CATÓLICA LISBON
SCHOOL OF BUSINESS & ECONOMICS

UNIVERSIDADE CATÓLICA PORTUGUESA

Mergers & Acquisitions: An Entertainment and Media Conglomerate

Kevin Plumen

Advisor: António Borges de Assunção

Dissertation submitted in partial fulfillment of requirements for the degree International Master of Science in Finance, at the Universidade Católica Portuguesa, 11 September 2015.

An Entertainment and Media Conglomerate

Kevin Plumen

Abstract:
The entertainment and media landscape is considered as a rapidly changing and highly growing industry. Due to increasing M&A activity and changing consumer demand for experiences and interactions with high-quality content, entertainment and media companies are advised to innovate their products and user experience with focus on digitalization. This thesis considers an acquisition of Time Warner by 21st Century Fox, two of the biggest companies in the entertainment and media industry. First of all, common practices of M&A deals with focus on valuation methods and value generation through a combination of two companies are revised and clarified. In addition, the entertainment industry and the companies are analyzed by focusing on trends, competition and historical financial performance. After this, the economic reasoning of the acquisition of Time Warner by Fox is determined. Both companies are valued independently and as a combined firm. As a result, the combination of these companies seems to be the perfect strategic and economic fit. The deal would create a leading position in the film and TV production and would reduce the upcoming competition from online and streaming companies. Moreover, both firms would not lose its negotiation power with cable companies concerning carriage fees of their content. The estimated value of synergies is $26,78bn, undermining the high potential of this entertainment and media conglomerate. Fox would have to pay around $100 per share constituting a premium of 16,1% with regard to Time Warner's estimated fair share price of $86,15.

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Acknowledgments

I would like to thank Professor António Borges de Assunção who provided its expertise in the fields of M&A that highly contributed to the outcome of this thesis. His assistance and feedback was of great help.

1. Introduction

Mergers and Acquisitions are becoming increasingly significant and are gaining in importance for many companies, which aim to realize an economic benefit from these deals. Therefore, the reasoning behind M&A transactions is to create a higher shareholder value in a combination of two companies compared to the single firm. The global M&A activity in 2014 increased significantly by 47% compared to 2013 and was estimated to be worth $3,5 trillion (imaa 2015), showing the importance and actuality of such transactions. In fact, M&A deals are getting more and bigger every year.

Especially in the entertainment and media industry, consolidation of companies are becoming fundamental in order to guarantee negotiation power with cable companies and to counteract the upcoming competition of streaming and online services. Customer demand within this industry is changing drastically to digitalization, forcing the entertainment industry to innovate its services. The underlying companies of this thesis, 21st Century Fox and Time Warner, two entertainment giants that mainly focus on the film and television segments, are particularly dependent of the changing developments within the industry. Fox already made a bid for Time Warner in June 2014, which was rejected by the target. According to Time Warner's board of directors, the deal was not in the best interest of its shareholders. Nevertheless, there still exist rumors that Fox wants to acquire Time Warner.

This thesis starts with a literature review that reflects a guideline of what to consider in M&A deals, such as the right choice and application of valuation methods and a fair estimation of possible synergies. Chapter three analyzes the entertainment and media industry and follows with a description of the business scopes and a financial analysis of both companies. This chapter carries on with the deal rationale and explains for which reasons Fox and Time Warner may execute the deal. As a next step, chapter four includes a multiple and discounted cash flow valuation of the companies. The last chapter follows with a valuation of the combined firm and the estimation of synergies, including the form of payment to acquire the target. As a last step this thesis presents the future perspectives of the acquisition.

2. Literature Review

2.1 Valuation models

One of the first steps after the management pursues a possible target that it wants to acquire is to determine the appropriate valuation model. According to Luehrmann (1997, "*What's it worth"*), there exist four commonly used valuation models: The standard Discounted Cash-Flow method (DCF), the APV method, Option Pricing and the Equity Cash Flow method. This thesis solely focuses on the APV and DCF valuation, which may be applicable to the underlying companies. The standard DCF-method emerged in the 1970's and "remains a favorite of practitioners and academics because it relies solely on the flow of cash in and out of the company, rather than on accounting-based earnings" (Koller et al. 2010). This method estimates a company value by forecasting expected cash flows and discounts them to the present value at the weighted average cost of capital (WACC). Therefore, the DCF method describes the relation between present value and a company's future value. Most firms first forecast their business cash flows like revenues and exclude cash flows of the financing program like interests and dividends. The free cash flows are computed as follows:

$$(\ ) \quad FCFF = EBIT * (1 - Tax) - CAPEX$$
$$-Changes\ in\ Net\ Working\ Capital + Depreciation\ and\ Amortization$$

The terminal value of the underlying company is calculated by increasing its last cash flow by the growth rate considered to be suitable for the company. This value is divided by the difference of WACC and the perpetual growth rate.

$$(2) \quad Terminal\ Value = \frac{FCFF_n * (1+g)}{(WACC - g)}$$

In order to find the enterprise value of the company, the sum of the discounted free cash flows and the discounted terminal value are added up:

$$(3) \quad Enterprise\ Value = \sum_{i=1}^{n} \frac{FCFF_i}{(1+WACC)^i} + \frac{Terminal\ Value}{(1+WACC)^n}$$

The most common tax- adjusted discount rate is the aforementioned WACC which tries to take into consideration the value of interest tax shields, which arises from the usage of debt within a firm's capital structure. The WACC is computed as follows:

$$(4) \quad WACC = k_e * \frac{E}{V} + k_d * \frac{D}{V} * (1 - Tax)$$

Where k_e constitutes the cost of equity, E equals the total shareholders' equity, V is the enterprise value of the company or the sum of total shareholders' equity and the total liabilities of the firm, k_d stands for the cost of debt and D describes the total liabilities of the firm. The cost of equity k_e is estimated by using the Capital Asset Pricing Model (CAPM), which is applied as follows:

$$(5) \quad k_e = r_f + \beta * r_m$$

Where r_f describes the risk free rate, β the systematic risk of the company and r_m the market risk premium. The usual calculation of beta is to regress a company's stock returns against market returns for a predetermined time period. Nevertheless, this method has three main flaws: First, it may have a high standard error. Second, it does not reflect the current business mix of the firm. Third, instead of the current financial leverage it considers the average leverage level of the company. Due to the weaknesses of the regression method and unreasonable results for the beta of both firms when using this approach, the estimation is adjusted for financial leverage, assuming that the debt carries no market risk (has a beta of zero) (Damodaran 1999). By using the average unlevered beta of the peer group, the business risks as well as the companies' competitors are taken into consideration. The unlevered betas for the company being valued and the peer group are estimated through the following equation:

$$(6) \quad \beta_U = \frac{\beta_L}{[1+(1-T_C)*(D/E)]}$$

Where β_L constitutes the leveraged or equity beta of each firm, T_C describes the tax rate and D/E is the debt to equity ratio. As a next step the average of these unlevered betas is estimated. In order to find the equity or levered beta for the company being valued, the above described equation is solved for β_L:

$$(7) \quad \beta_L = \beta_{U\,AVERAGE} * [1 + (1 - T_C) * (D/E)]$$

By implementing the levered beta of equation (7) in formula (5), the cost of equity is obtained. Afterwards, the cost of equity is inserted in equation (4) to estimate the WACC, which is used to discount the free cash flows of the underlying company.

However, Luehrmann (1997, "*Using APV"*) argues that the WACC method only gives reasonable values if the capital structure of a company is static and simple, meaning that it does not change significantly. Otherwise it has to be adjusted for financial side effects, which are mostly considered as tax shields (Koller et al. 2010). Due to the fact that most companies have a dynamic capital structure, the usage of the WACC often leads to a misestimating result. Based on this, new valuation methods such as the APV emerged, which are better tailored to a manager's decision. The APV is generally used in cases where the company plans to change its capital structure significantly. "In these cases, a valuation based on a constant WACC would overstate the value of the tax shields" analyze Koller et al. (2010). The APV valuation model is applied by forecasting expected cash flows, such as the standard DCF method, and discounts these projections to the present value at the cost of equity or opportunity cost, which are equal to a return the company could have earned with an investment of similar risk. The opportunity cost exists of time value, which is described as the return on a risk-free investment and a risk premium that constitutes the extra expected return of bearing the additional risk. In comparison to the WACC approach, which adjusts the discount rate of a business in order to illustrate financial enhancements, the APV method values financial side effects separately and adds them to the base-case scenario. The base-case scenario values the project as if it would be completely financed by equity. Financing side effects include interest tax shields, costs of financial distress, subsidies, hedges, issue costs and other costs. On the contrary, the WACC approach only considers tax effects as a financing side effect.

In conclusion, the APV method constitutes an alternative approach to value a company by focusing on two categories of cash flows. The first category constitutes real cash flows, which are related to the business operation such as revenues, operating expenses and capital expenditures, whereas the second category consists of the aforementioned side effects. The APV model helps to understand which positions are adding value and which are destroying value. The WACC on the other hand bundles every piece of the analysis together so that the manager only has to discount once.

Nevertheless, Fernández (2007) applied the ten most commonly DCF valuation methods, which are the following: Free cash flow discounted at the WACC, Equity cash flows discounted at the required return on equity, capital cash flows discounted at the WACC before tax, APV, the business`s risk-adjusted free cash flows and equity cash flows discounted at the required return on assets, the economic profit discounted at the required return on equity, EVA discounted at the WACC, the risk-free rate adjusted free cash flows discounted at the risk-free rate and the risk-free rate-adjusted equity cash flows discounted at the required return on assets. In his study, Fernández (2007) finds that all these methods give the same value due to the fact that they underlie the same reality and assumptions. The only difference is between the cash flows that are taken as a starting point in order to value the company.

According to a study of Kaplan & Ruback (1996), the discounted cash flow valuation methods such as the WACC-based DCF approach and the APV model generate reliable estimates of a company's market value. An additional tool to these two approaches is the estimation of comparables or so-called multiples in order to estimate a proxy for a company's value. In general, a multiple of value (typically the enterprise value) relative to a performance metric is estimated for a peer group of the underlying company. The most common used performance measures are earnings before interest, taxes, depreciation, and amortization (EBITDA) and earnings before interest and taxes (EBIT). In order to estimate the enterprise value of the underlying companies, the performance measure is multiplied by the average multiple of the comparable companies relatively the peer group. This valuation model underlies two assumptions: The expected cash flows of both, the company being valued and the comparable firms are assumed to be equal and the enterprise value as well as the performance measure is supposed to fluctuate in the same proportion. In case the two assumptions are approved to be true, the multiple valuation model

supports a more reliable estimation than the standard DCF method due to the fact that it includes market expectations of the discount rate as well as the future cash flows.

Nevertheless, the company being valued and its comparables are indeed not perfect matches, so that only applying the multiple valuation model may not be sufficient. In comparison to this valuation approach, in the standard DCF and APV method future cash flows of the underlying company are directly projected and the discount rates are contingent on historical risks. However, an accurate estimation of the company value highly depends on the correctness of the forecasts and the underlying assumptions. Although both valuation models incorporate weaknesses, they may produce a reliable estimate of the company value, whereas the multiple valuation method additionally may add explanatory power to the DCF and APV approach.

2.2 Mergers and Acquisitions

After applying the valuation model that fits best the capital structure and financial situation of the companies, the bidding company needs to clarify in which way the target is acquired. According to Damodaran (2002) there are four categories taking place in an acquisition process:

1. In a merger, the management of the two firms involved in the deal agrees that the target gets integrated in the acquiring firm. This kind of deal mostly requires an agreement of more than 50% of the shareholders of the acquiring firm as well as the target company.

2. In a consolidation, the underlying companies create a new firm of which the stockholders receive shares.

3. In a tender offer, the acquiring company offers to buy the targets outstanding shares at a predetermined price. The offer is communicated to the stockholders without informing the management or the board of directors of the acquired company.

4. In a purchase of assets, the acquiring firm buys the entire assets of the target company after approval of the acquired firm's shareholders.

2.2.1 Classifying and Valuing Synergies

According to Damodaran (2005), synergies are described as the created value when two firms get combined, which would not have been generated when the companies would operate independently. There exist two different kinds of synergies: operational and financial synergies.

Operating synergies are explained as increased growth opportunities or as synergies that are able to increase a company's operating income from existing assets. They can occur in form of cost savings or in increased cash flows. Cost savings will increase the cash flows in the period in which they occur and result in a higher company value. In comparison, growth synergies can occur in at least three different ways. The merged company earns higher returns on its investment, is able to find more investments or it increases its competitive position, which leads to growth in the long run. In general, operating synergies can be categorized in four different types: economies of scale, higher pricing power, consolidation of different functional strengths and higher growth in new or existing markets. Through economies of scales in mergers, which occur generally in horizontal mergers or intra business mergers, the combined company is expected to become more cost-efficient and profitable. The greater pricing power arises from the reduced competition and a higher market share of the merged firm. Furthermore, functional strengths of each firm can be transferred to the combined company and a higher market growth can be obtained.

In comparison to operating synergies, financial synergies can account for higher cash flows or a lower cost of capital or both. Considering a merger of a firm with excess cash and a firm with high yield projects, the combination of the companies can create a financial synergy through the possibility to finance the high return projects of the one firm with the excess cash of the other company. In addition, financial synergies can increase the overall debt capacity due to the fact that cash flows of the combined firm may become more stable and predictable, which allows to borrow a higher amount of money and creates a tax benefit. A last financial synergy can constitute a diversification possibility through different business opportunities of the merged company.

After classifying the different kinds of possible synergies, the management has to ensure that common errors in valuing synergies such as choosing a wrong discount rate and a mixing of control and synergy are avoided. By following these rules, Damodaran (2005) concludes that

there is a lot of potential for creating value through M&A transactions. The acquiring company should try to estimate the value in the best way possible in order to decide how much it should pay for it. Before valuing synergies the firm has to understand what forms are synergies expected to take and when the synergies start affecting cash flows. This is essential in order to obtain an unbiased estimate of value. The estimated value is usually obtained by following three steps: Value both companies independently, estimate the value of the combined company without considering synergies and take into consideration the effects of synergies and revalue the combined company. As a last step the value of the combined firm without synergies has to be extracted from the value of the combined company with synergies in order to analyze if the transaction is profitable.

2.2.2 Do M&A Deals add Value?

The discussion about if M&A deals add value on average or if they harm the acquirer's shareholders is controversial according to Sirower & Sahni (2006). Due to this, the main challenge of the management is to distinguish good deals from bad deals and to apply appropriate procedures in order to avoid criminal activity and scandals. The board should therefore demand answers to critical questions about the M&A transaction in order to act as a supervisor. Sirower & Sahni (2006) find in their M&A study that acquirers on average underperform their industry peers and that cash deals outperform stock deals. However, M&A deals create value for the entire economy. The shareholders of the selling company almost always gain value, while the buying shareholders lose value. Nevertheless, in aggregation the gained value typically exceeds the value that the acquirer loses.

The board should address two major issues in order to avoid such losses for the acquiring firm: Does the value of cost and revenue synergies exceed the premium that the buyer has to pay for the target?; And does exist a plausible range in which falls the value of synergies? The next step is to investigate former deals and to draw conclusions from the experience of other relevant transactions. Finally, a feasibility check should be applied that analyzes the probable sources of synergies of the combined firm. This strategy constitutes a useful complement to the DCF approach and can be used as a simple and reliable guidance.

Nevertheless, according to Eccles et al. (1999) most acquisitions do not add value for the shareholders of the acquiring company although the deals are getting more and companies pay more for the target firms every year. There are many reasons for the poor performance such as misunderstanding of the strategic importance of the deal, management overconfidence and weak integration skills. Due to this many companies pay more for the acquisition than the target including the value of synergies is worth. In order to avoid an overpayment for the target, managers should not follow the rush; they should rather understand that there exists no single, correct price for the acquisition and prevent paying more than the maximum price a company is able to pay. Furthermore, the management has to make sure that the cost savings and increased revenues by acquiring another firm are higher than the purchase price. Therefore, the understanding of the intrinsic value, market value, purchase price and synergy value has to be sufficient.

Bruner (2004) argues that a manager's opinion about if a deal is worth to invest in highly depends on a mixture of personal experience, rumors, conventional wisdom and facts. There exist two mayor misconceptions in the way many people think about M&A deals. In opposite to the general wisdom that M&A deals destroy value for the existing shareholders, more than 130 studies show that the targets shareholders earn high returns in an acquisition. Furthermore, the shareholders of the combined firm earn significant positive returns and shareholders of the buying company earn returns that are generally higher than the required return on investment.

Furthermore, Bruner (2004) criticizes that most studies are too imprecise and generalized on evidence instead of concentrating on an understanding of how profitability differs by deals and firms. In order to guarantee a successful deal that generates returns for both companies, managers should at first focus on the strategy of the deal. Therefore, they have to decide to focus or diversify the company in order to create growth, to build market share, to use excess cash in the most effective way, to exploit synergies and to finally initiate the acquisition. Usually shareholders are able to diversify themselves but in information intensive industries diversification by the company might pay out.

Nevertheless, in general company focus instead of a diversification strategy pays better in an acquisition process, due to the fact that merger benefits can be discovered more easily when a company operates in its area of expertise. The next step to avoid that the merger does not pay out

is to discover the investment opportunity of the deal. Generally, privately owned and underperforming targets are more profitable for the buyer, whereas foreign and overvalued targets seem to be more cost-intensive. A third category that plays an important role by considering an M&A deal constitutes the terms of transaction, including the form of payment, financing, tax treatments and social issues.

Considering the form of payment, shareholders returns are generally higher when the deal is paid in cash, whereas a payment in stocks generates significantly positive returns, which are lower than those for cash deals. At announcement, studies show that when the payment is in cash, the buyer's shareholders returns range from zero to positive, while a payment in stocks, generates a negative return for them. Managers should also focus on governance practices due to the fact that firms with stronger governance practices are more highly valued. According to Martynova & Renneboog (2009) the form of payment is highly influenced by the acquirers concerns regarding the cost of capital. Their study undermine that companies with high excess cash use internally generated funds as a form of payment, whereas acquirers without sufficient cash or internal funds mostly raise external funds. In case the company has a high debt capacity, the deal is paid by raising new debt, whereas new equity is issued in case the bidding company is not seen to be undervalued.

On the other hand, Cullinan et al. (2004) argue that one of the main reasons that many acquisitions deliver little value is a disregard of due diligence. In many cases a fair analysis of the deal and the possible value that could be generated becomes less important once the management has the target in sights. In order to avoid such a weak performance, managers should also focus on the strategic rationale of the deal and look for possible weaknesses and strength considering the assumptions of the valuation. Due diligence may help to create a counterweight against the emerging excitement of the deal. Instead of relying on secondary sources it is recommended to gather information about the industry, target, customers, suppliers, competitors, costs and capabilities. After analyzing the bottom up assessment of these factors, the results have to be translated into benefits in revenue, cost and earnings and cash flows. The main challenge is to find the real value of the target as a stand-alone business. Therefore, the management should pay special attention to common accounting tricks the target could have applied as the use of overoptimistic projections. In addition, it is worth having a critical view on the synergies that are assumed to be achieved through the deal. It is recommended to use the due diligence process to

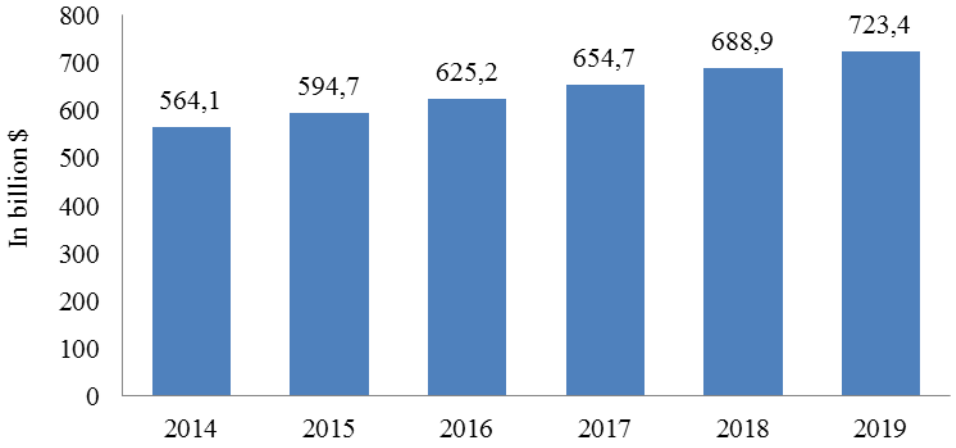
differentiate between the synergies and to calculate the potential value and the probability of realization, including the time frame and amount of investments with which the synergies can be generated. The last step of due diligence consists of determining the maximum price the company is willing to pay for the target, which should not include the entire potential value of synergies but the potential value of synergies realized by the target.

3. Industry and Company Analysis

3.1 Industry Analysis

The entertainment and media industry includes diversified companies that are mainly focused on programming and distribution of film, TV, music, internet, video games, advertising and print content. In 2014 the United States was the leading entertainment and media market worldwide with a value of around $564.1bn and is predicted to be worth over $594,7bn in 2015 (Statista 2015).

Figure 1: Value of the Entertainment Industry in the US



Note: Data Input from Statista (2015)

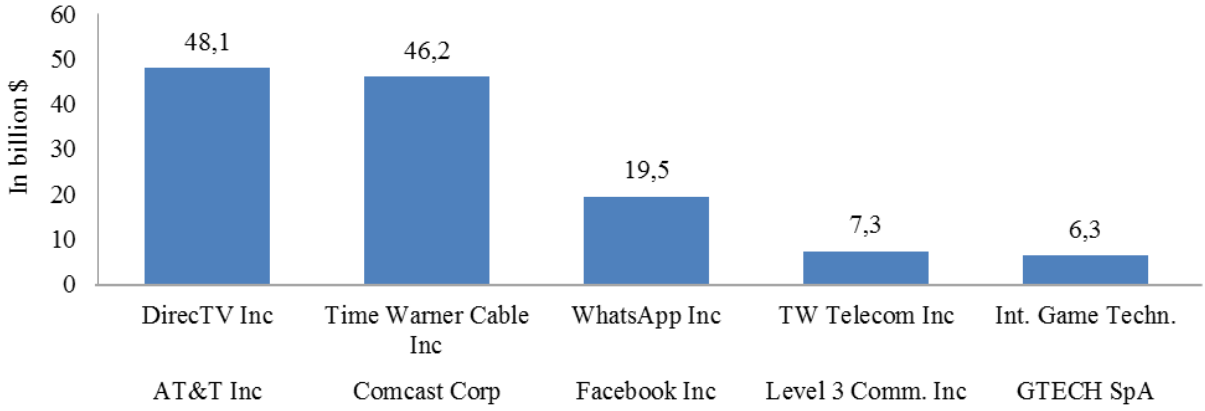
The determining factors of the ongoing increasing and developing entertainment and media industry are leisure time and the technological progress. The industry has grown due to increased income and available discretionary time in combination with the availability of digital content at any place or any time. On the one hand economic development was the main driver for a more efficient production of goods and services. The economy has been able to produce services and goods with fewer labor inputs, so that the growing entertainment industry has been directly connected to the development of a rising economic productivity and income (Owen 1971).

On the other hand, technological progress in combination with the rising demand and preferences for entertainment products and services was a driver for an increasing industry. With exception to the economic downturn during the financial crisis starting in 2009, the entertainment industry has proven to be robust even in times of economic instability. From 2011 onwards the industry

permanently recovered and regained its old strength. Stock prices as well as economic profitability have increased significantly after the recession (Christophersen 2013).

Especially in 2014, the entertainment and media industry experienced a wave of high value mergers altering the American media landscape. The value of M&A announcements increased around 90% to a total value of $141,6 billion in 2014 compared to the year before. This increase is primarily driven by two big deals in the cable sector, the acquisition of DirectTV Inc. by AT&T Inc. for $48,1bn and the acquisition of Time Warner Cable Inc. by Comcast Corp. for $46,2bn. Another deal of significant value ($19,5bn) was the acquisition of WhatsApp Inc. by Facebook (McKinsey 2014). The trend of a rising entertainment industry is expected to continue with an annual growth rate slightly behind the global GDP growth rate of around 3,3% projected for 2015 (IMF 2015). In 2015, the industry market capitalization is expected to reach approximately $2,0 trillion, compared to $1.9 trillion in 2014, representing the huge potential in this segment (Statista 2015).

Figure 2: M&A deals in the Entertainment & Media Industry 2014



Note: The first row shows the target companies; the second row constitutes the acquiring firms. Data Input from PWC 2015, *Momentum builds*.

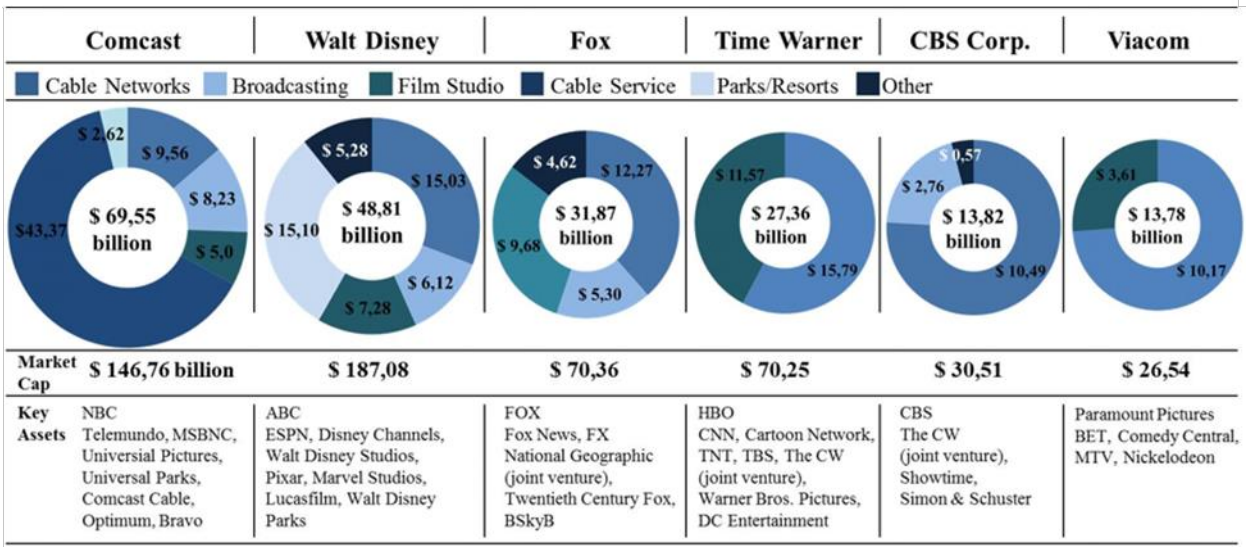
In order to strengthen its market positions and growth factors the entertainment companies are driving innovation and efficiency by creating new approaches concerning content development, operations, distribution channels, monetization and technology. The companies tend to reduce significantly the cost structures for its provided digital content through cutting content producers and editors. Instead they manage networks of external contributors, improve content production and technology as well as lower fix costs through centralization and portfolio rationalization.

Furthermore, the entertainment firms are focusing more on innovation and return on investments (ROI) in order to provide more resources to digital and database marketing. Customers demand for control, communication and interaction, so that the entertainment industry tends to develop premium inventory through registration acquired applications. The companies are moving towards a relationship with its own customers instead of simply creating impressions through its content. These new strategies help to add significant value to the companies in traditional and digital media. Due to the fact that online streaming as well as social and mobile media are the segments with the highest growth potential, the entertainment companies try to participate actively in this area through development of their business model, software and technology. Innovation is seen as the key element to achieve these goals. Additionally, the positioning in emerging markets such as Asia, Latin America, Russia and the Middle East has become essential to ensure long term growth in this particular industry. In these regions, the entertainment and media landscape is growing rapidly with less significant distribution barriers (PWC 2015: *Key trends*).

As mentioned before, during the last decade the entertainment industry has shift away from the traditional segments such as print media, television and radio and has focused more on online entertainment including streaming of television channels and movies (Plunkett Research LTD. 2015). The online entertainment sector provides a major opportunity for entertainment and media companies to connect directly with customers and represents a huge potential (Belson 2015). This shift towards digital media via internet broadens the availability for content and guarantees limitless access to digital media in order to satisfy the customer demand. According to Deloitte (2014), the demand for entertainment-oriented content has never been greater than in 2014, with an increasing tendency for future years.

According to the Forbes Magazine (Le 2014), Comcast constitutes the biggest company in the entertainment and media sector in the United States, with around 26,8 million cable customers and 21 million internet customers in 2014, as a result of the acquisition of Time Warner Cable. The ranking is based on a scoring methodology with focus on sales, profits, assets and market value. The second biggest company in this industry is Walt Disney, who is known for its film studios, cable channels and theme parks. In 2014, Walt Disney acquired Maker Studios, the world's leading online video network on YouTube. Fox constitutes the third place of the biggest entertainment company followed by Time Warner, CBS and Viacom.

Figure 3: Industry competitors ordered by revenues in 2014



Source: Layout from Wall Street Journal

The entertainment and media industry is highly competitive, especially in the main business segments of Fox and Time Warner. The cable network programming segment competes for content and distribution with its main competitors Comcast and Walt Disney. After distribution is obtained, both companies compete for its viewership and advertisement with firms that are operating in the fields of television broadcasting, motion picture theaters, DVDs, Blu-rays and internet. The most relevant competitive factors are charged programming fees and the quantity, quality and variety of offered programming.

Another competitive segment is the network television broadcasting. Fox competes with other broadcast networks, television stations and cable as well as direct broadcast satellite firms. In addition, both companies face competition with broadcast networks and programming distribution services for affiliation fees and station agreements. Furthermore, they compete in motion picture production and distribution. The amount of films produced by the competitors may create an oversupply of products in the market, harming the company's success. Moreover, both companies are facing the risks associated with controlling piracy and copying of its programs and motion pictures (21st Century Fox 2014).

3.2 Analysis of 21st Century Fox

3.2.1 Business Segments

21st Century Fox, Inc., which was previously known as News Corporation, is described as a diversified media and entertainment company, which operates in five different industry segments: Cable Network Programming; Television; Filmed Entertainment; Direct Broadcast Satellite Television; and Other, Corporate and Eliminations. The company principally operates in the United States, Europe, the United Kingdom, Latin America and Asia.

Regarding the *Cable Network Programming*, Fox serves as a producer and licenser of general and business news, sports, entertainment and movie programming and distributes its channels through direct broadcast satellite companies, cable television systems, , telecommunications companies as well as online video distributors in the United States and the aforementioned continents. Its centerpieces in this segment are the channels FOX News and Fox Business Network. According to Nielsen Media Research, Fox News is one of the best rated 24/7 national news channel and is available in 96 million U.S. households. In comparison, FOX Business Network is currently available in nearly 79 million U.S. households. FOX News also broadcasts and produces a political commentary show, FOX News Sunday and FSN Fox Sports, which focuses on live professional team sports events. Furthermore, FOX News licenses news feeds through its web pages, FOXNews.com and FOXBusiness.com. Additionally, it produces the FOX News Radio Network that provides news and programs to radio stations and satellite radio providers in the United States.

Fox also provides general entertainment channels that broadcast a wide range of original and popular TV series, movies and documentaries. According to Nielsen Media Research, these channels are currently reaching around 100 million households in the United States. Moreover, Fox distributes its programming services through its webpages and applications in order to provide live and on-demand streaming of network-related programming. Fox internationally operates through Fox International Channels *("FIC")* by developing and distributing sports, factual, lifestyle and general entertainment channels in Europe, Asia, Latin America and Africa.

Concerning the *Television* segment, Fox owns and operates 28 television stations and is engaged in the broadcasting of network programming with which it reaches approximately 99% of the households with television in the United States.

In the *Filmed Entertainment* segment Fox operates and acquires action and animated motion pictures for the distribution and licensing in entertainment media and television programming. Fox constitutes one of the world's biggest producers and distributors of feature films and has an arrangement with DreamWorks Animation SKG, Inc. to distribute animated motion pictures domestically and internationally. In 2014, Fox approximately produced and acquired 1.249 movies in the United States and 1.004 releases in the international market with the aid of third parties arrangements. Through these arrangements, Fox generates license fees depending on the licensee's gross. Furthermore, Fox produces television programs for the major cable networks in the United States.

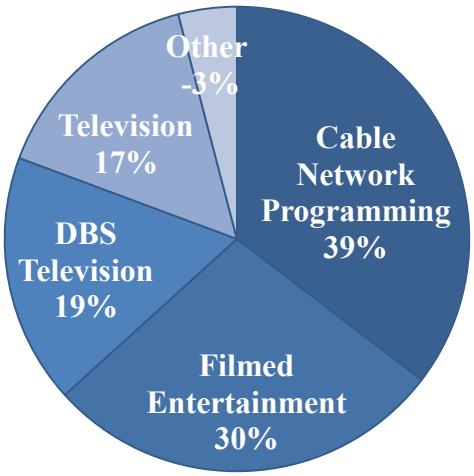
Concerning the *Direct Broadcast Satellite Television* segment, Fox was engaged in the broadcast service to its subscribers in Germany, Italy and Austria through its majority owned subsidiary Sky Deutschland as well as its wholly-owned subsidiary Sky Italia until July 2014. Nevertheless, Fox announced to sell its stake of the European DBS-TV platforms at the end of July 2014 to BSkyB (UK's leading entertainment and communications provider) of which it owns an equity interest of 39,1%. The deal could generate net after tax proceeds of around $7,2bn (James 2014). Furthermore, Fox owns equity interests of Hulu (online streaming service) and three international film production companies (21st Century Fox 2010-2014).

3.2.2 Financial Analysis

Fox states as its main purpose to create quality storytelling in order to connect the company on a personal level with its customers and to distinguish them from the competition. The company's aim is to balance its growth and its capital allocation with focus on returns. Fox's revenues increased 15,2% for the year 2014 compared to 2013. This was primarily due to increased affiliate and subscription fees as well as content and advertising revenues. The subscription fees mainly increased due to the effect of the consolidation of Sky Deutschland, whereas the increase

in affiliate fees resulted from higher rates per subscribers in Fox's channels. Furthermore, content revenues rose because of higher sales of television and motion pictures content, whereas advertising revenues were mainly attributable to the broadcast of the Superbowl in 2014 and the growing Cable Network Programming sector.

Figure 4: Revenues per Segment 2014



The *Cable Network Programming* business sector continued to increase Fox's financial performance in 2014. For the first time in the company's history, this sector surpassed $12bn in revenues, constituting a 12,8% increase over 2013. The main growth drivers were investments and acquisitions of newly launched sports and entertainment channels such as Fox Sports 1 and STAR Sports India. These investments in high-growth segments are substantial to guarantee future increases in revenues. Fox managed to stand out from its competitors through its new and established shows, its acquired sports rights and its high quality motion pictures.

Considering the *Filmed Entertainment* sector, revenues increased 12,0% ($1,04bn) compared to 2013. Fox launched critical shows that received great ratings and were nominated for 45 Emmys. Additionally, its successful series such as "Sons of Anarchy" and "American Horror Story" leveraged Fox's powerful brands and opened the possibility to create new programming experiences that connect the firm with its customers.

In the *Television* sector, Fox achieved a record viewership in 2014 and increased its revenues by 9,0% ($0,44bn) due to its newly acquired sports rights and launched series. For instance, the Fox

Soccer Channel grew in distribution of approximately 20 million households. Fox's centerpiece, the Fox News channel was the most watched cable news network in its twelfth consecutive year in the United States with a primetime audience higher than its three main competitors together.

The *Direct Broadcast Satellite Television* sector changed its strategy to a year round development cycle, which allows for launching new shows throughout the year rather than within a restricted timeframe. This led to a growth of 35,8% ($1,60bn) in 2014. Furthermore, investments in programming have been increased. Fox's television and film studios continued to increase the revenues by producing blockbusters and successful franchises. In the international market, the company focused on expansion of pay television and tried to satisfy the increasing demand for its entertainment content. In the international market, Fox could increase its customer base by 20% through 300 different channels in more than 180 countries. Particularly in Europe Fox experienced a period of growth with its 39% stake of Sky Deutschland and Sky Italia, which have been the leading companies in digital TV production.

The change in the *Other, Corporate and Elimination* sector of -23,0% was mainly due to intercompany transactions and the absence of revenues from Fox's digital media business.

Table 1: Revenues per segment Fox

Revenues in million $	2010	2011	2012	2013	2014	Ø growth
Cable Network Programming	7.038	8.037	9.324	10.881	12.273	-
% growth	14,8%	14,2%	16,0%	16,7%	12,8%	14,9%
Filmed Entertainment	7.631	6.899	8.363	8.642	9.679	-
% growth	28,6%	-9,6%	21,2%	3,3%	12,0%	10,3%
DBS Television	3.802	3.761	3.740	4.439	6.030	-
% growth	1,1%	-1,1%	-0,6%	18,7%	35,8%	9,9%
Television	4.228	4.778	4.803	4.860	5.296	-
% growth	4,4%	13,0%	0,5%	1,2%	9,0%	5,5%
Other	1.531	1.104	-1.179	-1.147	-1.411	-
% growth	-35,6%	-27,9%	-206,8%	2,7%	-23,0%	-
Publishing	8.548	8.826	-	-	-	-
% growth	4,7%	3,3%	-	-	-	-
Total Revenues	**32.778**	**33.405**	**25.049**	**27.675**	**31.868**	**-**
% growth	7,7%	1,9%	-25,0%	10,5%	15,1%	0,9%

Note: The geometric mean is used to calculate average growth rates.

Selling, general and administrative costs experienced an increase of 2,2% in 2014, compared to 2013 due to increasing costs in the Cable Network Programming and Direct Broadcast Satellite Television sector. The Cable Network Programming expenses increased primarily due to raising staff costs and the effect of Fox's acquisitions, whereas the increase in Direct Broadcast Satellite Television was due to the effect of the investment in Sky Deutschland. *Depreciation and amortization* increased approximately 43,3% in the year 2014 because of the investment in Sky Deutschland and the majority interest in the YES Network.

*Operating Expense*s increased by 20,6% due to increased costs of the Direct Broadcast Satellite Television ($1,49bn), Cable Network Programming ($1,07bn) and Filmed Entertainment ($0,98 bn) segment. The costs for the Direct Broadcast Satellite Television sector increased due to the consolidation with Sky Deutschland, while for the Cable Network Programming segment the increase was mainly due to higher programming costs. The increased costs of the Filmed Entertainment sector were attributable to an increase in production and participation costs. As a result, in 2014, Fox's *Operating Income* increased 2,8% compared to the previous year.

Table 2: Cost Structure and EBIT Fox

In million $	2010	2011	2012	2013	2014
Selling General & Admin Exp.	6.872	6.619	3.961	4.042	4.129
% growth	-55,3%	-3,7%	-40,2%	2,0%	2,2%
Depreciation & Amort.	1.185	1.191	711	797	1.142
% growth	4,1%	0,5%	-40,3%	12,1%	43,3%
Operating Expense	21.015	21.058	15.663	17.496	21.108
% growth	7,4%	0,2%	-25,6%	11,7%	20,6%
EBIT	**3.706**	**4.537**	**4.716**	**5.340**	**5.488**
% growth	165,6%	22,4%	3,9%	13,2%	2,8%

The *Net Interest Expenses* in 2014 increased 8,8% due to higher debt outstanding attributable to the investment in Sky Deutschland and the majority interest in the YES Network. Fox's *Income Tax* of 24,5% for the year 2014 was 7,5% lower than its usual rate of 35% due to tax deductions of the foreign operations and the effect of income related to non-controlling interests. As a result, Fox's *Net Income* decreased 36,4% in 2014 compared to the prior year mainly due to the absence of the revenues of the consolidation with Sky Deutschland recorded in 2013. Another reason was the sale of its stake in the pay-tv software company NDS.

Table 3: Net Interest Expenses, Tax and Net Income Fox

In million $	2010	2011	2012	2013	2014
Net Interest Expenses	900	840	955	1.006	1.095
% growth	7,7%	-6,7%	13,7%	5,3%	8,8%
Income Tax Expense	679	1.029	1.094	1.690	1.272
Tax Rate	18,7%	24,2%	24,5%	19,3%	24,5%
Net Income	**2.539**	**2.739**	**1.179**	**7.097**	**4.514**
% growth	175,2%	7,9%	-57,0%	502,0%	-36,4%

Considering Fox's Balance Sheet, total assets increased by 7,6% in 2014 compared to the prior year. This increase is mainly due to an increase of 10,1% of total liabilities, constituting a debt ratio of 61%, whereas total equity increased by 3,9%, representing 39% of the company's total assets in 2014. Concerning the financial ratios, Fox's liquidity increased, whereas its most liquid assets in relation to total liabilities decreased. Furthermore, the company's working capital decreased compared to 2013, while the company's leverage increased.

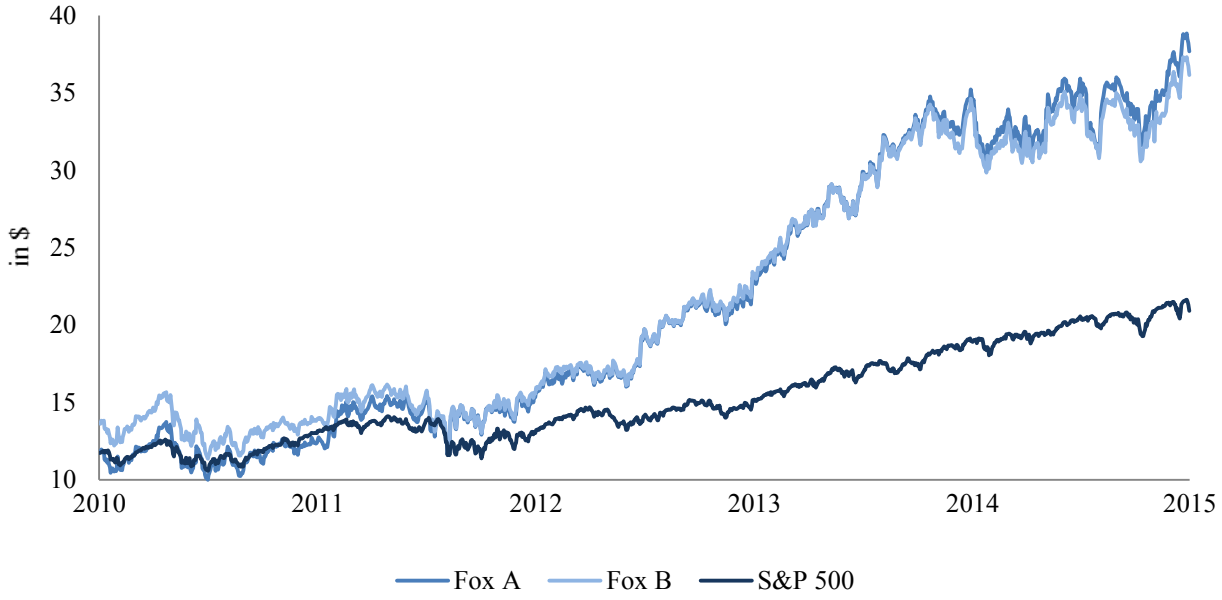
Table 4: Balance Sheet Analysis

BS in million $	2010	2011	2012	2013	2014
Total Assets	54.384	61.980	56.663	50.944	54.793
% growth	2,4%	14,0%	-8,6%	-10,1%	7,6%
Total Liabilities	28.518	31.091	30.837	30.300	33.351
% growth	-2,2%	9,0%	-0,8%	-1,7%	10,1%
Total Equity	25.866	30.889	25.826	20.644	21.442
% growth	7,9%	19,4%	-16,4%	-20,1%	3,9%
Financial Ratios & Metrics					
Current Ratio	1,69	2,46	2,03	1,62	1,82
Quick Ratio	1,76	2,03	1,75	1,52	1,39
Working Capital	9.162	12.213	9.831	7.132	6.520
Leverage Ratio	1,10	1,01	1,19	1,47	1,56

Figure 5 shows the stock price development of Fox's class A and class B shares from 2010 until 2014 compared to the S&P 500 Index, which was chosen as a market index. Class A shares constitute non-voting shares, whereas class B stocks carry voting rights. The total number of shares of 2,06bn consists of 60% class A shares and 40% class B shares. Fox's chairman Rupert Murdoch and his family own a 12% equity stake of the company, which gives them control of around 40% of Fox's voting rights (Damouni & Baker 2015).

Fox's stocks clearly outperformed the S&P 500 index from mid-2011 until the end of 2014. The stock price increased steadily from mid-2011 until the beginning of 2014, in which the price was more volatile compared to the prior years. In 2014, the share price of class A stocks increased 8,6% in line with an increase of 6,1% of class B shares. From 2010 until the beginning of 2014 class B shares were traded with premium in relation to class A shares. However, in 2014 class A shares surpassed class B shares, although they do not carry voting rights.

Figure 5: Stock Price Fox in comparison to the S&P 500 from 2010-2014



Note: The S&P 500 Index was normed to the stock price of Fox's class A shares as of 01/01/10 to make it comparable.

3.3 Analysis of Time Warner

3.3.1 Business Segments

Time Warner Inc. constitutes one of the leading media and entertainment companies and operates in the following four business segments: Turner, which mainly consists of digital media properties and cable networks; Home Box Office, which includes premium pay television services in the United States and internationally; Warner Bros. that principally consists of the production and distribution of movie, home video, television and videogame; Time Inc., which was spun-off (06/06/14) and mainly consists of magazine publishing.

The *Turner* business segment, including its wholly-owned cable networks and digital media properties, generates revenues by providing programming services to satellite service distributors, cable system operators, telephone companies as well as other distributors. These long-term agreements provide for annual service fees, sales and advertising fees and for fees that are connected to the number of subscribers in the domestic market. Turner's programming content focuses on premiere sports, news, original series, motion pictures and animation. The company also focuses on expanding it networks to digital platforms, in order to provide customers on-demand access to Turner's programming. Moreover, Turner produces own programs such as CNN and additionally acquires programming. Its content reaches around 100 million households in the United States. Turner also provides its programming services to households and hotels in around 200 countries in Europe, Asia and Latin America.

The *Home Box Office* segment provides premium pay television services in the domestic and international market through its multi-channel HBO and the Cinemax premium pay television. The company currently provides its programming to around 127 million subscribers worldwide; 43 million customers domestically and 84 million internationally in more than 60 countries in Europe, Latin America and Asia. HBO also generates its revenues through annual service fees and fees connected to the number of subscribers. Furthermore, it realizes revenues by selling its original programming in form of DVDs, Blu-ray's and the licensing of its content to international television networks. Additionally, Home Box Office provides on demand streaming content via HBO GO and MAX GO, which is distributed on mobile devices and online platforms. Another source of revenues is the exploitation of original programming through multiple distribution

channels. HBO constitutes the most widely distributed premium pay television service and is known for its award-winning original series.

Furthermore, Time Warner produces and distributes motion pictures, television programming and video games through the leading television production and distribution company *Warner Bros*. The company distributes its feature films domestically and in 125 other countries. Its revenues are mainly generated by the theatrical exhibition of the produced or licensed feature films in the 2D and 3D format. Another source of revenues represents licensing fees from the distribution of movies on television networks as well as pay-tv programming services. Additionally, Warner Bros. generates revenues through the development and distribution of video games in console and digital formats.

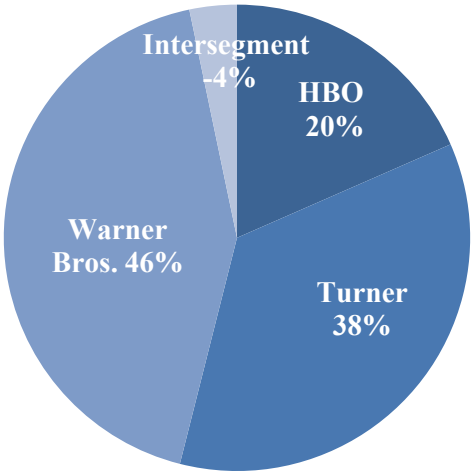
Time Warner's publishing business *Time Inc.*, which constitutes the biggest magazine publisher in the United States, was spun off in order to counteract its experienced declines and to position the company as the world's leading film content company. Before the spin-off in 2014, Time Inc. generated its revenues principally from advertising, subscription sales and newspaper stand sales.

Other Television Network Assets consists of a joint venture between Warner Bros. and CBS Corporation. (Time Warner 2010-2014).

3.3.2 Financial Analysis

In 2014, Time Warner experienced an increase in its revenues of 3,4% primarily due to the absence of the losses generated of its publishing business Time Inc. Additionally, the company generated higher revenues through subscription and advertising of its three main business segments Warner Bros., HBO and Turner.

Figure 6: Revenues by business segment 2014



For 2014, the revenues of the *Turner* business segment increased 4,1% compared to 2013, mainly due to higher subscription and advertising revenues. Its leading cable networks such as CNN, TNT, TBS, Cartoon Network, Adult Swim, Boomerang, truTV and Turner Sports continued to increase its customer base and its primetime ratings. In sports, Tuner additionally extended its content partnership with the NBA, guaranteeing an increase in advertising revenues.

The revenues for the *Home Box Office* sector increased 10,4% in fiscal 2014 due to higher subscription and content revenues. HBO was able to increase the revenues through creating and delivering groundbreaking original programming to its customers around the world on different platforms. This segment experienced the highest increase in the number of domestic subscribers in 2014 and won an award for the most watched HBO original series in its history, called "Game of Thrones". Furthermore, Time Warner expanded its programming through HBO GO and MAX GO and offered additional ways to enjoy its original content.

Warner Bros. increased its revenues in 2014 by 4,1%, primarily due to higher television product, and videogames revenues, which were partly offset by lower theatrical product revenues. Nevertheless, Warner Bros. released highly successful blockbusters such as "American Sniper" and its television group was the industry leader in 2014. The *Intersegment Elimination* primarily includes the Warner Bros. segment revenues, generated by licensing television and theatrical programming to the Turner and HBO segments. The recorded transactions decreased

approximately 32.7% in 2014 compared to 2013. The high revenues of this segment before 2013 are due to revenues generated by Time Inc. The publishing segment is not recorded anymore so that the revenues were distributed to Intersegment Elimination.

Table 5: Revenue per segment Time Warner

Revenues in million $	2010	2011	2012	2013	2014	Ø growth
Home Box Office	4.108	4.498	4.686	4.890	5.398	-
% growth	10,9%	9,5%	4,2%	4,4%	10,4%	7,8%
Turner	8.372	9.166	9.527	9.983	10.396	-
% growth	10,9%	9,5%	3,9%	4,8%	4,1%	6,6%
Warner Bros	11.622	12.638	12.018	12.312	12.526	-
% growth	5,0%	8,7%	-4,9%	2,4%	1,7%	2,5%
Intersegment Elimination	3.675	3.667	3.436	-724	-961	-
% growth	-1,6%	-0,2%	-6,3%	-121,1%	32,7%	-
Corporate	-889	-995	-938	-	-	-
% growth	33,3%	11,9%	-5,7%	-	-	-
Total Revenues	**26.888**	**28.974**	**28.729**	**26.461**	**27.359**	-
% growth	5,9%	7,8%	-0,8%	-7,9%	3,4%	1,5%

Note: The geometric mean is used to calculate average growth rates.

The *Cost of Goods Sold* for Time Warner increased 6,3% in 2014, mainly due to higher production costs in all three business segments. *Selling, general and administrative expenses* increased 5,1% in 2014 mainly attributable to increases in personnel costs at the Turner segment. *Depreciation and Amortization* expenses decreased 3,3% in 2014. Consequently, Time Warner's *Operating Income* for 2014 decreased 4,7% mainly due to decreases in the Turner and Warner Bros. segments, which were partially offset by an increase in the HBO segment.

Table 6: Cost Structure Time Warner

In million $	2010	2011	2012	2013	2014
Cost Of Goods Sold	15.023	16.311	15.934	14.935	15.875
% growth	5,5%	8,6%	-2,3%	-6,3%	6,3%
Selling, General & Admin Exp.	6.173	6.589	6.629	5.049	5.307
% growth	-3,6%	6,7%	0,6%	-23,8%	5,1%
Depreciation & Amort.	264	269	248	209	202
% growth	-5,7%	1,9%	-7,8%	-15,7%	-3,3%
EBIT	**5.428**	**5.805**	**5.918**	**6.268**	**5.975**
% growth	21,4%	6,9%	1,9%	5,9%	-4,7%

In 2014, the company's *Interest expenses* decreased 1,7% attributable to higher interest income of $92mio. Time Warner experienced a decrease in *Income tax* from 32,1% in 2013 to 16,5% in 2014. This change was principally due to a tax benefit attributable to the reversal of tax reserves in connection with a Federal tax settlement. As a result, Time Warner's *Net Income* increased by 3,7% primarily related to the revenue increase of HBO and the 15,6% decrease of the Income Tax.

Table 7: Net Interest Expense, Tax and Net Income Time Warner

In million $	2010	2011	2012	2013	2014
Net Interest Exp.	1.178	1.210	1.253	1.189	1.169
% growth	1,0%	2,7%	3,6%	-5,1%	-1,7%
Income Tax Expense	1.348	1.484	1.526	1.614	785
Tax Rate	34,4%	34,0%	34,3%	32,1%	16,5%
Net Income	**2.578**	**2.886**	**2.925**	**3.691**	**3.827**
% growth	4,1%	11,9%	1,4%	26,2%	3,7%

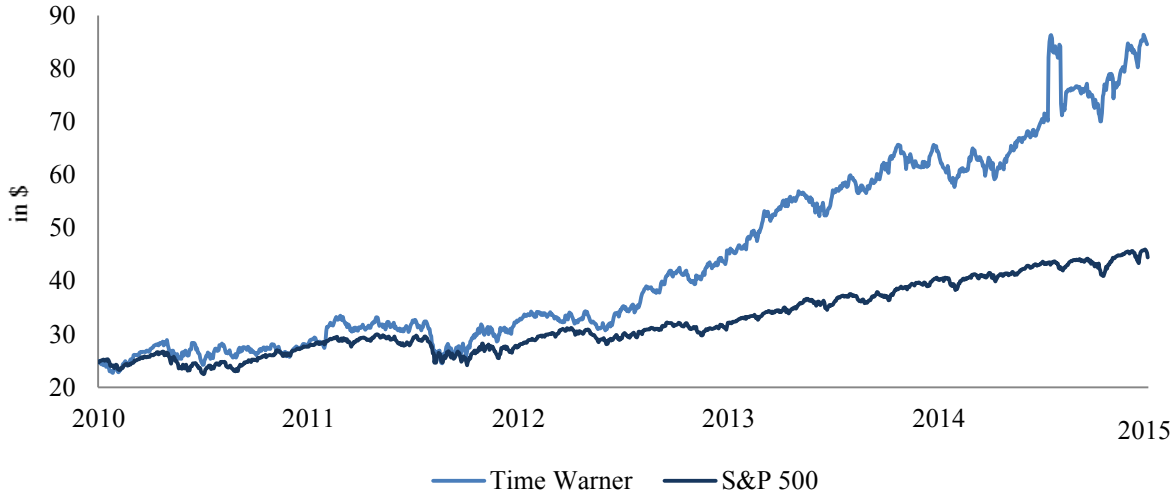
Time Warner's total assets in 2014 decreased 7,0% compared to 2013 due to a decrease of total equity by 18,2%. The decrease in total equity is mainly due to a $5bn stock buyback. In comparison, total liabilities increased by 1,8%. The equity ratio in 2014 is at 39%, whereas the debt ratio constitutes 61%. Regarding the financial ratios, Time Warner's liquidity decreased in 2014, whereas its leverage increased significantly due to the above described decrease in total equity.

Table 8: Balance Sheet Analysis Time Warner

BS in million $	2010	2011	2012	2013	2014
Total Assets	66.707	67.801	68.089	67.999	63.259
% growth	1,0%	1,6%	0,4%	-0,1%	-7,0%
Total Liabilities	33.762	37.847	38.292	38.095	38.783
% growth	3,4%	12,1%	1,2%	-0,5%	1,8%
Total Equity	32.945	29.954	29.797	29.904	24.476
% growth	-1,4%	-9,1%	-0,5%	0,4%	-18,2%
Financial Ratios & Metrics					
Current Ratio	1,51	1,51	1,35	1,49	1,43
Quick Ratio	1,29	1,29	1,15	1,30	1,25
Working Capital	4.495	4.510	3.465	4.143	3.976
Leverage Ratio	1,02	1,26	1,29	1,27	1,58

Considering the stock price of Time Warner, the company highly outperformed its market benchmark, the S&P 500 index. From 2010 until June 2014 Time Warner's share price increased significantly until it experienced a drop of its stocks of 11,9% after the withdraw of Fox's bid to acquire the company. Nevertheless, the share price at the end of 2014 is almost four times as high as in 2010. In 2014, Time Warner generated a stock price return of 31,9%.

Figure 7: Stock Price Time Warner in comparison to the S&P 500 from 2010- 2014



Note: The S&P 500 Index was normed to the stock price of Time Warner as of 01/01/10 to make it comparable.

3.4 Deal Rationale

Fox, as one of the biggest global media corporations primarily relies on affiliate broadcasting fees, its subscriber base, advertising fees and content licensing revenues. It is widely known for its incomparable original content and operates in comparison to its competitors in virtually every segment and medium of entertainment channels through the Fox group. Fox owns rights for successful motion pictures such as "Avatar" and for television as well as online series such as "Homeland", undermining the broad landscape in which the company performs.

Its diverse offerings in the entertainment ecosystem reach from content programming to distributing, generating revenues through many different entertainment branches. Through its

diverse assets, Fox gains an advantage over its competitors of which only few are able to offer such a wide spectrum of entertainment content.

Nevertheless, its success highly depends on the ability of distributing its contents through different channels and satisfying the customer demand of having access to these contents any time and at any place. Due to the fact that affiliate, advertising and subscription fees contributed to approximately 70% of its total revenues in 2014, Fox's long term success is expected to be highly relied to its capability to offer its original content on new platforms. As a result of its arrangements with and acquisitions of other companies in the entertainment industry, Fox owns 100% of FOX Deportes in Latin American and of an Indian broadcaster. Moreover, the company has a majority stake in the YES Network, which owns broadcasting rights for domestic sports events. Consequently, Fox has been able to maintain its position of a global player in the entertainment industry.

However, companies which are operating in the entertainment industry are seeking out more innovated distribution models in order to satisfy their customer's demand of an online availability of digital content. Online streaming service companies like Netflix emphasize this shift and are creating major risks for companies like Fox due to cost issues and the necessarily constant investment in new technologies.

In comparison to Fox, Time Warner owns with HBO the world's most successful pay-tv service that reaches approximately 114 million subscribers. Time Warner creates high-quality content in its operating entertainment sectors such as television and film and has developed a successful reputation. HBO plays a major role for Time Warner's strong reputation in the entertainment industry and is a main factor for its strong customer base.

Furthermore, its award winning film productions such as "The Hobbit" and its high rated TV series has led to the strong position of Time Warner in the entertainment landscape. The major contributor to its financial success is Time Warner's diversified operations, since they are attracting a bride scope of customers. Time Warner has been able to adjust successfully to the changing entertainment industry by the spin-offs of AOL, Time Warner Cable and Time Inc., which were generating decreasing revenues. The spin-offs have allowed Time Warner to focus on its major business segments such as film and television content and have contributed to a stable and improved growth.

Nevertheless, Time Warner still has to deal with declines in sales revenue over the last couple of years but maintains its opportunities for growth concerning movie and television content in the international markets of Asia Pacific, Latin America, and Eastern Europe. Time Warner is also subject to a highly competitive situation with the online streaming industry. Due to smaller subscription and monthly fees of streaming companies like Netflix or Vudu, Time Warner needs to continue to produce unique, high-quality content to avoid a decreasing subscriber base. (Time Warner 2014).

Fox, as well as Time Warner are two giants in the entertainment industry which are widely famous for their original content. Due to the rapid consolidation of both companies' distributors such as the acquisition of Time Warner cable by Comcast and the acquisition of DirecTV by AT&T, they face the risk of losing negotiation power of the fees for carriage of their channels. The combination of Time Warner and Fox would allow both companies to reduce these fees and would guarantee to assemble the right mix of assets in order to not lose their position as part of the biggest companies in the industry. Fox would profit from the strong pay-tv service HBO of Time Warner and would provide its highly profitable cable portfolio including the Fox News channel. Furthermore, Fox would boost its revenues by receiving control of rights to big sports events such as the NBA basketball tournament. These events are commonly watched live and serve as a big platform for advertisement, which is mostly skipped while watching TV (Sharma et al. 2014).

The merger would additionally create a leading position in film and TV production due to the ability of producing and owning TV content at the same time rather than licensing it to cable and broadcast companies. By producing and owning content, both companies would be able to boost its revenues through licensing its shows to international channels and online streaming providers, reducing the competitive risk by these companies. Another advantage of a combined company would be the ability to improve and boost Time Warner's streaming service HBO GO, by adjusting its fees to a level of its strongest competitors in this business segment such as Netflix and providing the streaming service with more original high-quality content of both companies, Fox and Time Warner. This would be an important step towards the changing customer demand of having available entertainment content online through any internet-connected device.

Additionally, both companies could profit from its different operations in international markets. Fox has a strong customer base in Latin America and Time Warner is boosting its operations in China; two markets with a high prospected growth rate in the entertainment industry. The deal would also create high cost savings for both companies, mainly by cutting sales staff and back-office functions and would enormously increase the revenues. Nevertheless, Fox and Time Warner would keep its most creative executives and successful managers, as well as their channels and studios, since they seem to be too valuable for the combined company's success (Sorkin & de la Merced 2014).

Nonetheless, the deal could be subject to antitrust and more regulatory issues than comparable deals due to the fact that both companies are direct competitors in the TV and film business. This horizontal merger highly reduces competition in the entertainment industry, but both film and television production are moderately concentrated industries. Fox and Time Warner constitute the largest movie producers concerning revenues, with a 19% market share of Fox and around 17% of Time Warner in 2014 (Stewart 2014). In the television sector, five producers account for 85% of the market (IBISWorld), so that the competition issue of the deal would be less drastic due to the relatively low market share of Fox (9%) and Time Warner (11%) (Kim & Baker 2014). However, the deal would face intense regulatory scrutiny concerning the fact that the merged company would own Fox News (21st Century Fox) and CNN (Time Warner) at the same time. Those news channels constitute the biggest in the United States, so that regulators will probably not allow keeping them both under the same roof. In order to avoid potential antitrust concerns of regulation authorities as well as advertiser, the merged company needs to sell one of the news channels to another company, which would probably be the less successful news provider CNN. According to Bloomberg, the estimated value of CNN in 2014 was around $6 bn and could be sold with a premium to CBS or ABC, which are considered as interested suitors (Grobart 2014). Concerning other issues of the deal, experts with knowledge of the companies' strategies do not expect more concerns, except in cable news, although the combined firm would own a high volume of content and would increase its power over the production landscape (Stewart 2014).

4. Valuation of 21st Century Fox and Time Warner

4.1 Multiple Valuation

One form to find a proxy for a company's enterprise value is the multiple valuation. The first step of using this method is to define a peer group. In this case the peer group consists of eight companies including Fox and Time Warner. The remaining six companies are: Comcast, Walt Disney, CBS Corp., Viacom, Discovery Communications and Liberty Interactive Corp., which are all specified in the entertainment and media landscape. Another selection criterion is the amount of realized revenues in 2014, ranging from $10,50bn (Liberty Interactive Corp.) to $68,78bn (Comcast), and the similarity of the chosen multiples for 2014. The applied multiples consist of Enterprise Value divided by Sales (EV/Sales), Enterprise Value in relation to EBITDA and EBIT (EV/EBITDA and EV/EBIT). These multiples are defined by expressing the value of an entire enterprise in relation to a statistic, which is connected to the entire enterprise. Additionally, the Price Earnings Ratio (Market Value per Share / Earnings per Share) was applied, which constitutes an equity multiple that expresses the value of shareholders claims on the assets and cash flow of the business. The next step is to estimate an average of the above described multiples and to multiply them by the underlying companies' statistics (Sales, EBITDA or EBIT).

Table 9: Multiples Peer Group

Companies	EV/Sales	EV/EBITDA	EV/EBIT	PER
21st Century Fox	2,57	11,75	14,90	19,50
Time Warner Inc.	3,31	14,08	15,14	18,74
Walt Disney Co	4,14	13,43	16,49	23,62
Discovery Communications	4,59	8,68	13,97	18,35
Viacom Inc.	2,88	11,70	9,78	11,90
Liberty Interactive Corp	1,74	10,67	15,15	30,56
CBS Corp	2,75	12,28	13,50	20,45
Comcast Corp	2,78	8,33	12,82	20,00
Average	**3,09**	**11,37**	**13,97**	**20,39**

Note: Multiples are computed based on data as of 31/12/14.

As a result, the enterprise value is obtained. For the PER, the peer average has to be multiplied by the Earnings per Share (EPS) of the underlying company times the number of shares to estimate

the equity value. By adding up the amount of cash and subtracting the debt amount from the enterprise value, the equity value is estimated. The last step is to divide the equity value by the shares outstanding to compare the current share price of Fox and Time Warner with its estimation by using valuation multiples. For Fox, the Equity Value (as of 22/05/15) constitutes $70,36bn. Concerning the multiple valuation, the equity value of 21st Century Fox varies between $64,07bn and $85,99bn. The EV/EBITDA and EV/EBIT seem to underestimate the value of the company, whereas the EV/Sales Multiple and PER may overestimate the firm value regarding the market value of equity.

Table 10: Multiple Valuation Fox

In million $	EV/Sales	EV/EBITDA	EV/EBIT	PER
Fox				
Enterprise Value	98.589	79.119	76.661	79.822
Cash	6.468	6.468	6.468	6.468
Debt	19.058	19.058	19.058	19.058
Equity Value	85.999	66.529	64.071	67.232
# Shares	2.057	2.057	2.057	2.057
Share Price in $	**41,81**	**32,34**	**31,15**	**32,68**

In contrast, the current market cap of Time Warner is $70,25bn. By using market multiples, the equity value of Time Warner varies between $50,36bn and $64,77bn. The implementation of the multiple valuation method based on the enterprise value seems to highly underestimate the company value compared to the market value as of 22/05/2015.

Table 11: Multiple Valuation Time Warner

In million $	EV/Sales	EV/EBITDA	EV/EBIT	PER
Time Warner				
Enterprise Value	84.642	73.025	83.464	70.233
Cash	2.618	2.618	2.618	2.618
Debt	22.494	22.494	22.494	22.494
Equity Value	64.766	53.149	63.588	50.357
# Shares	830	830	830	830
Share Price in $	**78,03**	**64,04**	**76,61**	**60,67**

In general, the implementation of multiples to value a company can provide useful information about the relative value of the firm, if they are used in a proper way. Its simplicity and focus on key statistics also can be considered as an advantage. Nevertheless, valuation multiples only serve as a proxy for the company value, so that additional valuation methods such as the DCF approach may be helpful. Furthermore, valuation multiples are difficult to compare due to the fact that they can differ for many reasons (Suozzo et al. 2001).

4.2 Discounted Cash Flow Valuation

The discounted cash flow valuation of Fox and Time Warner is based on data from the companies' annual reports and the Bloomberg database for the years 2010 to 2014. For the following eleven years (until 2025) the income statement is forecasted with focus on past data as well as micro- and macroeconomic factors. In order to predict the values for the years after 2014, both companies' revenue streams are split up in its different sectors in order to determine growth rates for each of these segments. As a next step, the revenue for both companies for the year 2015 is forecasted by using the average growth rates of the previous five years.

The growth rates of Fox for the following years underlie several different assumptions. The *Cable Network Programming* sector is expected to decrease 3% in 2016 and 2% until 2019 from its average of 14,9% in 2015. For the next three years the growth rate is assumed to decrease 100 basis points until 2021. From this year onwards it stays at its sustainable growth rate of 3,9%, moderately higher than the expected World GDP growth rate of 3,3%. The reason for determining the growth at this rate is Fox`s aim to reach even more than 96 million US households in the following years through its cable networks. In 2014, the United States had around 318,9 million habitants with an expected growth rate of around 0,8% for the following years (US Census Bureau 2015). According to Nielsen (2013), there are 115,6 million households in the United States that have a television, constituting an increase of 1,2% compared to the year before. Due to this, Fox has a lot of potential concerning the growth of this particular business sector by acquiring more clients for its sports and news channels. By doing so, Fox may be able to increase its revenues through raising its licensing and subscribing fees.

The growth rate for the *Filmed Entertainment* area is expected to decrease at a rate of 1% from its average until 2022 to a substantial growth rate of 4,1%. This segment is described as a centerpiece of Fox and constitutes a surety for its revenues, which may be increased by exploring more international markets such as Latin America and Asia. Consequently, Fox may be able to license its high quality films to more cinemas and TV channels around the world.

Concerning the *Direct Broadcast Satellite Television* sector, the company is expected to realize a decreasing growth of 1% for the years 2016 and 2017 from its five year average of 10,8%. The sustainable growth rate of 2,8% is assumed to be reached in 2023. The revenue growth of 10,8% in 2015 is highly related to Fox's high reputation and strong customer base in the United States. Nevertheless, the growth is expected to decrease significantly due to the sale of the company's stakes in Sky Deutschland and Sky Italy. According to IbisWorld (2014), the satellite television segment is in the mature phase of its life cycle. Due to increasing competition of streaming content providers, the subscriber base in this segment is decreasing so that the cost of acquiring and maintaining subscribers has increased. For these reasons the sustainable growth rate is assumed to be relatively low.

In comparison, the *Television* segment growth rate is expected to increase 1% in the first two years and decrease 1% each year from 2018 to 2021 from its average. Afterwards, it stays at a constant level of 3,6% until 2025. The reasoning behind this growth is similar as for the Cable Network Programming sector. Fox reaches around 96 mllion US households, so that an increased attraction of clients could be achieved until the customer base in this market is saturated. Furthermore, *Other* business segments are assumed to decrease at a rate of 50%.

Table 12: Revenues per segment in million $ of Fox

Forecast	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Ø
CNP	14.102	15.779	17.341	18.711	19.815	20.785	21.596	22.438	23.313	24.221	25.166	-
% growth	14,9%	11,9%	9,9%	7,9%	5,9%	4,9%	3,9%	3,9%	3,9%	3,9%	3,9%	6,7%
Filmed Ent.	10.754	11.840	12.918	13.965	14.957	15.870	16.680	17.364	18.077	18.819	19.591	-
% growth	11,1%	10,1%	9,1%	8,1%	7,1%	6,1%	5,1%	4,1%	4,1%	4,1%	4,1%	6,6%
DBS	6.681	7.336	7.982	8.605	9.190	9.723	10.190	10.578	10.874	11.179	11.492	-
% growth	10,8%	9,8%	8,8%	7,8%	6,8%	5,8%	4,8%	3,8%	2,8%	2,8%	2,8%	6,0%
Television	5.593	5.963	6.417	6.841	7.225	7.558	7.831	8.114	8.407	8.711	9.025	-
% growth	5,6%	6,6%	7,6%	6,6%	5,6%	4,6%	3,6%	3,6%	3,6%	3,6%	3,6%	5,0%
Other	-706	-353	-176	-88	-44	-22	-11	-6	-3	-1	-1	-
% growth	-50,0%	-50,0%	-50,0%	-50,0%	-50,0%	-50,0%	-50,0%	-50,0%	-50,0%	-50,0%	-50,0%	-50,0%
Tot. Rev.	**36.424**	**40.566**	**44.482**	**48.034**	**51.143**	**53.915**	**56.286**	**58.489**	**60.668**	**62.929**	**65.274**	**-**
% growth	14,3%	11,4%	9,7%	8,0%	6,5%	5,4%	4,4%	3,9%	3,7%	3,7%	3,7%	6,7%

Note: The geometric mean is used to calculate average growth rates.

In contrast, Time Warner displays the growth rates for the years 2015 until 2020 as follows: The *Home Box Office* segment is expected to increase 2% from its average until 2018. After this, the growth rate is expected to decrease 2% until 2022 and reaches its sustainable growth rate of 5,9%. Due to its strong potential, particularly in the streaming service sector, Time Warner may be able to reach such a high growth rate for the following years. Additionally, the company may boost its supply of HBO in emerging markets such as Asia, where the demand of international movies and TV series is significantly increasing.

Time Warner`s business sector *Turner* provides its channels to around 100 million households in the United States and to clients in 200 countries around the world. Due to its high potential, the growth rate is assumed to be constant at its average of 6,7% until 2020. From 2020 to 2023 this segment is assumed to decrease 1% until the sustainable growth rate of 3,7% is achieved. This growth rate takes into consideration the opportunity to provide its entertainment content to more households domestically and in the international market. By increasing the number of its long-term agreements with cable providers, the company may receive higher service, sales and advertising fees as well as fees generally related to the number of subscribers.

In comparison, *Warner Bros.* average growth rate accounts for 2,6% and is assumed to increase 100 basis points until 2019. Afterwards, it is predicted to decrease to a sustainable growth rate of 3,6% in 2022. Warner Bros is expected to grow at a lower rate compared to the aforementioned two segments due to the fact that revenues from the video games productions as well as theatrical

product revenues are assumed to grow moderately. Revenues through *Intersegment Elimination* are expected to decrease at a constant rate of the five year average.

Table 13: Revenues per Segment in million $ of Time Warner

Forecast	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Ø
HBO	5.822	6.397	7.155	8.147	9.114	10.013	10.800	11.433	12.103	12.813	13.564	-
% growth	7,9%	9,9%	11,9%	13,9%	11,9%	9,9%	7,9%	5,9%	5,9%	5,9%	5,9%	8,7%
Turner	11.087	11.825	12.611	13.450	14.344	15.298	16.163	16.914	17.532	18.172	18.835	-
% growth	6,7%	6,7%	6,7%	6,7%	6,7%	6,7%	5,7%	4,7%	3,7%	3,7%	3,7%	5,6%
Warner	12.853	13.317	13.930	14.712	15.537	16.253	16.840	17.447	18.077	18.729	19.405	-
% growth	2,6%	3,6%	4,6%	5,6%	5,6%	4,6%	3,6%	3,6%	3,6%	3,6%	3,6%	4,1%
Interseg.	-961	-776	-626	-505	-408	-329	-265	-214	-173	-140	-113	-
% growth	-19,3%	-19,3%	-19,3%	-19,3%	-19,3%	-19,3%	-19,3%	-19,3%	-19,3%	-19,3%	-19,3%	-19,3%
Tot. Rev.	**28.802**	**30.763**	**33.071**	**35.804**	**38.588**	**41.235**	**43.537**	**45.581**	**47.540**	**49.575**	**51.692**	**-**
% growth	5,3%	6,8%	7,5%	8,3%	7,8%	6,9%	5,6%	4,7%	4,3%	4,3%	4,3%	6,0%

Note: The geometric mean is used to calculate average growth rates.

Concerning the cost structure of both companies, expenses for the year 2015 are predicted by calculating the five year average of the percentage of total cost related to generated revenues. *Selling, general and administration expenses* for Fox are assumed to stay constant at its average of 16,8% for the entire time period. The company shows a permanently decreasing rate for those costs since 2009 so that the average is already at a low level and is therefore expected to vary in the same way than the revenues. *Depreciation and Amortization* expenses are calculated in relation to net fixed assets.[1] *Other operating expenses* are expected to stay at a constant level of its average of 64,8% due to only slight changes in the years before. As a result, Fox's *Total Expenses* related to total revenues stays at a level of 84,5%.

Compared to Fox, the average of Time Warner's *Cost of goods sold* in relation to total revenues of 56,9% is expected to decrease approximately 100 basis points in 2015 to a substantial ratio of 55,9%. Due to the company's spin-off of Time Inc. 2014, Time Warner is expected to realize cost savings of personnel and administration in 2015. For the same reasons, the company's *selling, general and administration expenses* are assumed to decrease around 200 basis points from its average to 19,5% in 2015. *Depreciation and amortization* are estimated in the same way as for

[1] Detailed Calculation in Appendices 6-7 & 10-11.

Fox. Time Warner's *Total Expenses* as a percentage of total revenues are assumed to stay constant at a level of 76,2%.

Table 14: Total Expenses Fox & Time Warner

Tot. Exp.	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Fox	30.787	34.288	37.598	40.600	43.228	45.571	47.575	49.437	51.279	53.190	55.172
% of revenues	84,5%	84,5%	84,5%	84,5%	84,5%	84,5%	84,5%	84,5%	84,5%	84,5%	84,5%
Time Warner	21.958	23.453	25.213	27.297	29.531	31.674	33.564	35.136	36.643	38.209	39.838
% of revenues	76,2%	76,2%	76,2%	76,2%	76,2%	76,2%	76,2%	76,2%	76,2%	76,2%	76,2%

By subtracting the total expenses from total revenues, the *Operating Income* is estimated for both companies and is further used to calculate the free cash flows to the firm. Fox's *EBIT* is expected to experience a high growth in 2016. From 2016 onwards EBIT is assumed to decrease constantly to a substantial growth of 3,7% compared to the World GDP growth of 3,3%. Time Warner's EBIT is expected to turn highly positive in 2015 and decrease to a substantial growth of 4,3% in 2023.

Table 15: Forecast EBIT

EBIT	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Fox	5.637	6.278	6.884	7.434	7.915	8.344	8.711	9.052	9.389	9.739	10.102
% growth	2,7%	11,4%	9,7%	8,0%	6,5%	5,4%	4,4%	3,9%	3,7%	3,7%	3,7%
Time Warner	6.843	7.309	7.858	8.507	9.204	9.872	10.460	10.950	11.420	11.908	12.416
% growth	14,5%	6,8%	7,5%	8,3%	8,2%	7,3%	6,0%	4,7%	4,3%	4,3%	4,3%

Interest expenses as well as *interest income* are expected to stay at a constant level for both companies due to an assumed unchanged debt level. *Non-operating income (expenses)* is again calculated by estimating the five year average percentage of its relation to total revenues. Due to the fact that both companies do not have positions considering other financial items, they are not considered for the following years. In order to project a reasonable tax rate for both companies, the five year average of the prior years is considered to be suitable for the following years. Consequently, the projected *Tax Rate* of Fox is 22,2%, while Time Warner has a predicted *Tax Rate* of 30,3%. Moreover, *extraordinary item and minority interest in earnings* is predicted by calculating the average of the absolute values, due to the fact that both companies did not possess a value for these two positions in every year, so that a perceptual average growth rate cannot be taken into consideration.

As a result, the predicted growth rates for the positions of Fox's income statement lead to an increase in its *Net Income* of 53,8% from $4,51bn in 2014 to $6,94bn in 2025. This development is mainly due to the aforementioned expected increasing revenues of the company. Compared to this, Time Warner's *Net Income* is predicted to increase approximately 100,4% from $3,83bn in 2014 to $7,77bn in 2025.

Table 16: Net Income Forecast

Net Income	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Fox	3.709	4.177	4.620	5.021	5.369	5.678	5.941	6.184	6.426	6.678	6.941
% growth	-17,8%	12,6%	10,6%	8,7%	6,9%	5,8%	4,6%	4,1%	3,9%	3,9%	3,9%
Time Warner	3.886	4.202	4.575	5.015	5.488	5.941	6.341	6.674	6.992	7.324	7.668
% growth	1,5%	8,1%	8,9%	9,6%	9,4%	8,3%	6,7%	5,2%	4,8%	4,7%	4,7%

The next step to value both companies is to determine the free cash flows and to discount them by the cost of capital of each firm as explained in section 2.1. First of all, the capital expenditures[2] for the firms are computed by using the following formula:

$$(7) \quad CAPEX = Net\ fixed\ assets_t - Net\ fixed\ assets_{t-1} + Depreciation_t$$

Depreciation and amortization may be calculated as explained before, whereas the change in net working capital of Fox and Time Warner is predicted by calculating the five year average of its relation to total revenues. This relation is kept constant for the following years and amounts for 0,7% considering Fox and 1,8% regarding Time Warner. The FCFF are calculated by applying formula (1) of section 2.1.

As a next step, the average asset beta needs to be estimated in order to estimate the discount rate (WACC) of the FCFF. Fox's and Time Warner's peer group is chosen for the same reasons than explained in section 4.1.

[2] Detailed Calculation in Appendices 6-7 & 10-11.

Table 17: Average Asset Beta Estimation

Companies	Market Cap (million $)	Raw Beta	Tax Rate	Debt/Equity	Asset Beta
21st Century Fox	70.356	1,00	25%	0,29	0,82
Time Warner Inc.	70.250	0,99	17%	0,32	0,78
Comcast Corp	146.760	1,22	31%	0,29	1,02
Walt Disney Co	187.080	1,15	35%	0,06	1,11
CBS Corp	30.510	1,19	35%	0,22	1,04
Viacom Inc.	26.540	1,19	30%	0,44	0,91
Discovery Communication	20.860	1,12	35%	0,33	0,92
Liberty Interactive Corp	13.490	1,23	31%	0,27	1,04
				Ø	0,95
21st Century Fox				0,29	**1,16**
Time Warner Inc.				0,32	**1,21**

The systematic risk of Fox is 1,16, whereas the beta of Time Warner is 1,21. Moreover, the costs of debt, which amounts for 2,69% regarding Fox and 2,37% considering Time Warner, are estimated by applying the five year average. As a risk free rate, the 10 year Treasury Bill of 2,21% is used for both companies, whereas the market risk premium for the United States is assumed to be 7,25% (Bloomberg Database). Consequently, the cost of equity are approximately 10,63% for Fox and 10,98% for Time Warner. As a result, the cost of capital for Fox amounts for 9,0% and for Time Warner 8,82%, estimated by applying formula (4) of section 2.1.

Table 18: WACC Estimation

In percentage	Fox	Time Warner
Cost of Equity	10,63	10,98
E/V	80,95	76,83
Cost of Debt	2,69	2,37
D/V	19,05	23,17
Tax Rate	22,23	30,26
WACC	**9,00**	**8,82**

For the terminal value of both companies the GDP World growth rate of 3,3% is applied. The enterprise value is estimated by adding up the discounted FCFF and the discounted terminal value. Fox is estimated to have an enterprise value of $84,96bn, whereas Time Warner's enterprise value is in the amount of $91,38bn.

Table 19: Discounted FCFF and Enterprise Value

In million $	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Terminal Value
Fox	2.394	3.442	3.521	3.547	3.518	3.439	3.329	3.190	3.041	2.894	2.754	49.892
EV												**84.961**
Time Warner	2.954	3.615	3.552	3.512	3.494	3.470	3.414	3.319	3.191	3.058	2.931	54.868
EV												**91.378**

By adding up the cash level and subtracting the amount of debt from the enterprise value, the equity value of the firms is obtained. The share price is calculated by dividing the equity value by the number of shares. Fox's Equity value is approximately $72,37bn with a share price of $35,18, involving both class A and class B shares. Compared to the company's current share price of class A stocks $34,25 and $34,11 class B stocks (as of 22/05/2015), Fox may be considered as undervalued in the amount of $0,93 relatively $1,07 per share. Contrarily, Time Warner has an estimated equity value of $71,50bn combined with a share price of $86,15. The company's current share price is approximately $85,20 constituting that Time Warner may be undervalued in the amount of $0,95 per share.

Table 20: Price per share Fox and Time Warner

In million $	Fox	Time Warner
Enterprise Value	84.961	91.378
Cash	6.468	2.618
Debt	19.058	22.494
Equity Value	72.371	71.502
# Shares	2.057	830
Price per share in $	**35,18**	**86,15**

5. The deal

5.1 Synergies

In order to value the combined firm of Fox and Time Warner, the financial figures of the individual companies are added up and discounted by the merged company's weighted WACC. Due to the fact that both companies have similar enterprise values and bear similar risk within the entertainment industry, the weighted average of the discount rate is considered to be a reasonable measure. The effective tax rate of the combined firm of 26,4% is also estimated by applying the weighted average. By using the new WACC and tax rate, the value of the merged entity without synergies is in the amount of $176,34bn, which equals the sum of the individual companies' enterprise values.

Table 21: WACC & Enterprise Value

In million $	Fox	Time Warner	Combined firm
WACC	9,00%	8,82%	**8,93%**
EV	84.961	91.378	**176.339**

Considering operating synergies of the merged company, revenues are expected to increase by the rising fee negotiation power with cable and satellite distributors like Comcast and streaming services like Netflix and Amazon as well as for future programs. Due to its enormous size, the merged firm may substantially increase its market share and consequently its ability to increase requested affiliate fees. The combined company's revenues are therefore expected to increase 0,75% on top of its usual revenue growth.

Cost reductions are principally generated by workforce reduction of overlapping support staff and head count as well as by cutting back-office functions. The combined firm is expected to improve work practices processes and technologies due to its expertise in the entertainment industry. Furthermore, workforce reduction is assumed to facilitate the economies of scale and scope that arise by sharing the companies' resources and the consolidation of functional areas. The aforementioned sale of CNN also leads to cost reductions by cutting the workforce. Moreover, decreasing marketing costs are expected due to the fact that the combined firm may be able to push movie theater companies to shorten the time between release and sale respectively rental of its movies. Consequently, the company is assumed to create a synergy by avoiding multiple

marketing for the same movie. Nevertheless, the film studios of both companies are expected to be kept essentially separate in order to maintain both firms' cultures of producing high quality content. During the former bid of Fox in July 2014, the company estimated to save costs in the amount of around $1bn by acquiring Time Warner (Reuters 2014). The implementation costs are estimated to be 1% of the total value of the deal, taking into consideration the costs of similar deals in the entertainment and media industry, such as the Comcast - Time Warner Cable deal. By adding up financial and operating synergies and subtracting the implementation costs, the merged firm is expected to create synergies in the amount of $26,78bn. Synergies created by Time Warner are assumed to be in the amount of the company's weight of the combined firm.

Table 22: Synergies

In million $	Fox	Time Warner	Combined firm
Operating Synergies			
Increasing Revenues	6.911	7.433	14.345
Cost benefits	6.478	6.967	13.445
Implementation costs	488	525	1.013
Total synergies	**12.901**	**13.876**	**26.777**

5.2 Bidding strategy

After the rejected $80bn offer ($85 per share) of Fox to acquire Time Warner in July 2014, analysts argued that a fair price to buy the target would be $100 per share. Due to this, the total value of the deal would be in the amount of $102,88bn, taking into account Time Warner's number of shares outstanding of 0,83bn at $100 per share and its net debt of $19,88bn. In this scenario, Fox would pay a premium of 16,1% in comparison to the fair price per share of $86,15 calculated in section 4.2.

In July 2014, Fox planned to pay the target with 40% of cash including new issued debt and 60% of new issued non-voting shares (Fool 2014). Paying the entire amount in cash would be more profitable for Fox due to its undervalued stock price. Nevertheless, the high enterprise value of Time Warner and the fact that its stock price is also undervalued seem to be sufficient for a mixed payment of stocks and cash. By applying the aforementioned payment structure to an

acquisition in 2015, Fox is assumed to pay $41,15bn (40%) in cash and $61,73bn (60%) in non-voting stocks, taking into consideration the $100 per share of Time Warner and the target's net debt. As explained before, Fox may sell the news channel CNN due to legal issues and use the estimated after-tax proceeds of $10bn as a part of the cash payment (Sorkin & de la Merced 2014). Furthermore, Fox would be able to use the $7,2bn of the sale of Sky Deutschland and Sky Italia to BskyB and its current cash level of $6,47bn (James 2014). The remaining value of the cash payment is assumed to be paid by issuing debt in the amount of $17,48bn. This debt issue would increase the combined company's debt to equity ratio from 29,3% to 41,6% but would not affect the credit rating and the related risk of the merged company according to a report from Moody's Investors Service (James 2014).

Regarding the payment in non-voting shares ($61,73bn), Fox is assumed to issue 1,80bn class A stocks at its market price of $34,25 (as of 22/05/15). Therefore, the combined firm's new number of shares of 3,86bn is the sum of the individual companies' shares and the new issued shares. Due to this, shareholders of Time Warner hold 46,7% (1,80bn shares) of the combined company, whereas Fox's shareholders own 53,3% (2,06bn shares). The capital structure of the combined firm results in a share price of $37,39, taking into consideration the estimated synergies and the increased debt level.

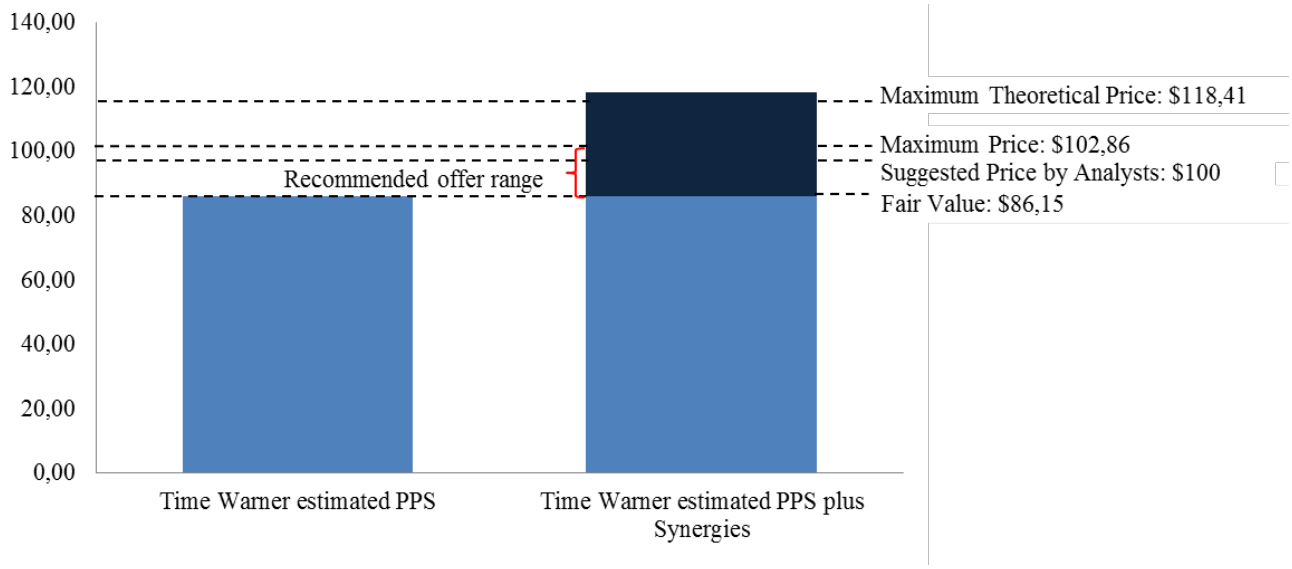
Table 23: New Capital Structure

In million $	Combined firm
Enterprise Value	176.564
Synergies	26.777
Cash	0
Debt	59.034
Equity Value	144.306
Number of shares	3.859
Share Price in $	**37,39**

In conclusion, Fox would probably have to pay the aforementioned $100 dollar per share in order to acquire Time Warner. The maximum price Fox should pay is the sum of Time Warner's enterprise value and the synergies generated by the target, which is $105,25bn. Consequently, the maximum price Fox may be willing to pay is $102,86 per share, constituting a premium of 19,4% compared to its fair value of $86,15. The maximum theoretical price Fox could pay would be the

sum of Time Warner's enterprise value and the synergies generated by both companies together, resulting in a price per share of $118,41. As explained in section 2.2.2, the synergies generated by the buying company should not be included, so that the recommended offer varies between $86,15 and $102,86 per share.

Figure 8: Bidding Strategy



6. Conclusion

In order to reasonably analyze and value an M&A deal, the first step is to apply an adequate valuation model and to execute a proper analysis of the companies' financials and insights, such as clarified in Chapter 2. Due diligence constitutes a key element in order to value possible synergies of the combined firm. Nevertheless, the estimated value of a future M&A deal highly depends on the underlying assumptions being made about the companies involved in the transaction. In many cases, there exists a guideline of experts in the fields of M&A of how to value a deal rather than a specified consensus. The same applies to the fair value of the target within the deal. Finding a consensual opinion about the fair value of the target seems to be difficult.

A first approach is to accurately analyze the industry in which both companies operate including a specified business description as executed in chapter 3. The entertainment industry is described as a high growth business with a lot of potential for future years. Especially the target Time Warner is considered to be one of the companies with the highest growth potential. Nevertheless, the consolidation of cable service companies in the same year drives other companies of the entertainment sector to get bigger in order to not lose its negotiation power concerning affiliate fees. Fox and Timer Warner would both benefit from the deal by counteracting the upcoming competition within the industry. Time Warner would profit from Fox's profitable cable portfolio and Fox would acquire the pay-tv service HBO as well as additional control rights of big sports events, so that the combined firm could take over the leading position in the entertainment and media sector. The estimated synergies of the deal of $27,8bn would be sufficient to make Fox pay a premium of 19,4% with a share price of $102,86 in order to appease Time Warner's shareholders after the rejected bid in June 2014. The price per share of $100, which is considered to be realistic according to analysts, lies within the recommended bidding price range of Fox.

In conclusion, the acquisition of Time Warner by Fox seems to reasonable with regards to the business scope of both companies and the value created through the deal. After the rejected deal in 2014, it would be profitable for both companies to combine as soon as possible to not lag behind the technical progress and customer demand for more digitalized entertainment content.

7. Appendices

Appendix 1: Fox - Historical Income Statement

Income Statement in million $ as of:	2010	2011	2012	2013	2014
Revenue	**32.778**	**33.405**	**25.049**	**27.675**	**31.868**
growth (%)	*7,7%*	*1,9%*	*-25,0%*	*10,5%*	*15,1%*
Cable Network Programming	7.038	8.037	9.324	10.881	12.273
growth (%)	*14,8%*	*14,2%*	*16,0%*	*16,7%*	*12,8%*
Filmed Entertainment	7.631	6.899	8.363	8.642	9.679
growth (%)	*28,6%*	*-9,6%*	*21,2%*	*3,3%*	*12,0%*
Direct Broadcast Satellite Television	3.802	3.761	3.740	4.439	6.030
growth (%)	*1,1%*	*-1,1%*	*-0,6%*	*18,7%*	*35,8%*
Television	4.228	4.778	4.803	4.860	5.296
growth (%)	*4,4%*	*13,0%*	*0,5%*	*1,2%*	*9,0%*
Other	1.531	1.104	-1.179	-1.147	-1.411
growth (%)	*-35,6%*	*-27,9%*	*-206,8%*	*-2,7%*	*23,0%*
Publishing	8.548	8.826	-	-	-
growth (%)	*4,7%*	*3,3%*	-	-	-
Operating cost	**29.072**	**28.868**	**20.335**	**22.335**	**26.379**
% of revenues	*88,7%*	*86,4%*	*81,2%*	*80,7%*	*82,8%*
Selling General & Admin Exp.	6.872	6.619	3.961	4.042	4.129
% of revenues	*21,0%*	*19,8%*	*15,8%*	*14,6%*	*13,0%*
R & D Exp.	-	-	-	-	-
Depreciation & Amort.	1.185	1.191	711	797	1.142
% of revenues	*3,6%*	*3,6%*	*2,8%*	*2,9%*	*3,6%*
Other Oper. Exp./(Inc.)	21.015	21.058	15.663	17.496	21.108
growth (%)	*64,1%*	*63,0%*	*62,5%*	*63,2%*	*66,2%*
EBIT	**3.706**	**4.537**	**4.716**	**5.340**	**5.488**
growth (%)	*165,6%*	*22,4%*	*3,9%*	*13,2%*	*2,8%*
Interest Expense	991	966	1.032	1.063	1.121
growth (%)	*6,9%*	*-2,5%*	*6,8%*	*3,0%*	*5,5%*
Interest Income	91	126	77	57	26
growth (%)	*0,0%*	*38,5%*	*-38,9%*	*-26,0%*	*-54,4%*
Currency Exchange Gains (Loss)	-	-	-	-	-
Other Non-Operating Inc. (Exp.)	-832	-560	-702	-4.437	-796
% of revenues	*-2,5%*	*-1,7%*	*-2,8%*	*-16,0%*	*-2,5%*
EBT Excl. Unusual Items	**3.638**	**4.257**	**4.463**	**8.771**	**5.189**
Impairment of Goodwill	-	-	-	35	-
Gain (Loss) On Sale Of Assets	-	-	-	-	-
Asset Writedown	-	-	-	-	-

Legal Settlements	315	80	-	-	-
Other Unusual Items	-630	-160	-	-70	-
EBT Incl. Unusual Items	**3.323**	**4.177**	**4.463**	**8.736**	**5.189**
Income Tax Expense	679	1.029	1.094	1.690	1.272
Tax rate %	*18,7%*	*24,2%*	*24,5%*	*19,3%*	*24,5%*
Earnings from Cont. Ops.	**2.644**	**3.148**	**3.369**	**7.046**	**3.917**
growth (%)	*179,9%*	*19,1%*	*7,0%*	*109,1%*	*-44,4%*
Extraord. Item & Account. Change	-	254	1.997	-277	-729
Minority Int. in Earnings	105	155	193	226	132
Net Income	**2.539**	**2.739**	**1.179**	**7.097**	**4.514**
growth (%)	*175,2%*	*7,9%*	*-57,0%*	*502,0%*	*-36,4%*

Appendix 2: Fox - Historical Balance Sheet

Balance Sheet in million $ as of:	2010	2011	2012	2013	2014
ASSETS					
Cash And Equivalents	8.709	12.680	9.626	6.659	5.415
Short Term Investments					
Total Cash & ST Investments	8.709	12.680	9.626	6.659	5.415
Accounts & Notes Receivable	6.431	6.330	6.608	5.459	6.468
Total Receivables	6.431	6.330	6.608	5.459	6.468
Inventories	2.392	2.332	2.595	2.784	3.092
Prepaid Exp.	-	-	-	-	-
Restricted Cash	-	-	-	-	-
Other Current Assets	492	442	619	665	401
Total Current Assets	18.024	21.784	19.448	15.567	15.376
growth (%)	*13,8%*	*20,9%*	*-10,7%*	*-20,0%*	*-1,2%*
Non- current assets					
Net Property, Plant & Equipment	5.980	6.542	5.814	2.829	2.931
Investments	3.515	4.867	4.968	3.704	2.859
Inventories	3.254	4.198	4.596	5.371	6.442
Long-term Investments	346	350	387	437	454
Intangible Assets	8.306	8.587	7.133	5.064	8.072
Goodwill	13.749	14.697	13.174	17.255	18.052
Other Long-Term Assets	1.210	955	1.143	717	607
Total Assets	**54.384**	**61.980**	**56.663**	**50.944**	**54.793**
growth (%)	*2,4%*	*14,0%*	*-8,6%*	*-10,1%*	*7,6%*
LIABILITIES					
Accrued Exp.	-	-	-	-	-
Short-term Borrowings	129	32	273	137	799
Accounts Payable	5.204	5.773	5.405	4.434	4.183
Curr. Income Taxes Payable	0	0	0	0	0
Other Current Liabilities	3.529	3.766	3.939	3.864	3.874
Total Current Liabilities	8.862	9.571	9.617	8.435	8.856
growth (%)	*-16,7%*	*8,0%*	*0,5%*	*-12,3%*	*5,0%*
Long-Term Debt	13.191	15.463	15.182	16.321	18.259
Unearned Revenue, Non-Current	-	-	-	-	-
Other Non-Current Liabilities	6.465	6.057	6.038	5.544	6.236
Total Liabilities	**28.518**	**31.091**	**30.837**	**30.300**	**33.351**
growth (%)	*-2,2%*	*9,0%*	*-0,8%*	*-1,7%*	*10,1%*

Pref. Stock, Non-Redeem.	-	-	-	-	-
Total Pref. Equity	-	-	-	-	-
Minority Interest	753	820	1.142	3.646	4.024
Additional Paid In Capital	17.434	17.461	16.163	15.863	15.063
Retained Earnings	7.679	12.608	8.521	1.454	2.389
Treasury Stock	0	0	0	0	0
Comprehensive Inc. and Other	0	0	0	-319	-34
Total Common Equity	25.866	30.889	25.826	20.644	21.442
Total Equity	**25.866**	**30.889**	**25.826**	**20.644**	**21.442**
growth (%)	*7,9%*	*19,4%*	*-16,4%*	*-20,1%*	*3,9%*
Total Liabilities And Equity	**54.384**	**61.980**	**56.663**	**50.944**	**54.793**
growth (%)	*2,4%*	*14,0%*	*-8,6%*	*-10,1%*	*7,6%*

Appendix 3: Time Warner - Historical Income Statement

Income Statement in million $ as of:	2010	2011	2012	2013	2014
Revenue	**26.888**	**28.974**	**28.729**	**26.461**	**27.359**
growth (%)	*5,9%*	*7,8%*	*-0,8%*	*-7,9%*	*3,4%*
Home Box Office	4.108	4.498	4.686	4.890	5.398
growth (%)	*10,9%*	*9,5%*	*4,2%*	*4,4%*	*10,4%*
Turner	8.372	9.166	9.527	9.983	10.396
growth (%)	*10,9%*	*9,5%*	*3,9%*	*4,8%*	*4,1%*
Warner Bros	11.622	12.638	12.018	12.312	12.526
growth (%)	*5,0%*	*8,7%*	*-4,9%*	*2,4%*	*1,7%*
Intersegment Elimination	3.675	3.667	3.436	-724	-961
growth (%)	*-1,6%*	*-0,2%*	*-6,3%*	*-121,1%*	*32,7%*
Corporate	-889	-995	-938	-	-
growth (%)	*33,3%*	*11,9%*	*-5,7%*	-	-
Operating cost	**21.460**	**23.169**	**22.811**	**20.193**	**21.384**
% of revenues	*79,8%*	*80,0%*	*79,4%*	*76,3%*	*78,2%*
Cost Of Goods Sold	15.023	16.311	15.934	14.935	15.875
% of revenues	*55,9%*	*56,3%*	*55,5%*	*56,4%*	*58,0%*
Selling General & Admin Exp.	6.173	6.589	6.629	5.049	5.307
% of revenues	*23,0%*	*22,7%*	*23,1%*	*19,1%*	*19,4%*
R & D Exp.	-	-	-	-	-
Depreciation & Amort.	264	269	248	209	202
% of revenues	*1,0%*	*0,9%*	*0,9%*	*0,8%*	*0,7%*
Other Operating Expense/(Income)	-	-	-	-	-
EBIT	**5.428**	**5.805**	**5.918**	**6.268**	**5.975**
growth (%)	*21,4%*	*6,9%*	*1,9%*	*5,9%*	*-4,7%*
Interest Expense	1.277	1.321	1.360	1.281	1.353
Interest Income	99	111	107	92	184
Currency Exchange Gains (Loss)	-	-	-	-	-
Other Non-Operating Inc. (Exp.)	331	229	217	50	58
growth (%)	*1,2%*	*0,8%*	*0,8%*	*0,2%*	*0,2%*
EBT Excl. Unusual Items	**3.919**	**4.366**	**4.448**	**5.029**	**4.748**
Impairment of Goodwill	-	-	-	-	-
Gain (Loss) On Sale Of Assets	-	-	-	-	-
Asset Writedown	-	-	-	61	69
Legal Settlements	-	-	-	-	-
Other Unusual Items	-	-	-	-122	-138
EBT Incl. Unusual Items	**3.919**	**4.366**	**4.448**	**4.968**	**4.679**
Income Tax Expense	1.348	1.484	1.526	1.614	785
Tax rate %	*34,4%*	*34,0%*	*34,3%*	*32,1%*	*16,5%*
Earnings from Cont. Ops.	**2.571**	**2.882**	**2.922**	**3.354**	**3.894**
growth (%)	*23,4%*	*12,1%*	*1,4%*	*14,8%*	*16,1%*
Extraord. Item & Account.	-	-	-	-337	67

Minority Int. in Earnings	-7	-4	-3	-	-
Net Income	**2.578**	**2.886**	**2.925**	**3.691**	**3.827**
growth (%)	*4,1%*	*11,9%*	*1,4%*	*26,2%*	*3,7%*

Appendix 4: Time Warner - Historical Balance Sheet

Balance Sheet in million $ as of:	2010	2011	2012	2013	2014
ASSETS					
Cash And Equivalents	3.663	3.476	2.841	1.816	2.618
Short Term Investments	-	-	-	-	-
Total Cash & ST Investments	3.663	3.476	2.841	1.816	2.618
Accounts & Notes Receivable	6.596	6.922	7.385	7.305	7.720
Total Receivables	6.596	6.922	7.385	7.305	7.720
Inventories	1.920	1.890	2.036	1.648	1.700
Prepaid Exp.	561	481	528	559	958
Restricted Cash	0	0	0	0	0
Other Current Assets	581	663	474	1.203	184
Total Current Assets	13.321	13.432	13.264	12.531	13.180
growth (%)	*-2,7%*	*0,8%*	*-1,3%*	*-5,5%*	*5,2%*
Non- current assets					
Net Property, Plant & Equipment	3.874	3.963	3.942	3.291	2.655
Long-term Investments	1.796	1.820	1.966	2.009	2.326
Deferred Charges, LT	-	-	-	-	-
Other Long-Term Assets	47.716	48.586	48.917	50.168	45.098
Total Assets	**66.707**	**67.801**	**68.089**	**67.999**	**63.259**
growth (%)	*1,0%*	*1,6%*	*0,4%*	*-0,1%*	*-7,0%*
LIABILITIES					
Accrued Exp.	-	-	-	-	-
Short-term Borrowings	26	23	749	66	1.118
Accounts Payable	7.809	7.815	771	505	574
Curr. Income Taxes Payable	0	0	0	0	0
Other Current Liabilities	991	1.084	8.279	7.817	7.512
Total Current Liabilities	8.826	8.922	9.799	8.388	9.204
growth (%)	*-6,8%*	*1,1%*	*9,8%*	*-14,4%*	*9,7%*
Long-Term Debt	16.523	19.501	19.122	20.061	21.376
Unearned Revenue, Non-Current	296	549	523	351	315
Other Non-Current Liabilities	8.117	8.875	8.848	9.295	7.888
Total Liabilities	**33.762**	**37.847**	**38.292**	**38.095**	**38.783**
growth (%)	*3,4%*	*12,1%*	*1,2%*	*-0,5%*	*1,8%*
Pref. Stock, Non-Redeem.	-	-	-	-	-
Total Pref. Equity	-	-	-	-	-
Minority Interest	5	-3	1	-	-

Additional Paid In Capital	157.162	156.131	154.594	153.427	149.299
Retained Earnings	-94.557	-91.671	-88.732	-85.041	-81.214
Treasury Stock	-29.033	-33.651	-35.077	-37.630	-42.445
Comprehensive Inc. and Other	-632	-852	-989	-852	-1.164
Total Common Equity	32.945	29.954	29.797	29.904	24.476
Total Equity	**32.945**	**29.954**	**29.797**	**29.904**	**24.476**
growth (%)	*-1,4%*	*-9,1%*	*-0,5%*	*0,4%*	*-18,2%*
Total Liabilities And Equity	**66.707**	**67.801**	**68.089**	**67.999**	**63.259**
growth (%)	*1,0%*	*1,6%*	*0,4%*	*-0,1%*	*-7,0%*

Appendix 5: Fox - Forecast Income Statement

Income Statement Forecast in million $ as of:	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenue	**36.424**	**40.566**	**44.482**	**48.034**	**51.143**	**53.915**	**56.286**	**58.489**	**60.668**	**62.929**	**65.274**
growth (%)	*14,3%*	*11,4%*	*9,7%*	*8,0%*	*6,5%*	*5,4%*	*4,4%*	*3,9%*	*3,7%*	*3,7%*	*3,7%*
Cable Network Programming	14.102	15.779	17.341	18.711	19.815	20.785	21.596	22.438	23.313	24.221	25.166
growth (%)	*14,9%*	*11,9%*	*9,9%*	*7,9%*	*5,9%*	*4,9%*	*3,9%*	*3,9%*	*3,9%*	*3,9%*	*3,9%*
Filmed Entertainment	10.754	11.840	12.918	13.965	14.957	15.870	16.680	17.364	18.077	18.819	19.591
growth (%)	*11,1%*	*10,1%*	*9,1%*	*8,1%*	*7,1%*	*6,1%*	*5,1%*	*4,1%*	*4,1%*	*4,1%*	*4,1%*
Direct Broadcast Satellite Television	6.681	7.336	7.982	8.605	9.190	9.723	10.190	10.578	10.874	11.179	11.492
growth (%)	*10,8%*	*9,8%*	*8,8%*	*7,8%*	*6,8%*	*5,8%*	*4,8%*	*3,8%*	*2,8%*	*2,8%*	*2,8%*
Television	5.593	5.963	6.417	6.841	7.225	7.558	7.831	8.114	8.407	8.711	9.025
growth (%)	*5,6%*	*6,6%*	*7,6%*	*6,6%*	*5,6%*	*4,6%*	*3,6%*	*3,6%*	*3,6%*	*3,6%*	*3,6%*
Other	-706	-353	-176	-88	-44	-22	-11	-6	-3	-1	-1
growth (%)	*-50,0%*	*-50,0%*	*-50,0%*	*-50,0%*	*-50,0%*	*-50,0%*	*-50,0%*	*-50,0%*	*-50,0%*	*-50,0%*	*-50,0%*
Publishing	-	-	-	-	-	-	-	-	-	-	-
Operating cost	**30.787**	**34.288**	**37.598**	**40.600**	**43.228**	**45.571**	**47.575**	**49.437**	**51.279**	**53.190**	**55.172**
% of revenues	*84,5%*	*84,5%*	*84,5%*	*84,5%*	*84,5%*	*84,5%*	*84,5%*	*84,5%*	*84,5%*	*84,5%*	*84,5%*
Selling General & Admin Exp.	6.131	6.828	7.487	8.085	8.608	9.074	9.473	9.844	10.211	10.591	10.986
% of revenues	*16,8%*	*16,8%*	*16,8%*	*16,8%*	*16,8%*	*16,8%*	*16,8%*	*16,8%*	*16,8%*	*16,8%*	*16,8%*
R & D Exp.	-	-	-	-	-	-	-	-	-	-	-
Depreciation & Amort.	1.044	1.163	1.275	1.377	1.466	1.545	1.613	1.677	1.739	1.804	1.871
Other Operating Expense/(Income)	23.613	26.298	28.836	31.139	33.154	34.951	36.489	37.916	39.329	40.795	42.315
% of revenues	*64,8%*	*64,8%*	*64,8%*	*64,8%*	*64,8%*	*64,8%*	*64,8%*	*64,8%*	*64,8%*	*64,8%*	*64,8%*
EBIT	**5.637**	**6.278**	**6.884**	**7.434**	**7.915**	**8.344**	**8.711**	**9.052**	**9.389**	**9.739**	**10.102**
growth (%)	*2,7%*	*11,4%*	*9,7%*	*8,0%*	*6,5%*	*5,4%*	*4,4%*	*3,9%*	*3,7%*	*3,7%*	*3,7%*

Interest Expense	1.121	1.121	1.121	1.121	1.121	1.121	1.121	1.121	1.121	1.121	1.121
Interest Income	26	26	26	26	26	26	26	26	26	26	26
Currency Exchange Gains (Loss)	-	-	-	-	-	-	-	-	-	-	-
Other Non-Operating Inc. (Exp.)	-755	-717	-680	-645	-612	-581	-551	-523	-496	-471	-447
% of revenues	*-5,1%*	*-5,1%*	*-5,1%*	*-5,1%*	*-5,1%*	*-5,1%*	*-5,1%*	*-5,1%*	*-5,1%*	*-5,1%*	*-5,1%*
EBT Excl. Unusual Items	**5.297**	**5.900**	**6.469**	**6.984**	**7.432**	**7.830**	**8.167**	**8.480**	**8.790**	**9.115**	**9.454**
Impairment of Goodwill	-	-	-	-	-	-	-	-	-	-	-
Gain (Loss) On Sale Of Assets	-	-	-	-	-	-	-	-	-	-	-
Asset Writedown	-	-	-	-	-	-	-	-	-	-	-
Legal Settlements	-	-	-	-	-	-	-	-	-	-	-
Other Unusual Items	-	-	-	-	-	-	-	-	-	-	-
EBT Incl. Unusual Items	**5.297**	**5.900**	**6.469**	**6.984**	**7.432**	**7.830**	**8.167**	**8.480**	**8.790**	**9.115**	**9.454**
Income Tax Expense	1.177	1.311	1.438	1.552	1.652	1.740	1.815	1.885	1.954	2.026	2.101
Tax rate %	*22,2%*	*22,2%*	*22,2%*	*22,2%*	*22,2%*	*22,2%*	*22,2%*	*22,2%*	*22,2%*	*22,2%*	*22,2%*
Earnings from Cont. Ops.	**4.120**	**4.588**	**5.031**	**5.432**	**5.780**	**6.090**	**6.352**	**6.595**	**6.837**	**7.089**	**7.353**
growth (%)	*5,2%*	*11,4%*	*9,7%*	*8,0%*	*6,4%*	*5,4%*	*4,3%*	*3,8%*	*3,7%*	*3,7%*	*3,7%*
Extraord. Item & Account. Change	249	249	249	249	249	249	249	249	249	249	249
Minority Int. in Earnings	162	162	162	162	162	162	162	162	162	162	162
Net Income	**3.709**	**4.177**	**4.620**	**5.021**	**5.369**	**5.678**	**5.941**	**6.184**	**6.426**	**6.678**	**6.941**
growth (%)	*-17,8%*	*12,6%*	*10,6%*	*8,7%*	*6,9%*	*5,8%*	*4,6%*	*4,1%*	*3,9%*	*3,9%*	*3,9%*

Appendix 6: Fox - Historical Net fixed assets, Depreciation & Capex

In million $	2010	2011	2012	2013	2014	Ø
Net Fixed Assets	5.980	6.542	5.814	2.829	2.931	-
% of revenues	12,7%	11,8%	17,2%	10,2%	9,2%	12,2%
Depreciation	1.185	1.191	711	797	1.142	-
% of Net Fixed Assets	19,8%	18,2%	12,2%	28,2%	39,0%	23,5%
Capex	914	1.171	564	622	678	-

Appendix 7: Fox - Forecast Depreciation & Capex in million $

Forecast	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Net Fixed Assets	4.447	4.953	5.431	5.865	6.244	6.583	6.872	7.141	7.408	7.684	7.970
% of revenues	12,2%	12,2%	12,2%	12,2%	12,2%	12,2%	12,2%	12,2%	12,2%	12,2%	12,2%
Depreciation	1.044	1.163	1.275	1.377	1.466	1.545	1.613	1.677	1.739	1.804	1.871
% of Net Fixed Assets	23,5%	23,5%	23,5%	23,5%	23,5%	23,5%	23,5%	23,5%	23,5%	23,5%	23,5%
Capex	2.560	1.669	1.753	1.811	1.846	1.884	1.903	1.945	2.005	2.080	2.157

Note: First, the net fixed assets are computed by applying the five year average of its relation to total revenues. As a next step, the five year average of depreciation in relation to net fixed assets is estimated and kept constant. By multiplying this percentage with the forecasted absolute value of net fixed assets, depreciation for the following years is estimated.

Capex are estimated by using formula (7): $CAPEX = Net\ fixed\ assets_t - Net\ fixed\ assets_{t-1} + Depreciation_t$

Appendix 8: Fox - DCF Calculation

	FCFF Forecast in million $ as of:	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Perpetuity
	EBIT	5.637	6.278	6.884	7.434	7.915	8.344	8.711	9.052	9.389	9.739	10.102	-
-	Tax on EBIT	1.253	1.395	1.530	1.652	1.759	1.855	1.936	2.012	2.087	2.165	2.245	-
+	Depre. & Amort.	1.044	1.163	1.275	1.377	1.466	1.545	1.613	1.677	1.739	1.804	1.871	-
-	Change in Net Working Capital	258	288	315	341	363	382	399	415	430	446	463	-
	% of revenues	*0,71%*	*0,71%*	*0,71%*	*0,71%*	*0,71%*	*0,71%*	*0,71%*	*0,71%*	*0,71%*	*0,71%*	*0,71%*	-
-	Capital Expenditures	2.560	1.669	1.753	1.811	1.846	1.884	1.903	1.945	2.005	2.080	2.157	-
=	FCFF	2.610	4.089	4.560	5.007	5.413	5.769	6.086	6.356	6.606	6.852	7.107	7.342
													128.766
	Discount Factor	1,09	1,19	1,30	1,41	1,54	1,68	1,83	1,99	2,17	2,37	2,58	2,58
	Discounted Cash-Flows	**2.394**	**3.442**	**3.521**	**3.547**	**3.518**	**3.439**	**3.329**	**3.190**	**3.041**	**2.894**	**2.754**	**49.892**
	Enterprise Value												**84.961**

Appendix 9: Time Warner - Forecast Income Stetement

Income Statement Forecast in million $ as of:	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenue	**28.802**	**30.763**	**33.071**	**35.804**	**38.735**	**41.546**	**44.025**	**46.086**	**48.063**	**50.117**	**52.254**
growth (%)	*5,27%*	*6,81%*	*7,50%*	*8,26%*	*8,19%*	*7,26%*	*5,97%*	*4,68%*	*4,29%*	*4,27%*	*4,26%*
Home Box Office	5.822	6.397	7.155	8.147	9.114	10.013	10.800	11.433	12.103	12.813	13.564
growth (%)	*7,86%*	*9,86%*	*11,86%*	*13,86%*	*11,86%*	*9,86%*	*7,86%*	*5,86%*	*5,86%*	*5,86%*	*5,86%*
Turner	11.087	11.825	12.611	13.450	14.344	15.298	16.163	16.914	17.532	18.172	18.835
growth (%)	*6,65%*	*6,65%*	*6,65%*	*6,65%*	*6,65%*	*6,65%*	*5,65%*	*4,65%*	*3,65%*	*3,65%*	*3,65%*
Warner Bros	12.853	13.317	13.930	14.712	15.684	16.564	17.327	17.953	18.601	19.272	19.967
growth (%)	*2,61%*	*3,61%*	*4,61%*	*5,61%*	*6,61%*	*5,61%*	*4,61%*	*3,61%*	*3,61%*	*3,61%*	*3,61%*
Intersegment Elimination	-961	-776	-626	-505	-408	-329	-265	-214	-173	-140	-113
growth (%)	*-19,30%*	*-19,30%*	*-19,30%*	*-19,30%*	*-19,30%*	*-19,30%*	*-19,30%*	*-19,30%*	*-19,30%*	*-19,30%*	*-19,30%*
Operating cost	**21.958**	**23.453**	**25.213**	**27.297**	**29.531**	**31.674**	**33.564**	**35.136**	**36.643**	**38.209**	**39.838**
% of revenues	*76,24%*	*76,24%*	*76,24%*	*76,24%*	*76,24%*	*76,24%*	*76,24%*	*76,24%*	*76,24%*	*76,24%*	*76,24%*
Cost Of Goods Sold	16.107	17.203	18.494	20.023	21.662	23.234	24.620	25.773	26.878	28.027	29.222
% of revenues	*55,92%*	*55,92%*	*55,92%*	*55,92%*	*55,92%*	*55,92%*	*55,92%*	*55,92%*	*55,92%*	*55,92%*	*55,92%*
Selling General & Admin Exp.	5.602	5.983	6.432	6.964	7.534	8.081	8.563	8.964	9.348	9.748	10.164
% of revenues	*19,45%*	*19,45%*	*19,45%*	*19,45%*	*19,45%*	*19,45%*	*19,45%*	*19,45%*	*19,45%*	*19,45%*	*19,45%*
R & D Exp.	-	-	-	-	-	-	-	-	-	-	-
Depreciation & Amort.	249	266	286	310	335	360	381	399	416	434	452
Other Operating Expense/(Income)	-	-	-	-	-	-	-	-	-	-	-
EBIT	**6.843**	**7.309**	**7.858**	**8.507**	**9.204**	**9.872**	**10.460**	**10.950**	**11.420**	**11.908**	**12.416**
growth (%)	*14,53%*	*6,81%*	*7,50%*	*8,26%*	*8,19%*	*7,26%*	*5,97%*	*4,68%*	*4,27%*	*4,27%*	*4,27%*
Interest Expense	1.353	1.353	1.353	1.353	1.353	1.353	1.353	1.353	1.353	1.353	1.353
Interest Income	184	184	184	184	184	184	184	184	184	184	184

Currency Exchange Gains (Loss)	-	-	-	-	-	-	-	-	-	-	-
Other Non-Operating Inc. (Exp.)	183	196	210	228	246	264	280	293	305	319	332
growth (%)	*0,64%*	*0,64%*	*0,64%*	*0,64%*	*0,64%*	*0,64%*	*0,64%*	*0,64%*	*0,64%*	*0,64%*	*0,64%*
EBT Excl. Unusual Items	**5.491**	**5.945**	**6.479**	**7.111**	**7.788**	**8.439**	**9.012**	**9.488**	**9.946**	**10.421**	**10.915**
Impairment of Goodwill	-	-	-	-	-	-	-	-	-	-	-
Gain (Loss) On Sale Of Assets	-	-	-	-	-	-	-	-	-	-	-
Asset Writedown	-	-	-	-	-	-	-	-	-	-	-
Legal Settlements	-	-	-	-	-	-	-	-	-	-	-
Other Unusual Items	-	-	-	-	-	-	-	-	-	-	-
EBT Incl. Unusual Items	**5.491**	**5.945**	**6.479**	**7.111**	**7.788**	**8.439**	**9.012**	**9.488**	**9.946**	**10.421**	**10.915**
Income Tax Expense	1.662	1.799	1.961	2.152	2.357	2.554	2.727	2.872	3.010	3.154	3.303
Tax rate %	*30,26%*	*30,26%*	*30,26%*	*30,26%*	*30,26%*	*30,26%*	*30,26%*	*30,26%*	*30,26%*	*30,26%*	*30,26%*
Earnings from Cont. Ops.	**3.829**	**4.146**	**4.518**	**4.959**	**5.431**	**5.885**	**6.284**	**6.617**	**6.936**	**7.267**	**7.612**
growth (%)	*-1,66%*	*8,26%*	*8,98%*	*9,75%*	*9,53%*	*8,35%*	*6,79%*	*5,29%*	*4,82%*	*4,78%*	*4,74%*
Extraord. Item & Account. Change	-54	-54	-54	-54	-54	-54	-54	-54	-54	-54	-54
Minority Int. in Earnings	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3
Net Income	**3.886**	**4.202**	**4.575**	**5.015**	**5.488**	**5.941**	**6.341**	**6.674**	**6.992**	**7.324**	**7.668**
growth (%)	*1,55%*	*8,14%*	*8,86%*	*9,63%*	*9,42%*	*8,26%*	*6,73%*	*5,24%*	*4,78%*	*4,74%*	*4,71%*

Appendix 10: Time Warner - Historical Net fixed assets, Depreciation & Capex

In million $	2010	2011	2012	2013	2014	Ø
Net Fixed Assets	3.874	3.963	3.942	3.291	2.655	-
% of revenues	14,4%	13,7%	13,7%	12,4%	9,7%	12,8%
Depreciation	264	269	248	209	202	-
% of Net Fixed Assets	6,8%	6,8%	6,3%	6,4%	7,6%	6,8%
Capex	631	772	643	568	474	-

Appendix 11: Time Warner - Forecast Depreciation & Capex in million $

Forecast	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Net Fixed Assets	3.684	3.934	4.230	4.579	4.954	5.314	5.631	5.894	6.147	6.410	6.683
% of revenues	12,8%	12,8%	12,8%	12,8%	12,8%	12,8%	12,8%	12,8%	12,8%	12,8%	12,8%
Depreciation	249	266	286	310	334	357	377	395	412	429	448
% of Net Fixed Assets	6,8%	6,8%	6,8%	6,8%	6,8%	6,8%	6,8%	6,8%	6,8%	6,8%	6,8%
Capex	1.278	517	582	660	710	719	698	663	669	697	726

Note: Depreciation and Capex are computed as explained for Appendix 7: Fox - Forecast Depreciation & Capex in million $.

Appendix 12: Time Warner - DCF Calculation

	FCFF Forecast in million $ as of:	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Perpetuity
	Ebit	6.843	7.309	7.858	8.507	9.204	9.872	10.460	10.950	11.420	11.908	12.416	-
-	Tax on Ebit	2.071	2.212	2.378	2.575	2.785	2.988	3.166	3.314	3.456	3.604	3.758	-
+	Depre. & Amort.	249	266	286	310	335	360	381	399	416	434	452	-
-	Change in Net Working Capital	529	566	608	658	712	764	809	847	884	921	961	-
	% of revenues	*1,84%*	*1,84%*	*1,84%*	*1,84%*	*1,84%*	*1,84%*	*1,84%*	*1,84%*	*1,84%*	*1,84%*	*1,84%*	-
-	Capital Expenditures	1.278	517	582	660	710	719	698	663	669	697	726	-
=	**FCFF**	**3.214**	**4.281**	**4.577**	**4.925**	**5.331**	**5.761**	**6.168**	**6.525**	**6.827**	**7.120**	**7.424**	**7.669**
													138.998
	Discount Factor	1,09	1,18	1,29	1,40	1,53	1,66	1,81	1,97	2,14	2,33	2,53	2,53
	Discounted Cash-Flows	**2.954**	**3.615**	**3.552**	**3.512**	**3.494**	**3.470**	**3.414**	**3.319**	**3.191**	**3.058**	**2.931**	**54.868**
	Enterprise Value												**91.378**

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