

2017 Duff & Phelps YOUniversity Deal Challenge

Valuation of Home Box Office (HBO)

October 2016

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Section 1

Executive Summary

Executive Summary

- ❖ Technological advancements have disrupted many traditional industries. In the case of the entertainment and media industry, technological advancement as a result of internet ubiquity and advent of smartphones and smart- connected-devices has led to changes in users behavioral patterns. These changes have created opportunities and risks for stakeholders of the companies that were protected by their traditional business models.
- Adapting to these changes is crucial to the success of businesses across the entertainment and media industry, including that of Time Warner Inc. ("Time Warner" or NYSE:TWX), the parent company of Home Box Office, Inc. ("HBO"), which owns and operates leading multichannel premium pay television services, HBO and Cinemax. HBO's businesses consist principally of premium pay television services, and the HBO NOW streaming service domestically, and premium pay, basic tier television and streaming services internationally, as well as home entertainment and content licensing. HBO NOW was unveiled in response to rapid changes of users' viewing and media consumptions habits.
- It's been approximately two years since Time Warner, Inc. announced the launch of HBO NOW. It has also been more than two years since Twenty-First Century Fox, Inc. (NASDAQ:FOXA), launched a bid for \$80 per share for Time Warner (the parent company of HBO). However, TWX's stock performance has been flat since both announcements. Time Warner's board wants to study all of its options with HBO and it has hired you to assist them with the assessment of their strategic options.

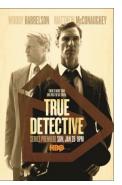
¹ Source: Time Warner, Inc. fillings.

Section 2

Background

Company Overview



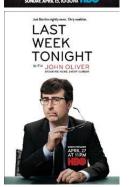


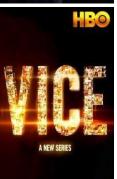














- HBO operates as a premium television company.¹
- HBO offers programs that include series, sports, documentaries, comedy, and movies. It allows viewers to stream episodes and programs on desktop computer, mobile devices, tablets, streaming players, game consoles, and connected televisions. It serves subscribers in the United States, Asia, Europe, and Latin America.
- As of December 31, 2015, HBO had approximately 49 million domestic subscribers and 82 million paid users internationally. In 2015, HBO generated approximately \$5.6 billion of revenues and \$1.9 billion of profit.²
- HBO Operates as a subsidiary of Time Warner Inc. (NYSE: TWX).

Source: (1) per Capital IQ; (2) TWX Form 10k, filed February 26, 2016.

Company Overview - Continued

HBO Family of Channels



- HBO provides up to thirteen multiplex channels seven 24-hour multiplex channels – as well as a subscription video on demand service.
- HBO GO, an online video service that offers a selection of films and TV shows from HBO, was launched in 2010.
 - HBO GO offers a selection of theatrically released films, original programs, movies, comedy specials, documentaries and sports programming from HBO.
 HBO GO is only available as a complementary service to existing HBO television subscribers.
- **HBO International:** Unique, country-specific HBOand Cinemax- branded premium pay, basic tier television, and streaming services are distributed in more than 60 countries.
- The terms of HBO's agreement with its international affiliates vary from country to country.

*Source: per Capital IQ

Company Overview - Continued



- On April 7, 2015, HBO launched a stand-alone streaming service to users of Apple Inc. products and customers of Cablevision Systems Corp., called HBO NOW.
- HBO NOW allows consumers to access approximately 2,000 HBO titles for a monthly fee, and only requires an internet connection.
- HBO used BAMTech to build the infrastructure of HBO NOW. BAMTech is a spin-off from MLB Advanced Media, which handles the backend and content delivery system for Major League Baseball.
- In February 2016, Richard Plepler, CEO of HBO announced that HBO NOW had roughly 800,000 paying subscribers since its launch in April of 2015.
- The subscriber count is lower than the 1 million to 2 million subscribers that Wall Street had expected the streaming service to gain at that point.

*Source: The Wall Street Journal

Historical Financial Information (USD in Million)		2012A		2013A		2014A		2015A	ası	LTM of Q2 2016
Subscription	\$	4,010.0	\$	4,231.0	\$	4,578.0	\$	4,748.0	\$	4,877.0
Content and Other	Ψ	676.0	Ψ	659.0	Ψ	820.0	Ψ	867.0	Ψ	875.0
Total Revenues		4,686.0		4,890.0		5,398.0		5,615.0		5,752.0
Programming Costs:										
Acquired Films and Syndicated Series		885.0		894.0		1,007.0		1,003.0		1,015.0
Originals and Sports		856.0		856.0		960.0		1,032.0		1,103.0
Total Programming Costs		1,741.0		1,750.0		1,967.0		2,035.0		2,118.0
Other Direct Operating Costs		659.0		618.0		741.0		776.0		787.0
Costs of Revenues		2,400.0		2,368.0		2,708.0		2,811.0		2,905.0
Gross Profit		2,286.0		2,522.0		2,690.0		2,804.0		2,847.0
Gross Margin		48.8%		51.6%		49.8%		49.9%		49.5%
Selling, General and Administrative		632.0		705.0		746.0		831.0		847.0
Gain on Operating Assets		-		(113.0)		-		-		-
Asset Impairement		-		-		4.0		-		-
Restructuring and Severance Costs		15.0		39.0		63.0		-		36.0
Depreciation		85.0		91.0		77.0		81.0		80.0
Amortization		7.0	-	9.0		14.0		14.0		14.0
Operating Expenses		739.0		731.0		904.0		926.0		977.0
Margin		15.8%		14.9%		16.7%		16.5%		17.0%
Operating Income		1,547.0		1,791.0		1,786.0		1,878.0		1,870.0
Margin		33.0%		36.6%		33.1%		33.4%		32.5%
Segment EBITDA		1,639.0		1,891.0		1,877.0		1,973.0		1,964.0
Less: Corporate SG&A		59.3		75.1		92.4		17.6		20.0
EBITDA	\$	1,579.7	\$	1,815.9	\$	1,784.6	\$	1,955.4	\$	1,944.0
Segment Capital Expenditures		65.0		45.0		58.0		68.0		n/a
Allocated Portion of Corporate Expens	ses									
Capital expenditures		8.0		14.4		7.6		4.1		n/a
Depreciation		5.0		5.2		5.6		1.1		1.3

Notes:

1. Content and Other – HBO also generates revenues from exploitation of its original programming through multiple distribution outlets. HBO sells its original programming in both physical and digital formats in the U.S. and various international regions through a wide variety of digital storefronts and traditional retailers.

HBO also licenses both individual programs and packages of programs to television networks and Subscription Video on Demand (SVOD) services.

- 2. Costs of Revenues and Selling, General and Administrative expenses exclude depreciation.
- 3. Fiscal year end as of December 31.
- 4. Refer to page 12 for a detailed calculation of the allocated portion of Corporate Expenses.
- 5.Refer to Time Warner's (NYSE:TWX) SEC filings for more information.

Historical Financial Information

_	2012A	2013A	2014A	2015A	LTM as of Q2 2016
Subscription	85.6%	86.5%	84.8%	84.6%	84.8%
Content and Other	14.4%	13.5%	15.2%	15.4%	15.2%
Total Revenues	100.0%	100.0%	100.0%	100.0%	100.0%
Programming Costs:					
Acquired Films and Syndicated Series	18.9%	18.3%	18.7%	17.9%	17.6%
Originals and Sports	18.3%	17.5%	17.8%	18.4%	19.2%
Total Programming Costs	37.2%	35.8%	36.4%	36.2%	36.8%
Other Direct Operating Costs	14.1%	12.6%	13.7%	13.8%	13.7%
Costs of Revenues	51.2%	48.4%	50.2%	50.1%	50.5%
Gross Profit	48.8%	51.6%	49.8%	49.9%	49.5%
Selling, General and Administrative	13.5%	14.4%	13.8%	14.8%	14.7%
Gain on Operating Assets	0.0%	(2.3%)	0.0%	0.0%	0.0%
Asset Impairement	0.0%	0.0%	0.1%	0.0%	0.0%
Restructuring and Severance Costs	0.3%	0.8%	1.2%	0.0%	0.6%
Depreciation	1.8%	1.9%	1.4%	1.4%	1.4%
Amortization _	0.1%	0.2%	0.3%	0.2%	0.2%
Operating Expenses	15.8%	14.9%	16.7%	16.5%	17.0%
Operating Income	33.0%	36.6%	33.1%	33.4%	32.5%
Segment EBITDA	35.0%	38.7%	34.8%	35.1%	34.1%
Corporate SG&A	1.3%	1.5%	1.6%	1.1%	1.3%
EBITDA	33.7%	37.2%	33.2%	34.0%	32.9%
Segment Capital Expenditures	1.4%	0.9%	1.1%	1.2%	n/a

Historical Financial Information

Trend Analysis - Growth				
_	2012A	2013A	2014A	2015A
Subscription	6.4%	5.5%	8.2%	3.7%
Content and Other	(7.4%)	(2.5%)	24.4%	5.7%
Total Revenues	4.2%	4.4%	10.4%	4.0%
Programming Costs:				
Acquired Films and Syndicated Series	(4.8%)	1.0%	12.6%	(0.4%)
Originals and Sports	10.3%	0.0%	12.1%	7.5%
Total Programming Costs	2.1%	0.5%	12.4%	3.5%
Other Direct Operating Costs	6.6%	(6.2%)	19.9%	4.7%
Costs of Revenues	3.3%	(1.3%)	14.4%	3.8%
Gross Profit	5.2%	10.3%	6.7%	4.2%
Selling, General and Administrative	(6.2%)	11.6%	5.8%	11.4%
Gain on Operating Assets	NMF	NMF	NMF	NMF
Asset Impairement	NMF	NMF	NMF	NMF
Restructuring and Severance Costs	0.0%	160.0%	61.5%	NMF
Depreciation	13.3%	7.1%	(15.4%)	5.2%
Amortization	(12.5%)	28.6%	55.6%	
Operating Expenses	(4.3%)	(1.1%)	23.7%	2.4%
Operating Income	10.3%	15.8%	(0.3%)	5.2%
Segment EBITDA	10.4%	15.4%	(0.7%)	5.1%
Corporate SG&A	NA	22.2%	18.1%	(25.9%)
EBITDA	NA	15.1%	(1.5%)	6.6%
Segment Capital Expenditures	(31.6%)	(30.8%)	28.9%	17.2%

Corporate Expense Allocation Calculation

	Historical Financial Information				С	ommon Siz	e (2)				
Revenues:		2012A	2013A	2014A	2015A	LTM as of Q2 2016	2012A	2013A	2014A	2015A	LTM as of Q2 2016
Turner		9,525.0	9,983.0	10,396.0	10,596.0	10,975.0	36.3%	36.7%	36.7%	36.3%	37.9%
НВО		4,686.0	4,890.0	5,398.0	5,615.0	5,752.0	17.9%	18.0%	19.1%	19.2%	19.8%
Warner Bros.		12,018.0	12,312.0	12,526.0	12,992.0	12,262.0	45.8%	45.3%	44.2%	44.5%	42.3%
Intersegment Eliminations	(1)_	(906.0)	(724.0)	(961.0)	(1,085.0)	(1,086.0)	100.0%	100.0%	100.0%	100.0%	100.0%
Time Warner Total Revenues		25,323.0	26,461.0	27,359.0	28,118.0	27,903.0					
Corporate Expenses:		2012A	2013A	2014A	2015A	LTM as of Q2 2016	(1) In the or	dinarv cours	e of busines	ss. Time Wa	arner's
SG&A		332.0	403.0	449.0	330.0	364.0	,	•			th one another.
Depreciation		28.0	28.0	27.0	21.0		These trans	actions are	eliminated ii	n consolida	tion.
·							(2) The com	mon size al	bove repres	ents each s	segments
Allocated Portion of Corporate						LTM	revenue as	a percentag	e of TWX's to	otal revenu	e. General
Expenses to HBO:		2012A	2013A	2014A	2015A	as of Q2 2016	Corporate e	xpenses an	d corporate	capital exp	enditures have
SG&A		59.3	72.5	85.6	63.5	72.2	been alloca	ted based o	n the revenu	ue of each s	segment as a
Depreciation		5.0	5.0	5.1	4.0	4.6					urposes, the
							allocation w		ore adjustin	g for Inters	egment
		2012A	2013A	2014A	2015A	LTM as of Q2 2016	Eliminations	5.			
Corporate Capital expenditures		45.0	77.0	37.0	76.0	n/a					
		2012A	2013A	2014A	2015A	LTM as of Q2 2016					

Corporate Timeline: Fox Take Over Attempt

Murdoch's interest in Time Warner despite its \$62 billion market value has been the subject of industry speculation. He still covets the owner of HBO, among other potential targets, according to a former News Corp employee told by executives recently about Murdoch's interest."

Looming large over these deals is the competitive threat from Silicon Valley. Internet giants like Google, <u>Amazon</u>, <u>Netflix</u> and others are pouring resources into original content and developing the next-generation TV companies."

"A merged Fox-Time Warner would have been a powerful counterweight to bigger distributors, although the prospect of a deal had unnerved some in the industry. Such a deal would create a "very powerful programming enterprise with lots of market power," Liberty Media Chairman <u>John Malone</u> had said on Monday, adding that such a deal would "raise all kinds of issues" for both the Justice Department and the Federal Communications Commission.

The direct-to-consumer HBO plan was the most significant news out of Time Warner's investor day presentation, which was aimed at easing concerns about the company's future in the wake of the decision to reject an \$85-a-share takeover offer from 21st Century Fox this past summer."



Murdoch's ambitions may take center stage in Sun Valley



Murdoch Puts Time Warner on His Wish List



Fox Withdraws Time Warner Bid

THE WALL STREET JOURNAL.

HBO to Launch Stand-Alone
Streaming Service

Time Warner Aims at 'Cord Cutters' Who Don't Subscribe to Pay TV

July 1, 2014 July 16, 2014 August 5, 2014 October 15, 2014

Corporate Timeline: HBO Since Fox Take Over Attempt

"HBO NOW, the channel's new standalone streaming service, is now available on Apple TV for \$14.99 per month. Early adopters can take advantage of a 30-day free trial that HBO is offering."

"We're very excited about where we are," said Plepler. When pressed about the lower-than-anticipated subscriber numbers, the HBO head got defensive. "I wouldn't say *only* 800,000 subs," he said. "We're just getting started. ... I think we're going to make a lot of progress as we put new content on to our platforms." Plepler said the cable company will hold fast to its \$14.99 a month price for the subscription service. "We don't have any plans to change the price point — we think that a premium price right now makes sense," he said.

"HBO, which is coming off its biggest Emmy haul ever last year, had a total of 94 nominations, the highest of any network for the 16th consecutive year. The streaming services Netflix and Amazon continue to make significant inroads, with each scoring its highest Emmy nomination totals (54 for Netflix and 16 for Amazon). The broadcast networks are still experiencing a diminished presence at the Emmys, with three of the networks — ABC, Fox and CBS — notching fewer nominations than in 2015."

"Comcast Corp's pay television subscribers will be able to stream movies and TV shows from Netflix Inc through the cable operator's X1 set-top box later this year, the companies said on Tuesday. The world's largest subscription video service has been working for years to strike deals with pay TV operators to stream its service through set-top boxes. In 2014, it reached agreements with three smaller U.S. cable operators. Comcast is the largest cable TV provider in the United States. The company reported 22.4 million video subscribers at the end of March. About 35 percent of them have X1, an operating system with upgraded features such as voice control. Comcast has been adding capabilities in a bid to retain customers who have increasingly gravitated to online video offerings."



April 7, 2015 February 10, 2016

July 5, 2016

July 14, 2016

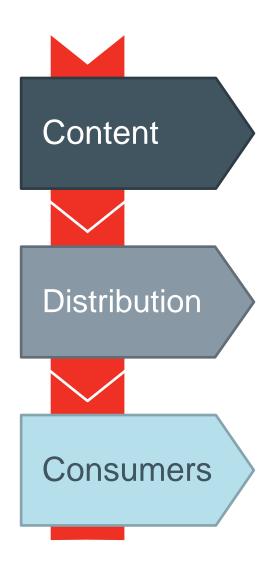
Section 3

Industry Information

Entertainment & Media Platforms

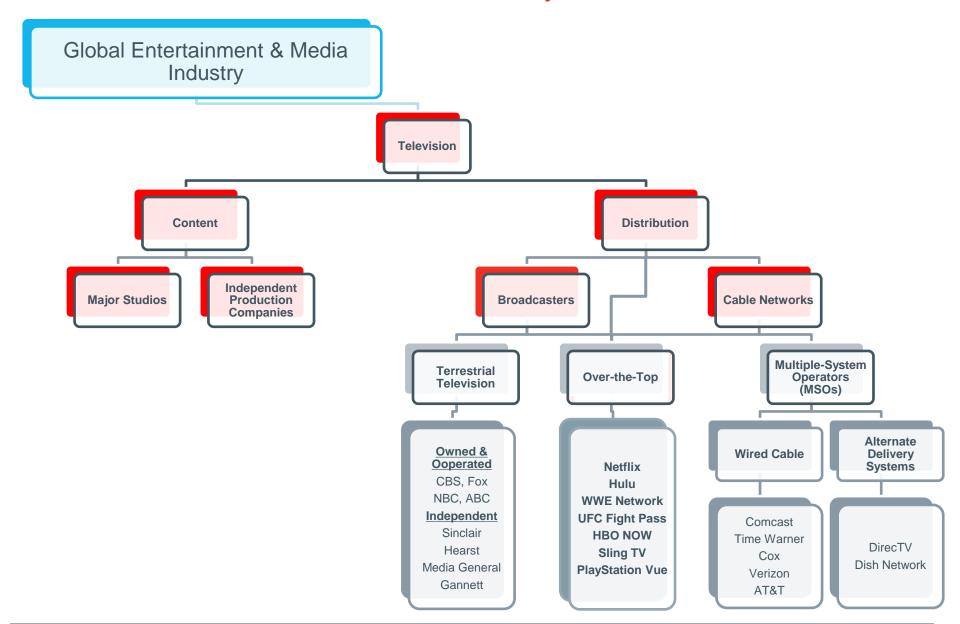
- Entertainment businesses are characterized by one of two activities:
 - Content Creation
 - Distribution
- Content creation requires substantial upfront investment
 - Deficit financing model
- Distributors generate revenues from various kinds of distribution arrangements:
 - Sale or rental of their content to consumers (e.g. Home Video, iTunes, etc.)
 - Advertising sales; and
 - Subscription service sales.
- The recent convergence of media platforms is providing both challenges and opportunities to market participants.
 - For example, content creation control has begun from businesses to the hands of consumers. (User generated content is making up an increasing portion of the content provided on the Internet)
 - » Example: Maker Studios, Fullscreen, and other multi-channel networks
 - New forms of distribution, (e.g. mobile, digital download, etc.) have resulted in opportunities (i.e. Netflix, YouTube, Facebook) and threats (Cord Cutters, publishing industry, music labels, etc.) for the industry players.

Television Industry Overview



- The television industry is comprised of companies that produce and distribute entertainment content.
- Companies in this industry broadcast television programs for free to the public (TV Broadcast) and for a fee to cable subscribers (Cable Networks).
- Traditionally, Broadcasters have relied on local TV stations that transmit TV signals over the air through their FCC licenses.
- Cable Networks, on the other hand, rely on the multiple-system operators ("MSOs") (e.g., Comcast) and telco companies (e.g., AT&T) for distribution to American households.
- Pay-TV is a subset of the Cable Networks segment of the Television Industry, where consumers can access content by paying MSOs a fee for a specific channel (HBO).
- Subscription Video on Demand (SVOD) services use a subscription business model, where subscribers are charged a monthly fee to access unlimited instant streaming to a program library. HBO NOW is provided to subscribers via SVOD.

Global Entertainment & Media Industry Structure



Cable Television History¹

- Cable television was developed in the late 1940s to provide television service to small communities that could not receive over-the-air signals due to difficult terrain or physical distance from broadcast stations.
- ❖ The service was slow to catch on at first. By 1970, cable served approximately 3.9 million subscribers, representing 6.7% of TV household at the time.
- ❖ Despite further advancements in early 1970s, which allowed cable companies to transmit more than 100 channels over their systems, the expansion was slow due to lackluster demand (consumers were able to receive over-the-air signal at no cost), prohibitive costs to expand.
- The advent of the first cable-only network, Time Warner Inc.'s HBO, increased the demand dramatically. HBO's success spurred other cable networks to enter the market.
- In the 1970s, the satellite television industry was also born in the U.S. from the cable television industry since cable companies we using communication satellites to distribute television programming.
- ❖ HBO, Turner Broadcasting System (TBS), and Christian Broadcasting Network (CBN) were among the first to use satellite television to deliver programming.
- Therefore, satellite television, a.k.a. Alternate Delivery Systems (ADS), provided another distribution system for cable networks.
- As of January 1, 2016, there were approximately 113 million TV Homes in the U.S., according to Nielsen. Among the U.S. TV Homes, the breakdown between ADS, Wired Cable, Telco, and Over the Air (OTA) (those without either ADS or Wired) is as follows:

	Total ADS	Cable	Telco	ОТА
TV Homes in U.S. ²	30.3 M	54.4 M	12.0 M	16.3 M
% of Total Homes	26.8%	48.1%	10.6%	14.4%

- 1. Source: Industry Surveys: Broadcasting, Cable & Satellite, S&P Capital IQ.
- 2. TVB.org and SNL Kagan; as of Q2 of 2016.

Television Landscape: 21st Century Fox Example

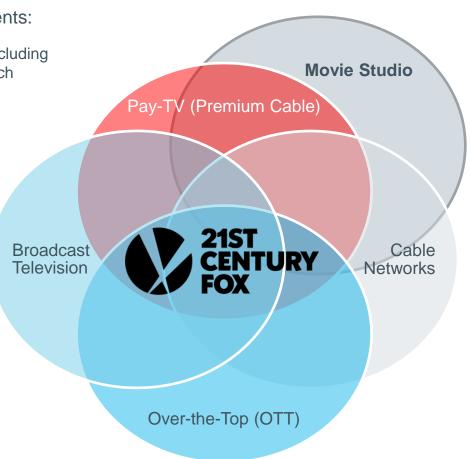
The following illustrates the landscape of the television industry using 21st Century Fox (Fox) as an example:

• <u>Cable Networks</u> → Fox produces and licenses programming for distribution primarily through cable television systems, direct broadcast satellite operators, telecommunications companies and online video distributors.

• Broadcast Television → Fox operates two main segments:

Fox Broadcasting Company – Fox has 207 FOX affiliates, including 17 stations owned and operated by the Company, which reach approximately 99% of all U.S. television households.

- Fox Television Stations owns and operates 28 full power stations. 17 stations are FOX affiliates.10 stations are MyNetworkTV stations. 1 station is independent.
- Over-the-Top (OTT) → The Company has an approximate 33% equity interest in Hulu which operates an online video service that offers video content from Fox, the other one-third partners in Hulu, NBCUniversal and The Walt Disney Company, as well as over 400 other third party content licensors.
- Pay-TV (Premium Cable) → Currently, Century Fox does note operate a Premium Cable Channel.



Pay-TV Industry Overview

- Subscriber-based business; No advertising
 - Direct selling to customers
 - Partnership with cable operators
- Premium Content
- Pay-per-view sports content
- Video on Demand
- General strategy: Releasing theatrical titles on TV and producing and airing original content (films, TV series)
- Reliance on film studios and producers for quality products
- Providing a specific program that appeals to each segment of the population
 - Creating original content (e.g. The Sopranos, Sex and the City, Game of Thrones)

Premium network window output deals						
output ucuis		Films Released				
Studio	Network	Through				
Open Road Films	Netflix	12/31/2016				
DreamWorks Animation	Netflix	12/31/2017				
Summit Entertainment	НВО	12/31/2017				
DreamWorks Studios	Showtime	12/31/2018				
Lions Gate Entertainment Corp.	EPIX	12/31/2018				
MGM Studios Inc.	EPIX	12/31/2018				
Paramount Pictures Corp.	EPIX	12/31/2018				
Relativity Media	Netflix	12/31/2018				
Walt Disney Pictures	Netflix	12/31/2018				
Weinstein Co.	Netflix	12/31/2018				
STX Entertainment	Showtime	12/31/2019				
Open Road Films#	Showtime	12/31/2020				
IFC Films	Showtime	12/31/2021				
Sony Pictures Entertainment*	Starz	12/31/2021				
Sony Animation	Netflix	12/31/2021				
Universal Studios Inc.	нво	12/31/2021				
Warner Bros. Entertainment	НВО	12/31/2021				
Twentieth Century Fox Film	НВО	12/31/2022				

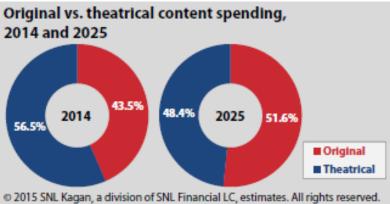
[#] Begins in 2017.

^{*} Excludes animation titles.

^{© 2016} SNL Kagan, a division of SNL Financial LC, estimates based on network, distributor and industry data.

Pay-TV Providers





- Netflix has been targeting the premium network window for several years and has secured Relativity Media film rights, renewed its deal with DreamWorks Animation in 2016, and secured Walt Disney Co. film rights beginning with those released in 2016.
- Netflix paid \$30.0 million in 2008 to gain the rights to stream Starz films. The deal expired in 2012.
- HBO / Cinemax extended its deal with Universal Studios and Fox until 2021 and 2022, respectively.
- Epix, a joint venture of Viacom (Paramount Pictures),
 Metro-Goldwyn-Myer and Lions Gate Entertainment, was launched in 2009 as a premium cable network and a subscription video on demand service.
- Original programming may receive much of the press, but theatrical films remain a significant content source for premium networks.
- On June 30, 2016, Lions Gate Entertainment Corp. (NYSE:LGF) agreed to acquire Starz Inc. (NASDAQ:STRZA) for \$4.4 billion in cash and stock.

Appendix A

Deliverables

Deliverable 1

- ❖ You are tasked to perform an analysis of the stand-alone fair market value ("FMV") of HBO.
 - We define Fair Market Value as the price at which property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or to sell, and both having reasonable knowledge of relevant facts (Regs., Sec. 20.2031-1(b); Rev. Rul. 59-60, 1959-1 C.B. 237). In estimating Fair Market Value, we will assume the Company's existing business to be ongoing.
- Estimate the FMV of HBO based on a Discounted Cash Flow Analysis, a Comparable Company Analysis (comps), and a Precedent Transaction Approach. Summarize your concluded value.
- Review Time Warner's public filings of segment financial data for HBO and conduct your own market research. Prepare an analysis of the division in relation to its strategic position, industry environment (from your research) and financial condition. Develop a forecast of the division's future financial performance for your discounted cash flow analysis.
- Please incorporate the impact of the OTT offering and provide supporting analysis. Specifically, determine the potential impact to HBO of having an online service in conjunction with its existing services.

Deliverable 2

- A. Time Warner's board is exploring various strategic options for HBO. One of the members of the Board of Directors (the "Board") suggested that due to favorable valuations of entertainment and media companies and a strong M&A market, Time Warner should consider selling HBO. One of the Board advisors from a large investment bank suggests that there are two types of buyers to consider for HBO: A strategic buyer and a financial buyer. However, the Board members may not fully understand the differences between each buyer.
 - Compare and contrast the two types of buyers for HBO. In answering this question, comment on synergies, leverage, and premium each buyer would be willing to pay. Also comment on the investment horizon and potential exit strategies for each buyer. In addition, comment on operational differences for HBO under each type of buyer. Finally, discuss any other differences that you can identify that are not mentioned above.
- B. After receiving your explanation of the differences between a financial and a strategic buyer, the Board members asked their investment banking advisors to recommend which type of buyer is better suited for HBO.
 - Choose one of the options below, defend your choice and justify your answer by providing specific reasoning as it relates to HBO.
 - 1. HBO is a better target to be acquired by a financial buyer.
 - 2. HBO is a better target to be acquired by a strategic buyer.

In addition, develop a list of the top <u>2 buyers</u> that would qualify under your selection with rationale. Do not use Twenty-First Century Fox as one of your selections.

No calculation is required for this deliverable.

Deliverable 3

- In April 2016, the sixth season of Game of Thrones was broadcast on HBO. Within hours of the broadcast, a pirated digital copy was available on the Internet via the software known as Bit Torrent.
- Bit Torrent is a free software program that lets users swap and download large media files. While the software does have legitimate uses, it is also heavily used to illegally download movies, TV shows, and other copyright-protected content.
- Ultimately, HBO estimated that over 2 million people had illegally downloaded a copy, all without paying anything to HBO or the creators of the show.
- HBO is contemplating a lawsuit against Bit Torrent for theft of copyrighted material.
- Present a <u>methodology</u> that describes how HBO would calculate damages related to this matter (*i.e.*, how would one determine damages based on the allegations?).
- ❖ A final damages calculation is not required.

Appendix B

Additional Assumptions

Other Information

Industry Benchmarking:

 HBO is a subsidiary of a publicly traded company; For the purpose of this analysis, use industry benchmarking for valuation inputs such as capital structure and net working capital level.

Cost of Debt:

For the purpose of the analysis, rely on TWX's cost of debt.

Cost of Equity:

 HBO is a private company; therefore, you can rely on comparable public companies to derive a beta for HBO (refer to your comp selection). For the purpose of calculating a beta, assume some sort of "industry norm" cap structure. For betas of comparable companies, we suggest using sources such as Bloomberg or Yahoo Finance.