



# Short WWE: Wrestling With Valuation

WWE (World Wrestling Entertainment Inc) is an entertainment/ media company who produces wrestling matches. Their most popular programming is WWE Raw, WWE SmackDown and WWE Wrestlemania. WWE has been a popular sports medium for several decades and their success is predicated on maintaining the WWE brand and cultivating talent. Their product has been distributed primarily through amPPV (pay-per-view) model where a cable company transmits the content and provides billing and other services in exchange for a portion of each view. Now that there exists new mediums to transmit content, WWE is moving away from the PPV

engaging in a monthly membership where subscribers can view all 12 PPV shows plus archived footage and other content of that sort for \$9.99 a month similar to the way that Netflix or Amazon allow streaming services at a monthly rate for their content. The new WWE network (which comes on line at the end of February 2014) will provide individuals with 24/7 access to wrestling content. WWE believes that the reduced cost and increased content will entice wrestling viewers to move to their subscriber model cutting out the middle man (cable companies).

WWE's willingness to innovate is noted and this certainly should drive revenues higher. However, the market seems to have gotten a bit ahead of itself. The company currently trades at 161x earnings (they traded at 23x just a year ago) and 26x EV/EBITDA. Their very low profit margin (and subsequently ROE) against a high valuation (P/CF of 20x) suggests the firm will have to expand enormously in order to grow into that multiple.

After performing DCF analysis it is clear that in order to earn its current multiple, WWE will have to go from around 500m in revenue to 4 billion in revenues over the next decade and increase FCF by 10x over the same period.

Furthermore, analysis of the investor presentation warrants some concern as the information is misleading and based on my analysis, incorrect. For example, WWE claims that 53% of total US TV households viewers have an affinity for WWE's content and that they have the highest prime time viewership of any TV network.

Snapshot	2013 (TTM)
P/E	161.40
P/E (cash adjusted)	151.23
EV/EBITDA	25.72
P/S	3.61
P/BV	6.49
P/CF	20.90
ROE	4.0%
ROA	2.9%
ROIC	6.1%
PEG	8.1
Gross Margin	38.2%
Operating Margin	4.1%
Profit Margin	2.1%

Based on the analysis conducted and displayed in the rest of this research report, I believe WWE is overvalued around 25-50%. There does not appear to be any likely way in which this firm can generate the FCF the street anticipates. The cost of content will rise, the cost to introduce viewers to this new medium will be expensive, the ability to grow their market share is doubtful, and the validity of their Investor Presentation is questionable. The stock is priced to perfection and incredibly expensive. The risks of poor adaptation, below stellar growth, the inability to renegotiate its rights fees resulting in higher revenue as both RAW and SmackDown come due in 2014 appears to be overlooked. Bottom line, in order to be successful, WWE must convince 2 million subscribers to spend \$120 a year of their discretionary budget on wrestling content. At a time when consumer discretionary spend is under stress, and the same amount of money could be spent on Netflix to give you access to incomparably more media, it seems unlikely there are enough people whose total consumer utility from wrestling warrants this sort of spend. I recommend shorting WWE a few weeks after their Feb 24th network goes live as the stock may appreciate in hype/anticipation of that event.

# Is the WWE Investor Presentation overly Optimistic?

The latest WWE investor presentation (released Jan 14) is filled with very ambitious and motivating statistics and graphs. The question is, are these achievable? Do they represent a fair overview of the business? I would argue that a good portion of WWE's recent stock run-up is based on some of the commentary in these investor presentations which, after some additional analysis, may not be as rosy as it seems. Before we get into the details, I want to bring one important forward looking accounting treatment to light. When they amp up their 24/7 network they will obviously need to produce more content. Currently "in release" content gets amortized over an approximate three year period. It seems unlikely that there will be significant rewatch value. Furthermore, there is a significant favor to watch sports content live. It would seem absurd to watch a football game you missed from two years ago. I would imagine the same demand/consumption patterns of the rest of the sports industry should apply to WWE. While depreciation of film and impairment for film and television production may seem low in 2014 and 2015, it will catch up to them causing significant reduction in EPS going forward. It is unclear how they anticipate to generate 24/7 content for wrestling given the amortization costs of that content

**1)** **Claim:** WWE touts themselves as the #7 ranked company on the Composite Social Business Index produced by Dachis Group. **Counter:** They are also ranked above Facebook, Zynga, Twitter, NFL, NHL, NBA, and the NBL so maybe we should take this ranking with a cup of salt.

**2)** **Claim:** WWE states they are the #1 cable program and have the largest number of prime time viewers outpacing the next best competitor by 50%. **Counter:** based on the same research firm, Nielson Company, for which the bulk of their analysis is derived, they don't even touch the top 10 list (see table 1 below). When researching on TV.com, they are the number 1 program (caveat, that is in the sports section, not overall) . Searching on-line we can also find contradictory reports from Nielson (see table 2). Table 3 is from the latest Investor Presentation from WWE suggesting that their RAW and Smack Down franchises generate 50% more prime time viewers than ESPN and ABC combined. This cannot be correct.

## Table 1

RANK	PROGRAM	NETWORK	RATING
1	GRAMMY AWARDS	CBS	16
2	NCIS	CBS	9
3	60 MINUTES	CBS	9
4	THE BIG BANG THEORY	CBS	8
5	AMERICAN IDOL-WEDNESDAY	FOX	8
6	AMERICAN IDOL-THURSDAY	FOX	7
7	NCIS: LOS ANGELES	CBS	7
8	CRIMINAL MINDS	CBS	7
8	NBC NFL PRO BOWL(S)	NBC	7
10	CSI	CBS	6

## Table 2

Weekly Ratings | Season Ratings | Cable Ratings

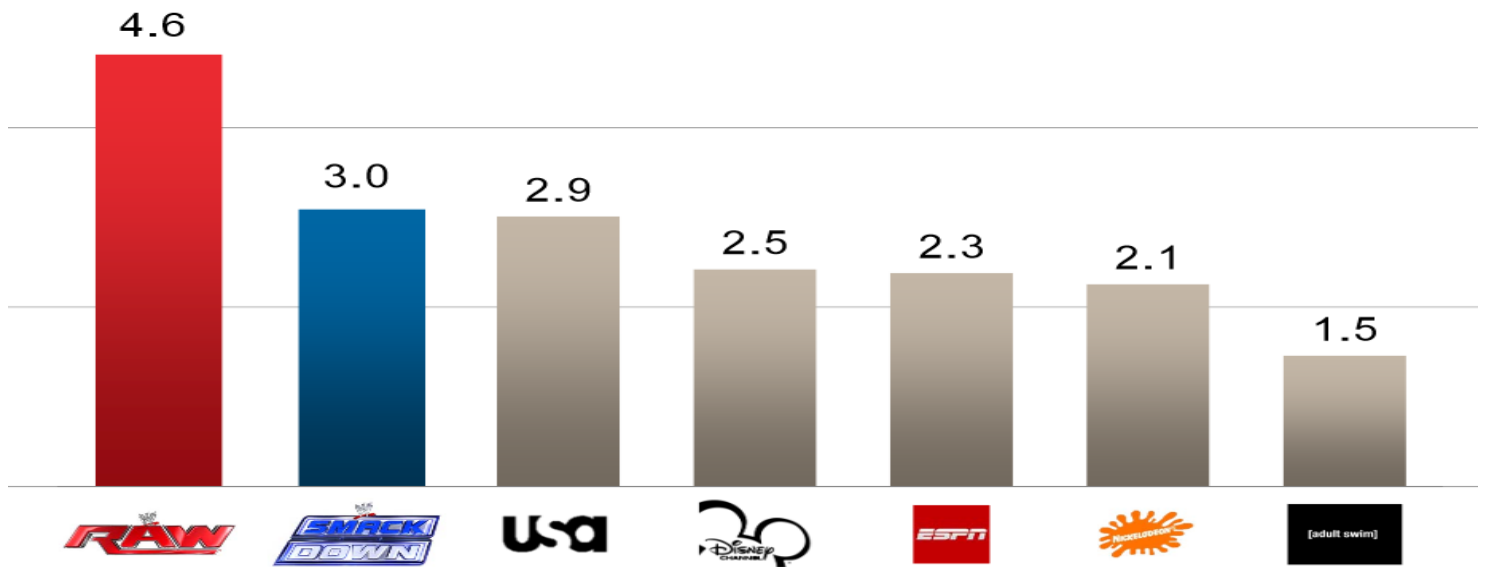
### Nielsen Television (TV) Ratings for Network Primetime Series

Top 20 Network Primetime Series: March 18-24, 2013

Rank	Program Name	Net	Day	Time	Viewers
1	THE BIG BANG THEORY	CBS	Thu	8:00 PM	15,901,000
2	PERSON OF INTEREST	CBS	Thu	9:01 PM	14,340,000
3	AMERICAN IDOL-WEDNESDAY	FOX	Wed	8:00 PM	13,440,000
4	NCIS	CBS	Tue	8:00 PM	13,177,000
5	TWO AND A HALF MEN	CBS	Thu	8:31 PM	12,177,000
6	NCIS: LOS ANGELES	CBS	Tue	9:00 PM	11,950,000
7	AMERICAN IDOL-THURSDAY	FOX	Thu	8:00 PM	11,926,000
8	ELEMENTARY	CBS	Thu	10:01 PM	11,327,000
9	THE BACHELOR: AFTER THE FINAL ROSE	ABC	Mon	10:07 PM	10,812,000
10	THE BACHELOR	ABC	Mon	8:00 PM	10,417,000
11	BLUE BLOODS	CBS	Fri	10:00 PM	10,409,000
12	60 MINUTES	CBS	Sun	7:00 PM	10,221,000
13	THE MENTALIST	CBS	Sun	10:00 PM	9,977,000
14	SURVIVOR: CARAMOAN	CBS	Wed	8:00 PM	9,889,000
15	THE GOOD WIFE	CBS	Sun	9:00 PM	9,076,000
16	THE AMAZING RACE	CBS	Sun	8:00 PM	8,909,000
17	GOLDEN BOY	CBS	Tue	10:00 PM	8,530,000
18	GREY'S ANATOMY	ABC	Thu	9:00 PM	8,204,000
19	THE FOLLOWING	FOX	Mon	9:00 PM	8,153,000
20	CSI	CBS	Wed	10:00 PM	7,938,000

\* Table 2 was pulled from <http://www.zap2it.com/zap-weekly-ratings,0,2436061.htmlstory>

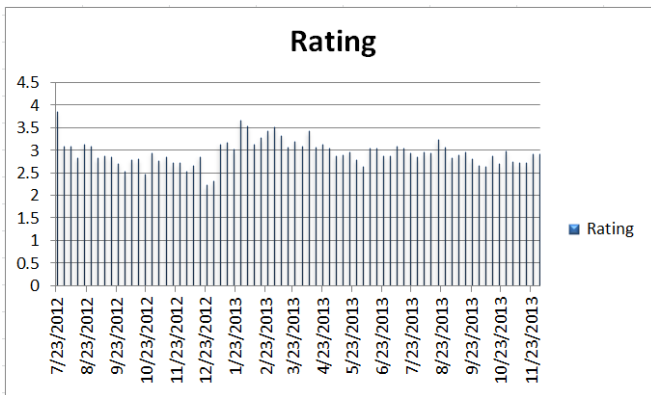
**2013 Average Prime Time Viewers\* (millions)**  
**WWE DELIVERS MORE VIEWERS IN PRIME TIME THAN ANY CABLE NETWORK**



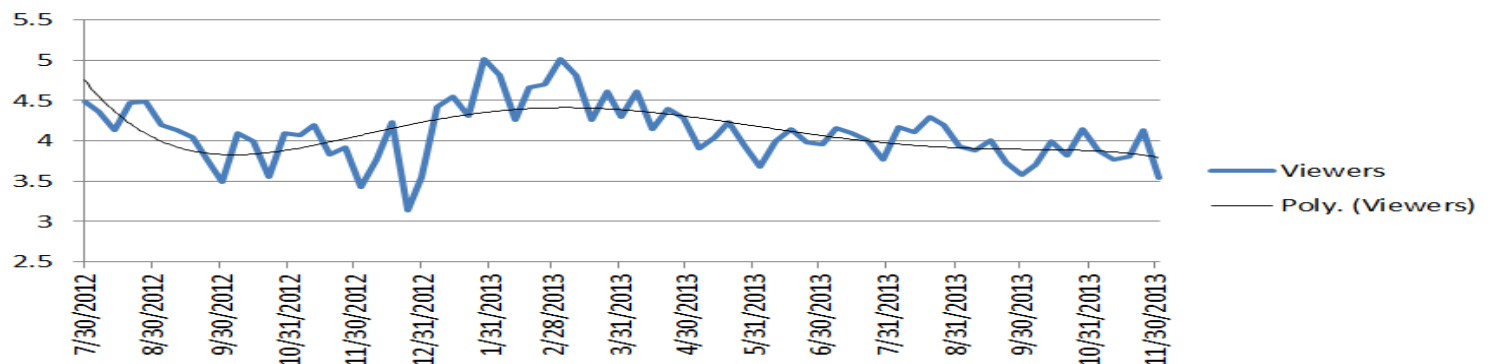
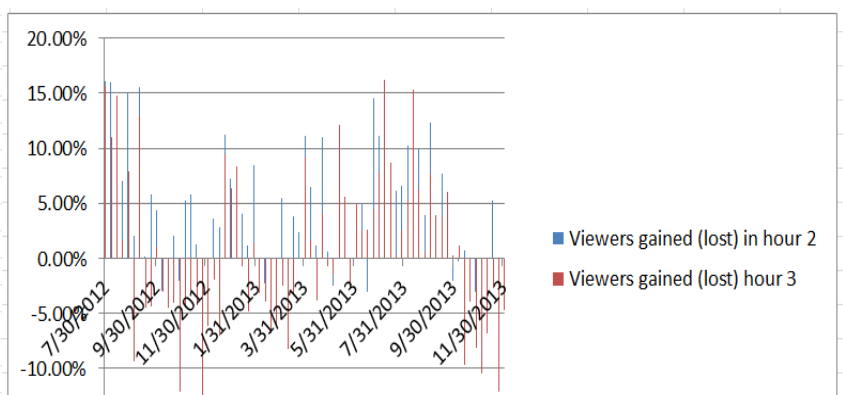
3)

**Claim:** WWE is growing (or has the potential to grow) rapidly both domestically and abroad specifically citing emerging markets. **Counter:** The company has barely grown in terms of viewers. Looking at statistics of viewership for the past year and a half (domestically) we see limited change in user experience (table 3) and some cyclicity in the amount of people that watch through the second and third hour of viewing (table 4). The pattern seems to peak in the last quarter of the year and drop to a low in the first quarter representing a sinusoidal pattern. The overall viewer count has been holding steady at the 3.75 million viewers.

**Table 3**



**Table 4**

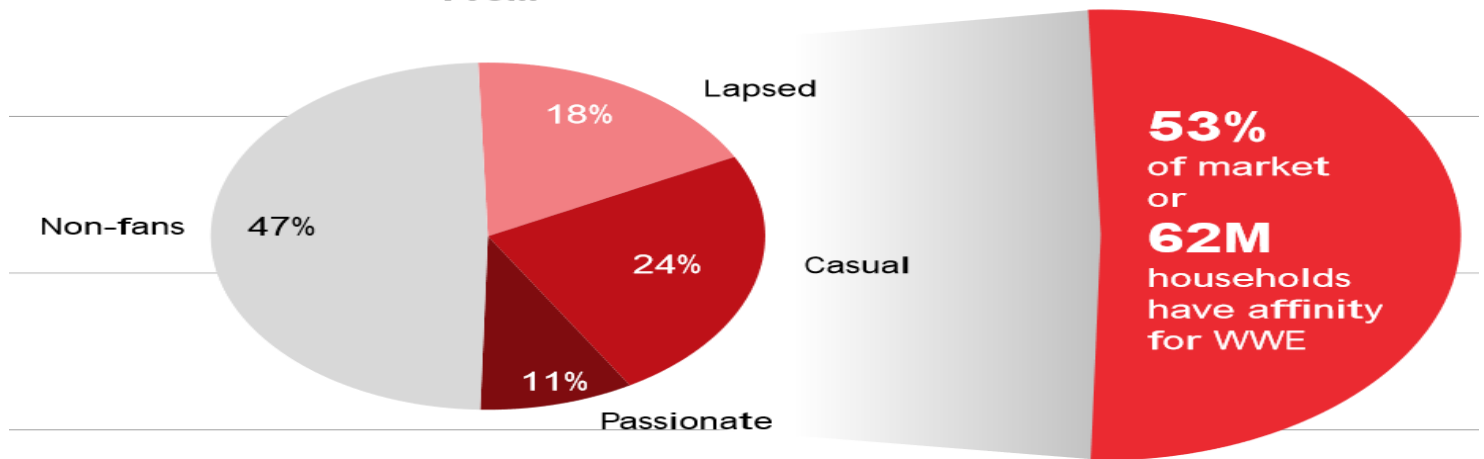


Raw data for tables 3-4 from <http://indeedwrestling.blogspot.com/2013/12/wwe-raw-viewers-in-3-hour-era-july-23.html>

4) Claim: WWE, based on a survey they did in June of 2012, claims that 53% of households have an affinity for their product (see Graph 1). Counter: Nope. I reached out to friends and family and asked if anyone watches (even on rare occasion) any sort of wrestling media (not exclusive to WWE). No one seems to watch this content. There may be a stigma associated with enjoying this entertainment such that it promotes individuals to lie about their consumption. It also may be the case that I associate with likeminded people and thus its by selective sampling that I found there to be little interest in this entertainment. To back up my personal study, I used the website <http://fanpagelist.com/category/tv-shows/view/list/sort/fans/> which tracks TV shows based on social media input. The summary of the results can be found in the tables below. Based on this information, there is no way that WWE commands 53% of the TV household viewership and even if they do (which they don't), can they really expand that market share? I would question their ability to grow at faster than the population growth rate, let alone 7% per year.

## Graph 1: WWE claim of viewership interest

US TV Households  
116M



- Tremendous appetite - want more content
- Similar results internationally

Show	Ranking	Facebook Likes
Sons of Anarchy	67	6,656,681
One Tree Hill	68	6,223,380
WWE Monday Night Raw	69	6,222,646
Wipeout	70	6,207,271
American Horror Story: Asylum	71	6,182,118

Show	Ranking	Facebook Likes
Once Upon a Time	93	4,382,034
Castle	94	3,765,136
WWE Friday Night SmackDown	95	3,751,097
The Cleveland Show	96	3,729,956
The Hills	97	3,709,288

Network	Ranking	Facebook Likes
TNT	147	1,985,307
PBS Network	158	1,638,548
WWE Network	167	1,452,520
Spike Network	174	1,356,625
Syfy Network	193	1,067,231

Network (Top Rated Networks)	Ranking	Facebook Likes
MTV	1	48,915,237
Cartoon Network	2	23,408,901
Nickelodeon	3	21,168,947
Discovery Channel	4	18,200,477
HBO	5	10,657,449

# What would it take for WWE to be worth \$24 a share?

It is not unusual for a firm to trade at a multiple inconsistent with its current fundamentals if the street implies that a change in the nature of the business will allow it to grow into its multiple. If the current market price of \$24 is the 'correct' price for the firm, it will benefit us to understand the course of action necessary to grow the firm into its current valuation. WWE will have to grow its bottom line by 35% on average for the next decade in order to deserve its current multiple in accordance with the below DCF analysis.

		Discount Rates				
		10%	11%	12%	13%	14%
Growth Rates	31%	\$ 23.44	\$ 21.34	\$ 19.50	\$ 17.87	\$ 16.43
	33%	\$ 26.26	\$ 23.87	\$ 21.77	\$ 19.91	\$ 18.27
	<b>35%</b>	\$ 29.42	\$ 26.70	<b>\$ 24.31</b>	\$ 22.20	\$ 20.33
	37%	\$ 32.96	\$ 29.87	\$ 27.15	\$ 24.75	\$ 22.63
	39%	\$ 36.92	\$ 33.41	\$ 30.32	\$ 27.60	\$ 25.20

Calculation	
Current Price	\$ 24.19
Terminal Growth	2%
Discount Rate	12%
Total Cash	\$ 114.82
Interest Bearing Debt	\$17.82
Present Value	\$ 1,825.41
Shares Outstanding	75.1
<b>Per Share Value</b>	<b>\$ 24.31</b>

Income Statement	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Revenue</b>	\$ 504.7	\$ 774.2	\$ 920.1	\$ 1,097.3	\$ 1,330.4	\$ 1,636.9	\$ 2,040.0	\$ 2,517.0	\$ 3,129.3	\$ 3,915.2
% change from prev year	4.3%	53.4%	18.8%	19.3%	21.2%	23.0%	24.6%	23.4%	24.3%	25.1%
Cost of Revenues	\$ 311.8	\$ 483.85	\$ 575.03	\$ 685.82	\$ 831.50	\$ 1,023.08	\$ 1,275.00	\$ 1,573.14	\$ 1,955.81	\$ 2,446.97
COGS (%)	61.8%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
<b>Gross Profit</b>	\$ 192.8	\$ 290.3	\$ 345.0	\$ 411.5	\$ 498.9	\$ 613.8	\$ 765.0	\$ 943.9	\$ 1,173.5	\$ 1,468.2
Gross Income (%)	38.2%	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%
<b>Operating Expenses</b>										
Selling, General & Admin. Expenses	\$ 148.4	\$ 160.2	\$ 187.5	\$ 220.7	\$ 264.5	\$ 321.9	\$ 397.5	\$ 486.9	\$ 601.7	\$ 749.1
SG&A (%)	29.4%	20.7%	20.4%	20.1%	19.9%	19.7%	19.5%	19.3%	19.2%	19.1%
EBITDA	\$ 67.6	\$ 130.2	\$ 157.5	\$ 190.7	\$ 234.5	\$ 291.9	\$ 367.5	\$ 456.9	\$ 571.7	\$ 719.1
Depreciation & Amortization	\$ 46.9	\$ 50.0	\$ 50.0	\$ 50.0	\$ 50.0	\$ 50.0	\$ 50.0	\$ 50.0	\$ 50.0	\$ 50.0
D&A (%)	9.3%	6%	5%	5%	4%	3%	2%	2%	2%	1%
<b>Operating Income</b>	\$ 20.6	\$ 80.2	\$ 107.5	\$ 140.7	\$ 184.5	\$ 241.9	\$ 317.5	\$ 406.9	\$ 521.7	\$ 669.1
Operating Income (%)	4.1%									
<b>Income Before Taxes (EBT)</b>	\$ 19.0	\$ 78.2	\$ 105.5	\$ 138.7	\$ 182.5	\$ 239.9	\$ 315.5	\$ 404.9	\$ 519.7	\$ 667.1
Income Taxes/(Credit)	\$ 7.7	\$ 25.01	\$ 33.76	\$ 44.40	\$ 58.38	\$ 76.78	\$ 100.96	\$ 129.58	\$ 166.32	\$ 213.47
Tax Rate %	40.5%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%
<b>Net Income Total</b>	\$39.37	\$53.15	\$71.75	\$94.35	\$124.07	\$163.15	\$214.54	\$275.36	\$353.43	\$453.62
Net Income (%)	7.8%	6.9%	7.8%	8.6%	9.3%	10.0%	10.5%	10.9%	11.3%	11.6%
<b>Shares and EPS</b>										
Total Basic EPS	\$ 0.15	\$ 0.71	\$ 0.96	\$ 1.26	\$ 1.65	\$ 2.18	\$ 2.86	\$ 3.67	\$ 4.71	\$ 6.05
Basic Shares Outstanding	75.1	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Diluted Shares Outstanding	75.4	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0

## Alternatively

The street plans to see massive earnings growth in the year 2014 and 2015 after the launch of their new monthly subscription membership in February 2014. WWE is certainly shaking up the PPV industry but are they able to nearly triple EARNINGS within two years? The likely course of events will be significant jump in revenues over the next couple of years and then ease out to their longer term CAGR of around 7%. The growth rates in 2014,2015,2016 will define their ability to grow into their multiple.

		FCF									
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
YoY grow in FCF			250.0%	35.0%	22.5%	10.0%	9.0%	8.5%	8.0%	7.5%	7.0%
		\$33.54	\$117.37	\$158.45	\$194.11	\$213.52	\$232.73	\$252.51	\$272.72	\$293.17	\$313.69
Terminal Growth Rate		<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>
3%		\$316.73	\$326.24	\$336.02	\$346.10	\$356.49	\$367.18	\$378.20	\$389.54	\$401.23	\$413.27

It is unlikely that either of these two projections represent any reasonable reality of the firm or its prospects.



# A more reasonable price - \$8.77 - Overvalued

Assuming a growth rate of 15% on the earnings line for the next decade, WWE should trade between \$8.50-\$9. The 15% growth seems large given their self reported 7% historical CAGR on OITDA but is awarded for the innovation of moving off PPV to a monthly subscription based service which will certainly generate volume. This valuation assumes their product will be consumed in EM countries as well as their new expansion to Europe.

Calculation	
Current Price	\$ 24.19
10yr Growth Rate	15%
Terminal Growth	2%
Discount Rate	12%
Total Cash	\$ 114.82
Interest Bearing Debt	\$17.82
Present Value	\$ 658.39
Shares Outstanding	75.1
Per Share Value	\$ 8.77

# Best Case (for WWE) - \$17.85 - Overvalued by 25%

FCF										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
YoY grow in FCF		100.0%	50.0%	50.0%	10.0%	9.0%	8.0%	7.0%	6.0%	5.0%
	\$33.54	\$67.07	\$100.61	\$150.91	\$166.00	\$180.94	\$195.41	\$209.09	\$221.64	\$232.72
Terminal Growth Rate	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
3%	\$239.70	\$246.89	\$254.30	\$261.93	\$269.79	\$277.88	\$286.22	\$294.80	\$303.65	\$312.76

Assuming profits surge by 100% in 2014 and are followed by 50% growth in 2015 and 2016 where the FCF generated declines to its longer term average of around 7% CAGR awards a DCF derived valuation of \$17.85. WWE in a very bullish environment is still overvalued by about 25%.

The main risk to the thesis is that in moving to this new model, WWE find SIGNIFICANT economies of scale and can reduce their operating costs. While the talent and facilities are fairly static and not much should be expected to change on that medium, there is an opportunity for WWE to reduce their distribution costs. If technology costs can be kept at bay, there may be larger bottom line growth. If they can find economies of scale, the operating margin will increase in a step function manner and shouldn't be expected to change dramatically from the initial realization of those savings.