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AN ACCRETION / DILUTION ANALYSIS OF THE WALT DISNEY COMPANY'S ACQUISITION OF TWENTY-FIRST CENTURY FOX, INC.

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ABSTRACT

The purpose of this thesis is to analyze The Walt Disney Company's acquisition of the various assets of 21st Century Fox, and the subsequent spinoff of the rest of Fox's assets. More specifically, the thesis will determine the specific operating scenarios in which Disney will achieve an accretive or a dilutive outcome. In order to achieve these results, I will complete a detailed accretion/dilution analysis through various financial modeling techniques. The numerous operating cases tested in this analysis will be determined by the synergies associated with the transaction, which will be subject to my discretion after the completion of in-depth research on the two companies, the industry, the macroeconomy, the overall financial market, etc. I hypothesize that accretion will occur in this acquisition when Disney incurs moderate revenue synergies and significant cost synergies. In addition, I hypothesize that movie ticket prices will increase in the years following the acquisition, on top of a decreased movie output by the combined entity.

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Chapter 1

Overview

On March 20, 2019, The Walt Disney Company[1] officially acquired Twenty-First Century Fox, Inc.[2], bringing massive changes to the media and entertainment industry. After a lengthy bidding war, Disney paid $71.3 billion for the company, including $35.7 billion in cash and $35.6 billion in common stock. In particular, Disney purchased Fox's film production businesses, television creative units, FX Networks, National Geographic Partners, Fox Networks Group International, Star India, and the company's stakes in Hulu, Tata Sky and Endemol Shine Group. 21st Century Fox spun off its news, sports, and broadcast businesses into Fox Corp. prior to the acquisition and Disney agreed to divest Fox's Regional Sports Networks following the completion of the transaction.

Figure 1. Key Transaction Information

Transaction Details	
Announcement Date*	11.15.2017
Closing Date	3.20.2019
Offer Price	$51.57
Transaction Value	$71 Bn

Key Statistics		
	Disney	Fox
Share Price (11.15.17)	$103.69	$27.95
Share Price (3.20.19)	$110.00	$49.61
Market Cap (3.20.19)	$158.43 Bn	$52.20 Bn
2018A Revenue	$50.87 Bn	$30.40 Bn
2018A Net Income	$12.60 Bn	$4.46 Bn

[1] The Walt Disney Company will be referred to as The Walt Disney Company, The Walt Disney Co., Disney, DIS, the acquirer, or the company throughout this paper.

[2] Twenty-First Century Fox, Inc. will be referred to as Twenty-First Century Fox, Inc., Twenty-First Century Fox, 21st Century Fox, Fox, the target, or the company throughout this paper.

The media and entertainment industry is undergoing significant changes at the moment as consumers switch from cable television to streaming services. It is becoming increasingly clear that in an overly competitive and well saturated market, content is the key to not only survival, but prosperity. Disney's acquisition of 21st Century Fox marked the merging of two huge players in the industry, bringing together massive portfolios of unique, well branded content and setting Disney up to be an obvious contender in the everlasting competition for winning entertainment.

A. Brief History of The Walt Disney Co.

The Walt Disney Company began as a cartoon company in 1923, created by Walt Disney and originally named Disney Brothers Cartoon Studio. Just six years later, the studio split into four entities: Walt Disney Productions, Walt Disney Enterprises, Liled Realty and Investment Co., and the Disney Film Recording Company. Walt Disney Productions in particular began trading as a stock in 1940.[3]

Disneyland opened in 1955, with Walt Disney World not far behind in 1971. These theme parks spread internationally in 1983 with the opening of Tokyo Disneyland. Also in 1983, the Disney Channel began broadcasting. In 1986, Walt Disney Productions officially changed its name to The Walt Disney Company.[4]

Beginning a long line of mergers to come, Disney bought Capital Cities / ABC in 1996, followed by Pixar Animation Studios in 2006, Marvel Entertainment in 2009, and Lucasfilm in

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[3] "History of Disney." About the Walt Disney Company. *The Walt Disney Company.*
[4] "History of Disney." About the Walt Disney Company. *The Walt Disney Company.*

2012. Then, in 2018, Disney launched ESPN+, its first move into the direct-to-consumer space. This was followed in 2019 by the acquisition of 21st Century Fox and the release of Disney+.[5]

After reorganizing the business in 2018, Disney currently operates in four key segments: Direct-to-Consumer (DTC) and International; Parks, Experiences, and Consumer Products; Media Networks; and Studio Entertainment. The newly created DTC and International segment aimed to capitalize on the industry's shift towards streaming and serves as a distribution outlet for the content created in Media Networks and Studio Entertainment. In particular, Media Networks consists of revenues derived from broadcasting and cable content and services, while Studio Entertainment focuses on the company's motion picture films. Finally, the Parks, Experiences, and Consumer Products segment combined together the company's theme park revenues, as well as consumer merchandise and licensing.

Figure 2. Overview of Disney's M&A Activity [6]

Acquisitions by The Walt Disney Company					
Company	**Year**	**Cost**	**Company**	**Year**	**Cost**
Miramax	1993	$60 MM	Junction Point Studios	2007	Undisclosed
Capital Cities/ABC/ESPN	1995	$19 Bn	Marvel	2009	$4 Bn
Starwave	1998	Undisclosed	Hulu	2009	$15 Bn
Infoseek	1999	Undisclosed	Wideload Games	2010	30% Stake
Freeform	2001	$2.9 Bn	Tapulous	2010	Undisclosed
Baby Einstein	2001	Undisclosed	Playdom	2010	$563 MM
The Muppets	2004	$75 MM	UTV Software Communications	2011	$297 MM
CrossGen	2004	$1 MM	Lucasfilm	2012	$4.06 Bn
Avalanche Software	2005	Undisclosed	Maker Studios	2014	$500 MM
Pixar	2006	$7.4 Bn	Sphero	2014	Undisclosed
Oswald the Lucky Rabbit	2006	Undisclosed	BAM	2016/2017	$2.58 Bn

[5] "History of Disney." About the Walt Disney Company. *The Walt Disney Company.*

[6] M&A is an abbreviation of "mergers and acquisitions." For the purpose of this paper, the terms, "merger" and "acquisition," will be used synonymously.

B. Brief History of Twenty-First Century Fox, Inc.

The company began in 1904 by William Fox, who hand-cranked short films in a New York City theater. By 1915, however, his films had expanded into 25 theaters around the city. Just one year later, William Fox launched the Fox Film Corporation in Los Angeles. The company then purchased Movietone in 1926 in order to shift into the motion picture business.[7]

In 1935, Fox Film Corporation merged with 20th Century Pictures and renamed itself 20th Century Fox. The film studio then went on to produce a massive number of movies, including the likes of *The Sound of Music*, *Titanic*, *Avatar*, *Star Wars*, *Home Alone*, and the *X-Men* series. The success also encouraged the company to launch 20th Century Fox Television in 1949.[8]

In 1953, 20th Century Fox introduced Cinemascope, special lenses used during filming to produce a wide format film, which marked a significant shift in the industry from its standard 1:33 aspect ratio. Later, in 1985, the company was acquired by News Corporation, which eventually became 21st Century Fox after an asset spin-off. 21st Century Fox then launched four entirely new film production companies in 1994 - Fox Searchlight, Fox Family, Fox 2000, and 20th Century Fox Animation - as well as FX Networks and the FX Movie Channel. A third network, FXX, launched in 2013.[9] Prior to being acquired by the Walt Disney Company, Fox was split into three major segments - Cable Network Programming, Television, and Filmed Entertainment - generating 56%, 16%, and 27% of FY2018 revenue, respectively.[10]

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[7] Lark, Max, and Beth Deitchman. "21st Century Fox: Eight Decades of Movie and Television Magic." D23. The Walt Disney Company, March 21, 2019.

[8] Lark, Max, and Beth Deitchman. "21st Century Fox: Eight Decades of Movie and Television Magic." D23. The Walt Disney Company, March 21, 2019.

[9] Lark, Max, and Beth Deitchman. "21st Century Fox: Eight Decades of Movie and Television Magic." D23. The Walt Disney Company, March 21, 2019.

[10] Percentages do not add to 100% due to losses from the Other, Corporate, and Eliminations Segment.

Chapter 2

Competitive Landscape

A. Industry Overview

In recent times, traditional media providers have been pressured by shifting revenue streams due to changing consumer viewing and listening habits. Cord cutting trends have accelerated over the last few years due to high prices for cable television and increasing choices in online streaming services, including Netflix, Amazon.com's Prime Video, Hulu, Disney+, and other direct-to-consumer options that offer quality content at a lower subscription price. Additionally, original programming is becoming more expensive, pressuring content providers to create original content in film and television shows in order to drive top line growth in the box office, as well as subscriber revenues, which has spurred an increase in M&A activity throughout the industry. In particular, these consolidations have heavily impacted the media landscape as companies struggle to generate organic growth amidst strong combinations like AT&T and Time Warner, as well as Disney and 21st Century Fox.

B. Key Competitors

Comcast

Comcast provides media and television broadcasting services to customers worldwide through video streaming, high speed internet, cable television, and communication services. The company also owns and operates Universal theme parks. In terms of a geographic breakdown, Comcast derives 87% of its revenue from the United States and 13% from abroad. The company

competes in the DTC space through its Xfinity Instant TV, a cable TV streaming service, as well as its upcoming Xfinity Flex. It also owns a minority stake in Hulu.[11]

Netflix

Netflix is a leading internet entertainment company providing its streaming services to over 139 million paid memberships worldwide. The company operates in three major segments: Domestic Streaming, International Streaming, and Domestic DVD. More specifically, it derives 50.7% of its revenue from the United States, and 49.3% internationally. Netflix has continued to be a leader in the market shift towards DTC and streaming, with both acquired content as well as original content that continue to be popular across the industry.[12]

CBS

CBS is a mass media company that operates through the following segments: Entertainment, Cable Networks, Publishing, and Local Media. The company owns and operates two primary streaming services: CBS All Access and CBSN. It generates 82.5% of its revenue from the United States, 4.0% from Australia, 2.3% from the United Kingdom, 5.5% from Other Europe, and 5.7% from Other International. The company recently merged with Viacom, an international entertainment company with a diversified product portfolio of television programs, films, short-form videos, applications, games, social media, and consumer products. It operates through two main business segments: Media Networks and Filmed Entertainment. The company

[11] "Comcast Corporation." Form 10-K. Securities and Exchange Commission, January 13, 2019.
[12] "Netflix, Inc." Form 10-K. Securities and Exchange Commission, February 8, 2019.

also supports a streaming service known as Pluto TV, which supports its flagship channels of BET, Comedy Central, MTV, Nickelodeon, and Nick Jr.[13]

Discovery

Discovery is a media company that provides content through various global platforms. It operates through four major business units, including U.S. Networks, International Networks, Education, and Corporate. More specifically, the U.S. Networks segment operates popular television networks including the likes of Discovery Channel and Animal Planet. The company has announced plans for an upcoming streaming service that will include this domestic content and more. Geographically, Discovery derives 60.8% of its revenue from the United States and 39.2% from abroad.[14]

AT&T

While AT&T may be known for its telecommunication services, it now competes in the media and entertainment space through its recent acquisition of Time Warner. In particular, Warner Media is one of AT&T's four major business segments, with others including Communications, Latin America, and Xandar. Warner Media produces and distributes films, television shows, gaming, and other content internationally through both physical and digital formats. The segment's flagship streaming service, HBO Max, launched in 2019. It bundles content from HBO, Cinemax, and Warner Bros to compete at a competitive price in the saturated

[13] "CBS Corporation." Form 10-K. Securities and Exchange Commission, February 15, 2019.
[14] "Discovery, Inc." Form 10-K. Securities and Exchange Commission, March 1, 2019.

DTC space.[15] It is important to note, however, that AT&T had not yet acquired Time Warner at the time of Disney's merger with Fox.

Sony

Sony is a Japanese company that provides a vastly diversified portfolio of products and services. The company operates through nine segments: Game and Network Services, Music, Pictures, Home Entertainment and Sound, Imaging Products and Solutions, Mobile Communications, Semiconductors, Financial Services, and All Others. Its Pictures business unit competes directly with Disney and Fox through the worldwide production and distribution of live action and animation motion pictures under popular brands such as Columbia Pictures and Sony Pictures Animations, as well as television shows and digital networks globally.[16]

[15] "AT&T Inc." Form 10-K. Securities and Exchange Commission, February 20, 2019
[16] "Sony Corporation." Form 10-K. Securities and Exchange Commission, June 18, 2019.

Chapter 3

Review of M&A Activity

A. Motives for M&A Activity

Although the terms “merger” and “acquisition” are being used synonymously throughout this paper for simplicity reasons, they are theoretically different. In a merger, two companies, typically of similar size, combine their assets together to form a new entity. On the other hand, an acquisition can be thought of as a takeover of sorts. One company, the “bidder,” purchases a majority stake in another company, the “target.” The bidding company will offer cash, stock, or a mixture of the two in order to purchase the shares of the target company. Although these two activities are different, the motives for undertaking either of them are typically the same, as they are both an alternative means to organic growth. In general, the two primary motives for M&A activity are either strategic or financial.

I. Strategic Motives

Strategic motives for M&A activity relate to a bidding company’s internal strategy. For example, Campbell et al. state that firms may aim to increase their share of an existing market, enter into a new market, expand geographically, or diversify their product offerings.[17] Rather than undergoing organic growth to increase market share, a company could simply buy one of its competitors in order to expand inside an existing market. Separately, if a company wanted to

[17] Campbell, Andrew, David O. Faulkner, and Richard Schoenberg. “Mergers and Acquisitions: Motives, Value Creation, and Implementation.” In The Oxford Handbook of Strategy: A Strategy Overview and Competitive Strategy. Oxford University Press, 2006-04-06.

enter into a new market, it might be easier to purchase a firm already in that market, especially if the market is categorized by high barriers to entry and a need for economies of scale. Furthermore, an acquisition may be an easy way to expand a business geographically, by buying a similar company that operates in a different country. This may also be the case for similar companies targeting different demographic populations. In addition, companies may wish to expand their product or service offerings without having to undergo extensive R&D costs. Buying a competitor that already has those established product lines is a simple and cost effective way to expand a business' offerings.

II. Financial Motives

Separately, a company may wish to undergo an acquisition for financial reasons. Acquisitions like these take place in order to boost earnings per share (EPS), reduce tax liabilities, expand borrowing capacity, or to ultimately re-sell the company or part of the company at a higher price.[18] Sometimes these motives entail the acquisition of a cash-rich company, or a struggling one that has been turning losses for years. One such activity that is often done for financial reasons is a leveraged buyout (LBO). This entails a firm utilizing large amounts of leverage (sometimes as high as 90% debt and only 10% equity) to purchase a target company, often using the target's assets as collateral and their stable and predictable cash flows to pay back the debt over time. This typically leads to a high return on equity (ROE) and internal rate of return (IRR) for the purchasing company.

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[18] Campbell, Andrew, David O. Faulkner, and Richard Schoenberg. "Mergers and Acquisitions: Motives, Value Creation, and Implementation." In The Oxford Handbook of Strategy: A Strategy Overview and Competitive Strategy. Oxford University Press, 2006-04-06.

III. The Walt Disney Company - 21st Century Fox, Inc.

In the case of Disney's acquisition of 21st Century Fox, this was primarily done for strategic reasons, as will be discussed in Chapter 4; however, Chapter 6 of this paper will determine whether or not Disney also achieved financial success in the acquisition. This success will be measured by post-merger EPS, with "accretion" being defined as an increase in EPS for Disney as a result of the merger, and "dilution" being a decrease in EPS.

It is also important to note that this was a *horizontal* merger. Horizontal mergers combine two companies with similar product/service offerings, while vertical mergers combine two companies at different points in the supply chain, though still in the same industry. Horizontal mergers decrease competition in an industry through the removal of a rival, e.g. Fox. For this reason, these mergers are often investigated diligently by the Department of Justice to ensure that the decreased competition will not end up harming consumers in any way.

B. Determining the Acquisition Price

In order to make an offer to acquire a company, one needs to determine the price, or value, of the company in question. This can be accomplished a number of ways, many of which are done for a single acquisition and combined together to create a range of possible prices. These valuation methods often yield extremely disparate results, depending on certain estimation factors like liquidation value or potential synergies, as well as motive for the acquisition in general.

I. Valuation Methods

a. Precedent Transactions

Precedent transactions are a typical way of thinking about the price of a potential acquisition. This valuation method entails an analysis of past M&A activity and uses those prices to come up with one for the acquisition at hand. Sample sizes often start out extremely large, but are then filtered out by characteristics like type, size, time, industry, product offering, geography, distribution channel, etc. It is important to note that no company or deal is exactly the same, so there will never be a perfect precedent transaction. Regardless, once a range of deals is found, financial information for the transactions is used to calculate transaction multiples. For example, the total amount paid will be used as an enterprise value (EV), and the target company's most recent earnings before interest, taxes, depreciation, and amortization (EBITDA) will be used to come up with an EV/EBITDA multiple. An average of these values, for a number of precedent transactions, is then applied to your target company's most recent EBITDA to come up with an estimated EV, or deal value (i.e. precedent's EV/EBITDA multiplied by potential target's EBITDA equals potential target's EV). This math can be done for a number of different multiples, including EV/Sales, P/E (stock price divided by EPS), market to book ratio (market capitalization divided by book value), etc.

b. Public Comparables

Similar to precedent transactions, public comparables consist of utilizing other firms' multiples and applying them to the target company's financial information to come up with a

potential deal value. In this case, however, companies similar to the target company are researched, rather than comparable M&A transactions. For example, a set of comparables similar to Estée Lauder may include L'Oréal, Coty, Revlon, and Avon Products. For Disney, however, it is important to note that comparable companies (comps) are difficult to find given Disney's vastly diversified business model. Potential comps may include Comcast, Netflix, CBS, Discovery, AT&T, or Sony. A company like Netflix is likely to be considered in the valuation given Disney's push into streaming with Disney+ and Hulu. Once again, as was done with precedent transactions, an average of the comps' multiples are applied to a potential target company's financials in order to arrive at an estimated deal value or price.

c. Discounted Cash Flow

Perhaps the most widely used valuation method is a discounted cash flow model. This model essentially projects out the future cash flows of a business and discounts them back to the present value to account for the concept of time value of money. The sum of all of these cash flows is the projected enterprise value of the target firm. Equity value can then be found by subtracting out net debt and, lastly, this value is divided by diluted shares outstanding in order to arrive at a projected price per share. This method is widely used for its forecasting method, rather than looking at historical data of the company, its competitors, or comparable transactions. One could simply look at the current enterprise value of a company, though this would not account for any control premium, potential synergies derived from a merger or acquisition, or change in share price once the deal is announced.

d. Synergy Value

Synergy is the additional value created when two firms are better together than when operating separately. It could be thought of, in simple terms, as 2 + 2 = 5. Opportunities are created when two firms merge together that otherwise wouldn't have been available. These opportunities can be found in either financial or operational synergies. As discussed by Damodaran, financial synergies are typically demonstrated through higher cash flows or a lower cost of capital.[19] These were mentioned as the potential "financial motives" for undergoing an acquisition in Part A of this chapter. Separately, Damodaran mentions potential operational synergies, which are derived in large part from the "strategic motives" mentioned in Part A.[20] Operational synergies often come in the form of increased revenue or cost savings. Not all synergies will come through in the first year of an acquisition, so it is important when valuing a company to determine when each type of synergy will be realized. For example, 50% of revenue synergies could be realized in year 1, jumping to the full 100% by year 2, but cost savings may be 75% realized in years 1 and 2, with the remaining 25% not coming until year 3. When valuing a potential target company for an acquisition, synergies are typically built into a model like a discounted cash flow to arrive at the projected present value of the firm.

[19] Damodoran, Aswath. NYU Stern School of Business, October 2005. http://people.stern.nyu.edu/adamodar/pdfiles/papers/synergy.pdf.
[20] Damodoran, Aswath. NYU Stern School of Business, October 2005. http://people.stern.nyu.edu/adamodar/pdfiles/papers/synergy.pdf.

e. Relief from Royalty

This is a slightly different and not commonly used method of valuation that could be done in addition to one or more of the previously mentioned methods. The Relief from Royalty method looks specifically at a company's intangible assets, like patents or trademarks. It calculates the hypothetical amount that a company could save from owning these intangible assets, rather than having to pay royalty or licensing fees for them.[21] At the moment, Disney pays royalty fees to companies like Sony for the rights to Spider-Man. If Disney were to ever have wanted to use the X-Men, for example, in one of their movies, the company would have to license these rights from 21st Century Fox. In purchasing Fox, however, Disney will fully own the rights to these characters as well as many more.

II. Additional Risks to Consider

There are, of course, a number of risks to consider when undertaking a merger or acquisition. Not all acquisitions go as planned, especially if they're blocked by the Department of Justice or a related entity immediately after plans are put into place. This type of antitrust risk is discussed further in Chapter 7. Additional risks, however, include overpayment risk, integration risk, and leverage risk, among many others.

[21] Puca, Antonella, and Mark L. Zyla. "The Intangible Valuation Renaissance: Five Methods." CFA Institute Enterprising Investor. CFA Institute, March 4, 2019. https://blogs.cfainstitute.org/investor/2019/01/11/a-renaissance-in-intangible-valuation-five-methods/.

a. Overpayment Risk

It is extremely common for a firm to overpay for a target company in a merger or acquisition. This could happen because a bidding war escalates the price of purchase, known as the "winner's curse." Another potential reasoning for overpayment is that the bidding company uses optimistic assumptions that overestimate potential synergies that could occur as a result of the transaction, or underestimate the timing that these synergies can be realized. Although the combined firm may operate smoothly, the return on investment just isn't as high as what was expected due to the high price of purchase. This creates less value for shareholders than was initially anticipated, which could end up depressing the combined company's stock price.

b. Integration Risk

On the other hand, integration risk could occur if the combined company does not operate as previously expected. This could occur either operationally or culturally, both of which cause significant risks for the combined company and its stock price. Specifically, integration may take longer than anticipated, leaving the company to operate separately for a longer period of time and miss out on potential synergies. In addition, Gavin mentions that two disparate cultures may be difficult to integrate together, with a traditional, results-driven team running its business extremely differently than a technological, innovation-focused company.[22]

[22] Gavin, Matt. "Mergers and Acquisitions: What They Are & Potential Risks: HBS Online." Business Insights. Harvard School of Business, July 25, 2019. https://online.hbs.edu/blog/post/mergers-and-acquisitions.

c. Leverage Risk

Finally, firms may take on the risk of being over-levered following an acquisition. Acquisitions are sometimes financed predominantly with debt, which may put a strain on the acquiring firm moving forward if the target firm is not very cash-rich. Another problem may occur if the management team of the combined firm ends up passing over potential value-creating opportunities in order to focus solely on deleveraging. Furthermore, management may be less likely to take on risky projects that could have high returns on investment, since the firm is already operating at high risk levels of leverage. Harrison et al. conducted a study demonstrating that "high target leverage and high added leverage are significantly associated with poor post-acquisition stock performance," likely due to some of the aforementioned reasons.[23]

[23] Harrison, J.S., Hart, M. & Oler, D.K. Leverage and acquisition performance. Rev Quant Finan Acc 43, 571–603 (2014).

Chapter 4

Strategic Review

The Walt Disney Company announced a strategic reorganization of its business units in March of 2018. Four distinct segments were created, including Direct-to-Consumer and International; Parks, Experiences, and Consumer Products; Media Networks; and Studio Entertainment. The goal of this reorganization was to ensure that the company would be at the forefront of the rapidly changing media industry, emphasized by the creation of the DTC and International segment. Additionally, the strategic shift was done to align with the company's long-term growth priorities, focused on content, innovation, and global expansion. Chairman and CEO Robert Iger stated that Disney is "strategically positioning [its] businesses for the future, creating a more effective, global framework to serve consumers worldwide, increase growth, and maximize shareholder value." [24]

Given the industry's focus on the shift into streaming and original content, it was important for Disney to focus an entire business segment on DTC and International. This allows the company to better invest in and innovate its existing DTC platforms, as well as continue to develop strong original content that will be able to compete with rival streaming services. Although Disney has historically incurred extensive losses following its acquisition of BAMTech, with Disney+ and an entirely new content portfolio, the company will likely be able to turn a profit in this business segment moving forward. Relatedly, Disney is continuing to focus on its television and film content. This is demonstrated through its acquisition of 21st

[24] "The Walt Disney Company Announces Strategic Reorganization." The Walt Disney Company, June 27, 2018.

Century Fox, another massive content producer and distributor. Robert Iger noted about the transaction:

> "This is an extraordinary and historic moment for us - one that will create significant long-term value for our company and our shareholders. Combining Disney's and 21st Century Fox's wealth of creative content and proven talent creates the preeminent global entertainment company, well positioned to lead in an incredibly dynamic and transformative era." [25]

Not only will Disney now be able to utilize Fox's brands within their own content, but it also has a number of new channels through which to distribute this content. Although Disney is already a strong international brand, the acquisition of Fox will allow for an even larger expansion of content globally. Both domestically and abroad, Disney's footprint in Hollywood will grow even larger, given the historic success of 21st Century Fox movies. Although Disney's *Avengers: Endgame* took the spot for highest grossing film worldwide, Fox's *Avatar* held the spot for ten years prior and will likely remain in second long into the future.

[25] "Disney's Acquisition of 21st Century Fox Will Bring an Unprecedented Collection of Content and Talent to Consumers Around the World." The Walt Disney Company, March 19, 2019.

Chapter 5

Review of Deal Timeline and Structure

A. Timeline of Events Leading to Acquisition

November 6, 2017 - Rumors spread that Disney had been working with Fox on a potential acquisition.[26]

November 15, 2017 - At Fox's shareholder meeting, the management team recommended eliminating Verizon from consideration, as Verizon and Comcast had both also shown interest in acquiring the company. In the following days, members of Fox's management met with various representatives from both Comcast and Disney.[27]

December 2, 2017 - Rumors spread once again that Disney and Fox were continuing discussions on a potential acquisition.[28]

December 7, 2017 - Comcast CEO Brian Roberts informed Fox CEO Rupert Murdoch that the company was suspending discussions on any potential acquisition.[29]

December 14, 2017 - Disney announced that it would acquire Fox's entertainment division, with the remainder of the company to be spun off into "New Fox," which would retain a focus on sports and news. Disney offered a total price of approximately $52.4 billion in all stock.[30]

[26] Liptak, Andrew. "The Disney - 21st Century Fox Deal: a Timeline." The Verge, April 20, 2018.
[27] Liptak, Andrew. "The Disney - 21st Century Fox Deal: a Timeline." The Verge, April 20, 2018.
[28] Liptak, Andrew. "The Disney - 21st Century Fox Deal: a Timeline." The Verge, April 20, 2018.
[29] Liptak, Andrew. "The Disney - 21st Century Fox Deal: a Timeline." The Verge, April 20, 2018.
[30] Liptak, Andrew. "The Disney - 21st Century Fox Deal: a Timeline." The Verge, April 20, 2018.

May 23, 2018 - Comcast announced that it was in the "advanced stages of preparing" an offer for Fox in the hopes that Fox would choose their bid instead of Disney's.[31]

June 12, 2018 - The Department of Justice approved AT&T's acquisition of Time Warner, paving the way for another acquisition of such scale and market share.[32]

June 13, 2018 - Comcast filed a statement with the SEC in opposition to Disney's acquisition of Fox and officially made its own, higher offer of $65 billion.[33]

June 20, 2018 - Disney increased its offer for Fox to a price of $38 per share, or $71.3 billion in total, both cash and stock, to which Fox agreed.[34]

June 27, 2018 - Disney won antitrust approval from the Department of Justice to acquire Fox, given that Disney were to divest Fox's 21 Regional Sports Networks (RSNs) upon completion of the acquisition.[35]

July 19, 2018 - Comcast announced that it would no longer be vying for Fox's assets and instead would focus on its bidding for Sky plc.[36]

July 27, 2018 - Disney received full shareholder approval for the purchase of 21st Century Fox.[37]

October 15, 2018 - Disney submitted a list of antitrust concessions to the European Commission in hopes of getting the acquisition of Fox approved.[38]

November 6, 2018 - The European Commission approved Disney's proposed acquisition of Fox on the condition that Disney divest its interests in History, H2, Crime & Investigation,

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[31] Liptak, Andrew. "The Disney - 21st Century Fox Deal: a Timeline." The Verge, April 20, 2018.
[32] Shaw-Williams, Hannah. "A Complete Timeline Of The Disney-Fox Deal." ScreenRant, February 2019.
[33] Liptak, Andrew. "The Disney - 21st Century Fox Deal: a Timeline." The Verge, April 20, 2018.
[34] Liptak, Andrew. "The Disney - 21st Century Fox Deal: a Timeline." The Verge, April 20, 2018.
[35] Shaw-Williams, Hannah. "A Complete Timeline Of The Disney-Fox Deal." ScreenRant, February 2019.
[36] Shaw-Williams, Hannah. "A Complete Timeline Of The Disney-Fox Deal." ScreenRant, February 2019.
[37] Shaw-Williams, Hannah. "A Complete Timeline Of The Disney-Fox Deal." ScreenRant, February 2019.
[38] Shaw-Williams, Hannah. "A Complete Timeline Of The Disney-Fox Deal." ScreenRant, February 2019.

Blaze, and Lifetime cable television channels in the European Economic Area.[39] One of Fox's major operations in Europe that Disney would be acquiring included Fox Network Group's distribution of television and cable channels.

November 19, 2018 - Chinese officials provided unconditional approval for the merger, marking the overcoming of one of the largest regulatory hurdles.[40]

February 27, 2019 - Brazil's antitrust regulatory, Cade, approved the transaction on the condition that Disney divest the Fox Sports channel in Brazil.[41]

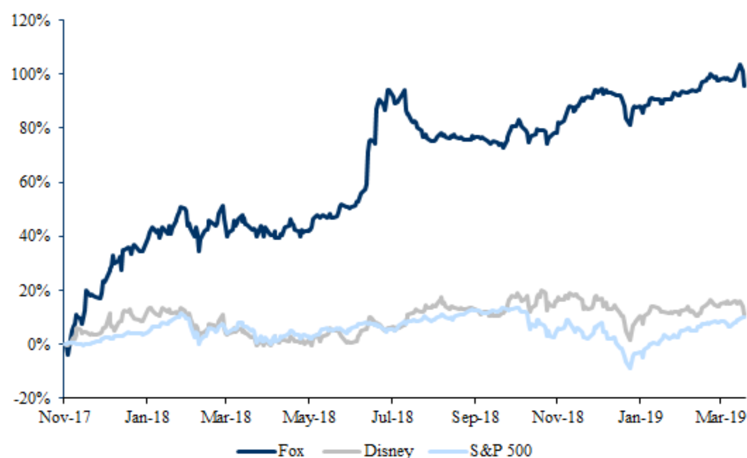
March 20, 2019 - The Walt Disney Company officially acquired 21st Century Fox.

B. Share Price Performance of Disney and Fox

Figure 3 below demonstrates the percent change in stock prices of Disney and Fox, relative to the S&P 500, from the first acquisition rumor to the acquisition's close on March 20, 2019. It is important to note that the large increase in Fox's stock price in June 2018 was due to approval of the merger by the DOJ.

[39] Shaw-Williams, Hannah. "A Complete Timeline Of The Disney-Fox Deal." ScreenRant, February 2019.
[40] Shaw-Williams, Hannah. "A Complete Timeline Of The Disney-Fox Deal." ScreenRant, February 2019.
[41] James, Meg. "Brazil Approves Disney's Purchase of Fox Assets, Paving the Way for the Deal to Close." Los Angeles Times, February 27, 2019.

Figure 3. Percent Change in Stock Prices from First Rumor to Close of Acquisition



C. Deal Structure

The Walt Disney Company agreed to purchase 21st Century Fox for $71.3 billion, using both cash and stock.[42] The acquisition officially took place at 12:02 AM on March 20, 2019, following 21st Century Fox's spin-off of certain assets into Fox Corporation.[43] Under the original merger agreement, Fox shareholders had the ability to choose to receive either $38 in cash for each share of Fox common stock, or a set amount of shares in Disney common stock.[44] At the time of acquisition, the per share value was multiplied by a Distribution Adjustment Multiple of 1.357190, allowing shareholders to convert each Fox common stock into $51.572626 or 0.4517 shares of Disney. The conversion from Fox common stock into Disney common stock was calculated by dividing the per share value of $51.572626 by $114.1801, the volume

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[42] James, Meg. "Brazil Approves Disney's Purchase of Fox Assets, Paving the Way for the Deal to Close." Los Angeles Times, February 27, 2019.

[43] "The Walt Disney Company Signs Amended Acquisition Agreement To Acquire Twenty-First Century Fox, Inc., For $71.3 Billion In Cash And Stock." The Walt Disney Company, February 5, 2019.

[44] James, Meg. "Brazil Approves Disney's Purchase of Fox Assets, Paving the Way for the Deal to Close." Los Angeles Times, February 27, 2019.

weighted average trading price of a share of Disney common stock on the NYSE over 15 consecutive trading days ending after March 15, 2019. In the transaction, Disney also acquired approximately $19.8 billion of cash and $19.2 billion of debt. As such, the acquisition price implied a total equity value of $71.3 billion.[45]

Prior to Disney's acquisition, 21st Century Fox spun-off a portfolio of assets including the FOX News Channel, FOX Business Network, FOX Broadcasting Company, FOX Sports, FOX Television Stations Group, and sports cable networks FS1, FS2, Fox Deportes, and Big Ten Network. These assets formed the new Fox Corporation (NYSE: FOX, FOXA). As such, Disney received 20th Century Fox, Fox Searchlight Pictures, Fox 2000 Pictures, Fox Family and Fox Animation, 20th Century Fox Television, FX Productions, Fox21, FX Networks, National Geographic Partners, Fox Networks Group International, Star India, and Fox's stakes in Hulu, Tata Sky, and Endemol Shine Group. Following the acquisition, Disney was required by the U.S. Department of Justice to divest Fox's 21 Regional Sports Networks, which it sold to Sinclair Broadcast Group for $10.6 billion.[46]

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[45] "Disney and 21st Century Fox Announce per Share Value in Connection with $71 Billion Acquisition." The Walt Disney Company, March 20, 2019.

[46] "Disney and 21st Century Fox Announce per Share Value in Connection with $71 Billion Acquisition." The Walt Disney Company, March 20, 2019.

Chapter 6

Methodology

In order to determine whether Disney's acquisition of 21st Century Fox will be accretive or dilutive, a model was created in Microsoft Excel that combined the two companies under different financial operating cases. This chapter will focus on the assumptions made throughout the model and the rationale behind each of them, leading to the various cases that demonstrate accretion or dilution in the years following the merger. Once again, accretion is defined as an increase in earnings per share (EPS) for Disney as a result of the merger, while dilution represents a decrease in EPS.

A. Overarching Model Assumptions

Figures 4 and 5 below display the base inputs to the model, with data as of the date of the official merger. It is important to note that throughout the entire model, it was assumed that there would be no major economic shocks, no major changes to Disney or Fox that are currently unannounced, and no major changes to competitors or the overall industry. In addition, the merger officially closed on March 20, 2019, meaning FY2019[47] data has already been released and was incorporated into the model where possible.

In the figures below, each company's beta is Bloomberg's three-year adjusted beta. Beta represents the volatility of a stock in relation to the overall market. It encapsulates the systematic risk (i.e. market risk) of a stock by analyzing historical returns over a certain time period. For context, a beta of 1.0 means that when the market (e.g. the S&P 500) increases by 10%, the stock

[47] "FY" stands for "fiscal year," representing a year-long period used by companies in financial reporting

also tends to increase by 10%. A beta of 0.9, however, means that when the market increases by 10%, the stock tends to increase by only 9%, demonstrating slightly lower volatility.

Figure 4. Disney Inputs

Acquirer	
Name	The Walt Disney Company
Short Name	Disney
Ticker	DIS
Last FY	9/29/2018
Current Share Price	$114.18
Basic Shares Outstanding	1491.00
Diluted Shares Outstanding	1498.00
Beta	0.91

Figure 5. Fox Inputs

Target	
Name	Twenty-First Century Fox, Inc. Class B
Short Name	Fox
Ticker	TFCF
Last FY	6/30/2018
Current Share Price	$51.57
Basic Shares Outstanding	1371.59
Diluted Shares Outstanding	1499.00
Beta	0.88

B. Disney Operating Model Assumptions

This model incorporates sell-side equity research reports from Wall Street analysts, cross referenced from the period prior to the merger's completion to the most recent data. A report by JPMorgan[48] released on 3/6/19 was used most prominently given its breadth, but was cross checked with reports by Macquarie[49] on 2/19/19, CFRA[50] on 3/20/19, and Imperial Capital[51] on

[48] Quadrani, Alexia S., Anna Lizzul, and David Karnovsky. "The Wonderful World of Disney+: Updating Our Estimates for the DTC Initiative," March 6, 2019.
[49] Nolen, Tim, and Stephen Beckett. "Modeling the New Disney," February 19, 2019.
[50] Amobi, Tuna N. "The Walt Disney Company," March 20, 2019.
[51] Miller, David W. "Walt Disney Co." March 25, 2019.

3/25/19. It is important to note that although some of these reports were released after the close of the acquisition, none of them are pro-forma (i.e. they don't consider the Fox acquisition in their projections). In addition, certain line items from these research reports were directly linked into the model for years 2020 and 2021, with the rest of the projection period subjectively decided based upon prior year estimates, company commentary, and personal conviction.

A particularly important set of assumptions made were with regards to Disney's debt pay-down schedule. The model assumes no additional debt issuances, no discretionary pay-downs of debt, and a 0.10% interest rate on cash. LIBOR estimates were derived from The Economy Forecast Agency[52] and were cross-checked with other sources of LIBOR forecasting.

Figure 6. Disney Income Statement

	Pre-Merger				Post-Merger				
	2015	2016	2017	2018	2019	2020	2021	2022	2023
Revenue	$ 52,465	$ 55,632	$ 55,137	$ 59,434	$ 62,620	$ 67,131	$ 67,296	$ 67,969	$ 68,649
Cost of Goods Sold	28,364	29,864	30,306	32,726	35,380	43,361	46,153	42,141	39,816
Gross Profit	**24,101**	**25,768**	**24,831**	**26,708**	**27,240**	**23,770**	**21,143**	**25,828**	**28,832**
D&A	2,354	2,527	2,782	3,011	2,891	3,034	3,419	4,248	4,291
SG&A	8,523	8,754	8,176	8,860	10,019	6,728	3,458	6,117	8,238
Other Operating Expenses (Income)	-	-	-	-	-	-	-	-	-
EBIT	**13,224**	**14,487**	**13,873**	**14,837**	**14,330**	**14,008**	**14,267**	**15,463**	**16,304**
Net Interest Expense (Income)	145	260	412	574	569	506	446	376	341
Net Other Expenses (Income)	(789)	(641)	(327)	(466)	(631)	(594)	(550)	(594)	(615)
Pretax Income	**13,868**	**14,868**	**13,788**	**14,729**	**14,393**	**14,096**	**14,371**	**15,680**	**16,578**
Income Tax	5,016	5,078	4,422	1,663	2,951	2,960	3,018	3,293	3,481
Minority Interest	470	399	386	468	468	468	468	468	468
Net Income	**$8,382**	**$9,391**	**$8,980**	**$12,598**	**$12,084**	**$10,668**	**$10,885**	**$11,919**	**$12,629**
Effective Tax Rate	36%	34%	32%	11%	21%	21%	21%	21%	21%
COGS as % of Sales	54%	54%	55%	55%	57%	65%	69%	62%	58%
D&A as % of CapEx	55%	53%	77%	67%	63%	67%	68%	86%	89%
SG&A as % of Sales	16%	16%	15%	15%	16%	10%	5%	9%	12%
Other Expenses as % of Sales	0%	0%	0%	0%	0%	0%	0%	0%	0%
Gross Margin	46%	46%	45%	45%	44%	35%	31%	38%	42%
EBIT Margin	25%	26%	25%	25%	23%	21%	21%	23%	24%
Profit Margin	16%	17%	16%	21%	19%	16%	16%	18%	18%

[52] The Economy Forecast Agency. "LIBOR Forecast for 2020, 2021, and 2022." March 24, 2020.

Figure 7. Disney Balance Sheet

	Pre-Merger				Post-Merger				
	2015	2016	2017	2018	2019	2020	2021	2022	2023
Cash and Cash Equivalents	$ 4,269	$ 4,610	$ 4,017	$ 4,150	$ 6,868	$ 2,211	$ 4,709	$ 3,348	$ 4,198
NWC	768	(520)	(963)	(1,128)	(1,709)	3,964	(1,009)	(1,020)	(1,030)
Other Current Assets	493	244	143	635	626	671	673	680	686
Total Current Assets	**5,530**	**4,334**	**3,197**	**3,657**	**5,785**	**6,846**	**4,372**	**3,008**	**3,855**
PP&E	25,179	27,349	28,406	29,540	31,514	33,256	35,172	36,208	37,084
Goodwill	27,826	27,810	31,426	31,269	31,269	31,269	31,269	31,269	31,269
Other Intangible Assets	7,172	6,949	6,995	6,812	6,569	6,314	6,027	5,670	5,309
Other Long Term Assets	11,247	12,959	13,074	14,152	14,152	14,152	14,152	14,152	14,152
Total Assets	**$76,954**	**$79,401**	**$83,098**	**$85,430**	**$89,290**	**$91,838**	**$90,992**	**$90,307**	**$91,669**
Other Current Liabilities	543	523	731	902	754	837	891	899	875
Total Current Liabilities	**543**	**523**	**731**	**902**	**754**	**837**	**891**	**899**	**875**
Long Term Debt	17,336	20,170	25,291	20,874	18,124	15,124	13,021	10,124	10,124
Deferred Tax Liabilities	4,051	3,679	4,480	3,109	3,109	3,109	3,109	3,109	3,109
Other Long Term Liabilities	6,369	7,706	6,443	6,590	6,590	6,590	6,590	6,590	6,590
Total Liabilities	**$28,299**	**$32,078**	**$36,945**	**$31,475**	**$28,577**	**$25,660**	**$23,611**	**$20,722**	**$20,698**
Common Stock & APIC	35,122	35,859	36,248	36,779	37,192	37,635	38,080	38,528	38,981
Treasury Stock	47,204	54,703	64,011	67,588	70,338	73,088	80,338	87,588	96,338
Retained Earnings	59,028	66,088	72,606	82,679	92,086	99,858	107,867	116,873	126,556
Minority/Non Controlling Interest	4,130	4,058	4,837	5,182	5,182	5,182	5,182	5,182	5,182
Other	(2,421)	(3,979)	(3,527)	(3,097)	(3,410)	(3,410)	(3,410)	(3,410)	(3,410)
Shareholders' Equity	**$48,655**	**$47,323**	**$46,153**	**$53,955**	**$60,712**	**$66,178**	**$67,381**	**$69,585**	**$70,971**
Total Liabilities and SE	**$76,954**	**$79,401**	**$83,098**	**$85,430**	**$89,290**	**$91,838**	**$90,992**	**$90,307**	**$91,669**

Figure 8. Disney Statement of Cash Flows

	Post-Merger				
	2019	2020	2021	2022	2023
Net Income	$ 12,084	$ 10,668	$ 10,885	$ 11,919	$ 12,629
D&A	2,891	3,034	3,419	4,248	4,291
Stock Based Compensation	413	443	444	449	453
Change in NWC	581	(5,673)	4,973	10	10
Other Current Assets	9	(45)	(2)	(7)	(7)
Other Current Liabilities	(148)	83	54	9	(24)
Cash From Operating Activities	**15,830**	**8,510**	**19,773**	**16,628**	**17,352**
Capital Expenditures	(4,622)	(4,521)	(5,047)	(4,928)	(4,805)
Purchase of Intangible Assets	-	-	-	-	-
Asset Sales	-	-	-	-	-
Acquisitions and Divestitures	-	-	-	-	-
Other Investing Activities	-	-	-	-	-
Cash from Investing Activities	**(4,622)**	**(4,521)**	**(5,047)**	**(4,928)**	**(4,805)**
Dividend Payouts	(2,677)	(2,896)	(2,876)	(2,914)	(2,946)
Net Stock Issuance (Repurchase)	(2,750)	(2,750)	(7,250)	(7,250)	(8,750)
Other Cash from Financing	(313)	-	-	-	-
Cash from Financing Activities	**(5,740)**	**(5,646)**	**(10,126)**	**(10,164)**	**(11,696)**
Net Cash Flow	**5,468**	**(1,657)**	**4,601**	**1,536**	**850**

	2019	2020	2021	2022	2023
Plus: Beginning Cash	$ 4,150	$ 6,868	$ 2,211	$ 4,709	$ 3,348
Plus: Minimum Cash Balance	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
CF Available for Mandatory Debt Paydown	**$ 7,618**	**$ 3,211**	**$ 4,812**	**$ 4,245**	**$ 2,198**
Less: Mandatory Debt Paydowns	$ (2,750)	$ (3,000)	$ (2,103)	$ (2,897)	$ -
Less: Discretionary Debt Paydowns	$ -	$ -	$ -	$ -	$ -
Remaining Cash Flow	**$ 4,868**	**$ 211**	**$ 2,709**	**$ 1,348**	**$ 2,198**
Plus: Minimum Cash Balance	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Ending Cash Balance	**$ 6,868**	**$ 2,211**	**$ 4,709**	**$ 3,348**	**$ 4,198**

C. 21st Century Fox Operating Model Assumptions

The same methodology as described in the prior section was used to create Fox's standalone operating model. Wall Street equity research reports were hard to come by for the time period preceding the merger, so only one by CFRA[53] from 3/21/19 was used alongside subjective reasoning. Once again, the same assumptions as Disney were used for Fox's debt pay-down schedule.

Figure 9. Fox Income Statement

	Pre-Merger				Post-Merger				
	2015	2016	2017	2018	2019	2020	2021	2022	2023
Revenue	$ 28,987	$ 27,326	$ 28,500	$ 30,400	$ 31,494	$ 33,447	$ 34,450	$ 35,312	$ 36,018
Cost of Goods Sold	18,561	17,511	18,185	19,813	20,944	22,410	22,910	23,306	23,592
Gross Profit	**10,426**	**9,815**	**10,315**	**10,587**	**10,551**	**11,038**	**11,541**	**12,006**	**12,426**
D&A	736	530	553	584	630	669	689	706	720
SG&A	3,784	3,418	3,325	3,682	3,937	4,348	4,306	4,237	4,322
Other Operating Expenses (Income)	-	-	-	-	-	-	-	-	-
EBIT	**5,906**	**5,867**	**6,437**	**6,321**	**5,984**	**6,020**	**6,546**	**7,062**	**7,384**
Net Interest Expense (Income)	1,159	1,146	1,183	1,209	432	287	133	(41)	(257)
Net Other Expenses (Income)	(5,100)	567	565	702	-	-	-	-	-
Pretax Income	**9,847**	**4,154**	**4,689**	**4,410**	**5,552**	**5,734**	**6,413**	**7,103**	**7,640**
Income Tax	1,243	1,130	1,419	(364)	1,166	1,204	1,347	1,492	1,604
Minority Interest	298	269	318	310	310	310	310	310	310
Net Income	**$8,306**	**$2,755**	**$2,952**	**$4,464**	**$4,076**	**$4,220**	**$4,756**	**$5,301**	**$5,726**
Effective Tax Rate	13%	27%	30%	(8%)	21%	21%	21%	21%	21%
COGS as % of Sales	64%	64%	64%	65%	67%	67%	67%	66%	66%
D&A as % of CapEx	174%	202%	147%	106%	100%	100%	100%	100%	100%
SG&A as % of Sales	13%	13%	12%	12%	13%	13%	13%	12%	12%
Other Expenses as % of Sales	0%	0%	0%	0%	0%	0%	0%	0%	0%
Gross Margin	36%	36%	36%	35%	34%	33%	34%	34%	35%
EBIT Margin	20%	21%	23%	21%	19%	18%	19%	20%	21%
Profit Margin	29%	10%	10%	15%	13%	13%	14%	15%	16%

[53] Amobi, Tuna N. "Twenty-First Century Fox, Inc," March 21, 2019.

Figure 10. Fox Balance Sheet

	Pre-Merger				Post-Merger				
	2015	2016	2017	2018	2019	2020	2021	2022	2023
Cash and Cash Equivalents	$ 8,428	$ 4,424	$ 6,163	$ 7,622	$ 8,888	$ 10,443	$ 11,967	$ 13,950	$ 16,711
Net Working Capital	1,863	2,908	2,797	3,599	3,986	4,417	4,909	5,444	6,040
Other Current Assets	259	976	545	922	945	1,003	1,034	1,059	1,081
Total Current Assets	**10,550**	**8,308**	**9,505**	**12,143**	**13,819**	**15,864**	**17,910**	**20,454**	**23,832**
PP&E	1,722	1,692	1,781	1,956	2,206	2,456	2,706	2,956	3,206
Goodwill	12,513	12,733	12,792	12,768	12,768	12,768	12,768	12,768	12,768
Other Intangible Assets	6,320	6,777	6,574	6,101	5,851	5,601	5,351	5,101	4,851
Other Long Term Assets	12,136	12,214	13,291	13,673	13,988	14,322	14,667	15,020	15,380
Total Assets	**$43,241**	**$41,724**	**$43,943**	**$46,641**	**$48,632**	**$51,011**	**$53,402**	**$56,299**	**$60,038**
Other Current Liabilities	244	427	457	1,054	945	1,003	1,034	1,059	1,081
Total Current Liabilities	**244**	**427**	**457**	**1,054**	**945**	**1,003**	**1,034**	**1,059**	**1,081**
Long Term Debt	18,795	19,298	19,456	18,469	17,769	17,224	16,224	15,224	14,674
Deferred Tax Liabilities	2,290	2,888	2,782	1,892	1,892	1,892	1,892	1,892	1,892
Other Long Term Liabilities	3,105	3,678	3,616	3,664	3,664	3,664	3,664	3,664	3,664
Total Liabilities	**$24,434**	**$26,291**	**$26,311**	**$25,079**	**$24,270**	**$23,783**	**$22,813**	**$21,839**	**$21,310**
Common Stock & APIC	13,447	12,230	12,425	12,631	12,851	13,086	13,327	13,574	13,826
Treasury Stock	-	-	-	-	-	-	-	-	-
Retained Earnings	5,343	3,575	5,315	8,934	11,593	14,307	17,513	21,226	25,331
Minority/Non Controlling Interest	1,587	1,772	1,910	1,998	1,998	1,998	1,998	1,998	1,998
Other	(1,570)	(2,144)	(2,018)	(2,001)	(2,080)	(2,163)	(2,249)	(2,338)	(2,428)
Shareholders' Equity	**$18,807**	**$15,433**	**$17,632**	**$21,562**	**$24,362**	**$27,228**	**$30,589**	**$34,460**	**$38,727**
Total Liabilities and SE	**$43,241**	**$41,724**	**$43,943**	**$46,641**	**$48,632**	**$51,011**	**$53,402**	**$56,299**	**$60,037**

Figure 11. Fox Statement of Cash Flows

	Post-Merger				
	2019	2020	2021	2022	2023
Net Income	$ 4,076	$ 4,220	$ 4,756	$ 5,301	$ 5,726
D&A	630	669	689	706	720
Stock Based Compensation	220	234	241	247	252
Change in NWC	(387)	(431)	(492)	(535)	(596)
Other Current Assets	(23)	(59)	(30)	(26)	(21)
Other Current Liabilities	(109)	59	30	26	21
Cash From Operating Activities	**4,407**	**4,692**	**5,194**	**5,720**	**6,102**
Capital Expenditures	(630)	(669)	(689)	(706)	(720)
Purchase of Intangible Assets	-	-	-	-	-
Asset Sales	-	-	-	-	-
Acquisitions and Divestitures	-	-	-	-	-
Other Investing Activities	(315)	(334)	(345)	(353)	(360)
Cash from Investing Activities	**(945)**	**(1,003)**	**(1,034)**	**(1,059)**	**(1,081)**
Dividend Payouts	(1,417)	(1,505)	(1,550)	(1,589)	(1,621)
Net Stock Issuance (Repurchase)	-	-	-	-	-
Other Cash from Financing	(79)	(84)	(86)	(88)	(90)
Cash from Financing Activities	**(1,496)**	**(1,589)**	**(1,636)**	**(1,677)**	**(1,711)**
Net Cash Flow	**1,966**	**2,100**	**2,525**	**2,983**	**3,311**
Plus: Beginning Cash	$ 7,622	$ 8,888	$ 10,443	$ 11,967	$ 13,950
Plus: Minimum Cash Balance	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
CF Available for Mandatory Debt Paydown	**$ 7,588**	**$ 8,988**	**$ 10,967**	**$ 12,950**	**$ 15,261**
Less: Mandatory Debt Paydowns	$ (700)	$ (545)	$ (1,000)	$ (1,000)	$ (550)
Less: Discretionary Debt Paydowns	$ -	$ -	$ -	$ -	$ -
Remaining Cash Flow	**$ 6,888**	**$ 8,443**	**$ 9,967**	**$ 11,950**	**$ 14,711**
Plus: Minimum Cash Balance	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Ending Cash Balance	**$ 8,888**	**$ 10,443**	**$ 11,967**	**$ 13,950**	**$ 16,711**

D. Transaction Assumptions

After completing both companies' operating models, assumptions regarding the transaction were made; however, the majority of these inputs are factual given the acquisition is already complete. First of all, the transaction was financed using 50% stock and 50% cash, with the cash portion being derived 90% from debt and 10% from excess cash.

Disney issued $31.76 billion in debt to finance the transaction, $15.00 billion of which came from a short-term unsecured bridge loan that was paid back immediately following the transaction. The weighted average interest rate on newly issued debt was 4.80% and all debt was assumed to have a 0.50% cost that was amortized annually until the debt matured. Furthermore, it was assumed that deal fees would make up 0.50% of the offer value.

Figure 12. Sources & Uses of Funds

Transaction Sources		
New Debt Issued	$31,757	44.6%
Excess Cash	4,123	5.8%
New Equity Issued	35,368	49.6%
Total Sources	**$71,249**	

Transaction Uses		
Stock Used in Purchase	$35,368	49.6%
Cash Used in Purchase	35,368	49.6%
Deal Fees	354	0.5%
Financing Fees	159	0.2%
Total Uses	**$71,249**	

Figure 15 below indicates new goodwill created in the transaction. Goodwill is an intangible asset that is created in an acquisition and represents the additional value to the purchasing company over and above the book value of the actual assets purchased. Write-ups represent this additional presumed value. PP&E (plant, property, and equipment) write-ups were assumed to be 0% as there is no material additional value for Disney in acquiring Fox's physical assets. A 25% write-up, however, was assumed for Fox's intangible assets given that this was the

primary reason for the acquisition. Finally, the creation of new deferred tax liabilities was calculated by taking the total asset write-ups and multiplying this value by Disney's tax rate.

Figure 13. Creation of New Goodwill

Goodwill Creation	
Offer Value	**$70,737**
Less: Fox Book Value of Equity	(14,763)
Plus: Write-Off of Fox Goodwill	7,584
Excess Purchase Price	**$63,558**
Less: Write-Up of PP&E	0.0
Less: Write-Up of Intangible Assets	(467)
Plus: Deferred Tax Liabilities Created	96
Goodwill Created	**$63,187**

E. Case Methodology

After incorporating all of the previously discussed assumptions, the model creates a pro-forma balance sheet that projects what Disney's balance sheet would look like following the merger's completion.

Figure 14. Pro-Forma Balance Sheet

Pro-Forma Balance Sheet	**Standalone**		Adjustments		**Pro-Forma**
	DIS	TFCF	Increase	(Decrease)	
Cash & Cash Equivalents	$4,150	$19,837		(4,123)	$19,864
NWC	(1128)	(4277)			(5405)
Other Current Assets	635	653			1288
PP&E	29540	821			30361
Intangible Assets	6812	3111	625		10548
Goodwill	31269	7584	63,187	(7,584)	94456
Other Long Term Assets	14152	10344			24496
Total Assets	**$85,430**	**$38,073**			**$175,608**
Current Debt	902	887			1789
Long Term Debt	20874	18321	31,757		70952
Deferred Tax Liabilities	3109	891	96		4096
Other Long Term Liabilities	6590	3211			9801
Total Liabilities	**$31,475**	**$23,310**	31,853	0	**$86,638**
Preferred Stock	0	0			0
Non-Controlling Interest	5182	0			5182
Shareholders' Equity	48773	21263	35,368	(21,617)	83788
Total Shareholders' Equity	**$53,955**	**$21,263**			**$88,970**
Total Liabilities + Shareholders' Equity	**$85,430**	**$44,573**			**$175,608**

Finally, the model creates a pro-forma income statement and calculates the estimated accretion or dilution to Disney's EPS in the years following the merger. The current case demonstrates a $1.30 dilutive impact to 2019 earnings, but an accretive impact of $0.32 and $1.11 to 2020 and 2021 earnings, respectively. There are 16 different cases of these numbers based upon various revenue and cost synergies, however, which will be discussed in the upcoming section.

Figure 15. Pro-Forma Income Statement

Pro-Forma Income Statement	2019	2020	2021	2022	2023
Disney Revenue	$62,620	$67,131	$67,296	$67,969	$68,649
Fox Revenue	21,602	22,941	23,629	24,220	24,704
Synergies	198	417	671	673	680
Pro-Forma Revenue	**$84,420**	**$90,489**	**$91,596**	**$92,862**	**$94,033**
Disney EBITDA	17,634	17,485	18,130	20,160	21,048
Fox EBITDA	3,672	4,114	4,568	4,765	5,159
Synergies	1,004	2,177	3,356	3,358	3,371
Pro-Forma EBITDA	**$22,310**	**$23,776**	**$26,053**	**$28,283**	**$29,578**
Disney D&A	2,891	3,034	3,419	4,248	4,291
Fox D&A	432	432	432	432	432
Purchase Accounting	23	23	23	23	23
Pro-Forma D&A	**$3,346**	**$3,489**	**$3,874**	**$4,703**	**$4,746**
Pro-Forma EBIT	**$18,964**	**$20,287**	**$22,178**	**$23,580**	**$24,832**
Net Interest Expense	(2,500)	(2,305)	(2,082)	(1,986)	(1,875)
Deferred Financing Fees	(87)	(10)	(8)	(6)	(6)
Net Other Expense	(91)	(54)	(10)	(54)	(75)
Pro-Forma Pre-Tax Income	**$16,286**	**$17,918**	**$20,078**	**$21,533**	**$22,877**
Income Tax Expense	(3,363)	(3,763)	(4,216)	(4,522)	(4,804)
Non-Controlling Interest	725	725	725	725	725
Pro-Forma Net Income	**$12,199**	**$13,430**	**$15,137**	**$16,286**	**$17,348**
Pro-Forma EPS	$6.70	$7.36	$8.28	$8.89	$9.45
Disney Standalone EPS	*$8.00*	*$7.05*	*$7.17*	*$7.83*	*$8.28*
Diluted Shares Outstanding	1510	1514	1518	1522	1525
New Shares Issued	310	310	310	310	310
New Diluted Shares Outstanding	**1820**	**1824**	**1828**	**1832**	**1835**
EPS Accretion / (Dilution) - $	($1.30)	$0.32	$1.11	$1.06	$1.17
EPS Accretion / (Dilution) - %	*(16%)*	*5%*	*15%*	*14%*	*14%*

F. Case Analysis

As mentioned previously, there are 16 different synergy cases built into this model. In particular, there are four types of cases: the standalone model projections, as well as bear, base, and bull cases (i.e. conservative, moderate, and aggressive). The SEC released a statement[54] discussing Disney's expectation of $2 billion in cost synergies by 2021, so this was utilized as the base case scenario for projecting SG&A (sales, general, and administrative expenses). All other cases were subjectively decided, with 33% of synergies being realized in 2019, 67% in 2020, and 100% in 2021 and thereafter. Revenue synergies, when assumed, were expected to be derived from possible brand extensions, cross-selling to existing customers, geographic expansion, channel expansion in existing markets, and overall sales optimization. Figure 18 below shows each of the 16 synergy cases, broken up by the four revenue cases (% growth in revenue y/y) and the four SG&A cases (SG&A as a % of sales in each year).

Figure 16. Synergy Cases

Case	Revenue Case	2019	2020	2021	2022	2023	SG&A Case	2019	2020	2021	2022	2023
16	**4**	**6%**	**8%**	**1%**	**2%**	**2%**	**4**	**15%**	**13%**	**11%**	**11%**	**10%**
1	1	5%	7%	0%	1%	1%	1	16%	16%	15%	15%	14%
2	2	5%	7%	0%	1%	1%	1	16%	16%	15%	15%	14%
3	3	6%	8%	1%	2%	2%	1	16%	16%	15%	15%	14%
4	4	6%	8%	1%	2%	2%	1	16%	16%	15%	15%	14%
5	1	5%	7%	0%	1%	1%	2	16%	15%	14%	15%	14%
6	2	5%	7%	0%	1%	1%	2	16%	15%	14%	15%	14%
7	3	6%	8%	1%	2%	2%	2	16%	15%	14%	15%	14%
8	4	6%	8%	1%	2%	2%	2	16%	15%	14%	15%	14%
9	1	5%	7%	0%	1%	1%	3	15%	14%	12%	12%	11%
10	2	5%	7%	0%	1%	1%	3	15%	14%	12%	12%	11%
11	3	6%	8%	1%	2%	2%	3	15%	14%	12%	12%	11%
12	4	6%	8%	1%	2%	2%	3	15%	14%	12%	12%	11%
13	1	5%	7%	0%	1%	1%	4	15%	13%	11%	11%	10%
14	2	5%	7%	0%	1%	1%	4	15%	13%	11%	11%	10%
15	3	6%	8%	1%	2%	2%	4	15%	13%	11%	11%	10%
16	4	6%	8%	1%	2%	2%	4	15%	13%	11%	11%	10%

[54] "Disney and 21st Century Fox Announce Per Share Value in Connection with $71 Billion Acquisition." U.S. Securities and Exchange Commission, March 19, 2019.

Finally, a VBA macro simulation was used to run through each of the 16 cases and their impact on Disney's earnings in each of the projection years. The data is demonstrated below in both dollar terms as well as percentage terms. Although all of the cases lead to a dilutive impact in 2019, six of the cases turn accretive in 2020. Looking at the overall five year projection period, exactly half of the cases lead to an accretive outcome and half lead to a dilutive outcome.

Figure 17. Accretion / Dilution Cases ($)

Accretion / Dilution Analysis ($)						
Case	2019	2020	2021	2022	2023	2019 - 2023
1	($1.74)	($0.62)	($0.34)	($0.39)	($0.28)	($3.37)
2	($1.74)	($0.62)	($0.34)	($0.39)	($0.28)	($3.37)
3	($1.68)	($0.50)	($0.13)	($0.19)	($0.08)	($2.59)
4	($1.66)	($0.46)	($0.06)	($0.12)	($0.02)	($2.33)
5	($1.65)	($0.43)	($0.05)	($0.39)	($0.28)	($2.79)
6	($1.65)	($0.43)	($0.05)	($0.39)	($0.28)	($2.79)
7	($1.59)	($0.31)	$0.16	($0.19)	($0.08)	($2.01)
8	($1.57)	($0.27)	$0.23	($0.12)	($0.02)	($1.75)
9	($1.46)	($0.04)	$0.53	$0.49	$0.61	$0.13
10	($1.46)	($0.04)	$0.53	$0.49	$0.61	$0.13
11	($1.41)	$0.08	$0.75	$0.70	$0.81	$0.92
12	($1.39)	$0.12	$0.82	$0.76	$0.88	$1.19
13	($1.37)	$0.15	$0.82	$0.78	$0.90	$1.29
14	($1.37)	$0.15	$0.82	$0.78	$0.90	$1.29
15	($1.32)	$0.28	$1.04	$0.99	$1.11	$2.10
16	($1.30)	$0.32	$1.11	$1.06	$1.17	$2.36

Figure 18. Accretion / Dilution Cases (%)

Accretion / Dilution Analysis (%)					
Case	2019	2020	2021	2022	2023
1	(22%)	(9%)	(5%)	(5%)	(3%)
2	(22%)	(9%)	(5%)	(5%)	(3%)
3	(21%)	(7%)	(2%)	(2%)	(1%)
4	(21%)	(7%)	(1%)	(2%)	(0%)
5	(21%)	(6%)	(1%)	(5%)	(3%)
6	(21%)	(6%)	(1%)	(5%)	(3%)
7	(20%)	(4%)	2%	(2%)	(1%)
8	(20%)	(4%)	3%	(2%)	(0%)
9	(18%)	(1%)	7%	6%	7%
10	(18%)	(1%)	7%	6%	7%
11	(18%)	1%	10%	9%	10%
12	(17%)	2%	11%	10%	11%
13	(17%)	2%	11%	10%	11%
14	(17%)	2%	11%	10%	11%
15	(16%)	4%	14%	13%	13%
16	(16%)	5%	15%	14%	14%

Chapter 7

Impact on Entertainment Industry

A. Oligopolistic Competition

An oligopoly is a market structure in which a small number of firms that offer similar goods or services limit competition within an industry. Although the industry may be highly concentrated with a few large firms, smaller firms may still exist. It is generally difficult to enter such an industry due to economies of scale or economies of scope.

Particularly within the film industry, economies of scale by the "Big Three" (AMC, Regal, Cinemax) have historically reduced the ability of smaller independent theater operators to compete for market share. Larger chains are more easily able to negotiate and afford the screening rights for first run films, and can often do so at a lower average cost per screening. In addition, film distributors will typically favor theaters with higher screen capacity and grossing potential, giving a clear advantage to the Big Three, with total screens of approximately 8,000, 7,200, and 4,600, respectively, for AMC, Regal, and Cinemark, versus a total of 4,900 screens by all other top ten North American theater operators.[55] As of the end of 2019, the Big Three theater chains had a combined market share of approximately 60% in the United States and Canada, measuring a medium level of market concentration, up from just 35% in 2000.[56] In economics, a commonly used rule of thumb is that an industry is oligopolistic when the top five firms account

[55] "Top 10 U.S. & Canadian Circuits." National Association of Theatre Owners, February 2020.

[56] "AMC Entertainment Holdings, Inc." Form 10-K. Securities and Exchange Commission, February 28, 2020.

for more than 60% of total sales.[57] In this case, the top three companies already total a 60% market share in the theater industry, characterizing it truly as an oligopoly.

Recently, larger chains have survived declining levels of attendance through the ability to innovate their theaters. These investments have gone towards satellite-delivered digital projections, 3D or IMAX capabilities, and other customer experiences like reclining seats. With the advent of streaming services, film distributors have another potential outlet either in addition to or instead of theaters, thereby weakening theaters' negotiating power when it comes to licensing deals. As a result of streaming's increasing popularity among consumers, it has been and will continue to be important for theaters to innovate and make the experience more attractive; this, once again, favors the Big Three.

In an industry struggling to keep up with streaming and pouring constant investments into upgrades, it is essential for theater chains to focus on profitability. As such, they will vie for the licensing rights for big budget blockbuster films with an almost guaranteed return on investment. This leaves independent film ("Indie") producers struggling for spots among the major film distributors, predominantly the "Big Six" (Walt Disney, 20th Century Fox, Sony Pictures, Universal, Paramount Pictures, Warner Bros).

[57] Kenton, Will. "Concentration Ratio." Investopedia, July 8, 2019.

Figure 19. Combined Market Share of the "Big Six" Film Distributors in the United States [58]

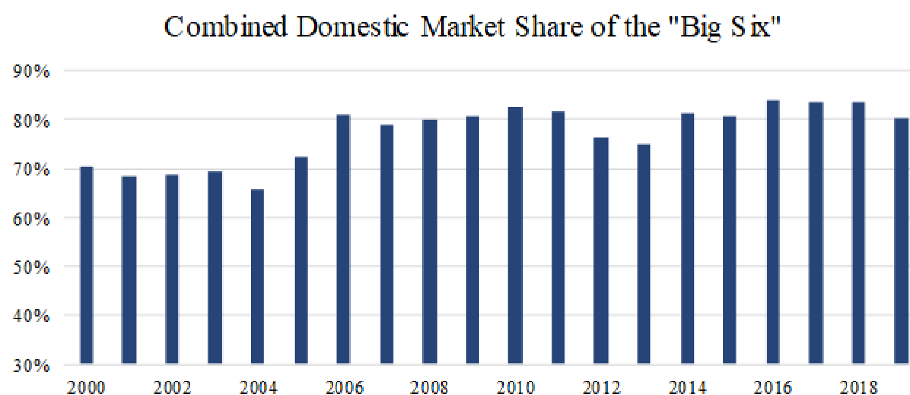
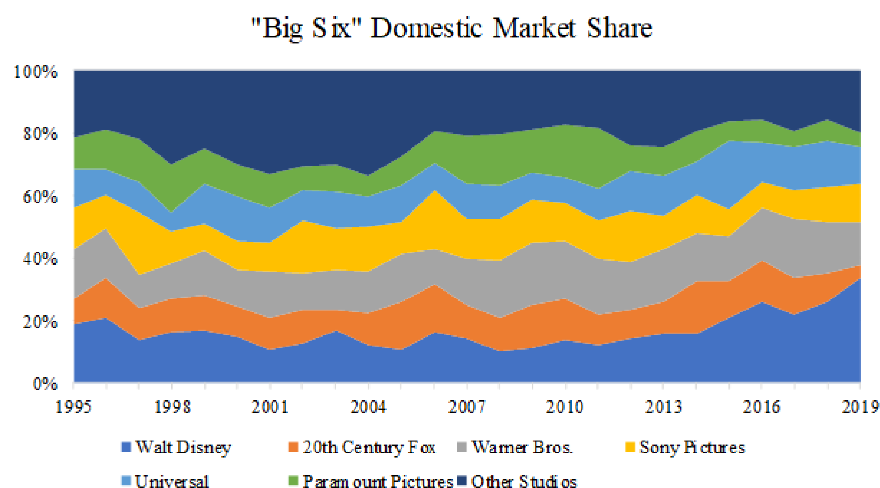


Figure 20. Distribution of Market Share by the "Big Six" Film Distributors [59]

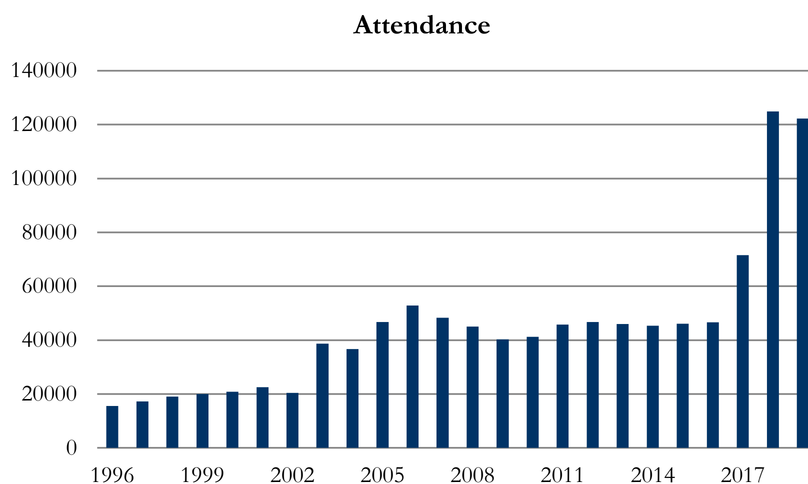


With the growth in popularity of Indie films over the last decade, consumers may not be thrilled with an increasing number of blockbuster movies if it corresponds with a lack of Indies. Although statistics for Indie films are few and far between, the rising popularity of these films can be demonstrated through the increase in attendance at film festivals like Sundance, the largest independent film festival in the United States. Specifically, attendance at Sundance grew

[58] "Market Share for Each Distributor 1995-2020." The Numbers - Where Data and Movies Meet. Nash Information Services. Accessed January 28, 2020.
[59] "Market Share for Each Distributor 1995-2020." The Numbers - Where Data and Movies Meet. Nash Information Services. Accessed January 28, 2020.

by 53% in 2017 and an additional 74% in 2018. It is important to note that the slight dip in 2019 attendance in Figure 23 below was potentially attributed to the festival's final day coinciding with Super Bowl Sunday, as well as the festival being held slightly later in January than usual.

Figure 21. Annual Attendance at Sundance Film Festival [60]



B. Licensing Contracts between Theaters and Film Distributors

Theaters are able to play movies as a result of licensing agreements. All contracts between theaters and film distributors have historically been done on a film-by-film and theater-by-theater basis. Typically, a theater will record all ticket sales as revenue on its income statement, accounting for the money that then goes back to film distributors as an expense. On AMC Entertainment Holdings' income statement, for example, the company recorded $3.23 billion in admissions revenue in 2019, but then $1.60 billion in film exhibition costs, representing a total of 42% of ticket sales that went directly back to distributors.[61]

[60] "35 Years of Sundance Film Festival." Sundance Institute. 2019.

[61] "AMC Entertainment Holdings, Inc." Form 10-K. Securities and Exchange Commission, February 28, 2020.

Contracts between film distributors and theaters vary based on a number of things, including, but not limited to: licensing fees, the number of screens a movie must be played on, and the duration of time that a movie must be played for at the theater. Licensing fee arrangements historically were determined primarily via a “sliding scale” formula, under which a distributor may receive a higher proportion of ticket sales during the first few weeks of a firm’s release, declining over time. Now, with increasing popularity, theaters and distributors may agree to a “firm term” formula, i.e. a fixed percentage agreed upon prior to the film’s release, or, to a lesser extent, a “review or settlement” formula, i.e. a fixed percentage agreed upon after a firm finishes playing in theaters.[62] Another possibility is a mix of these different agreements; for example, one may determine the percentage of an upcoming week’s admissions revenues based upon performance of the movie during the prior week. This is the formula typically used by AMC in various European territories.[63]

C. Negotiating Power of Film Distributors

Given the size of the Big Six and their increasing power over theater chains, these distributors have the ability to negotiate ever stricter licensing terms for their movies. More specifically, the Big Six maintained a combined market share of over 80% of the film industry in 2019, providing them with powerful leverage. Historically, theaters have kept only 20% - 25% of the ticket sales from the first couple of weeks that a film is shown, with this percentage

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[62] “Regal Entertainment Group.” Form 10-K. Securities and Exchange Commission, March 1, 2018.

[63] “AMC Entertainment Holdings, Inc.” Form 10-K. Securities and Exchange Commission, February 28, 2020.

increasing as the weeks go on.[64] In total, theaters will tend to keep about 40% of a film's ticket sales in the United States and 60% to 80% elsewhere.[65] These percentages fluctuate drastically though when it comes to certain films and their distributors, and can make it very difficult for theaters to be profitable at times without raising prices.

In 2017, the *Wall Street Journal* reported that exhibitors were forced to commit to "a set of top-secret terms that numerous theater owners say are the most onerous they have ever seen" for Disney's *Star Wars: The Last Jedi*. In particular, Disney was set to receive an industry high 65% of all ticket revenue from the movie, while also requiring theaters to show the movie in their largest auditorium for four or more weeks. In addition, if any theater were to violate this contract, including missing one screening or marketing prior to being given the company's permission, Disney was allowed to take 5% more of all ticket sales, totaling 70%.[66] This, in turn, left theaters deciding whether to risk not showing the movie and letting competitors steal the revenue, or take the agreement with lower than usual profits, forcing the theater to make up the profits through higher prices. Independent theater operators, meanwhile, were left unable to economically afford any licensing rights whatsoever.

It is important to note, however, that certain restrictions did used to be in place with regards to the contracts between film studios and theaters. In United States v. Paramount Pictures, Inc. (1948), the Paramount Consent Decrees were formed, prohibiting film distributors from also owning theaters. In addition, distributors were prohibited from "block booking (bundling multiple films into one theater license), circuit dealing (entering into one license that

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[64] Campea, John. "Economics of the Movie Theater – Where the Money Goes and Why it Costs Us So Much." The Movie Blog, October 22, 2007.

[65] Zipin, Dina. "How Exactly Do Movies Make Money?" Investopedia, April 9, 2020.

[66] Schwartzel, Erich. "Disney Lays Down the Law for Theaters on 'Star Wars: The Last Jedi'." The Wall Street Journal. Dow Jones & Company, November 1, 2017.

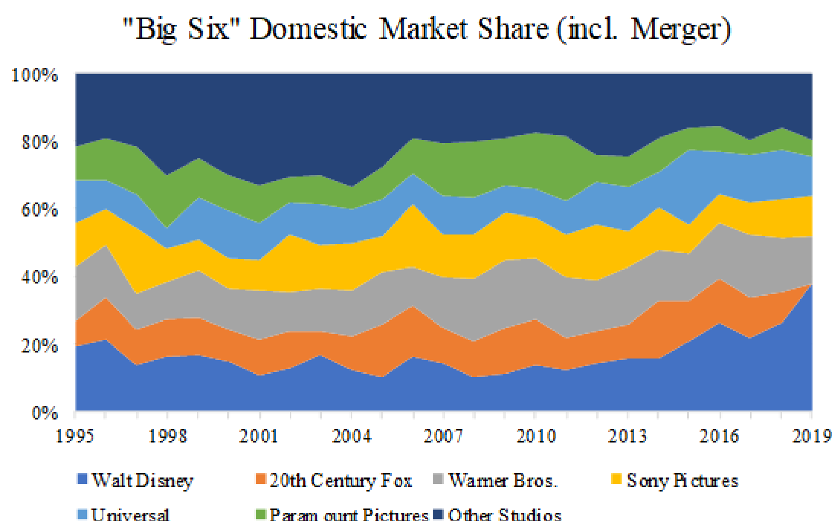
covered all theaters in a theater circuit), resale price maintenance (setting minimum prices on movie tickets), and granting overbroad clearances (exclusive film licenses for specific geographic areas)." [67] However, these decrees were technically only in place for the eight large studios that were being sued at that time: Paramount Pictures, 20th Century Fox, Loew's (now MGM), Radio-Keith-Orpheum (since dissolved), Warner Bros, Columbia Pictures, Universal, and United Artists.[68] As such, Disney was not actually legally bound to these rules, but did tend to follow them anyway as being standard for the industry. As of November 2019, however, the Department of Justice filed a motion to terminate the Decrees, opening up even more power for film distributors.

Even with the Paramount Decrees in place, film distributors were still able to negotiate increasingly strict contracts for a movie that is expected to be a box office hit, forcing theaters to choose lower percentages of ticket sales, or no ticket sales at all. Now, in dismissing the Decrees, actions such as block booking will be permitted, making moviegoers increasingly concerned over stricter licensing agreements and the potential for rising ticket prices, especially given Disney's acquisition of another member of the Big Six, bolstering its power in the industry even more. In addition, consumers may face even further limitations in film choice if distributors force theaters to book entire slates of 'big hit' movies on multiple screens for extended periods of time.

[67] United States v. Paramount Pictures, Inc., 334 U.S. 131 (1948). The United States Department of Justice, February 6, 2020.

[68] United States v. Paramount Pictures, Inc., 334 U.S. 131 (1948). The United States Department of Justice, February 6, 2020.

Figure 22. Distribution of Market Share by the "Big Six" Film Distributors, Assuming Disney Acquired Fox in the Terminal Year [69]



D. Antitrust Regulation & Consumer Welfare

I. Overview of Antitrust Policy

Antitrust laws, also referred to as competition laws, are statutes put together by the U.S. government that regulate business practices and promote competition in order to ultimately protect consumers. These laws are primarily carried out by the U.S. Department of Justice (DOJ) and the Federal Trade Commission (FTC) in the United States. As defined by the DOJ, the "goal of antitrust laws is to promote economic freedom and opportunity by promoting free and fair competition in the marketplace." [70] It is important to understand that there are no strict rules for the DOJ and FTC to follow when determining whether behavior is anticompetitive or not; rather,

[69] "Market Share for Each Distributor 1995-2020." The Numbers - Where Data and Movies Meet. Nash Information Services. Accessed January 28, 2020.

[70] "Mission." The United States Department of Justice, July 20, 2015.

they investigate practices through a series of guidelines, using information from prior cases, industry research, discussions with firms, etc.

II. History of Antitrust Legislation in the United States

1890 Sherman Act: This was the first act passed by Congress to dissolve and prohibit trusts. The existence of trusts typically damaged competition through pricing agreements and a restriction of trade. While the Sherman Act prohibited this behavior, it did not prevent simple horizontal mergers that also reduced competition.[71]

1914 Clayton Act: This act was passed in 1914 to address certain oversights of the Sherman Act. In particular, the Clayton Act prohibits M&A activity that impedes competition or leads to a monopoly within an industry; however, the original act only applies to the transfer of shares.[72]

1914 FTC Act: The FTC Act officially created and formed the role of the Federal Trade Commission, which protects consumers through the prohibition of unfair methods of competition, as well as unfair or deceptive behaviors in commerce. Through this act, the FTC is empowered to gather information, conduct investigations, seek legal remedies for consumers, and make recommendations to Congress and the public.[73]

[71] Act of July 2, 1890 (Sherman Anti-Trust Act). Enrolled Acts and Resolutions of Congress, 1789-1992; General Records of the United States Government; Record Group 11; National Archives, July 2, 1890.
[72] "The Antitrust Laws." Federal Trade Commission, December 15, 2017.
[73] "Federal Trade Commission Act." Federal Trade Commission, December 14, 2018.

1936 Robinson-Patman Act: The Robinson-Patman Act was an amendment to the 1914 Clayton Act. It placed additional bans on certain behaviors, including "discriminatory prices, services, and allowances in dealings between merchants."[74]

1950 Celler-Kefauver Act: This was another amendment to the 1914 Clayton Act that prohibited the exchange of assets in M&A activity, in addition to shares, when it resulted in decreased competition. It strengthened the Clayton Act and improved upon its ambiguity.[75]

1976 Hart-Scott-Rodino Act: The Hart-Scott-Rodino Act also amended the 1914 Clayton Act and helped to set up the process for M&A activity that companies follow today. In particular, it required firms planning large mergers or acquisitions to disclose these plans to the government prior to taking any action.[76]

III. Current Antitrust Regulation

The DOJ maintains Horizontal Merger Guidelines that are referenced in the event of potential anticompetitive behavior resulting from horizontal mergers. It draws on statutory provisions of various federal antitrust laws, including Section 7 of the Clayton Act, Sections 1 and 2 of the Sherman Act, and Section 5 of the Federal Trade Commission Act.[77] Most prominently, Section 7 of the Clayton Act states that mergers will likely be prohibited if "in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or tend to create a monopoly."[78]

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[74] "The Antitrust Laws." Federal Trade Commission, December 15, 2017.
[75] Kenton, Will. "Celler-Kefauver Act." Investopedia, November 18, 2019.
[76] "The Antitrust Laws." Federal Trade Commission, December 15, 2017.
[77] "Horizontal Merger Guidelines (08/19/2010)." The United States Department of Justice, June 25, 2015.
[78] "Horizontal Merger Guidelines (08/19/2010)." The United States Department of Justice, June 25, 2015.

It is important to note that the DOJ and FTC utilize the Horizontal Merger Guidelines to best make *predictions* about the outcome of such mergers, as certainty regarding potential anticompetitive effects is rarely possible.

There are a number of ways that a merger could increase a firm's market power. As defined by the DOJ, a merger enhances market power "if it is likely to encourage one or more firms to raise price, reduce output, diminish innovation, or otherwise harm customers as a result of diminished competitive constraints or incentives." Specifically, a merger could simply eliminate competition between the merging parties, causing unilateral effects. Similarly, a merger could increase the risk of coordinated behavior between remaining competitors, through collusion or conscious parallelism, both of which are known as coordinated effects. When looking at firm behavior amidst potential antitrust concerns, the DOJ focuses on that which would be most profitable for said firms.[79]

When analyzing a prospective or consummated merger, the DOJ looks at multiple pieces of evidence, including actual effects observed, direct comparisons based on experience, market share and concentration, substantial head-to-head competition, and the disruptive role of a merging party. One relevant piece of evidence regarding the merger between The Walt Disney Company and Twenty-First Century Fox, Inc. is market share and concentration. In particular, the DOJ "gives weight to the merging parties' market shares in a relevant market, the level of concentration, and the change in concentration caused by the merger." [80]

Specifically with regards to market share and concentration, the DOJ uses the Herfindahl-Hirschman Index (HHI), though it is important to note that this is an imperfect measure. In this

[79] "Horizontal Merger Guidelines (08/19/2010)." The United States Department of Justice, June 25, 2015.
[80] "Horizontal Merger Guidelines (08/19/2010)." The United States Department of Justice, June 25, 2015.

model, HHI is calculated by summing the squares of each individual firm's market share in an industry. The DOJ also considers the increase in HHI as a result of a merger, which is equivalent to twice the product of the merging firms' market shares. Based on historical evidence, markets are classified into three types based on their HHI: unconcentrated markets (HHI < 1500), moderately concentrated markets (1500 < HHI < 2500), and highly concentrated markets (HHI > 2500).[81]

a. Quantitative Analysis of the Film Industry

Using 2019 data to analyze the film industry, an HHI of 1702 would place it in the moderately concentrated bucket. Market share in this case is calculated based upon the total North American box office revenue of each film distributor. With regards to changes in industries following horizontal mergers, the DOJ notes that "mergers resulting in moderately concentrated markets that involve an increase in the HHI of more than 100 points potentially raise significant competitive concerns and often warrant scrutiny." [82] Taking into consideration the merger between The Walt Disney Company and Twenty-First Century Fox, Inc., the film industry's HHI would increase by approximately 290 points to 1992. While this is still quite a long way from reaching the barrier for highly concentrated markets, it is obvious that the increase of 290 is enough to warrant concern. For context, the DOJ mentions that "mergers resulting in highly concentrated markets that involve an increase in the HHI of more than 200 points will be presumed to be likely to enhance market power." [83]

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[81] "Herfindahl-Hirschman Index." The United States Department of Justice, July 31, 2018.
[82] "Horizontal Merger Guidelines (08/19/2010)." The United States Department of Justice, June 25, 2015.
[83] "Herfindahl-Hirschman Index." The United States Department of Justice, July 31, 2018.

b. Price Effects of Horizontal Mergers

When a horizontal merger occurs, there are often price effects that negatively affect consumers. Enhanced market power by these merged firms often leads to sellers elevating prices charged to their customers. There may, however, be non-price effects as well, including reduced product quality, reduced product variety, reduced service, or diminished innovation.[84] These may arise independently, or they could coexist with the aforementioned price effects.

Although a historically common way of predicting anti-competitive effects of mergers has been a combination of demand estimates with an assumption of constant marginal costs and Bertrand competition, many papers these days look directly at prices before and after mergers take place.[85] In this form of investigation, it is important to look at pricing effects not only on merging parties, but on competitors as well, to distinguish between direct impacts of the merger and overall industry changes. It is also essential to look at the timing of these various price changes in an attempt to understand the reasoning behind them.

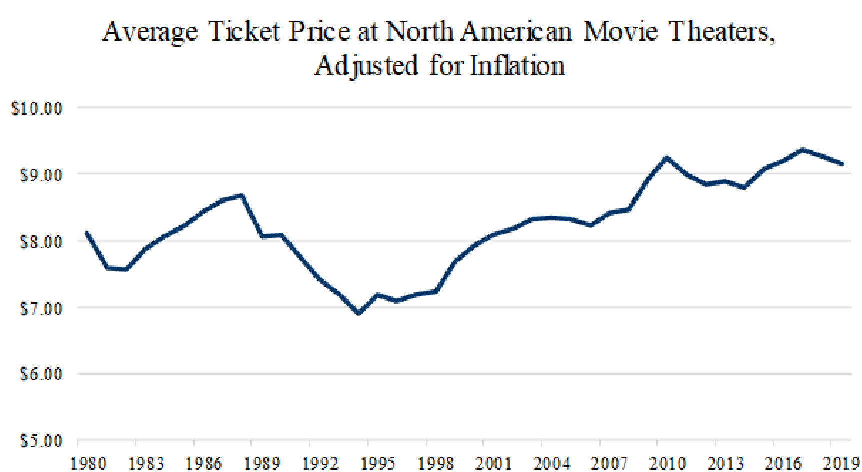
Typically, the Department of Justice would look to other similar horizontal mergers in determining potential antitrust concerns regarding pricing; however, there have not yet been sizeable enough transactions within the Media & Entertainment industry to draw from in this case. As a result, the next section will look simply at historical movie ticket prices dating from 1980 to 2019, as well as published quarterly prices since the completion of the Disney – Fox merger.

[84] "Horizontal Merger Guidelines (08/19/2010)." The United States Department of Justice, June 25, 2015.
[85] "Herfindahl-Hirschman Index." The United States Department of Justice, July 31, 2018.

Analysis of Movie Ticket Prices

Rising movie ticket prices have been a concern of the American public for quite some time. From 1980 to 2019, average North American ticket prices increased from $2.69 to $9.16, representing a change of 241%; however, inflation often remains unaccounted for. After adjusting for inflation, average ticket prices increased by 13% over that same time period. Looking at this in terms of more recent periods, prices have increased by about 19% over the past two decades, but only 3% throughout the last decade. It is important to note that two large acquisitions of theater companies have taken place over the last decade, potentially easing the higher costs of licensing agreements with increasing economies of scale. Specifically, AMC acquired Carmike in December 2016, which increased its U.S. presence by 271 theaters, totaling 2,923 screens. In addition, Cineworld acquired Regal in February 2018, providing it with exposure to the U.S. through 555 theaters and 7,269 total screens.[86]

Figure 23. Average North American Movie Ticket Prices, Adjusted for Inflation and Pegged to 2019 Prices [87]



[86] Miller, Anna. "Movie Theaters in the US." IBISWorld, December 2019.
[87] Miller, Anna. "Movie Theaters in the US." IBISWorld, December 2019.

Following the completion of the Disney-Fox merger at the end of 1Q2019, movie ticket prices increased by 2.8% q/q in 2Q2019, dropped by 3.6% q/q in 3Q2019, and rose again by 4.9% q/q in 4Q2019. With just three quarters of data, there is not enough evidence to draw a conclusion as to whether the merger has or has not increased the price of movie tickets for consumers.

Analysis of Concessions Prices

Looking at the price of movie tickets is important, but it doesn't tell the full story. Theaters tend not to make much of a profit off of their ticket revenue, so they rely on their concessions stands instead. While annual data on concessions pricing is limited, there have been a few studies on the rising price of popcorn in theaters. In particular, from 1929 to 2019, accounting for inflation, the average price of popcorn increased by 1,188%, while ticket prices only increased by 108%.[88] Although concessions only made up 31% of AMC's 2019 revenue and 35% of Cinemark's 2019 revenue, the companies posted margins of 84% and 82%, respectively, compared to 42% and 44% margins on admissions revenue.[89] [90] It is clear that concessions are a far more profitable business for movie theaters than admissions, so given the drastic rise in average popcorn prices versus ticket prices and the fact that this revenue does not need to be shared with film distributors, concessions may actually be the place that consumers are being hurt in the search for profitability by theaters.

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[88] Crockett, Zachary. "Why is Movie Theater Popcorn so Outrageously Expensive?" The Hustle, September 8, 2019.

[89] AMC Entertainment Holdings, Inc." Form 10-K. Securities and Exchange Commission, February 28, 2020.

[90] "Cinemark Holdings, Inc." Form 10-K. Securities and Exchange Commission, February 21, 2020.

c. Reduced Output due to Horizontal Mergers

Another major concern that the Department of Justice investigates with respect to potential antitrust issues of a horizontal merger is a unilateral reduction in output, thereby helping to drive up prices. In terms of the Disney-Fox merger, there is a potential for Disney to reduce the number of films it produces following the merger, given less competition from the rest of the industry now that Fox is no longer a rival.

Following the acquisition, Disney announced that it would be shutting down its Fox 2000 film studio. This studio historically created movies like *Marley & Me*, *The Fault in Our Stars*, *Life of Pi*, and *Alvin & the Chipmunks*. The company would, however, be maintaining Fox Searchlight Pictures and the umbrella studio, 20th Century Fox. Both Fox 2000 and Fox Searchlight produced movies in cooperation with 20th Century Fox, while 20th Century Fox also produced separate movies on its own.

Looking at Fox 2000 in particular, the film studio averaged just over three films each year from 1996 to 2019, making up about 18% of Fox's annual film output. This proportion increases to 21% when looking at just the last ten years alone, demonstrating a huge potential loss of film output to coincide with the shutting down of the studio. It is important to note, however, that this loss could easily be counteracted through an increase in films by Disney's studios or by Fox's other two studios, which seems to be the case given 2019 and 2020 data.

Disney, in particular, has produced an average of 18 movies a year since 1996 and 14 movies a year over the last decade. The studio produced 15 movies under its own Disney name in 2019, while Fox produced 14 – nine by 20th Century Fox and five by Fox Searchlight Pictures. It is important to note that the merger took place in March of 2019, so 1Q2019 Fox releases were under the prior Fox name, while the rest were at that point under Disney's control. For proper

naming conventions, it should also be mentioned that 20th Century Fox became "20th Century Studios" following the merger, and Fox Searchlight Pictures became "Searchlight Pictures."

Looking at 2020 releases so far, in addition to announced upcoming releases, Disney as a whole is set to produce 24 movies, ten of which will be by 20th Century Studios and three by Searchlight Pictures. These 2019 and 2020 numbers represent almost a doubling of 20th Century Fox / 20th Century Studios film production, from a prior decade average of just over four films to nine in 2019 and ten in 2020, while Searchlight has declined from a prior decade average of just over eight films to five in 2019 and three in 2020. In total, this represents an overall increase in Fox films from a prior decade average of just under 13 films per year to 14 in 2019 and 13 in 2020. As such, it appears that Disney plans to make up for its shutting down of Fox 2000 through an increase in production at Fox's other studios, thereby not reducing output for consumers.

Finally, the output of competitors should be considered as well. Over the past ten years, Sony has produced an average of 12.6 films per year, Universal has produced 13.3, Paramount has produced 12.3, and Warner Bros has produced 19.3. In 2020, these companies are expected to produce 7, 7, 11, and 11 films, respectively, and 9, 11, 11, and 11 in 2021. This does not represent a significant enough drop from the companies' typical annual movie output to cause concern for consumers.

IV. Termination of the Paramount Consent Decrees

Looking ahead, it seems likely that the termination of the Paramount Consent Decrees by the Department of Justice will end up inflating antitrust issues for the film industry. The DOJ believes that the film industry has changed massively since the Decrees with the advent of

multiplex theaters and additional film distribution channels for consumers; however, without the Decrees, large film distributors like Disney will be able to open up their own theaters or purchase others, vertically integrating and potentially limiting the distribution of movies to only company-owned theaters.[91]

Independent theater operators responded to the DOJ's opening of review of the Paramount Decrees by stating that they are already dealing with unfair market competition and would not be able to survive if the Decrees were abolished. For example, the DOJ published a letter sent to them by an independent theater operator claiming that companies like Disney favor the Big Three theater chains in a number of ways, on top of likely price breaks, including the fact that Disney granted a policy exemption to AMC and Cinemark, allowing them to show and market old Disney products.[92] The DOJ motioned to terminate the decrees nonetheless, allowing "a two-year transition period for block-booking and circuit dealing to allow the theater and motion picture industry to have an orderly transition to the new licensing changes." [93]

Without the Paramount Decrees, film distributors will have the ability to force theaters into setting minimum ticket prices, known as resale price maintenance. This may lead to theaters offering less discounts or promotions, on top of a potential rise in prices, especially for big hit movies. Furthermore, now that block-booking is permitted, film distributors will be allowed to force theaters into purchasing the licensing rights to bundles of films, rather than one film at a time. In order to gain the rights to hit blockbuster movies, theaters will likely also be forced to play potentially less popular movies, rather than choosing movies based on inherent consumer

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[91] United States v. Paramount Pictures, Inc., 334 U.S. 131 (1948). The United States Department of Justice, February 6, 2020.

[92] "Paramount Consent Decree Review Public Comments 2018: Hobson Financial Group of Illinois." Department of Justice, August 7, 2018.

[93] "Department of Justice Files Motion to Terminate Paramount Consent Decrees." Department of Justice, November 22, 2019.

demand. Consumers may end up facing drastically limited choices at the theater given this flood of “hit” movies and simultaneous reduction in targeted programming. Indie movies, for example, may no longer be produced given their profit uncertainty, not only limiting their distribution in theaters, but also onto streaming platforms. Taking these concerns into mind, on top of others such as circuit dealing or the targeting of specific geographic areas for film release, it is clear that theaters and consumers alike have the potential to be harmed in a number of ways as a result of the termination of the Paramount Consent Decrees.

Chapter 8

Conclusion

After reviewing all of the scenarios created in the accretion/dilution model, it is clear that if Disney successfully achieves its estimated $2 billion in cost synergies by 2021, the merger will become accretive by that time, if not earlier. Accretion over the five year projection period is achieved in cases 9 through 16, which incorporate the base case (cases 9-12) and bull case (cases 13-16) scenarios for SG&A as a percent of sales, as well as all four cases of revenue growth. There are still eight cases, however, in which Disney's earnings will be diluted as a result of this merger over the five year projection period, though by varying degrees. As a result, it will be important for Disney to focus on its cost cutting initiatives throughout this integration period, as well as attempt to find revenue synergies wherever possible.

Looking at the industry as a whole, the increase in HHI of 290 points as a result of the merger does warrant concern, but this would still only be considered "moderately concentrated" instead of "highly concentrated." The Department of Justice does note that "mergers resulting in moderately concentrated markets that involve an increase in the HHI of more than 100 points potentially raise significant competitive concerns and often warrant scrutiny," [94] but in reviewing the Disney-Fox merger, the only antitrust issues investigated by the DOJ were with regards to the companies' cable television businesses. This, of course, warrants the question: why didn't the DOJ look into the film industry? It seems as if this would have been especially essential given the lack of precedent transactions in the film distribution industry for the DOJ to examine.

[94] "Herfindahl-Hirschman Index." The United States Department of Justice, July 31, 2018.

Regardless, when the DOJ investigates antitrust concerns of horizontal mergers, two of the factors they look into are pricing effects and a reduction in output. Although there is limited data on Disney following the Fox acquisition, it appears thus far that there have not been an increase in the price of movie tickets, nor a reduction in film output. It should be noted, however, that theaters may increase the price of concessions rather than admissions, so this is something that should be analyzed in the future once the effect of the acquisition can truly be felt by the industry. In addition, looking at film output, although Disney did immediately shut down the Fox 2000 film studio, previously producing an average of three films a year, it appears from 2019 releases as well as historical and future 2020 releases that the company will be increasing its output from other studios to make up for this slight loss.

In conclusion, the accretion/dilution analysis demonstrates that Disney will likely benefit from this acquisition financially by 2021, assuming no major changes to the industries that it operates in, or the global economy. Given its increased market share in the film industry, it is possible that Disney will be progressively stricter with regards to the licensing terms of its films to theaters. Theaters may therefore incur lower profits, unless they pass the costs onto consumers through higher admissions or concessions costs. It will be important to analyze this data in the coming years as theaters and consumers alike feel the impact of this acquisition, whether it ends up being harmful or not.

A point of further research should be an analysis of the film industry before and after the termination of the Paramount Consent Decrees. Ultimately, what I hypothesize will happen in the future is that a company like Disney will purchase one of the Big Three theater chains. Disney, or another film studio, will likely stop licensing its movies to independent theater operators and focus on major chains, potentially only the one that it purchased and now owns.

The film studio will now have the power to set ticket prices and concessions prices, and may limit consumers' choices to only Disney-distributed movies. Altogether, the future of Disney and the film industry is vastly uncertain, but Disney is going to be, without question, an absolute winner. With accretion from the Fox merger and a termination of the Paramount Decrees, Disney is going to be more powerful than ever.

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Morgan Stanley — **New York, NY**
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- Analyzed and filtered companies for potential buy-side M&A deals; prepared teaser, fireside chat deck, and confidential information memorandum for client in sell-side M&A deal; completed preliminary modeling for potential $20 Bn M&A deal
- Created pitch deck for analyst day presentation in preparation of the $480 MM minority IPO of BellRing Brands, formerly the Active Nutrition segment of Post Holdings; prepared documents for the forward sale agreement of 20 MM common shares of Restaurant Brands International Limited Partnership by HL1 17 LP, an affiliate of 3G Capital Partners

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Lead Analyst | Communications Sector — *Aug 2018 – Aug 2019*

- Managed the ~$1 MM Communications Sector of the ~$9 MM student-run hedge fund striving to outperform the S&P 500 Index
- Presided over the Sector's shift from Telecommunications into Communications in alignment with the reorganization of the S&P 500 Index, creating a new benchmark tracker and adjusting the portfolio to account for new discretionary and technology-based holdings
- Worked directly with investors as the Director of Monthly Reports and Director of Compliance in order to ensure all demands were met

Lead Analyst | Consumer Staples Sector — *May 2018 – Aug 2018*

- Managed the ~$550 k Consumer Staples Sector of the ~$9 MM student-run hedge fund striving to outperform the S&P 500 Index
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- Managed the ~$600 k Energy Sector of the ~$9 MM student-run hedge fund striving to outperform the S&P 500 Index
- Assembled weekly, monthly, quarterly, and annual reports for investors detailing performance, trends, and company-specific events
- Researched current and potential holdings for the Energy Sector and created valuations using fundamental analysis, equity research reports, discounted cash flow models, net asset valuation models, and comparable analysis in order to support stock selections

NSI, Neal Systems Inc. — **Newtown, PA**
Finance Intern — *May 2017 – Aug 2017*

- Collected, applied, and posted A/R payments to the General Ledger, as well as verified receipts to process commission for salesmen
- Worked on a project team to set up a more efficient customer relationship management database
- Vouchered and disbursed A/P, as well as performed audits on approximately 45 completed projects in order to verify profits

Wall Street Boot Camp I and II — **University Park, PA**
Participant and Student — *Aug 2017 – Dec 2017*

- Selected as one of the top 40 students in the Smeal College of Business for two intensive training programs featuring weekly classes and information sessions taught by current and former Wall Street professionals in a variety of career paths
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Penn State IFC/Panhellenic Dance Marathon (THON) — **University Park, PA**
Sales Associate | THON Store — *May 2018 – Aug 2018*

- Worked ~15 hours a week assisting customers, operating the check out, and maintaining the front and back areas of the store
- Maintained sales and inventory records in order to ensure accurate reconciliations and efficient restocking of merchandise

Finance Captain | Alternative Fundraising — *Oct 2016 – May 2018*

- Counted, tracked, and deposited all alternative fundraiser revenue and other cash and check donations totaling ~$10.15 MM
- Liaised with the Organization of Student Activities to ensure proper depositing and crediting of all relevant donations
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F.O.R.M. (Future Opportunities Reached by Mentorship) Consulting — **University Park, PA**
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