable communications segment and NBC-Universal segment. In the Cable communication segment it has been invested in Comcast IP, cloud-enable video platform, deployment of wireless gateways in customer's home, network infrastructure as well as on the expansion of business services and home security and automation services. On the other hand, Comcast has strategically invested in new universal theme parks and other tangible and intangible assets related to the Cable communications and NBC-Universal operations.

Despite of the high annual growth rate of 15, 4% in Comcast's capital expenditure in 2013, in terms of percentage of revenues which continuously almost stable over the last three years by representing 10%, 9%, 10% of revenues in 2011, 2012 and 2013 respectively. We thus forecast a capital expenditure of 12% of revenues during the next five years in order to be consistent with PPE growth.

5.1.1.1.6. Net Working Capital

Working capital is an instrument which measures a company's efficiency and its short-term financial health. To get this measure, it might be calculated through the difference between the current asset and current liabilities⁹; meanwhile, we forecast the working capital through analysing the future of Comcast current assets and current liabilities as percentage of revenues. We therefore assume the average percentage of the current asset on revenues in the last three years of 23%, while for the current liabilities we assume the average percentage of revenues on current liabilities of 27%; hence, these percentages were applied to the forecasted revenues.

5.1.1.1.7. Financial Leverage and Cost of Capital

⁸ The depreciation and amortization have corresponded on average 22% of PPE over the last three years.

⁹ In effect, in this difference was taken into consideration de sum of inventories plus receivables less current liabilities.

As mentioned in the literature review, to estimate the cost of capital we need to set up all variable that concur to obtain the appropriate or at least the reasonable discount factor (WACC) to apply on the FCF denominator. We will start through focussing at the Comcast capital structure; hence analysing the cost of equity (Re) and estimating the cost of debt.

The capital structure corresponds to the sum of equity and debt (E+D); however, these two pieces are based on the value of the market. The market value of equity was calculated by taking into account the number of outstanding shares multiplied by the share price; while for market value of debt, was assumed as the book value of debt; whereas, the market value of debt is either difficult to estimate or when estimated it is commonly not different from the market value (Shill, 2013). As Comcast has done a huge investment in last years (for example the NBC-Universal acquisition), it was assumed the same level of the debt to equity ratio of 30% in five years, however, the appropriate D/E ratio will depend on the dynamic of firm which is influenced by internal and external factors.

Regarding the cost of equity (Re), was assumed a risk free of 2.47% which corresponds to the US 10 years treasury bond, while the market risk premium is the US equity risk premium as of January 2014 (5%)¹⁰; then to estimate the beta, we have taken into account the weighted averages of the beta of the individual segment (Cable communication and NBC-Universal) through using Damodaran data. We thus have selected betas from Cable TV industry for Cable communication segment and Broadcast industry for NBC-Universal which led to get a Comcast’s levered beta of 1.2 (Table 2); hence, it was obtained a Re of 8%.

Table2: Comcast’s weighted average beta.

Segment	Revenues	Value/EBITDA	Estimated Value	Unlevered Beta	Segment Weight	Weighted Beta	Levered Beta
Cable TV	41836	10.42	436,053	0.71	33%	0.23	
NBC Universal	23650	37.90	896,253	1.1	67%	0.74	
Total	65486	48.32	1,332,306		100%	0.97	1.2

¹⁰ http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html

The effective cost of debt (R_d) was 2.5% by assuming the company credit rating of A-¹¹, which has a default spread rate of 1.3% according to the Damodaran's scale rating (Appendix 4). Put all pieces together, it was calculated different WACC for each year and finally it was obtained a firm value of \$196,303 million assuming that the company will grow 3.5% at perpetuity. **In sum, the Comcast's target price using WACC method is \$58.42 per share.**

5.1.1.1.8. Sensitivity Analysis

The US telecommunication, media and entertainment industry is one of the most competitive all over the world where companies are constantly innovating and several potential entrants with news products or services, so that Comcast is not behind either the weakness or the opportunities coming from this industry atmosphere. Thus, bear and bull situations were applied to the revenues, cost of revenues and the terminal growth rate under the base case scenario. The bull case scenario assumes revenues and terminal growth rate of 1% higher and cost of revenues of 1% lower for each of the following years; while the bear case scenario assumes revenues and terminal growth rate of 1% lower and cost of revenues 1% higher. In the bull case, Comcast's firm value summed up to \$279,669 million with a price target of \$90.36 per share, while in bear case scenario Comcast's firm value summed up to \$148,561 million with a price target of \$40.13 per share. As we notice, in comparison with the price target of base case valuation, Comcast's price target is over valued in first scenario, while in second scenario we have an opposite situation.

5.1.1.1.9. Comparable Valuation

By definition relative valuation or multiple aims to value assets based on how similar assets are currently priced in the market. However, to do so, it is need to find similar firms even though there are no identical firms in the same business due to different levels of risk, growth, reinvestment rate and cash flows. Regardless of those difficulties of finding the appropriate peer group, it has selected a set of companies that operate within US telecommunication, media and entertainment industry that seems reasonable to the procedure of the relative valuation (table 3).

¹¹ https://www.moodys.com/research/Moodys-Changes-Time-Warner-Cable-Baa2-rating-review-to-review--PR_292788

Table 3: Peer group multiple (US telecommunication, media and entertainment industry)

Company	Country	Mkt Cap (USD, Millions)	P/E	P/Sales	EV/Sales	EV/EBIT	EV/EBITDA
Directv	US	42,920	14.61	1.37	1.83	11.07	7.32
Time Warner Cable	US	41,180	20.48	1.85	2.85	13.64	7.36
Dish Network Corp	US	29,528	34.74	2.10	2.29	19.18	12.10
Verizon Communications Inc.	US	204,153	15.50	1.30	2.45	9.03	6.07
At&T Inc	US	178,917	13.70	1.39	1.89	8.47	5.26
Charter Communication	US	16,869		1.87	3.40	32.55	10.46
CBS Corp	US	31,635	19.75	2.43	2.65	13.03	11.67
Walt Disney Co.	US	154,523	21.51	3.30	3.48	14.37	11.95
Twenty-First Century Fox	US	77,048	22.60	2.53	3.13	17.35	14.18
Viacom Inc.	US	34,034	15.04	2.66	3.32	11.99	11.35
Time Warner Inc	US	65,805	17.24	2.32	3.06	11.14	9.98
Sirius Xm Holdings Inc	US	20,192	44.86	5.40	5.94	22.78	18.42
Discovery Communications	US	29,762	27.21	5.19	5.73	15.81	13.54
Average		71,274	22.27	2.59	3.23	15.42	10.74
Comcast Corporation	US	141,111	19.85	2.12	2.69	12.68	8.20

In spite of Comcast having a market capitalization roughly higher than the peer group average, it is under all average multiples. Looking at equity value multiples, the obtained price target (table 4) of EV/Sales and EV/EBITDA are closer to the price target calculated using DCF valuation through WACC method.

Table 4 : Price target using multiple.

	P/E	P/Sales	EV/Sales	EV/EBIT	EV/EBITDA	DCF
Equity Value	106,711	170,417	166,419	125,355	167,119	152,483
Price Target	40.89	65.29	63.76	48.03	64.03	58.42

5.1.1.2. Time Warner Cable Inc.

TWC forecast analysis will be done focusing on the evolution of services as whole, taking into consideration the information from chapter 3 and other perspective about the technology,

telecommunication and media US and world outlook 2014-2018 from different sources (PWC, Bloomberg and others).

5.1.1.2.1. Revenues

TWC revenues are driven by the number of WTC’s services subscribers (video, high-speed data and voice services). TWC has registered a slight increase of 1% on the number of subscribers per year over the last three years, with high-speed data and voice services has had a CAGR of 4% and 3% respectively while video services contribute negatively to the total subscribers with -2% of CAGR at the same period of time. Taking into account the growth of the US economy, it is reasonable to assume that this landscape will change in the near future (Table 5).

Table 5: Selected Subscribers-statistics

Selected subscriber-related statistics (In thousands)	2013	CAGR (2011-2013)	2014E	2015E	2016E	2017E	2018E	CAGR(2014-2018)
Customer relationships	15008	1%	15308	15767	16083	16404	16732	2%
Video	11393	-2%	11507	11852	11971	12090	12211	1%
High-speed data	11606	4%	12302	12671	13432	14238	15092	4%
Voice	5081	3%	5233	5390	5552	5719	5890	2%
Total	43088	1%	44351	45681	47037	48451	49926	2%

Source: Company reports

TWC’s revenues have grown at a 4% CAGR during the last three years. The highlight of this evolution is attributed to the constant increased over the high-speed data which has increased at a constant growth rate of 14% in 2012 to 2013. Taking into account the rapid development of telecommunications companies and their capacity of producing sophisticate products which requires strength and high-speed internet, we assume a constant annual growth of 5% in high-speed data residential services as well as 2% for business services. Due to the decreased of 4% in residential video services in 2013 and a negative CAGR of 0.3% as well as the increased in video segment, we forecasted it assuming that will continues to decrease at a constant growth rate of 3%, while in business services a constant annual growth of 5% was assumed. Regarding voice services we presumed a decrease of 2% for residential services, while in business services we assume a constant rate of 5%. Advertising will likely keep a decrease rate of 2% in the next five years taking into account the argument stated previously on Comcast revenues forecast.

5.1.1.2.2. Operating Expenses

TWC's operating expenses will be forecasted as a percentage of TWC's revenues as we did in Comcast. The percentage of operating expenses over the revenues has been almost constant along over three years (It was 64% in last three years, excluding depreciations and amortizations). We thus forecast TWC's operating expenses assuming that it will represent between 64% and 73% as percentage of revenues till 2018.

5.1.1.2.3. Tax Rate

The effective income tax rate depends on the TWC operations during its course of business, taking into consideration the US marginal corporate tax rate of 35%. Looking back at the last three years, we noticed that the effective income tax rate in TWC was 34.4% on average; thus, this will be applied for effective income tax rate of 35% for the next period as done in Comcast.

5.1.1.2.4. Depreciation and Amortization

The amount of depreciation and amortization, though have grown at a CAGR of 2% and 56% respectively (2011-2013), in terms of percentage of PPE and equipment there are no any significant changes on that period, whereas the depreciation was 22%, 21%, 21% of PPE in 2011, 2012 and 2013 respectively and the amortization was represented by a constant fraction of 1% in 2012% and 2013. Taking into account the PPE CAGR of 3% of last three years, we forecasted depreciation and amortization assuming that PPE will grow at a constant annual growth rate of 3% and depreciation will continue to be 21% as percentage of PPE in the next period of time. On the other hand the amount of amortization remains constant.

5.1.1.2.5. Capital Expenditure

TWC's capital expenditure was 15%, 14% and 14% of revenues in 2011, 2012 and 2013 respectively, however for the next period, we believe that this situation may remain the same. We thus, forecast capital expenditure considering that it will be 14% of revenues.

5.1.1.2.6. Net Working Capital

Considering what we have already explained in Comcast's net working capital, our examination goes straightforward to the working capital drivers (Current assets and current liabilities)¹². Our forecast was based on the average of current asset and current liabilities as a percentage of revenues in 2011, 2012 and 2012, which was 22% and 25% respectively.

5.1.1.2.7. Financial Leverage and Cost of Capital

In this session we will follow the same reasoning as we have done on Comcast, though some elements have to be changed in TWC.

Looking at TWC's capital structure has verified a high debt to equity ratio over the last years, but it was assumed a decrease on TWC's debt level so that the debt to equity ratio will decline to at least 55.9% in five years; however, the appropriate D/E ratio will depend on the dynamic of firm which is influenced by internal and external factors as stated on Comcast analysis.

Regarding cost of equity (R_e), it was assumed that a risk free of 2.47% which corresponds to the US 10 years treasury bond, while the market risk premium is the US equity risk premium as of January 2014 (5%) as has already mentioned. The value of levered beta was obtained from Damodaran's estimative of unlevered betas by sectors (Appendix 5) which led to get a levered beta of 0.9.

The effective cost of debt (R_d) is 2.9% by assuming the company credit rating of BBB, which has a default spread rate of 2% according to the Damodaran's scale rating (Appendix 4) . Put all pieces together, was calculated different WACC for each year and finally it has obtained a firm value of \$67,293 million assuming that the company will grow 3.5% at perpetuity. **In sum the TWC's price target using WACC method is \$159.20 per share.**

5.1.1.2.8. Sensitivity Analysis

For the TWC sensitivity analysis has followed the same reasoning as in Comcast. Thus, the bull case scenario assumes revenues and terminal growth rate of 1% higher and cost of revenues 1% lower for each of the following years; while the bear case scenario assumes revenues and terminal growth rate of 1% lower and cost of revenues 1% higher . In the bull case, TWC's firm value summed up to \$123,900 million with a price target of \$359.69 per share, while in bear case scenario TWC's firm value summed up to \$44,341 million with a price target of \$77.91 per share. As we notice, in comparison with the price target of base case valuation TWC's price target is over valued in the

¹² The current asset and current liabilities were calculated as referred on footnote 8.

first scenario, while in the second scenario we have an opposite situation as verified on Comcast valuation.

5.1.1.2.9. Comparable Valuation

Contrary to Comcast, who competes with companies from both Cable communication segment and NBC-Universal segment, TWC has a restricted list of companies that can be used as a peer group. Although Comcast is bigger than TWC, in relative valuation TWC is over the peer group average in terms of P/E multiple as well as EV/sale (table 6).

Table 6: Peer group multiple (Cable TV industry)

Company	Country	Mkt Cap (USD)	P/E	P/S	EV / Sale	EV/ EBIT	EV/EBITDA
Comcast Corp.	US	141,111	19.85	2.12	2.69	12.68	8.20
Dish Network Corp.	US	29,528	34.74	2.10	2.29	19.18	12.10
Cablevision Systems-Ny Grp	US	4,940	20.00	0.75	2.07	14.94	7.33
Directv	US	42,920	14.61	1.37	1.83	11.07	7.32
At&T Inc.	US	178,917	13.70	1.39	1.89	8.47	5.26
Verizon Communications Inc.	US	204,153	15.50	1.30	2.45	9.03	6.07
Charter Communication	US	16,869		1.87	3.40	32.55	10.46
Echostar Corp.	US	4,538	81.75	1.34	1.54	24.51	7.45
Sirius Xm Holdings Inc	US	20,192	44.86	5.40	5.94	22.78	18.42
Tivo Inc.	US	1,596	44.27	3.59	2.29	20.10	16.21
Average		64,477	32.14	2.12	2.64	17.53	9.88
Time Warner Cable Inc.	US	41,180	20.48	1.85	2.85	13.64	7.36

Looking at the equity value using multiple, the price target of DCF valuation using WACC is still higher than all multiples even though P/S multiple is slightly close to the DCF (table 7)

Table7: Price target using multiple.

	P/E	P/S	EV / Sale	EV/ EBIT	EV/EBITDA	DCF
Equity Value	34,394	41,386	39,344	31,394	30,667	44,948
Price Target	121.82	146.58	139.35	111.19	108.61	159.20

6. Valuation of the Merged Entity

As the standalone valuation has been completed, the next step is to value the merged company as a whole; however, at the beginning the resulted merged will be valuated without taking into account any synergy, afterward it will be considered a set of elements that might be potential candidates for generating synergies to the new entity in order to assess the merged company with synergies.

6.2. Valuation of the Merged Entity without Synergies

The valuation of the merged entity without synergy is the second step in M&A valuation and constitutes a base to achieve the value of synergies; whereas, it corresponds to the sum of both Comcast and TWC value obtained in standalone valuation without considering any Shareholder's additional worth for both companies which is \$ 263,596 million.

6.3. Valuation of the Merged Entity with Synergies

This session will strive to find the elements that shareholders of both companies believe will bring value creation for customers, shareholders and other stakeholders all over the US market. In a word, it will be assessed the value of synergies that may result from the difference between the merged companies with no synergies and the merged companies with such elements considered as synergies. As the companies have different level of risk, the synergies will be calculated taking into account the WACC of the target company (TWC).

6.3.1. Operating synergies

The main aim for both companies is to continue growing and being the leader of Cable TV market in the US, but to do so through the combination of Comcast and TWC they have examined both, a range of improvements on products and services that already exist and on opportunities to create new products. According to Comcast's reports, the merger will generate significant cost savings and other efficiencies (economy of scale), that allows Comcast to build industry leading products like X1 Entertainment Operating System, increase internet speeds , comprehensive communications and digital phone products and features as well as home management. Comcast will also benefit from broadband market by investing on TWC's networks in order to be improved and provide higher speeds and greater reliability so that TWC will recover its subscribers¹³. Another pointed

¹³ An analyst estimated that TWC in New York City lost 45% of their subscribers to Verizon since 2008.

improvement is related to the business and enterprise customers whose services will be offered in advanced modus, such as high-performance point-to-point and multi-point Ethernet services with the capacity to deliver cloud computing, small and medium-size businesses, as well as backhaul services to wireless carrier. Not less important is the combined advertising platforms and channels that will allow Comcast to offer broader and more valuable packages to advertisers.

From the content presented above, it is possible to draw some conclusion regarding the synergies that the merger will bring. Regarding the revenues, if Comcast and TWC reach the 33 million video subscribers (22 from Comcast plus 11 from TWC) beyond the high quality of services, the possibility of a potential monopoly can motivate an increase on TV price offers so, it was assumed the synergies of 5% of TWC revenues in fourth and fifth year after the merger (2.5% per year), even though there is difficult to achieve this kind of synergies. Regarding the cost savings, it was assumed a bulk of \$1.5 billion¹⁴ of operating expenses which was equally distributed in three years (2015, 2016 and 2017). Besides the cost savings on operating expenses, it is expected a reduction of \$400 million on capital expenditure which seems reasonable by assuming that with the merger, both entities will operate separately as before the transaction.

6.3.3. Integration Costs

As any merger and acquisition transaction, Comcast is not absent of its commitments with regulators, investment banking and other players involved on the transaction. In fact, the integration costs are related to the amount of money paid to the firms of lawyers involved on the transaction, the fees charged by investment banks and other consulting firms need to achieve the deal. Moreover, the post-merger also obliges to dismiss a number of employees, but in case of Comcast and TWC merger it is hard to believe that this will happen. Whereas, this information are not available neither on companies reports nor on other sources of information for public interest, the costs of integration will be 14% of total deal value, which is the average integration costs per deal according to the EY's survey in 2013¹⁵, even though in this analysis these costs were calculated from gross TWC's equity value with synergies.

¹⁴ According to Comcast's reports, the transaction will generate approximately \$1.5 billion in operating efficiencies and will be accretive to Comcast's free cash flow per share while preserving balance sheet strength.

¹⁵ <http://www.ey.com/GL/en/Newsroom/News-releases/News-Corporates-underestimating-costs-of-post-merger-integration>.

6.3.4. Value of Synergies

The value of synergies was calculated from the difference between the merged firms with no synergies and the merged with synergies by imputing each sort of synergy individually, however at the end these synergies are presented as whole (table 8).

Table 8: Synergies by categories

In USD millions	Value of Synergies	% of total synergies
Revenue synergies	13,908	92%
Cost synergies	826	5%
Capex synergies	330	2%
Total synergies	15,064	100%
Integration costs	6,604	78%
Net synergies	8,460	

Although the revenues synergies represent 92% of total revenues, in reality if we put all synergies in order of conducting the revenues synergies would become the last on the list due to the difficulty of its achievement. Thus, the most valuable synergies are cost synergies which represent 5% and capital expenditure with 2% of total synergies. The 78% of integration costs reflects not only the factors mentioned before, but embody the risk of losing some customers after the merger.

In terms of benefits, the synergies are shared according to the weight that each firm has on merged firm value (table 9).

Table9: Synergies benefit

In USD millions	Value of Synergies	Comcast	TWC
Revenue synergies	13,908	10,357	3,551
Cost synergies	826	615	211
Capex synergies	330	246	84
Total synergies	15,064	11,218	3,846
Integration costs	6,604	4,918	1,686
Net synergies	8,460	6,300	2,160

Comcast benefit is \$4.140 million which explains 74.5% of the merged firm value belongs to the Comcast.

7. The Acquisition Process

Notwithstanding Comcast being considered as the largest communication, media and Entertainment Company in the US due to the constant investments and technological improvement under different business divisions that has led Comcast to have an unstoppable growth; despite these aspects, the company remains vulnerable before a strong competition and a radical transformation in the industry that Comcast managers might be aware about. The new entrants in the television industry such as Netflix, Amazon, and Apple which have already proven adept at seizing opportunities amid of disruption and creating new products that cater to consumer's changing media habits can undermine the future of Comcast's cable TV distribution. In order to maintain its growth aligned with company strategy, Comcast continues to identify business opportunities to invest on.

Several analysts believe that TWC is the right target for Comcast though the merger has been deeply analysed in a legal standpoint before it takes place. Thus, with TWC, Comcast would be geographically more expanded, the new entity would have nearly twice as many high-speed internet subscribers and control roughly 38 percent of the high-speed internet market and allow Comcast to launch an internet-TV service based on its existing Xfinity brand.

In sum, Comcast and TWC merger will allow Comcast domain the pay TV and broadband internet carrier down the entire East Coast from Maine to Florida as well as to pick up Los Angeles and many of the biggest cities in Texas. On the other hand, Comcast can overwhelmingly dominate the competition, and expands into states where they currently have no presence. This expansion can also bring some influence in negotiations with content providers to drop Comcast's costs for access to networks and programming.

7.1. Type of Acquisition

As both Comcast's managers and board of directors and TWC's managers and board of directors agreed to merger with the buyout of 100% of TWC's outstanding shares, the acquisition is entitled as a friendly takeover. On the other side, considering that both companies operate in the same industry as well as in same country, the merger is horizontal in terms of economic function.

7.2. Premium offered and SVAR

The TWC's market capitalization at day before the merger announcement (February 12th, 2014) was \$37,603 million, while the average TWC's market capitalization in 2013 was \$30,936 million.

Furthermore, TWC’s equity value on standalone valuation is \$44,948 million (16% upside compared with the February 12th market cap and 31% upside compared with the 2013 average market cap). At same time the TWC’s equity value with synergies summed up to \$47,108 million which is the maximum amount that Comcast should be willing to pay to acquire TWC. The difference between this value and the TWC’s equity value calculated on standalone valuation is the premium that Comcast might pay for the acquisition. In sum, the value of premium to be paid to TWC is \$2,160 million which corresponds to 6% of the offer.

After the premium payment, Comcast remain with a gain of \$4,140 million (3% of gain for Comcast’s shareholders) which reflects a SVAR of 2%.

$$SVAR = \frac{\text{Premium paid for the acquisition}}{\text{Market value of acquiring company before the announcement}}$$

7.3. Method of Payment

The acquisition will be Stock-for-stock, which means that Comcast will buyout 100% of TWC’s shares outstanding at a specific exchange ratio.

The TWC’s share price at day before the merger announcement (February 12th, 2014) was \$133.18 and its the average share price in 2013 was \$103.93, while Comcast’s share price as of February 12th was \$54.76 and its average share price was 42.46 in 2013. Moreover, Comcast and TWC target price on standalone valuation are \$58.42 and \$159.20 respectively. At the same time the price target with synergies for TWC is \$166.8 per share and \$60.01 per share for Comcast (this price reflects the net Comcast equity value). Thus, the exchange ratio will be 2.78 (TWC’s price target/Comcast’s price target). In a word Comcast will issue shares outstanding (CMCSA) that meet that ratio.

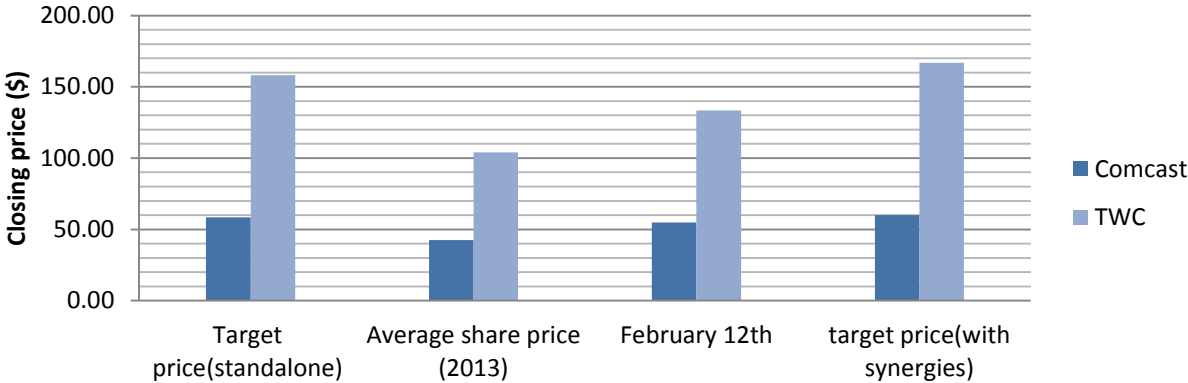


Figure 18: Comparison of share price.

7.4. The deal proposal

As already referred, the merger is friendly, stock-for stock transaction in which Comcast will acquire 100% of TWC's 282.34 million shares outstanding for shares of Comcast equivalent to \$47,108 million in equity value. In the meantime, each TWC share will be swapped for 2.11 shares of CMCSA, which means that TWC's shareholders will own nearly 23 percent of Comcast's common stock of class A (CMCSA). Furthermore, TWC will continue operating as the surviving corporation and a whole owned subsidiary of Comcast. On the other hand, the merger will not be completed unless both the TWC stockholders adopt the merger agreement and Comcast shareholders approve the stock issuance.

7.5. Legal concern

The merger between Comcast and TWC can bring the two largest US cable providers form a combined company with approximately 30 million subscribers, nearly 30% of the entire US market and a presence in 19 of the 20 largest domestic markets. As a result, the merger has been reviewed by Federal Communication Commission (FCC) in terms of public interests and by the department of Justice (DOJ) and the Federal Trade Commission (FTC) in terms of antitrust law, as well as by several states. The main fear is related to a potential monopoly in industry which can harms customers and other competitors. Notwithstanding, Comcast has made an effort in order to make the merger happen (i.e. divest 3 million customers in attempt to limit the anticompetitive effects of the merger). The divestment can maintain the combined entity below 30% of the total market, but there is no guarantee whether it will leads to have an acceptable Herfindahl-Hirschman Index (HHI)¹⁶ to have the deal approved.

¹⁶ HHI is a way to measure the concentration of a given market. The government's lawyers apply this test to see whether a proposed merger would create monopoly-like conditions. Any merger that increases an industry's HHI by more than 200 points in a highly concentrated market, or more than 100 points in a moderately concentrated market, sounds alarm bells at the DOJ.

8. Conclusions

The US is considered as one of the biggest markets in the world with strong competition and constant entrants of new players in the market. The enlargement of companies on technological industry and the non-stop innovation as well as the US economy recovery has brought a lot of opportunities and risks at same time. Thus, the best strategy approach found by managers is the M&A.

New players in the television industry such as Netflix, Amazon and Apple which have already proven adept at seizing opportunities amid of disruption and creating new products that cater to customer's changing media habits undermines the future of Comcast. TWC cable was found as the company that fit with Comcast's strategy in order to prevent those risks and take advantage from the underlying opportunities.

The present thesis assessed the synergies created through the merger between Comcast and TWC using the DCF approach and was found that both companies together generate a net synergy of 4%. Moreover, due to the merger agreement of companies' managers and shareholders, the merger is considered friendly takeover and the transaction will be stock-for-stock payment.

Comcast and TWC merger are considered as the two biggest Cable TV companies in the US with almost 22 million and 12 million subscribers respectively. *Ceteris paribus*, the merger can likely cause a monopoly; hence, the companies involved might look for other strategies (i.e. divestment) to accomplish the deal. In sum, the merger will take place only after the final decision of FCC and antitrust law and its success will depend on the manager's effort as well as on the decent corporate governance police.

9. Appendices

Appendix 1: Recent Development in the Entertainment and Media Industry

Complete list of market research data provided by Plunkett Research, Ltd. for the Entertainment & Media Industry

- ▶ **Introduction to the Entertainment & Media Industry**
- ▶ Multimedia Hub Homes Slowly Become a Reality/TVs Are Internet Ready
- ▶ DVR Market Evolves/Time-Shifting Hurts Advertisers
- ▶ Apple's iPod and iTunes Set the Standard in the Music Industry
- ▶ Pandora and Spotify Lead in Internet Radio Music Subscriptions/SiriusXM Tops 25 Million
- ▶ Broadcast Radio Stations on the Internet/The Era of Digital Radio Begins
- ▶ Internet Film and TV Content Grows/Netflix Evolves to Focus on Online Delivery
- ▶ Casino Expansion Underway in Select Locations, including Asia/Internet Gambling Expands in the U.S.
- ▶ New Electronic Game Consoles Help Revive Sales
- ▶ Reality TV Dominates Broadcast Programming/Falling Ratings Force Networks to Find New Ways to Distribute Content
- ▶ Cable and Satellite TV Lose Subscribers to Free Internet Options
- ▶ Telecom Companies, Including AT&T and Verizon, Compete in the Television Market
- ▶ Television Ads Evolve to Face New Challenges
- ▶ Ultra-High-Definition (UHDTV) and 3-D TV Disappoint
- ▶ Movie Attendance Rises/Film Companies Innovate with 3-D, Digital Projection and Enhanced Cinema Experiences
- ▶ China and India Expand Film and TV Production Activity
- ▶ Global Broadband Market Nears 3 Billion Subscribers, Fixed and Wireless
- ▶ Entertainment-Based Retailing, including Power Towns
- ▶ Mobile Videos and TV Gain Smartphone Users
- ▶ Newspapers and Magazines See Excellent Growth in Digital Editions and Apps
- ▶ Tablets and Smartphones Cause Shift in Desktop PC Market/eBook Sales Grow
- ▶ Virtual Worlds Open Up New Revenue Sources for Games Publishers
- ▶ 3-D Games Open New Opportunities/Immersion Games Offer Virtual Reality
- ▶ Online and Mobile Game Playing Booms/Multi-Player Gaming (MMORPG) is Strong Worldwide
- ▶ App Revenues Approach \$26 Billion

Appendix 2: Comcast and TWC Market Area

Rank	Designated Market Area	COMCAST	Time Warner Cable	Rank	Designated Market Area	COMCAST	Time Warner Cable
1	New York	✓	✓	26	Indianapolis	✓	
2	Los Angeles		✓	27	Baltimore	✓	
3	Chicago	✓		28	San Diego		✓
4	Philadelphia	✓		29	Nashville	✓	
5	Dallas-Ft. Worth		✓	30	Hartford & New Haven	✓	
6	San Francisco-Oakland-San Jose	✓		31	Kansas City	✓	✓
7	Boston	✓		32	Columbus, OH		✓
8	Washington, DC	✓		33	Salt Lake City	✓	
9	Atlanta	✓		34	Milwaukee		✓
10	Houston	✓		35	Cincinnati		✓
11	Detroit	✓		36	San Antonio		✓
12	Phoenix			37	Greenville-Spartanburg-Ashville		
13	Seattle-Tacoma	✓		38	West Palm Beach-Ft. Pierce	✓	
14	Tampa-St. Petersburg	✓		39	Grand Rapids-Kalamazoo	✓	
15	Minneapolis-St. Paul	✓		40	Austin, TX		✓
16	Miami-Ft. Lauderdale	✓		41	Oklahoma City		
17	Denver	✓		42	Las Vegas		
18	Orlando-Daytona Beach	✓		43	Harrisburg-Lancaster, PA	✓	
19	Cleveland-Akron		✓	44	Birmingham		
20	Sacramento	✓		45	Norfolk-Portsmouth-Newport News		
21	St. Louis			46	Greensboro-H. Point-W. Salem		✓
22	Portland, OR	✓		47	Albuquerque-Santa Fe	✓	
23	Pittsburgh	✓		48	Jacksonville	✓	
24	Raleigh-Durham		✓	49	Louisville	✓	✓
25	Charlotte		✓	50	Memphis	✓	

Appendix 3: Companies' SWOT Analysis

Comcast's SWOT analysis	
Strength	<ul style="list-style-type: none"> • Provides re-branded triple play services i.e. <u>Xfinity</u> which includes company's digital cable, cable internet access, and cable telephone services • Economies of scale lower cost and increase services to customers • Possess regional barriers to entry because they own exclusive government dictated rights • Huge market share in cable services as it requires tremendous capital expenditures • Easy to add additional services to existing networks • Possess good brand recognition • Global market leader due to stable business and higher margins
Weakness	<ul style="list-style-type: none"> • This industry requires tremendous capital expenditures to provide service to their customers • Increasing programming expenses • Not expanded in whole US area
Opportunity	<ul style="list-style-type: none"> • Graduated response to data usage so as to reduce bandwidth and avoid clogging • Changing trends towards "3D Televisions" which is immune to piracy • Network upgrades to triple-play services could help future growth • Growing digital cable and internet access market • Commercial business services to SMBs • Expand its horizon by acquisition and joint ventures
Threats	<ul style="list-style-type: none"> • Regulatory changes by federal, state and local government could affect future growth opportunities • Satellite communications providers can threaten cable providers • New entrants on the industry • Subjected to criticism for its stance on net neutrality • Poor results from customer satisfaction surveys • Audience fragmentation of traditional media is to reach those audiences more difficult and expensive • Increasing content cost

TWC's SWOT analysis	
Strength	<ul style="list-style-type: none"> • Two way data communications • Urban growth areas • Second market leader • Regional barriers to entry • Easy possibility to add new services
Weakness	<ul style="list-style-type: none"> • Weak portfolio • Low capacity to enhance the capital expenditure
Opportunity	<ul style="list-style-type: none"> • Divest non-core assets/business • Introduction of 3D television • <u>WiFi</u> home calling • <u>Analog</u> to digital Switch • Data intensive applications • Triple-play service
Threats	<ul style="list-style-type: none"> • Regulatory changes by federal, state and local government could affect future growth opportunities • Satellite communications providers can threaten cable providers • Digital video records • Sharing pipes government reforms • Digital media increasing

Appendix 4: Ratings, Interest Coverage Ratios and Default Spread (US companies)

For large non-financial service companies with market cap > \$ 5 billion

Interest coverage ratio			
>	≤ to	Rating is	Spread is
8.50	100000	Aaa/AAA	0.40%
6.5	8.499999	Aa2/AA	0.70%
5.5	6.499999	A1/A+	0.85%
4.25	5.499999	A2/A	1.00%
3	4.249999	A3/A-	1.30%
2.5	2.999999	Baa2/BBB	2.00%
2.25	2.499999	Ba1/BB+	3.00%
2	2.249999	Ba2/BB	4.00%
1.75	1.999999	B1/B+	5.50%
1.5	1.749999	B2/B	6.50%
1.25	1.499999	B3/B-	7.25%
0.8	1.249999	Caa/CCC	8.75%
0.65	0.799999	Ca2/CC	9.50%
0.2	0.649999	C2/C	10.50%
-100000	0.199999	D2/D	12.00%

For smaller non-financial service companies with market cap < \$ 5 billion

If interest coverage ratio is			
greater than	≤ to	Rating is	Spread is
12.5	100000	Aaa/AAA	0.40%
9.5	12.499999	Aa2/AA	0.70%
7.5	9.499999	A1/A+	0.85%
6	7.499999	A2/A	1.00%
4.5	5.999999	A3/A-	1.30%
4	4.499999	Baa2/BBB	2.00%
3.5	3.999999	Ba1/BB+	3.00%
3	3.499999	Ba2/BB	4.00%
2.5	2.999999	B1/B+	5.50%
2	2.499999	B2/B	6.50%
1.5	1.999999	B3/B-	7.25%
1.25	1.499999	Caa/CCC	8.75%
0.8	1.249999	Ca2/CC	9.50%
0.5	0.799999	C2/C	10.50%
-100000	0.499999	D2/D	12.00%

Source: Damodaran's web site (January 2014)

Appendix 5: Unlevered beta by Industry in US.

Industry Name	Number of firms	Market Beta	D/E Ratio	Tax rate	Unlevered beta	Cash/Firm value	Unlevered beta corrected for cash
Advertising	65	1.03	52.57%	6.04%	0.69	5.91%	0.73
Broadcasting	30	1.53	48.49%	13.21%	1.08	2.31%	1.10
Cable TV	16	0.97	49.23%	15.00%	0.69	2.58%	0.71
Entertainment	85	1.19	25.98%	4.85%	0.95	4.05%	0.99
Recreation	70	1.30	25.13%	8.81%	1.06	4.22%	1.11

Source: Damodaran's Web site (January 2014)

Appendix 6: Historical and Expected Comcast's Balance Sheet.

Balance Sheet (In millions)	COMCAST Corp.							
	2011	2012	2013	Explicit Forecast Period				2018
				2014	2015	2016	2017	
Assets								
Current Assets:								
Cash and cash equivalents	1,620	10,951	1,718	4,391	4,476	4,566	4,675	4,777
Investments	54	1,464	3,573	1,666	1,698	1,732	1,773	1,812
Receivables, net	4,652	5,521	6,376	6,360	6,482	6,612	6,771	6,919
Programming rights	987	909	928	1,211	1,235	1,259	1,290	1,318
Other current assets	1,260	1,146	1,480	1,514	1,543	1,574	1,612	1,647
Total current assets	8,573	19,991	14,075	15,143	15,433	15,743	16,122	16,473
Film and television costs	5,227	5,054	4,994	4,994	4,994	4,994	4,994	4,994
Investments	9,854	6,325	3,770	3,770	3,770	3,770	3,770	3,770
Property and equipment, net	27,559	27,232	29,840	31,685	32,297	32,950	33,751	34,490
Franchise rights	59,376	59,364	59,364	59,364	59,364	59,364	59,364	59,364
Goodwill	26,874	26,985	27,098	27,098	28,453	29,876	31,369	32,938
Other intangible assets, net	18,165	17,840	17,329	19,195	19,195	19,195	19,195	19,195
Other noncurrent assets, net	2,190	2,180	2,343	2,343	2,343	2,343	2,343	2,343
Total assets	157,818	164,971	158,813	163,592	165,849	168,235	170,908	173,567
Liabilities and Equity								
Current Liabilities:								
Accounts payable and accrued expenses related to trade creditors	5,705	6,206	5,528	6,479	6,596	6,721	6,854	6,994
Accrued participations and residuals	1,255	1,350	1,239	1,427	1,453	1,480	1,510	1,541
Deferred revenue	790	851	898	936	953	971	990	1,010
Accrued participations and other current liabilities	4,124	5,931	7,967	6,438	6,554	6,678	6,810	6,950
Current portion of long-term debt	1,367	2,376	3,280	3,879	3,879	3,879	3,879	3,879
Total current liabilities	13,241	16,714	18,912	19,158	19,434	19,729	20,042	20,375
Long-term debt, less current portion	37,942	38,082	44,567	43,968	43,968	43,968	43,968	43,968
Deferred income taxes	29,932	30,110	31,935	31,935	31,935	31,935	31,935	31,935
Other noncurrent liabilities	13,034	13,271	11,384	12,320	11,573	11,384	11,384	11,384
Redeemable noncontrolling interests and redeemable subsidiary preferred stock	16,014	16,998	957	957	957	957	957	957
Total liabilities	110,163	115,175	107,755	108,338	107,867	107,973	108,286	108,619
Equity:								
Outstanding Stock								
Class A common stock	25	25	25	25	25	25	25	25
Class A Special common stock	7	6	5	5	5	5	5	5
Additional paid-in capital	40,940	40,547	38,890	40,970	41,349	41,022	40,489	39,603
Retained earnings	13,971	16,280	19,235	21,351	23,699	26,306	29,200	32,412
Treasury stock	- 7,517	- 7,517	- 7,517	- 7,517	- 7,517	- 7,517	- 7,517	- 7,517
Accumulated other comprehensive income (loss)	- 152	15	56	56	56	56	56	56
Total Comcast Corporation shareholders' equity	47,274	49,356	50,694	54,890	57,617	59,897	62,258	64,584
Noncontrolling interests	381	440	364	364	364	364	364	364
Total equity	47,655	49,796	51,058	55,254	57,981	60,261	62,622	64,948
Total liabilities and equity	157,818	164,971	158,813	163,592	165,849	168,235	170,908	173,567

Appendix 7: Historical and Comcast's Income Statement

Balance Sheet (In millions)	COMCAST Corp.							
	Historical			Explicit Forecast Period				
	2011	2012	2013	2014	2015	2016	2017	2018
Revenues:								
Cable Communication segment								
Video	19,625	19,952	20,535	20,740	20,948	21,157	21,369	21,582
High-speed Internet	8,743	9,544	10,334	10,851	11,393	11,963	12,561	13,189
Phone/Voice	3,503	3,557	3,657	3,675	3,694	3,712	3,731	3,749
Business Services	1,791	2,565	3,241	3,403	3,573	3,752	3,939	4,136
Advertising	2,005	2,284	2,189	2,145	2,102	2,060	2,019	1,979
Other	1,559	1,702	1,880	1,993	2,112	2,239	2,373	2,516
Total Cable communication Segment	37,226	39,604	41,836	42,807	43,823	44,883	45,993	47,152
NBCU Segment								
Cable NetWorks	8,061	8,727	9,201	9,477	9,761	10,054	10,356	10,666
Broadcast Television	5,982	8,200	7,120	6,764	6,426	6,105	5,799	5,509
Filmed Entertainment	4,239	5,159	5,452	5,681	5,920	6,168	6,427	6,697
Theme Parks	1,874	2,085	2,235	2,302	2,371	2,442	2,516	2,591
Headquarters and other	45	43	31	31	31	31	31	31
Eliminations	- 941	- 402	- 389	- 389	- 389	- 389	- 389	- 389
Total NBCU Segment	19,260	23,812	23,650	23,866	24,120	24,411	24,740	25,106
Corporate and other	558	498	600	612	624	637	649	662
Eliminations	- 1,202	- 1,344	- 1,429	- 1,515	- 1,606	- 1,702	- 1,804	- 1,912
Total Revenues	55,842	62,570	64,657	65,771	66,961	68,229	69,578	71,008
Costs and Expenses:								
Programming and production	16,596	19,929	19,670	20,905	21,308	21,739	22,267	22,756
Other operating and administrative	16,646	17,833	18,584	19,787	20,169	20,577	21,077	21,539
Advertising, marketing and promotion	4,243	4,831	4,969	5,228	5,329	5,437	5,569	5,691
Costs of revenues	37,485	42,593	43,223	45,920	46,807	47,753	48,914	49,986
Depreciation	6,040	6,150	6,254	6,971	7,105	7,249	7,425	7,588
Amortization	1,596	1,648	1,617	1,729	1,756	1,785	1,815	1,846
Operating Expenses	45,121	50,391	51,094	54,620	55,668	56,787	58,154	59,420
EBITDA	18,357	19,977	21,434	19,850	20,154	20,476	20,664	21,022
Operating Income (EBIT)	10,721	12,179	13,563	11,150	11,293	11,443	11,424	11,588
Other Income (Expense):								
Interest expense	- 2,505	- 2,521	- 2,574	- 2,871	- 2,871	- 2,871	- 2,871	- 2,871
Investment income (loss), net	159	219	576	576	576	576	576	576
Equity in net income (losses) of investees, net	- 35	959	- 86	86	86	86	86	86
Other income (expense), net	- 133	773	- 364	- 364	- 364	- 364	- 364	- 364
Total (Other income/expense)	- 2,514	- 570	- 2,448	- 2,573	- 2,573	- 2,573	- 2,573	- 2,573
Ernings before income tax (EBT)	8,207	11,609	11,115	8,578	8,720	8,870	8,851	9,015
Income tax expense	- 3,050	- 3,744	- 3,980	- 3,955	- 3,052	- 3,104	- 3,098	- 3,155
Net income	5,157	7,865	7,135	4,622	5,668	5,765	5,753	5,860

In USD millions	2013	2014	2015	2016	2017	2018
Debt						
Short term Debt	3280	3879	3879	3879	3879	3879
Long term debt	44567	43968	43968	43968	43968	43968
Total Debt	47847	47847	47847	47847	47847	47847
Cash and Cash Equivalents	1718	4391	4476	4566	4675	4777
Net Debt	46129	43456	43371	43281	43172	43070

Working Capital	2013	2014	2015	2016	2017	2018
Current Asset	8,784	9,086	9,260	9,446	9,673	9,884
Current Liability	15,632	15,279	15,555	15,850	16,163	16,496
	-	-	-	-	-	-
NWC	6,848	6,193	6,295	6,404	6,490	6,612
	-	-	-	-	-	-
Change in NWC	86	655	102	109	86	122
	-	-	-	-	-	-
Capital Expenditure (CAPEX)	6,596	8,816	7,717	7,902	8,226	8,328

Appendix 8: Comcast's Valuation Data

	2013	2014	2015	2016	2017	2018
Nº of shares outstanding(in millions):						
CMCSA	2,609.98	2,609.98	2,609.98	2,609.98	2,609.98	2,609.98
Stock price (February 12th)	54.76	54.76	54.76	54.76	54.76	54.76
Equity market value	142,924	142,924	142,924	142,924	142,924	142,924
Net Debt	43,456	43,371	43,281	43,172	43,070	43,070
Enterprise Value	186,379	186,295	186,205	186,095	185,994	185,994

	2013	2014	2015	2016	2017	2018
Rf(10 years US treasury Bond)	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%
Risk premium(Rm-Rf)	5%	5%	5%	5%	5%	5%
D/E Ratio	30.4%	30.3%	30.3%	30.3%	30.2%	30.1%
Levered Beta	1.2	1.2	1.2	1.2	1.2	1.2
D/(D+E)	23%	23%	23%	23%	23%	23%
Re	8%	8%	8%	8%	8%	8%
Pretax cost of debt	4%	4%	4%	4%	4%	4%
Rd	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
E/V	76.7%	76.7%	76.8%	76.8%	76.8%	76.8%
WACC	6.9%	6.9%	6.9%	6.9%	6.9%	6.9%
g (US GDP Growth + US Expected inflations)						3.5%

Damodaran data (Cable TV)	
USA	
Unlevered Beta	0.97
Corporate Tax	35%

Segment	Revenues	Value/EBITDA	Estimated Value	Unlevered Beta	Segment Weight	Weighted Beta	Levered Beta
Cable TV	41836	10.42	436,053	0.71	33%	0.23	
NBC Universal	23650	37.90	896,253	1.1	67%	0.74	
Total	65486	48.32	1,332,306		100%	0.97	1.2

Appendix 9: Comcast's Base-case Valuation

COMCAST Corp.						
FCFF USD, in millions	Explicit Forecast Period					
	2013	2014	2015	2016	2017	2018
Total Revenues	64,657	65,771	66,961	68,229	69,578	71,008
Total Operating Expenses	51,094	54,620	55,668	56,787	58,154	59,420
EBIT	13,563	11,150	11,293	11,443	11,424	11,588
Income Taxes	-	-	-	-	-	-
Depreciation and Amortization	3,980	3,955	3,052	3,104	3,098	3,155
Change in NWC	7,636	7,798	7,871	8,700	8,862	9,034
Capex	-	-	-	-	-	-
Free Cash Flow to the Firm (FCFF)	86	655	102	109	86	122
	-	-	-	-	-	-
	6,596	8,816	7,717	7,902	8,226	8,328
	10,537	6,832	8,293	9,028	8,876	9,017

COMCAST Corp.						
DCF	Explicit Forecast Period					
	2013	2014	2015	2016	2017	2018
FCFF	10,537	6,832	8,293	9,028	8,876	9,017
WACC		6.93%	6.93%	6.93%	6.94%	6.94%
Discount Factor	1.00	0.94	0.87	0.82	0.76	0.72
Discounted Cash Flow	10,537	6,389	7,252	7,383	6,788	6,448

DCF Calculation (USD, in millions)	
Explicit Value	44,798
Terminal Value	211,898
Firm Value	196,303
Net Debt	43,456
Noncontrolling interests	364
Equity Value	152,483
Price Target	58.42

Appendix 10: Comcast's Bull Case Valuation

COMCAST Corp.						
FCFF USD, in millions	Explicit Forecast Period					
	2013	2014	2015	2016	2017	2018
Total Revenues	65,304	66,428	67,631	68,912	70,274	71,718
Total Operating Expenses	50,583	54,074	55,112	56,219	57,572	58,826
EBIT	14,721	12,354	12,519	12,693	12,701	12,892
	-	-	-	-	-	-
Income Taxes	3,980	3,955	3,481	3,542	3,545	3,612
Depreciation and Amortization	7,636	7,798	7,871	8,700	8,862	9,034
	-	-	-	-	-	-
Change in NWC	86	655	102	109	86	122
	-	-	-	-	-	-
Capex	6,596	8,816	7,717	7,902	8,226	8,328
Free Cash Flow to the Firm (FCFF)	11,695	8,036	9,090	9,840	9,706	9,865

COMCAST Corp.						
DCF	Explicit Forecast Period					
	2013	2014	2015	2016	2017	2018
FCFF	11,695	8,036	9,090	9,840	9,706	9,865
WACC		6.93%	6.93%	6.93%	6.94%	6.94%
Discount Factor	1.00	0.94	0.87	0.82	0.76	0.72
Discounted Cash Flow	11,695	7,515	7,950	8,048	7,423	7,055

DCF Calculation (USD, in millions)	
Explicit Value	49,685
Terminal Value	321,661
Firm Value	279,669
Net Debt	43,456
Noncontrolling interests	364
Equity Value	235,850
Price Target	90.36

Appendix 11: Comcast's Bear Case Valuation

COMCAST Corp.						
FCFF USD, in millions	Explicit Forecast Period					
	2013	2014	2015	2016	2017	2018
Total Revenues	64,010	65,113	66,291	67,547	68,882	70,298
Total Operating Expenses	51,605	55,166	56,225	57,355	58,735	60,014
EBIT	12,405	9,947	10,066	10,193	10,147	10,284
	-	-	-	-	-	-
Income Taxes	3,980	3,955	2,623	2,667	2,651	2,699
Depreciation and Amortization	7,636	7,798	7,871	8,700	8,862	9,034
	-	-	-	-	-	-
Change in NWC	86	655	102	109	86	122
	-	-	-	-	-	-
Capex	6,596	8,816	7,717	7,902	8,226	8,328
Free Cash Flow to the Firm (FCFF)	9,379	5,628	7,496	8,215	8,045	8,169

COMCAST Corp.						
DCF	Explicit Forecast Period					
	2013	2014	2015	2016	2017	2018
FCFF	9,379	5,628	7,496	8,215	8,045	8,169
WACC		6.93%	6.93%	6.93%	6.94%	6.94%
Discount Factor	1.00	0.94	0.87	0.82	0.76	0.72
Discounted Cash Flow	9,379	5,263	6,555	6,719	6,153	5,842

DCF Calculation (USD, in millions)	
Explicit Value	39,912
Terminal Value	151,959
Firm Value	148,561
Net Debt	43,456
Noncontrolling interests	364
Equity Value	104,742
Price Target	40.13

Appendix 12: Historical and Expected TWC's Balance Sheet.

Balance Sheet (In millions)	TWC Inc.							
	2011	2012	2013	Explicit Forecast Period				
	2014	2015	2016	2017	2018			
ASSETS								
Current assets:								
Cash and equivalents	5,177	3,304	525	2,848	2,890	2,936	2,985	3,038
Short-term investments in U.S. Treasury securities		150		51	51	52	53	54
Receivables, less allowances	767	883	954	1,227	1,245	1,265	1,286	1,309
Deferred income tax assets	267	317	334	432	438	445	453	461
Other current assets	187	223	331	377	383	389	395	402
Total current assets	6,398	4,877	2,144	4,935	5,008	5,087	5,172	5,263
Investments	774	87	56	56	56	56	56	56
Property, plant and equipment, net	13,905	14,742	15,056	15,701	15,935	16,186	16,456	16,745
Intangible assets subject to amortization, net	228	641	552	552	552	552	552	552
Intangible assets not subject to amortization	24,272	26,011	26,012	25,782	25,587	25,458	25,334	25,216
Goodwill	2,247	2,889	3,196	2,736	2,346	2,088	1,840	1,604
Other assets	452	562	1,257	280	308	321	315	287
Total assets	48,276	49,809	48,273	50,042	49,792	49,748	49,724	49,723
Current liabilities:								
Accounts payable	545	647	565	619	628	638	635	660
Deferred revenue and subscriber-related liabilities	169	183	188	190	193	196	211	203
Accrued programming expense	807	872	869	898	911	926	977	958
Current maturities of long-term debt	2,122	1,518	1,767	1,903	1,932	1,962	1,987	2,030
Mandatorily redeemable preferred equity issued by a subsidiary		300		105	107	109	-	112
Other current liabilities	1,727	1,805	1,837	1,892	1,920	1,950	2,066	2,018
Total current liabilities	5,370	5,325	5,226	5,607	5,691	5,781	5,877	5,981
Long-term debt	24,320	25,171	23,285	23,285	22,785	22,535	22,285	22,035
Mandatorily redeemable preferred equity issued by a subsidiary	300							
Deferred income tax liabilities, net	10,198	11,280	12,098	12,243	12,239	12,237	12,238	12,242
Other liabilities	551	750	717	934	928	925	926	933
Total liabilities	40,739	42,526	41,326	42,069	41,642	41,478	41,326	41,190
TWC shareholders' equity:								
Common stock	3	3	3	3	3	3	3	3
Additional paid-in capital	8,018	7,576	6,951	7,470	7,657	7,782	7,908	8,034
Retained earnings (accumulated deficit)	68	363	- 55	451	441	437	439	448
Accumulated other comprehensive income (loss), net -	559	- 663	44	44	44	44	44	44
Total TWC shareholders' equity	7,530	7,279	6,943	7,968	8,145	8,266	8,394	8,530
Noncontrolling interests	7	4	4	4	4	4	4	4
Total equity	7,537	7,283	6,947	7,972	8,149	8,270	8,398	8,534
Total liabilities and equity	48,276	49,809	48,273	50,042	49,792	49,748	49,724	49,723

Appendix 13: Historical and Expected TWC's Income Statement.

Income statement (USD, in millions)	TWC Inc.					Explicit Forecast Period		
	2011	2012	2013	2014	2015	2016	2017	2018
Revenues:								
Residential Services								
Video	10,589	10,917	10,481	10,450	10,418	10,387	10,356	10,325
High-speed data	4,476	5,090	5,822	6,113	6,419	6,740	7,077	7,431
Voice	1,979	2,104	2,027	1,986	1,947	1,908	1,870	1,832
Other	49	64	72	73	73	74	75	76
Total Residential Services Revenues	17,093	18,175	18,402	18,622	18,857	19,109	19,377	19,663
Business Services								
Video	286	323	347	349	350	352	354	356
High-speed data	727	912	1,099	1,121	1,143	1,166	1,190	1,213
Voice	197	306	421	442	464	487	512	537
Wholesale transportation	154	184	251	276	304	334	367	404
Other	105	176	194	196	198	200	202	204
Total Business services Revenues	1,469	1,901	2,312	2,384	2,460	2,540	2,625	2,715
Advertising	880	1,053	1,019	999	979	959	940	921
Other	233	257	387	426	468	515	567	623
Total Revenues	19,675	21,386	22,120	22,430	22,764	23,123	23,508	23,922
Costs and Expenses:								
Cost of Revenues								
Video	4,342	4,621	4,782	5,558	5,641	5,730	5,826	5,928
High-speed data	170	185	175	215	218	221	225	229
Voice	595	614	554	715	726	737	750	763
Employee	2,621	2,865	3,019	3,436	3,487	3,542	3,601	3,665
Video Franchise and other fees	500	519	500	615	625	634	645	656
Other direct operating	910	1,138	1,312	1,351	1,371	1,393	1,416	1,441
Total cost of revenues	9,138	9,942	10,342	11,891	12,068	12,258	12,463	12,682
Selling, general and administrative								
Employee	1,472	1,666	1,841	2,008	2,038	2,070	2,104	2,141
Marketing	635	653	676	795	807	820	833	848
Bad debt	118	131	131	154	156	158	161	164
Other	1,086	1,170	1,150	1,379	1,399	1,421	1,445	1,470
Total selling and administrative	3,311	3,620	3,798	4,335	4,399	4,469	4,543	4,623
Depreciation	2,994	3,154	3,155	3,297	3,346	3,399	3,456	3,517
Amortization	33	110	126	99	99	99	99	99
Merger-related and restructuring costs	70	115	119	148	150	152	155	158
Asset impairments	60							
Operating expenses	15,606	16,941	17,540	19,770	20,063	20,378	20,716	21,079
EBITDA	7,096	7,709	7,861	6,056	6,146	6,243	6,347	6,459
Operating Income (EBIT)	4,069	4,445	4,580	2,660	2,701	2,745	2,792	2,843
Interest expense, net	- 1,518	- 1,606	- 1,552	- 1,560	- 1,531	- 1,518	- 1,504	- 1,491
Other income (expense), net	- 89	497	11	11	11	11	11	11
Income before income taxes(EBT)	2,462	3,336	3,039	1,110	1,180	1,238	1,299	1,363
Income tax	- 795	- 1,177	- 1,085	- 389	- 413	- 433	- 455	- 477
Net income	1,667	2,159	1,954	722	767	805	845	886

Debt	2013	2014	2015	2016	2017	2018
Short Term Debt	1,767	1,903	1,932	1,962	1,987	2,030
Long Term Debt	23,285	23,285	22,785	22,535	22,285	22,035
Total Debt	25,052	25,188	24,717	24,497	24,272	24,065
Cash and Cash Equivalents	525	2,848	2,890	2,936	2,985	3,038
Net Debt	24,527	22,340	21,826	21,561	21,287	21,028

Working Capital	2013	2014	2015	2016	2017	2018
Current Assets	1,619	2,087	2,118	2,151	2,187	2,225
Current Liabilities	3,459	3,704	3,759	3,818	3,890	3,950
WC	1,840	1,618	1,642	1,667	1,703	1,725
Change in NWC	1,392	222	24	26	36	22
Capita Expenditure (CAPEX)	6,596	3,942	3,580	3,650	3,726	3,806

Appendix 14: TWC' Valuation Data

	2013	2014	2015	2016	2017	2018
Nº of shares outstanding(in millions):	282.34	282.34	282.34	282.34	282.34	282.34
Stock price	133.18	133.18	133.18	133.18	133.18	133.18
Equity market value	37,603	37,603	37,603	37,603	37,603	37,603
Net Debt	24,527	22,340	21,826	21,561	21,287	21,028
Enterprise Value	62,130	59,943	59,429	59,164	58,890	58,630

	2013	2014	2015	2016	2017	2018
Rf(10 years US treasury Bond)	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%
Risk premium(Rm-Rf)	5%	5%	5%	5%	5%	5%
D/E Ratio	59.4%	58.0%	57.3%	56.6%	55.9%	55.9%
Levered Beta	1.0	1.0	1.0	1.0	1.0	1.0
D/(D+E)	37%	37%	36%	36%	36%	36%
Re	7%	7%	7%	7%	7%	7%
Pretax cost of debt	4%	4%	4%	4%	4%	4%
Rd	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%
E/V	62.7%	63.3%	63.6%	63.9%	64.1%	64.1%
WACC	5.7%	5.7%	5.8%	5.8%	5.8%	5.8%
g (US GDP Growth)						3.5%

Appendix 15: TWC's Base-Case Valuation

COMCAST Corp.						
FCFF	Explicit Forecast Period					
	2013	2014	2015	2016	2017	2018
USD, in millions						
Total Revenues	22,120	22,430	22,764	23,123	23,508	23,922
Total Operating Expenses	17,540	19,770	20,063	20,378	20,716	21,079
EBIT	4,580	2,660	2,701	2,745	2,792	2,843
	-	-	-	-	-	-
Income Taxes	1,085	389	413	433	455	477
Depreciation and Amortization	3,281	3,397	3,446	3,498	3,555	3,616
	-	-	-	-	-	-
Change in NWC	1,392	222	24	26	36	22
	-	-	-	-	-	-
Capex	6,596	3,942	3,580	3,650	3,726	3,806
Free Cash Flow to the Firm (FCFF)	-	-	-	-	-	-
	1,212	1,948	2,129	2,134	2,131	2,154

COMCAST Corp.							
DCF	Explicit Forecast Period						
	2013	2014	2015	2016	2017	2018	
FCFF	-	1,212	1,948	2,129	2,134	2,131	2,154
WACC		5.72%	5.74%	5.76%	5.77%	5.78%	
Discount Factor	1.00	0.95	0.89	0.85	0.80	0.76	
Discounted Cash Flow	-	1,212	1,842	1,905	1,805	1,704	1,628

DCF Calculation (USD, in millions)	
Explicit Value	7,672
Terminal Value	78,970
Firm Value	67,293
Net Debt	22,340
Noncontrolling interests	4
Equity Value	44,948
Price Target	159.20

Appendix 16: TWC's Bull Case Valuation

COMCAST Corp.						
FCFF	Explicit Forecast Period					
	2013	2014	2015	2016	2017	2018
USD, in millions	2013	2014	2015	2016	2017	2018
Total Revenues	22,341	22,654	22,991	23,354	23,743	24,161
Total Operating Expenses	17,365	19,573	19,862	20,174	20,509	20,868
EBIT	4,977	3,082	3,129	3,180	3,234	3,293
	-	-	-	-	-	-
Income Taxes	1,085	536	563	586	610	635
Depreciation and Amortization	3,281	3,397	3,446	3,498	3,555	3,616
	-	-	-	-	-	-
Change in NWC	1,392	222	24	26	36	22
	-	-	-	-	-	-
Capex	6,596	3,942	3,580	3,650	3,726	3,806
Free Cash Flow to the Firm (FCFF)	-	815	2,222	2,408	2,416	2,419
	815	2,222	2,408	2,416	2,419	2,446

COMCAST Corp.							
DCF	Explicit Forecast Period						
	2013	2014	2015	2016	2017	2018	
FCFF	-	815	2,222	2,408	2,416	2,419	2,446
WACC		5.72%	5.74%	5.76%	5.77%	5.78%	
Discount Factor	1.00	0.95	0.89	0.85	0.80	0.76	
Discounted Cash Flow	-	815	2,102	2,154	2,044	1,934	1,849

DCF Calculation (USD, in millions)	
Explicit Value	9,267
Terminal Value	151,836
Firm Value	123,900
Net Debt	22,340
Noncontrolling interests	4
Equity Value	101,556
Price Target	359.69

Appendix 17: TWC'S Bear Case Valuation

COMCAST Corp.						
FCFF	Explicit Forecast Period					
USD, in millions	2013	2014	2015	2016	2017	2018
Total Revenues	21,899	22,206	22,536	22,891	23,273	23,683
Total Operating Expenses	17,715	19,968	20,264	20,582	20,923	21,290
EBIT	4,183	2,238	2,272	2,310	2,350	2,393
	-	-	-	-	-	-
Income Taxes	1,085	241	263	281	300	320
Depreciation and Amortization	3,281	3,397	3,446	3,498	3,555	3,616
	-	-	-	-	-	-
Change in NWC	1,392	222	24	26	36	22
	-	-	-	-	-	-
Capex	6,596	3,942	3,580	3,650	3,726	3,806
	-	-	-	-	-	-
Free Cash Flow to the Firm (FCFF)	1,609	1,674	1,851	1,851	1,844	1,861

COMAST Corp.							
DCF	Explicit Forecast Period						
	2013	2014	2015	2016	2017	2018	
FCFF	-	1,609	1,674	1,851	1,851	1,844	1,861
WACC		5.72%	5.74%	5.76%	5.77%	5.78%	
Discount Factor	1.00	0.95	0.89	0.85	0.80	0.76	
Discounted Cash Flow	-	1,609	1,583	1,656	1,566	1,474	1,407

DCF Calculation (USD, in millions)	
Explicit Value	6,077
Terminal Value	50,682
Firm Value	44,341
Net Debt	22,340
Noncontrolling interests	4
Equity Value	21,996
Price Target	77.91

Appendix 18: Historical and Expected Balance sheet of Merged Entity without Synergies

Balance Sheet (In millions)	MERGED ENTITY WITHOUT SYNERGIES							
	Historical			Explicit Forecast Period				
	2011	2012	2013	2014	2015	2016	2017	2018
Assets								
Current Assets:								
Cash and cash equivalents	6,797	14,255	2,243	7,239	7,366	7,502	7,660	7,815
Investments	54	1,614	3,573	1,716	1,749	1,784	1,826	1,866
Receivables, net	5,419	6,404	7,330	7,587	7,727	7,877	8,057	8,227
Deferred Income Tax Asset	267	317	334	432	438	445	453	461
Programming rights	987	909	928	1,211	1,235	1,259	1,290	1,318
Other current assets	1,447	1,369	1,811	1,891	1,926	1,963	2,008	2,050
Total current assets	14,971	24,868	16,219	20,077	20,441	20,830	21,294	21,736
Film and television costs	5,227	5,054	4,994	4,994	4,994	4,994	4,994	4,994
Investments	10,628	6,412	3,826	3,826	3,826	3,826	3,826	3,826
Property and equipment, net	41,464	41,974	44,896	47,386	48,231	49,135	50,206	51,236
Intangible assets subject to amortization, net	59,604	60,005	59,916	59,916	59,916	59,916	59,916	59,916
Goodwill	29,121	29,874	30,294	29,834	30,799	31,964	33,209	34,542
Other intangible assets, net	42,437	43,851	43,341	44,977	44,782	44,653	44,529	44,411
Other noncurrent assets, net	2,642	2,742	3,600	2,623	2,651	2,664	2,658	2,630
Total assets	206,094	214,780	207,086	213,633	215,641	217,982	220,632	223,291
Liabilities and Equity								
Current Liabilities:								
Accounts payable and accrued expenses related to trade creditors	6,250	6,853	6,093	7,097	7,224	7,359	7,489	7,654
Accrued participations and residuals	1,255	1,350	1,239	1,427	1,453	1,480	1,510	1,541
Deferred revenue	959	1,034	1,086	1,126	1,146	1,167	1,201	1,213
Accrued participations and other current liabilities	4,931	6,803	8,836	7,336	7,465	7,604	7,788	7,908
Current portion of long-term debt	3,489	3,894	5,047	5,782	5,811	5,841	5,866	5,909
Mandatorily redeemable preferred equity issued by a subsidiary	-	300	-	105	107	109	-	112
Other current liabilities	1,727	1,805	1,837	1,892	1,920	1,950	2,066	2,018
Total current liabilities	18,611	22,039	24,138	24,765	25,125	25,510	25,919	26,355
Long-term debt, less current portion	62,262	63,253	67,852	67,253	66,753	66,503	66,253	66,003
Deferred income taxes	40,130	41,390	44,033	44,178	44,174	44,172	44,173	44,177
Other noncurrent liabilities	13,585	14,021	12,101	13,254	12,501	12,309	12,310	12,317
Redeemable noncontrolling interests and redeemable subsidiary preferred stock	18,611	22,039	24,138	24,765	25,125	25,510	25,919	26,355
	16,314	16,998	957	957	957	957	957	957
Total liabilities	150,902	157,701	149,081	150,407	149,510	149,451	149,612	149,808
Equity:								
Outstanding Stock	150,902	157,701	149,081	150,407	149,510	149,451	149,612	149,808
Class common stock	28	28	28	28	28	28	28	28
Class A Special common stock	7	6	5	5	5	5	5	5
Additional paid-in capital	48,958	48,123	45,841	48,441	49,006	48,804	48,397	47,638
Retained earnings	14,039	16,643	19,180	21,802	24,141	26,744	29,639	32,860
Treasury stock	- 7,517	- 7,517	- 7,517	- 7,517	- 7,517	- 7,517	- 7,517	- 7,517
Accumulated other comprehensive income (loss)	- 711	- 648	100	100	100	100	100	100
Total Comcast Corporation shareholders' equity	54,804	56,635	57,637	62,858	65,763	68,164	70,652	73,114
Noncontrolling interests	388	444	368	368	368	368	368	368
Total equity	55,192	57,079	58,005	63,226	66,131	68,532	71,020	73,482
Total liabilities and equity	206,094	214,780	207,086	213,633	215,640	217,982	220,632	223,290

Appendix 19: Historical and Income Statement sheet of Merged Entity without Synergies

Income Statement (In millions)	MERGED ENTITY WITHOUT SYNERGIES								
	Hist.			Explicit Forecast Period					
	2011	2012	2013	2014	2015	2016	2017	2018	
Revenues:									
Cable Communication segment									
Video	30,214	30,869	31,016	31,190	31,366	31,544	31,725	31,907	
High-speed Internet	13,219	14,634	16,156	16,964	17,812	18,703	19,638	20,620	
Phone/Voice	5,482	5,661	5,684	5,662	5,640	5,620	5,600	5,582	
Business Services	3,260	4,466	5,553	5,787	6,033	6,292	6,564	6,851	
Advertising	2,885	3,337	3,208	3,144	3,081	3,019	2,959	2,900	
Other	1,841	2,023	2,339	2,491	2,654	2,828	3,015	3,215	
Total Cable communication Segment	56,901	60,990	63,956	65,237	66,586	68,006	69,501	71,074	
NBCU Segment									
Cable NetWorks	8,061	8,727	9,201	9,477	9,761	10,054	10,356	10,666	
Broadcast Television	5,982	8,200	7,120	6,764	6,426	6,105	5,799	5,509	
Filmed Entertainment	4,239	5,159	5,452	5,681	5,920	6,168	6,427	6,697	
Theme Parks	1,874	2,085	2,235	2,302	2,371	2,442	2,516	2,591	
Headquarters and other	45	43	31	31	31	31	31	31	
Eliminations	- 941	- 402	- 389	- 389	- 389	- 389	- 389	- 389	
Total NBCU Segment	19,260	23,812	23,650	23,866	24,120	24,411	24,740	25,106	
Corporate and other	558	498	600	612	624	637	649	662	
Eliminations	- 1,202	- 1,344	- 1,429	- 1,515	- 1,606	- 1,702	- 1,804	- 1,912	
Total Revenues	75,517	83,956	86,777	88,201	89,725	91,352	93,086	94,930	
Costs and Expenses:									
Programming and production	20,938	24,550	24,452	26,463	26,949	27,469	28,093	28,684	
Video Franchise and Fees	500	519	500	615	625	634	645	656	
Other operating and administrative	23,618	25,602	26,766	29,044	29,564	30,120	30,779	31,412	
Advertising, marketing and promotion	4,878	5,484	5,645	6,023	6,136	6,257	6,402	6,539	
Costs of revenues	49,934	56,155	57,363	62,146	63,274	64,480	65,920	67,292	
Depreciation	9,034	9,304	9,409	10,268	10,452	10,648	10,881	11,104	
Amortization	1,629	1,758	1,743	1,829	1,856	1,884	1,914	1,945	
Merger-related and restructuring costs	70	115	119	135	142	149	157	165	
Asset impairments	60								
Operating Expenses	60,727	67,332	68,634	74,378	75,723	77,161	78,872	80,506	
EBITDA	25,583	27,801	29,414	26,054	26,451	26,872	27,166	27,639	
Operating Income (EBIT)	14,790	16,624	18,143	13,823	14,001	14,191	14,214	14,424	
Other Income (Expense):									
Interest expense	- 4,023	- 4,127	- 4,126	- 4,431	- 4,402	- 4,388	- 4,375	- 4,362	
Investment income (loss), net	159	219	576	576	576	576	576	576	
Equity in net income (losses) of investees, net	- 35	959	- 86	86	86	86	86	86	
Other income (expense), net	- 222	1,270	- 353	- 353	- 353	- 353	- 353	- 353	
Total (Other income/expense)	- 4,121	- 1,679	- 3,989	- 4,122	- 4,093	- 4,079	- 4,066	- 4,053	
Earnings before income tax (EBT)	10,669	14,945	14,154	9,701	9,908	10,111	10,149	10,371	
Income tax expense	- 3,845	- 4,921	- 5,065	- 4,344	- 3,465	- 3,538	- 3,553	- 3,632	
Net income	6,824	10,024	9,089	5,357	6,443	6,573	6,596	6,739	

In Millions	2013	2014	2015	2016	2017	2018
Debt						
Short term Debt	5,047	5,646	5,782	5,811	5,841	5,866
Long term debt	67,852	67,253	66,753	66,503	66,253	66,003
Total Debt	72,899	72,899	72,535	72,314	72,094	71,869
Cash and Cash Equivalents	2,243	7,239	7,366	7,502	7,660	7,815
Net Debt	70,656	65,660	65,169	64,812	64,434	64,054

Working Capital	2013	2014	2015	2016	2017	2018
Current Asset	10,403	11,172	11,378	11,597	11,860	12,109
Current Liability	19,091	18,983	19,315	19,669	20,053	20,446
	-	-	-	-	-	-
NWC	8,688	7,811	7,937	8,072	8,193	8,337
			-	-	-	-
Change in NWC	458	877	126	135	122	144
			-	-	-	-
Capital Expenditure (CAPEX)	12,331	12,758	11,297	11,552	11,952	12,134

Appendix 20: Merged Entity value without synergy

FCFF	Merged Entity					
	2013	2014	2015	2016	2017	2018
USD, in millions						
Total Revenues	86,777	88,201	89,725	91,352	93,086	94,930
Total Operating Expenses	68,634	74,391	75,731	77,165	78,870	80,499
EBIT	18,143	13,810	13,993	14,187	14,216	14,431
	-	-	-	-	-	-
Income Taxes	5,065	4,344	3,465	3,538	3,553	3,632
Depreciation and Amortization	10,917	11,195	11,317	12,198	12,417	12,650
	-	-	-	-	-	-
Change in NWC	1,478	877	126	135	122	144
			-	-	-	-
Capex	-	13,192	3,942	3,580	3,726	3,806
Free Cash Flow to the Firm (FCFF)	9,325	8,780	10,422	11,161	11,007	11,171

DCF Calculation (USD, in millions)	
Explicit Value	52,470
Terminal Value	290,867
Firm Value	263,596
Net Debt	65,796
Noncontrolling interests	368
Equity Value	197,432

Appendix 21: Historical Income Statement of Merged Entity with Synergies

Income Statement (In millions)	MERGED ENTITY WITH SYNERGIES							
	Hist.			Explicit Forecast Period				
	2011	2012	2013	2014	2015	2016	2017	2018
Revenues:								
Cable Communication segment								
Video	30,214	30,869	31,016	31,190	31,366	31,544	31,725	31,907
High-speed Internet	13,219	14,634	16,156	16,964	17,812	18,703	19,638	20,620
Phone/Voice	5,482	5,661	5,684	5,662	5,640	5,620	5,600	5,582
Business Services	3,260	4,466	5,553	5,787	6,033	6,292	6,564	6,851
Advertising	2,885	3,337	3,208	3,144	3,081	3,019	2,959	2,900
Other	1,841	2,023	2,339	2,491	2,654	2,828	3,015	3,215
Total Cable communication Segment	56,901	60,990	63,956	65,237	66,586	68,006	69,501	71,074
NBCU Segment								
Cable NetWorks	8,061	8,727	9,201	9,477	9,761	10,054	10,356	10,666
Broadcast Television	5,982	8,200	7,120	6,764	6,426	6,105	5,799	5,509
Filmed Entertainment	4,239	5,159	5,452	5,681	5,920	6,168	6,427	6,697
Theme Parks	1,874	2,085	2,235	2,302	2,371	2,442	2,516	2,591
Headquarters and other	45	43	31	31	31	31	31	31
Eliminations	- 941	- 402	- 389	- 389	- 389	- 389	- 389	- 389
Total NBCU Segment	19,260	23,812	23,650	23,866	24,120	24,411	24,740	25,106
Corporate and other	558	498	600	612	624	637	649	662
Eliminations	- 1,202	- 1,344	- 1,429	- 1,515	- 1,606	- 1,702	- 1,804	- 1,912
Total Revenues	75,517	83,956	86,777	88,201	89,725	91,352	93,086	94,930
Costs and Expenses:								
Programming and production	20,938	24,550	24,452	26,463	26,949	27,469	28,093	28,684
Video Franchise and Fees	500	519	500	615	625	634	645	656
Other operating and administrative	23,618	25,602	26,766	29,044	29,564	30,120	30,779	31,412
Advertising, marketing and promotion	4,878	5,484	5,645	6,023	6,136	6,257	6,402	6,539
Costs of revenues	49,934	56,155	57,363	62,146	63,274	64,480	65,920	67,292
Depreciation	9,034	9,304	9,409	10,268	10,452	10,648	10,881	11,104
Amortization	1,629	1,758	1,743	1,829	1,856	1,884	1,914	1,945
Merger-related and restructuring costs	70	115	119	135	142	149	157	165
Asset impairments	60							
Operating Expenses	60,727	67,332	68,634	74,378	75,723	77,161	78,872	80,506
EBITDA	25,583	27,801	29,414	26,054	26,451	26,872	27,166	27,639
Operating Income (EBIT)	14,790	16,624	18,143	13,823	14,001	14,191	14,214	14,424
Other Income (Expense):								
Interest expense	- 4,023	- 4,127	- 4,126	- 4,431	- 4,402	- 4,388	- 4,375	- 4,362
Investment income (loss), net	159	219	576	576	576	576	576	576
Equity in net income (losses) of investees, net	- 35	959	- 86	86	86	86	86	86
Other income (expense), net	- 222	1,270	- 353	- 353	- 353	- 353	- 353	- 353
Total (Other income/expense)	- 4,121	- 1,679	- 3,989	- 4,122	- 4,093	- 4,079	- 4,066	- 4,053
Earnings before income tax (EBT)	10,669	14,945	14,154	9,701	9,908	10,111	10,149	10,371
Income tax expense	- 3,845	- 4,921	- 5,065	- 4,344	- 3,640	- 3,713	- 3,934	- 3,842
Net income	6,824	10,024	9,089	5,357	6,268	6,398	6,215	6,530

Appendix 22: Value of Merged Entity with Synergies

FCFF	Merged Entity					
		Explicit Forecast Period				
USD, in millions	2013	2014	2015	2016	2017	2018
Total Revenues	86,777	88,201	89,725	91,352	93,674	95,528
Total Operating Expenses	68,634	74,391	75,231	76,665	78,370	80,499
EBIT	18,143	13,810	14,493	14,687	15,304	15,029
	-	-	-	-	-	-
Income Taxes	5,065	4,344	3,640	3,713	3,934	3,842
Depreciation and Amortization	10,917	11,195	11,317	12,198	12,417	12,650
	-	-	-	-	-	-
Change in NWC	1,478	877	126	135	122	144
	-	-	-	-	-	-
Capex	13,192	3,942	3,580	3,650	3,726	3,806
Free Cash Flow to the Firm (FCFF)	9,325	8,780	10,847	11,586	11,814	11,659

DCF Calculation (USD, in millions)	
Explicit Value	54,225
Terminal Value	308,495
Firm Value	278,659
Net Debt	65,796
Noncontrolling interests	368
Equity Value	212,495

9. Bibliography

Bibliography names

- Bruner, R.F. (2004), "Where M&A Pays and Where It Strays: A Survey of the Research", *Journal of Applied Corporate Finance*, 16(4), pp. 63-76.
- Copeland, T., Koller, T., Murrin, J.(2000), *Valuation: Measuring and Managing the Value of Companies*, 3rd ed., John Wiley & Sons.
- Damodaran, A. (2005), *The Value of Synergy*, Stern Business School (Working Paper, October).
- Damodaran, A. (2012), *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset*, 3rd ed., John Wiley & Sons.
- Eccles, R., Lanes, K. and Wilson, T. (1999), *Are You Paying Too Much for That Acquisition?* (Working paper, July-August).
- Fernández, Pablo.(2004), *80 Common Error in Company Valuation*, IESE Business School (Working paper, Jun 26).
- Fernández, Pablo (2013), "company valuation methods" IESE Business School (Working paper, Nov 23).
- Foushee, S., Koller, T. and Mehta, A. (2012), *Why Bad Multiples Happen to Good Companies* (Corporate Finance Practice, May).
- Goedhart, M.H., Koller, T. and Wessels, D. (2005), *The Right Role for Multiples in Valuation*, McKinsey on Finance, 15: 7-12, Spring
- Hitchner, J. (2003), *Financial Valuation: Applications and Models*, 1st ed., N.Y: John Wiley & Sons.
- Kaplan, S.N. and 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, Winter.
- Kaplan, P. D., and Peterson, J. D. (1998), *Full-Information Industry Betas*, *Financial Management*, v o l Vol. 27 (2), pp. 85-93.
- Koller, T., Goedhart, M., & Wessels, D. (2010), *Valuation – Measuring and Managing the Value of Companies*, 5th ed., Hoboken, New Jersey: John Wiley& Sons.
- Lie, E., and Lie, H. (2002) *Multiples Used to Estimate Corporate Value*, *Financial Analysis Journal*, pp. 44-54.
- Lintner, J. (1965), *The Valuation of Risk Assets and the Selection of Risky Investments in stock Portfolios and Capital Budgets*, *Review of Economics and Statistics*, pp. 13-37.
- Loughran, T. and Vijh, A.M. (1997), *Do Long-Term Shareholders Benefit from Corporate Acquisitions ?*, *The Journal of Finance*, Vol. 52, No. 5, pp. 1765-1790.
- Luehrman, T.A. (1997), *Using APV: A Better Tool for Valuing Operations*, *Harvard Business Review*, pp. 3-10.

- Luehrman, T.A. (1997), *What's it Worth?: A General Manager's Guide to Valuation*, *Harvard Business Review*, pp. 132-141.
- Pettit, J. (1999), Corporate Capital Costs: A Practitioner's Guide, *Journal of Applied Corporate Finance*, vol. 12(1), pp. 113-120.
- Rappaport, A., Sirower, M.I. (1999), Stock or Cash?: *The Trade-offs for buyers and Sellers in Mergers and Acquisitions*, *Harvard Business Review*, pp.147-158.
- Risberg, A. (2003), *The Merger and Acquisition Process*, *Journal of International Business Studies*.
- Ross, S., Westerfield, R. and Jaffe, Jeffrey (2003), *Corporate Finance*, 6th ed., New York City: MacGraw-Hill.
- Sharpe, W. (1964), *Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk*, *The Journal of Finance*, pp. 425-442.
- Schill, M.J. (2014), *Business Valuation: Approaches and Applications*, *University of Virginia Darden School Foundation* (Working paper, Feb. 7)
- Shivdasani, A. and Zak, A. (2007), The Return of the Recap: Achieving Private Equity Benefits as a Public Company", *Journal of Applied Corporate Finance*, Vol. 19, No. 3, pp. 32-41.
- Sirower, M.L. and Sahni, S. (2006), *Avoiding the synergy Trap: Practical Guidance on M&A Decisions for CEOs and Boards*, *Journal of Applied Corporate Finance*, Vol.18, No. 3, pp. 83-95.
- Stahl, G.K. and Voigt, A. (2005), *Impact of Cultural Differences on Merger and Acquisition Performance: A Critical Research Review and an Integrative Mode*, *Advances in Mergers and Acquisitions* 4, pp. 51-82.
- Vaihekoski, M. (2009), *A Note on the Calculation of the risk Free Rate for Tests of Asset Pricing Models*, *Turku School of Economics* (Working paper, August 27).
- Very, P. and Schweiger, D.M. (2001), *The Acquisition Process as a Learning Process: Evidence from a Critical Problems and Solutions in Domestic and Cross-border Deals*, *Journal of World Business*, 36(1), pp. 11-31.
- Wasserstein, B. (1998), *Big Deal: Merger and acquisitions in the digital Age*, *Grand Central Publishing* NY: Warner Business Books.
- Weston, J.F., Chung, K.S. and Hoag, S.E. (1990), *Mergers, Restructuring and Corporate Control*, New Jersey: Prentice-Hall.
- Young, M., Sullivan, P., Nokhasteh, A., and Holt, W. (1999) *All Roads Lead to Rome – An Integrated Approach to Valuation Models*, Goldman Sachs Investment Research.
- Zenner, M., Matthews M., Marks J. and Mago, N. (2008) "The Era of Cross-Border M&A: How Current Market Dynamics are Changing the M&A landscape", *Journal of Applied Corporate Finance*, 20(2), pp. 84-96.

Other Sources

<http://www.pwc.com/us/en/industry/entertainment-media/publications/outlook/tv-subscriptions.jhtml>

<http://nymag.com/daily/intelligencer/2014/02/why-comcasttime-warner-cable-should-be-blocked.html>

<http://cblr.columbia.edu/archives/13011>

<http://fortune.com/2014/09/08/u-k-markets-slide-as-poll-shows-first-lead-for-scottish-independence/>

<http://www.theverge.com/2014/4/9/5597074/inside-comcasts-shaky-fcc-defense-of-time-warner-cable-takeover>

<http://www.newyorker.com/currency-tag/why-comcast-wants-to-buy-time-warner-cable>

<http://consumerist.com/2014/02/24/why-comcast-wants-to-buy-time-warner-cable-and-why-twc-wants-to-let-them/>

<http://www.buzzfeed.com/peterlauria/two-maps-that-explain-why-comcast-wants-to-buy-time-warner-c>

<http://www.bloomberg.com/news/2014-04-22/comcast-adds-cable-tv-customers-again-bucking-industry.html>

<http://commercialobserver.com/2014/02/contentious-comcasttime-warner-deal-could-save-12-2m-in-real-estate-synergies/>

<http://www.cnbc.com/id/101413235#>

<http://www.marketingcharts.com/wp/television/us-traditional-media-outlook-2013-2017-30129/>

<http://www.marketingcharts.com/wp/traditional/us-traditional-media-advertising-outlook-2013-2018-43187/>

<http://www.ibisworld.com/industry/default.aspx?indid=804>

<http://press.pwc.com/GLOBAL/News-releases/pwc-issues-global-entertainment-and-media-outlook-2014-2018/s/5be3359b-db3a-4097-b694-a38e35bc0b4b>

[PWC's entertainment and media outlook \(2014-2018\), details the drivers of increase in advertising market](#)

http://www.deloitte.com/view/en_US/us/Industries/industry-outlook/9ced365249afa310VgnVCM3000003456f70aRCRD.htm

<http://www.treasury.gov/resource-center/fin-mkts/Pages/default.aspx>

<http://www.marketresearch.com/First-Research-Inc-v3470/TV-Broadcast-Cable-Networks-8292696/>

<http://adage.com/article/special-report-tv-upfront/discovery-holds-back-inventory-tv-upfront/294416/>

<http://www.ey.com/GL/en/Newsroom/News-releases/News-Corporates-underestimating-costs-of-post-merger-integration>

http://useconomy.about.com/od/candidatesandtheeconomy/a/Obama_Stimulus.htm

<http://www.sec.gov/Archives/edgar/data/1166691/000119312514107315/d681637ds4.htm>

<http://www.worldbank.org/en/publication/global-economic-prospects/summary-table>

<http://www.statista.com/statistics/244983/projected-inflation-rate-in-the-united-states/>

https://www.moody.com/research/Moodys-Changes-Time-Warner-Cable-Baa2-rating-review-to-review--PR_292788