

SIX FLAGS ENTERTAINMENT CORP - VALUATION

Group 4: Richard Wang
Michael Ren
Xiyuan Zheng



Agenda

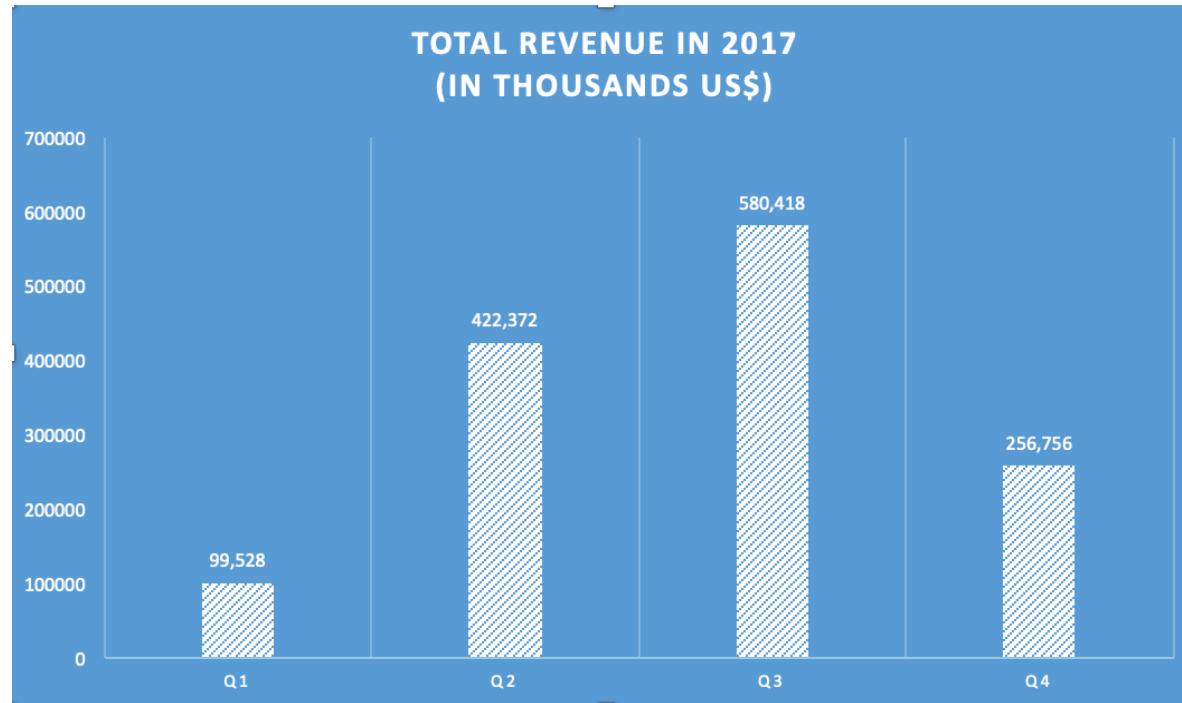
- Understanding Industry & Company
- DCF Model Chosen
- Valuation Process
- Conclusion

Industry & Company

General characteristics of Six Flags

Six Flags is...

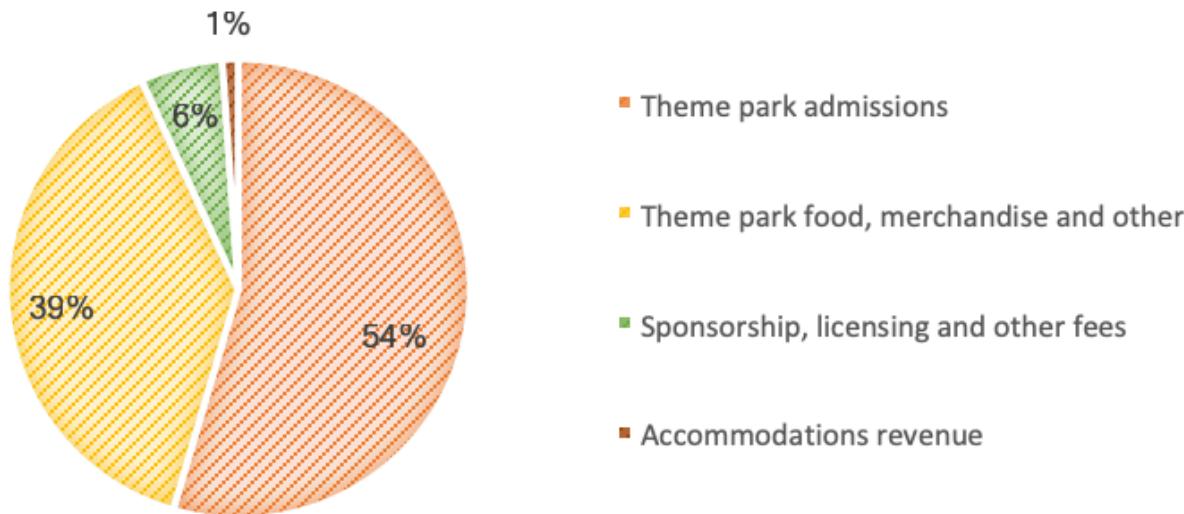
- Largest regional theme parks in the world
- Highly cyclical
- 54% revenue come from ticket sales



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- 54% revenue come from ticket sales

REVENUE STREAM BREAKDOWN



Six Flags is...

History

- Performance up and down
- Times Warner Bros
- Bankruptcy in 2009

Future

- Target 750million EBITDA by 2020
- International expansion through licensing
- (8 parks in China & Dubai)



Porter's Five Forces

Rivalry Threats

- Medium
- 3 – 4 direct competitors (peer groups)

New Entrants Threats

- Low
- Huge capital & time requirements for initiation
- Limited real estate supply
- Zoning restrictions

Substitute Threats

- High
- Many substitutes such as movies, sporting events, home entertainment options, restaurants

Customer Bargaining Power

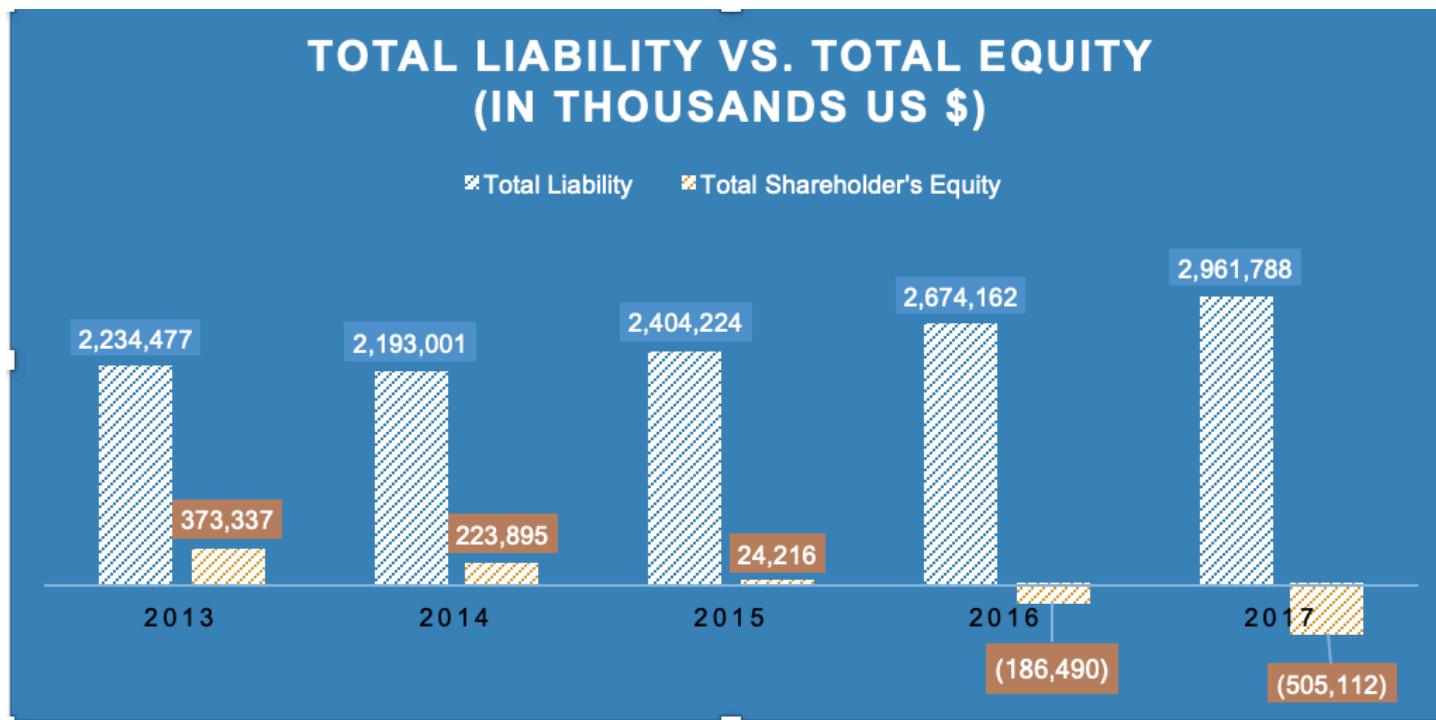
- High
- Highly seasonal
- Many alternative options

Supplier Bargaining Power

- Low
- Many suppliers in terms of constructions and food

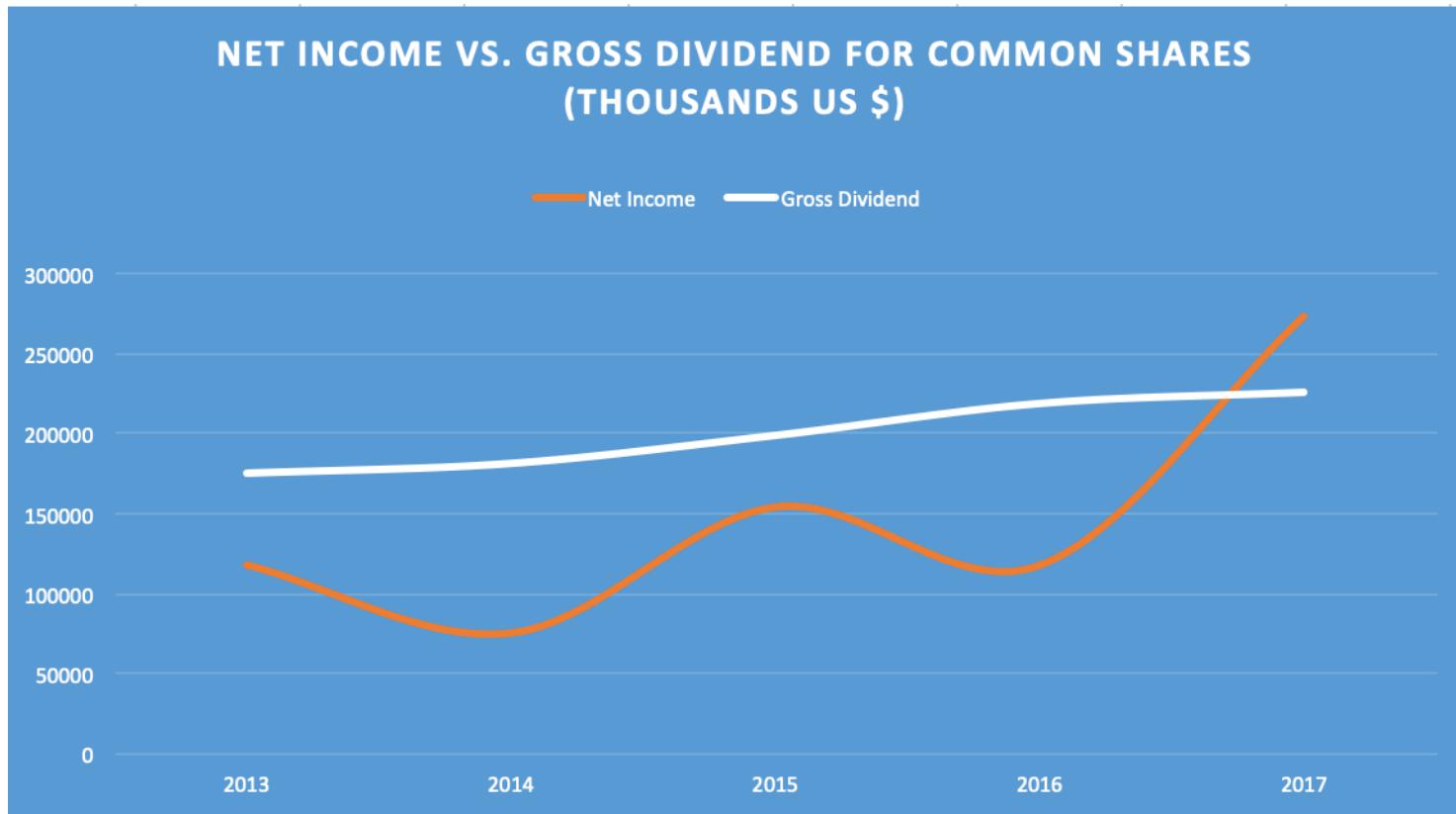
Red Flag for Six Flags

- Deeply in debt
- High dividend payout from 2013 – 2017



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Peer Groups

SEAWORLD PARKS
& ENTERTAINMENT

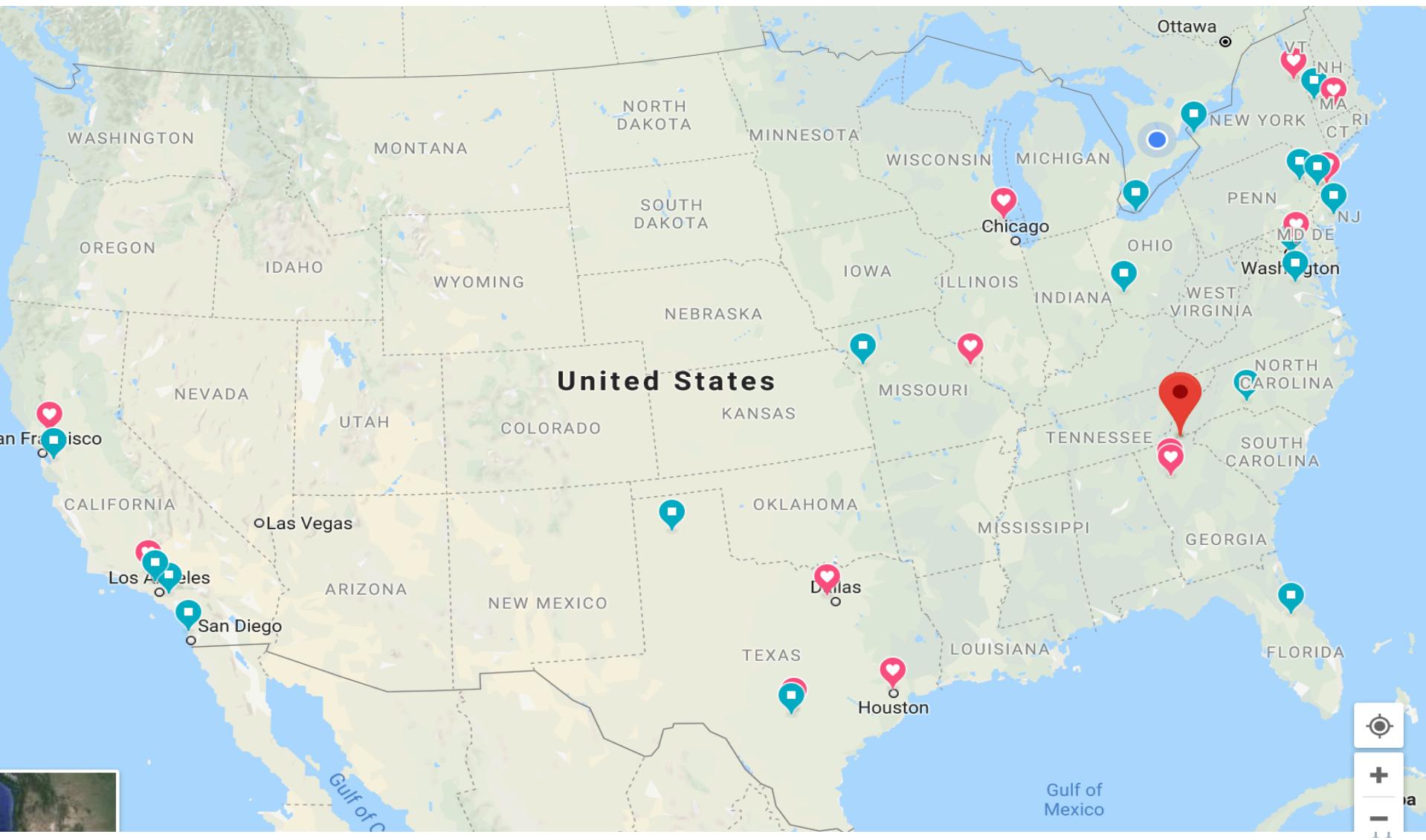


The logo features three stylized letters 'P', 'C', and 'F' in blue and grey, forming a knot-like shape.
Cedar Fair

The logo includes a blue castle silhouette with red flags on top, resting on white clouds. Below the castle, the words 'Walt Disney World.' are written in a blue, flowing script font. A smaller line of text, 'Where dreams come true', is written in a cursive blue font underneath.
Walt Disney World.
Where dreams come true

The logo features a large, stylized blue 'M' that curves upwards and to the right. To the right of the 'M' is a bright yellow starburst with several small blue stars around it. Below the 'M' and starburst, the word 'MERLIN' is written in a bold, dark blue serif font, with 'ENTERTAINMENTS' in a smaller, lighter blue sans-serif font underneath.
MERLIN
ENTERTAINMENTS

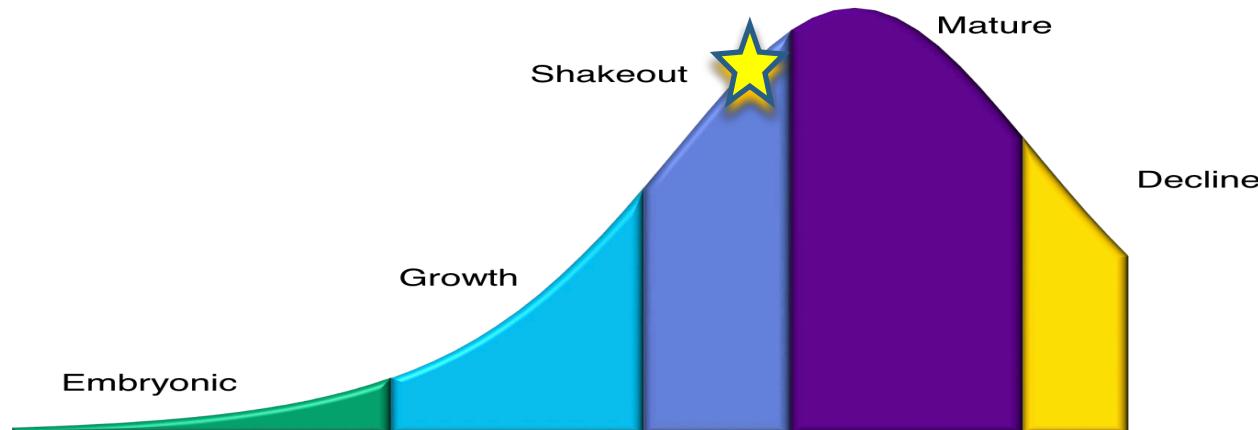
Peer Group Location Comparison



Peer Group Key Ratio Comparison

	P/S	P/E	EV/EBITDA	P/CF
Cedar Fair	2.608	24.676	10.456	9.344
Sea World	1.298	41.30333333	10.256	6.794
Merlin	3.206	28.65	13.556	11.112
DIS	3.096	20.652	11.944	14.448
Peer Group Average	2.552	28.82033333	11.553	10.4245
Six Flags	3.84	35.404	15.324	11.084

- Six Flags' P/E 35.404 > Normal P/E 28.82 -> Still growing!



Construct Industry Index on Theme Parks

- Market Capitalization Approach
- Peer Group as Industry
- Market Return: 23.05%



Model Choice & Valuation

Model Selection

Characteristics of Six flags

1. Negative equity



Residual Income Model



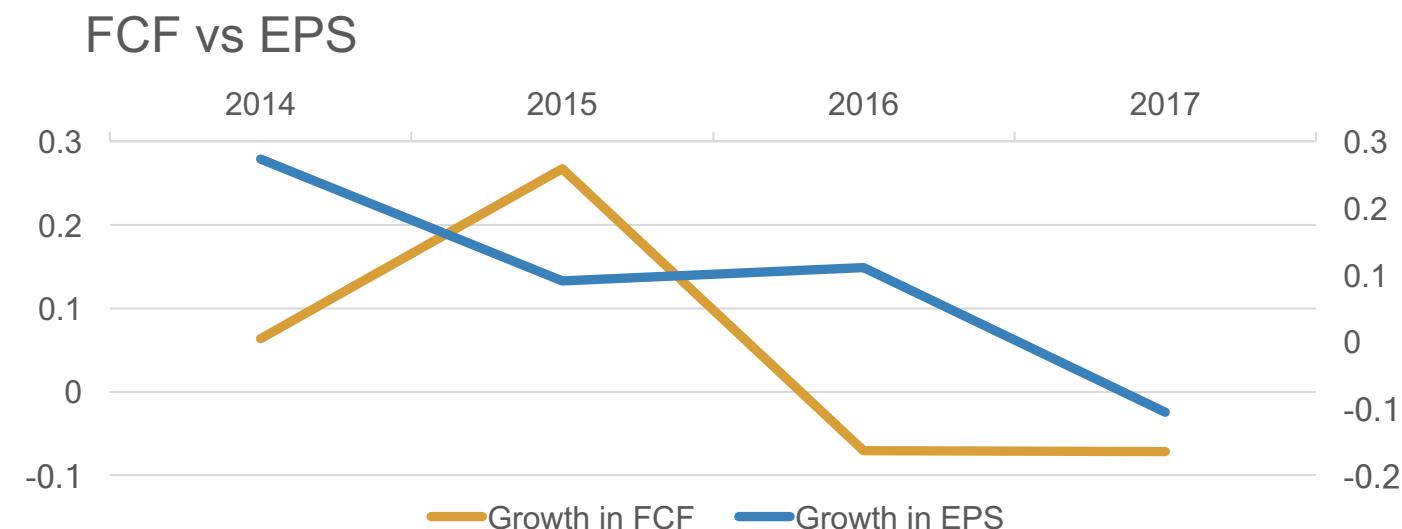
	2013	2014	2015	2016	2017
Total Equity	373,337	223,895	24,216	(186,490)	(505,112)

Model Selection

Characteristics of Six flags

2. Cash flow not related to earning; High dividend payout

Free Cash Flow Model 



Model Selection

Characteristics of Six flags

- 3. High intangible assets and goodwill (~40% of assets)



- 4. Limited competition; Unreliable multiples from peers



Conclusion: DDM method

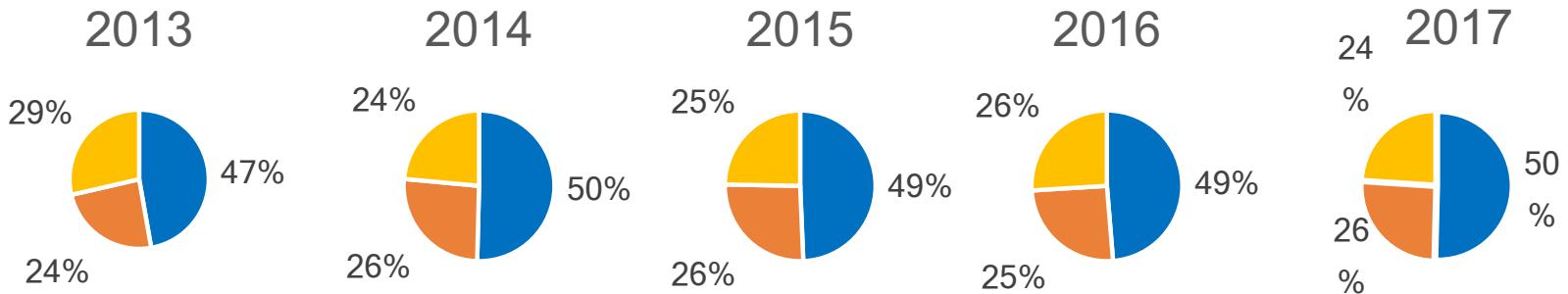


-- high dividend payout

Financial Highlights

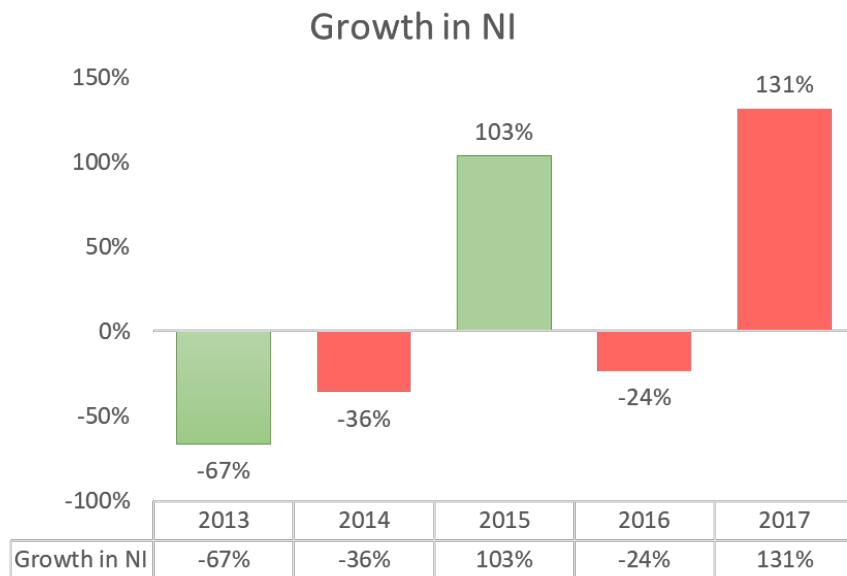
Balance Sheet

	2013	2014	2015	2016	2017
Land, Rides, Equipment (net of Depreciation)	47.230%	50.400%	49.338%	48.690%	50.392%
Goodwill	24.168%	26.077%	25.953%	25.335%	25.655%



- Land, Rides, Equipment (net of Depreciation)
- Goodwill
- Other Assets

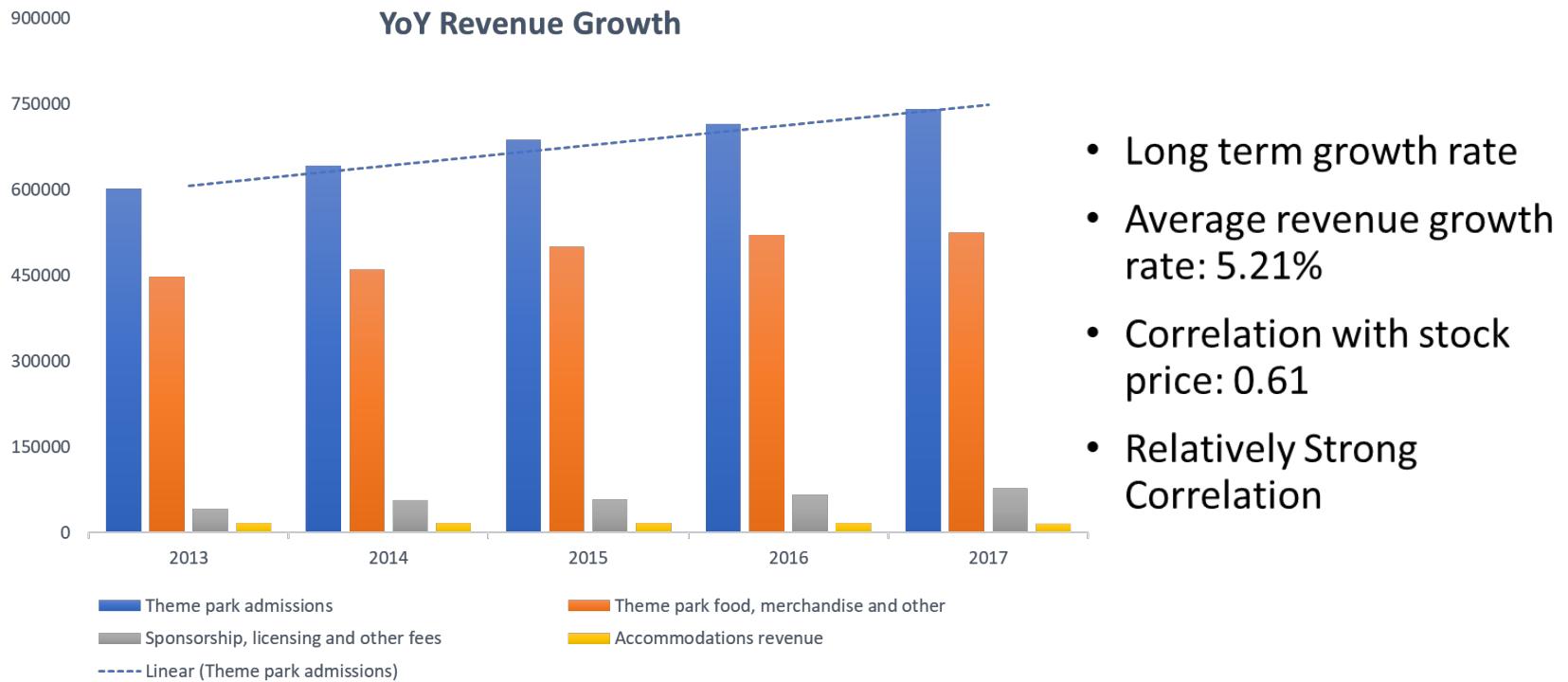
Past Growth and Forecast



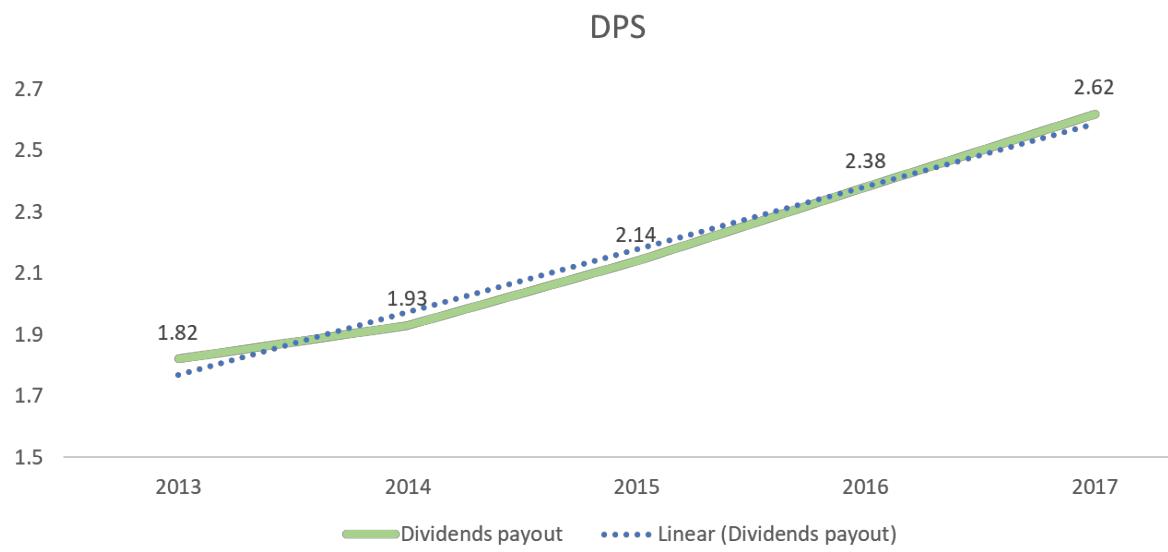
Net income is not a good proxy

- Volatile
- Stock-based compensation
 - 11.6% vs. total operating expense in 2016
- Loss on debt extinguishment
 - Changed from 0.2% to 4% of the total operating expense

Past Growth and Forecast – Long Term



Past Growth and Forecast – Short Term



Justification 1:

- Average dividend growth rate: 14.61%
- Exhibit linear growth rate
- Short term growth rate

Justification 2:

- Adjusted EBITDA Target \$750m by 2020
- Adj. EBITDA: 542m in 2016
- Implicit growth: 12.8%

Choice of H

- $H = 5$
- Justification:
 1. 10-year floating rate debts
 2. Need positive equity at some point time
 3. Converge with management projection of 12.8% growth by 2020

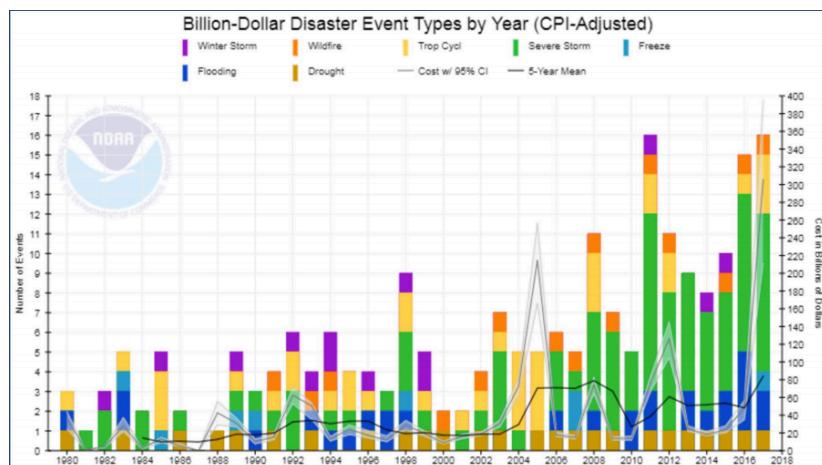
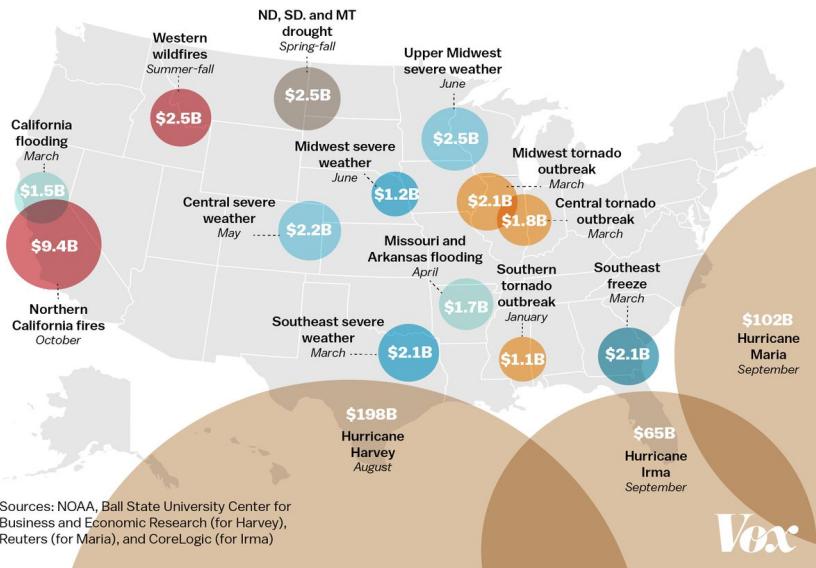


Quality of Earning

- Cash- or cash-equivalent- based earning
 - Strong cash position
 - Supports high dividend payouts
- Seasonal pass/membership penetration
 - Supports smooth dividend payouts
- Weather impact

Weather Distortions in 2017

Billion-dollar disasters of 2017 in the US



DDM inputs – Cost of Equity

- CAPM Model
- Beta: 0.59
- Risk free rate: 2.21% (5-year US T-Bills)
- $R_{\text{flags}} = 2.21\% + 0.59 * (23.05\% - 2.21\%) = 14.6\%$



SEAWORLD PARKS
& ENTERTAINMENT



Two-Stage H-Model Formula

$$V_0 = \frac{\left[D_0 \times (1 + g_L) \right] + \left[D_0 \times H(g_S - g_L) \right]}{r - g_L}$$

$$V0 = \{ [2.62 * (1 + 5.21\%)] + [2.62 * 5 (14.61\% - 5.21\%)] \} / (14.59\% - 5.21\%)$$

$$V0 \rightarrow \$ 42.51$$

Sensitivity Analysis

Most sensitive to the denominator

- Required Return
- Long-Term Growth

Current price: \$60



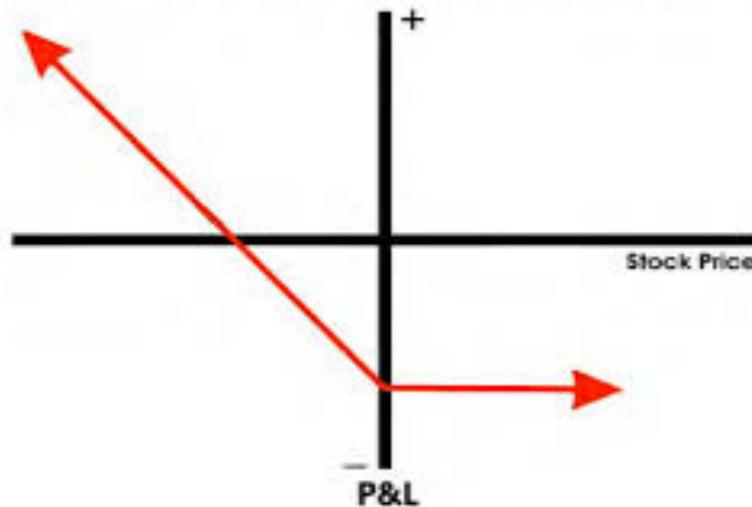
Sensitivity Analysis on Required Return							
%Change	-5%	-2%	-1%	0.00%	+1%	+2%	+5%
Require Return	9.59%	12.59%	13.59%	14.59%	15.59%	16.59%	19.59%
Price	\$91.05	\$54.04	\$47.59	\$42.51	\$38.42	\$35.04	\$27.73

Sensitivity Analysis on L-T Growth							
%Change	-5%	-2%	-1%	0.00%	+1%	+2%	+5%
L-T Growth	0.21%	3.21%	4.21%	5.21%	6.21%	7.21%	10.21%
Price	\$31.38	\$36.88	\$39.43	\$42.51	\$46.34	\$51.20	\$79.08

Conclusion – Strong Sell

- $\$42.5 < \60.0
- Overvalued!
- Investment Recommendation: **Strong sell**
- Strategic Decision: Protected Call

Protective Call (Synthetic Put) P&L Chart



Questions

