SAF/No.17/June 2017

Studies in Applied Finance

INVESTMENT THESIS FOR TRIPADVISOR, INC. (NASDAQ: TRIP)

Arshad Ajani

Johns Hopkins Institute for Applied Economics,
Global Health, and the Study of Business Enterprise

Investment Thesis for TripAdvisor, Inc. (NASDAQ: TRIP)

By Arshad Ajani

About the Series

The studies in Applied Finance Series is under the general direction of Professor Steve H. Hanke (hanke@jhu.edu), Co-Director of The Johns Hopkins Institute of Applied Economics, Global Health, and study of Business Enterprise and Dr. Hesam Motlagh (hnekoor1@jhu.edu), a Fellow at The Johns Hopkins Institute of Applied Economics, Global Health, and study of Business Enterprise.

This working paper is one in a series on applied financial economics, which focuses on company valuations. The authors are mainly students at The Johns Hopkins University in Baltimore who have conducted their word at the Institute as undergraduate researchers.

Author

Arshad Ajani (aajani2@jhu.edu) is a rising senior at The Johns Hopkins University. He conducted the research for this paper while serving as Prof. Hanke's research assistant at The Johns Hopkins Institute of Applied Economics, Global Health, and study of Business Enterprise during the Spring of 2017. This summer, he will be an Investment Banking Summer Analyst at BNP Paribas. Arshad is graduating in May 2018 with a major in Economics.

Summary

The working paper is an in-depth financial analysis of TripAdvisor, Inc. (TRIP). Our analysis examines the resilience in TRIP's business model by exemplifying great potential to grow and gain market share in the years to come. This analysis is combined with our proprietary Discounted Cash Flow (P-DCF) model and a Monte-Carlo simulation. This results in distributions of probable free cash flows. In addition to these quantitative factors, we also examine compensation plans of TripAdvisor's executives to assess the degree to which the executives' compensation incentives are aligned with the objective of creating shareholder value.

Acknowledgements

Many thanks to Prof. Steve Hanke, Dr. Hesam Motlagh, and Charlie Bushnell for guidance and draft comments.

Keywords: TRIP, TripAdvisor, Inc., Travel, Discounted Cash Flow, Free Cash Flow, Monte-Carlo Simulations, Investment Thesis, Compensation.

Rating: Buy – Average Free Cash Flow per Share: $53.41

Company Name	TripAdvisor, Inc.
Date	5/4/17
Fiscal year ends (current period)	12/31/2017 (Q3 - Ends 9/17)
Current Price	$45.50
52 week high (date)	$71.69 (7/28/16)
52 week low (date)	$40.645 (3/02/17)
Market Cap	$6,423.7M
Enterprise Value	$5,848.7M
Total Debt	$171.0M
Cash	$746.0M
Net Debt/Enterprise Value	-9.83%
Dividend	N/A
Shares Outstanding/Float	128.4M/109.7M
Current P/E	57.25x
2018 P/E (EPS)	20.20x ($2.252)*
2018 P/E (EPS)	31.49x ($1.445)*
2017 P/E (EPS)	37.76x ($1.205)*
2016 EPS	$1.40**
2015 EPS	$2.05**
2014 EPS	$1.93**
*Consensus Estimates from Bloomberg as of 5/4/2017	
**Adjusted EPS used	

Table of Contents

Executive Summary

TripAdvisor, Inc. (NASDAQ: TRIP) owns and operates a portfolio of leading online travel brands. TripAdvisor's website is the world's largest travel site with the goal of providing help to plan, book, and experience the perfect trip. Using historical performance statistics, we have determined through a Probabilistic Discounted-Cash-Flow (P-DCF) model that the Company is fundamentally worth approximately $53.41/share representing a 18.66% discount to the current market price. Through investigating their current business model and expansion techniques we find that TripAdvisor is in a transitional period, which although does not bode well for current investor confidence, presents an interesting opportunity to invest given that the transition is not fully incorporated into the share price. Further, inspection of management compensation reveals that it is aligned with investor interests through the use of large portion of variable and performance based compensation. Thus, we rate TRIP a **BUY**.

Catalysts and Risks

- Foreign Currency Exchange rates.
- Slow-down in site and mobile visits.
- Reduction in advertising by advertisers.
- Consumer adoption of mobile use.
- Government internet privacy regulation changes.

Company Description and Historical Performance

TripAdvisor is a global travel site that uses their various platforms including the TripAdvisor website, app, or travel partner site or apps to enable users to compare real-time pricing and availability for multiple experiences including but not limited to: booking hotels, flights, cruises, vacation rentals, tours, activities, and attractions. The company operates in the global travel industry segment, with a focus in online travel activity and online advertising. The market size for this industry is calculated through the total global travel spending which is expected to be around $1.3 trillion in 2017 (which is a 5% increase from 2016) and of which 43% is online travel expenditure. TripAdvisor's internet presence reaches 48 markets and 28 languages worldwide. The average monthly user visits is around 390 million during peak season. The website currently features 465 million reviews and opinions on 7 million places to stay, eat, and things to do.

Currently headquartered in Needham, MA, TripAdvisor was co-founded in February 2000 by Stephen Kaufer (President and CEO). Later, in 2004, TripAdvisor was acquired by InterActiveCorp who later spun-off all its travel brands including TripAdvisor into a separate corporation called "Expedia". In December 2011, Expedia then completed its own spin-off of TripAdvisor and shortly thereafter, TripAdvisor completed its Initial Public Offering and began trading on NASDAQ under ticker TRIP. Liberty Interactive Corporation then purchased 4.8 million in shares of TRIP from Barry Diller (former Chairman of Board of Directors) and bought him out of his positions. Total Liberty currently owns about 18 million common stock (13.8% of total common stock) as well as 12.8 million Class B shares (100% of Class B Common Stock).

Common stocks are allocated 1 vote per stock whereas Class B stocks are allocated 10 votes per stock. Because of this distributed voting rights, Liberty Interactive Corporation currently has 56.4% voting power in TripAdvisor.

Despite a very one-sided voting share power, TripAdvisor has continued to show strong ability to grow. Through a four-pronged approach, TripAdvisor not only states how they plan to grow in the future, but also address their shortcomings as well. The company takes pride and believes in the following four growth strategies: delivering a great user experience, increasing traffic, enhancing mobile offerings, and growing attractions, restaurants and vacation rental businesses.

Business Segments

As a global online travel company, TRIP reports two operating segments:

1. Hotel – including all advertising and revenue for hotel based content
2. Non-Hotel – advertising and other revenue generated through Attractions, Restaurant, and Vacation Rental content

A closer look at these business segments allows us to understand that the growth of the non-hotel sector is a recent development that has started gaining traction over the last couple of years. Including the effects of acquisitions, large growth rates have reached even over 100% during the past few years as the new business segment finds a growth spurt.

In the figure below (Figure 1) it can be seen that although the hotel segment makes up a majority of the revenue share today, the non-hotel segment is growing at a much faster pace. Since 2012, non-hotel segment has grown from 4.06% of total net sales to around 20% in 2016. This growth rate has been largely organic with introduction of rental, dining, and attraction options.

Further, there have also been large decreases in the hotel segment revenue that has lead TRIP to leverage marketing channels to increase their consumer base through paid and unpaid options. TRIP has also been hurt from the increased use of mobile devices. Because users are more heavily reliant on their mobile devices, more bookings and traction come from mobile access compared to desktop access. This hurts the company as advertisements are less abundant and cause a decrease in monetization.

The non-hotel segment revenue has been increasing steadily. TRIP has tried to strategically invest in improving the user experience on all devices as well as in building inventory of global supply of bookable attractions, restaurants, and vacation rentals. This is a relatively new venture for TRIP and management expects this segment to continue growing around 2016 growth numbers.

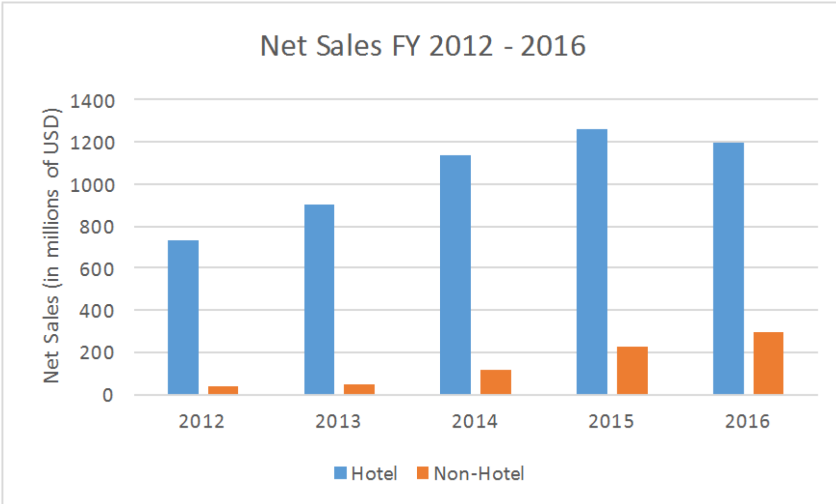

Figure 1: TRIP Net Sales

Blue bars indicate Hotel segment revenue compared to a much smaller portion of Non-Hotel revenue (orange bars). This figure also shows the increasing size of Non-Hotel segment even as a proportion of total net sales.

Source: TRIP 2016 10-K

Historical Performance

TripAdvisor's general stock performance compared to the S&P 500 is outlined in figure 2.

Figure 2: Historical 5 Year Stock Performance

TRIP's (white line) 5 year stock performance against SPX Index (green line).

Source: Bloomberg <GP> Accessed 2/3/2017

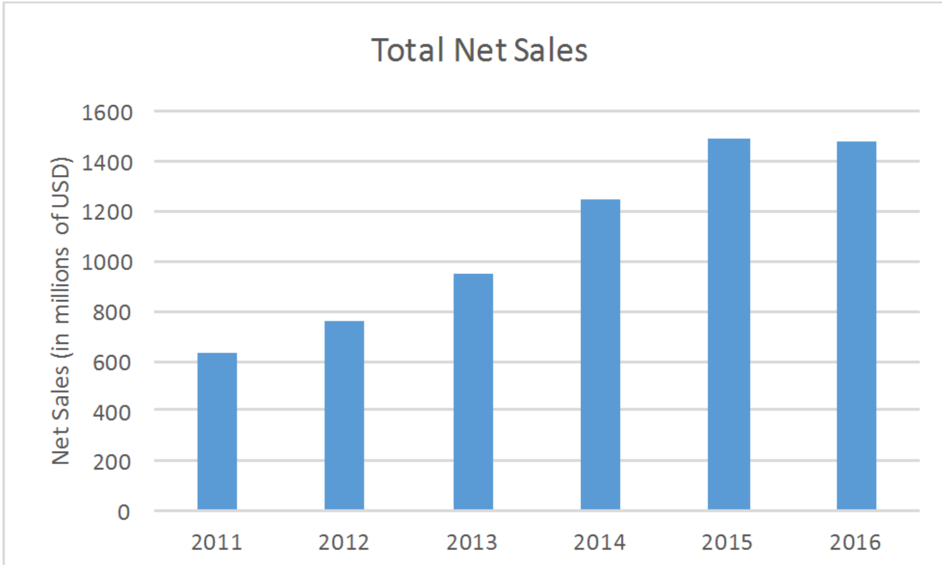

Figure 3: TRIP Net Sales Growth
TripAdvisor total combined net sales across both Hotel and Non-Hotel business segments.

Source: TRIP 10-K

TripAdvisor's historical performance is laden with strong growth especially compared to the S&P 500 index. As a growth company, TRIP has shown that it does have strong potential to achieve this growth in its stock price. However, due to unforeseen circumstances with certain revenue generation techniques, TripAdvisor has experienced a decrease in 2016. This has resulted in a downward trend that can be seen in figure 2 where the S&P index finally realizes stronger growth.

Figure 3 helps relay the stagnation that was experienced in 2016. With strong double digit growth rates from 2013 to 2015 of 24%, 32%, and 20%, respectively, 2016 total net sales growth was stunted to -0.8% achieving a record low rate over the past five years. Figure 3 represents the absolute magnitude of total net sales for each year which draws a picture that confirms the direct correlation between the stock price and revenue.

The current trends that TripAdvisor has experience are outlined as follows.

In 2015, TRIP fully rolled out their Instant Booking feature which allows users to instantly book promoted deals from the website directly. However, because the monetization on this instant booking feature was only through click-based advertisement, the ads monetized at a lower revenue per hotel compared to the older metasearch feature. This resulted in a dilutive first half of 2016 because click-based advertisements only generated revenue upon clicking on the link and other forms of revenue generation were lagged behind and not implemented till later. Moving forward, we expect this type of advertisement to grow revenues when click-based revenue increases with the addition of timed revenue for longer stays. Although we expect sales from the instant booking feature to increase, it is important to consider the 10% decrease in click-based advertisements during 2016 because of this small delay.

Moving on to the second type of advertising, an increase in price for display-based advertising has lead TRIP to increase the number of display-based advertisements on their website over the last four years. Peaking growth in 2014 with a rate of 96%, the display-based ads gained traction from a large number of hotels, airlines, and cruises. Because display-based ads promote specific hotel, airline, and cruise brands TRIP has seen an increase in customer retention rates within each of these brands that TRIP promotes. Customers are likely to return to the TripAdvisor website and book with the same hotel or airline that they previously experienced.

Finally, there has been a large increase in “Other Revenue”. This segment includes: revenue from click-based ads, display-based ads, and room reservations from non-TripAdvisor sites such as smartertravel.com, independenttraveler.com, and bookingbudding.com. This segment also contains the non-hotel segment. Attraction, restaurants, and vacation rental businesses have increased from an increase in supply of these attraction listings and partnerships. This new market is opening up into TripAdvisor’s online booking system. With many new partnerships to make in this new segment, the opportunities for new advertisement deals are abundant. Thus, it is not uncommon that we see a 91% growth of this advertisement segment in 2014. Looking at 2015 and 2016 we notice that revenue growth is still strong at around 54% and 17% respectively. Management suggests that although a 16.97% is nothing to scoff at; they believe they can achieve above 20% growth rate in their “Non-Hotel” segment. To clarify, the bulk of TripAdvisor’s “Subscription, transaction and other” is now included in their new “Non-Hotel” business segment.

Looking at the breakdown of Hotel vs. Non-Hotel revenue we notice that 2016 has resulted in a negative growth rate for the year across the Hotel revenue segment. Management has suggested that this 5.78% decline is related to various macroeconomic and geopolitical situations such as: foreign currency, terrorist events, etc. However, through looking at specific types of advertisement, it is clear that TripAdvisor has experienced a large decrease in traction through all forms of ads during 2016. Click-based ads are the leading source of this decrease in Hotel revenue. With the failure of fully rolling out this type of ad with their Instant booking feature, TripAdvisor (as mentioned previously) left a lot of monetization opportunities on the table and has thwarted the growth of the Hotel segment.

This stunt in growth is not, however, without a resolution. With the combination of a fully implemented Click-based ad in TripAdvisor’s instant booking feature and with hopefully stable macroeconomic and geopolitical situations in 2017, management believes that the company will gain a boost in their net sales and put them back on track to see large, yet sustainable, growth.

Model Assumptions

Now that we have qualitatively quantified the historical performance of TRIP, we turn to the model that will be the foundation for our quantitative analysis. The P-DCF uses historical averages and standard deviations of growth and margins as the underlying basis of our future projections. For TripAdvisor, we projected revenue across each of the companies operating segments. We find that TRIP models better when broken up into multinational business segments rather than multi-business geographies as per its management structure and historical growth averages per segment. Further, data that was provided on the 10-K SEC filings for revenue growth were better organized for each business segment rather than each region.

Balance Sheet and Income Statement Trends

The results are contained in the 'Balance Sheet' and 'Income Statement' tabs of the accompanying spreadsheet.

The first thing we notice upon glancing at the balance sheet is the steady Cash and Cash Equivalents growth from $368 million in 2012 to $614 million 2015. However, from 2015 to 2016 we see a stagnation in the amount of cash. Further questioning reveals that this is a result of a reliance on various credit facilities to finance the company rather than cash. This has lead to a small increase in the growth rate of Working Capital from -1.62% in 2015 to -0.66% in 2016. With this dependence on credit facilities extending to the future, we expect Working Capital to continue to increase and hit positive growth in fiscal year 2017.

Further, TripAdvisor clearly lists out their uses of cash in their 10-K filings as a means to fund working capital requirements, CAPEX, and to meet long-term debt obligations and other financial commitments. However, with the introduction of credit facilities in 2011 and then a renewal in 2015, we see the reliance on cash decrease. TRIP states that if cash is scarce and there is not enough to provide for the various operating factors, management will take on debt from the remaining $906 million of borrowing capacity under the 2015 Credit Facility. The company states this as their first action plan followed by a reduction in CAPEX and a scale back of the scope of business growth initiatives.

The large increase in Property and Equipment is mainly a result of increasing their various office spaces. With 49% of employees outside of the US, there is a need to grow office space domestically and internationally. Currently there is 465,000 square feet in office space around the world. Special attention is placed on the new headquarter office in Needham, MA. With a 280,000 square feet building opened in 2015, there is a large increase in Property and Equipment in 2014 and 2015 due to the recognition of this large investment.

Current portion of the debt decreases rapidly in 2015 because of the initiation of 2011 Credit Facility repayment. As a result, TRIP is not expected to have any residual debt from the original 2011 Credit Facility but will consequently have debt from the 2015 and 2016 Credit Facilities.

2016 Credit Facility will take on a $76 million value and 2015 Credit Facility will bare a $290 million burden to repay the 2011 Credit Facility.

Turning our attention to the Income Statement, we notice strong top-line revenue growth around 19%. However, a huge stunt is also noticeable from 2015 to 2016. This is because of the previously mentioned delay in implementation of click-based advertisement in 2016. Overall, during the past five years, it is easily seen that TripAdvisor is in a strong growth stage where they are still making progress in entering new markets within both of their business segments. Management believes that although 2014-like revenue growth of 31.85% is not sustainable, a more reasonable 20% growth estimate is likely.

Moving down the Income Statement, we move on to the Cost of Revenue. This line item includes: direct costs and personnel and overhead costs. These costs increased by a total of $13 million during 2016 because of an increase in transaction costs from acquiring growth in Attraction and Vacation Rentals. Although management states that these costs were mandatory during 2016, we expect this not to turn into trend in the future and expect long run Cost of Revenue to decrease with lower frequency in new business acquisitions.

With the large acquisition of online traffic - through new Attraction and Vacation Rentals mentioned in the above paragraph - Selling and Marketing has increased over the last couple of years. These costs totaled $79 million in 2016 but were offset by a decrease in TV advertisement of around $50 million that was initiated in 2015. There has been a strong correlation with increased online traffic and Selling and Marketing costs and we expect this to continue.

Moving on to the Income Tax, we can see a uniquely low effective tax rate of just 20.5%. To better understand this, we must comprehend the average corporate tax rate in America of 34-35%. This lower than usual tax rate is due to a large amount of business that is conducted and revenues are also realized abroad. In 2016, about 46% of total sales were from regions outside of the United States. During recent years there has also a slight increase in the percent of revenue that comes from abroad. In 2016, there was a 7% increase in these foreign transactions.

Value Drivers

The results are contained in the 'P-DCF' tab of the accompanying spreadsheet.

Although we have seen large top-line sales growth, the consistency of such strong numbers is a bit flawed. To better understand this fluctuation, we notice the average 13.92% standard deviation that is associated with total net sales. This high standard deviation is especially due to high growth in 2014 from a large boost in Non-Hotel revenue followed by a large slump in 2016. 2014 revenue was also especially due to the inorganic growth through the acquisition of Viator (a leading resource in researching and booking destination activities around the world) for $192 million. This acquisition along with six other acquisitions totaled $208 million in cash and was booked in 2014. This large increase in sales created a large separation from the average revenue that TripAdvisor had been expecting and has further added to the standard deviation.

In a broad analysis of the value drivers, it can be seen that the operating costs from year to year seem to be increasing due to the proclaimed idea that increasing costs is a natural part of growth. This might not be an issue if operating costs were only increasing in absolute value, however we notice increasing costs even as a percentage of sales. The largest increase in operating costs can be attributed to selling & marketing. However, from 2015 to 2016 there has been around a 5% increase in selling & marketing and around a 2.5% increase in technology and content yet total net sales have decreased 0.8% during this same period. Although this negative correlation between increased costs and decreased revenue is worth mentioning it must be taken with a grain of salt.

TripAdvisor has found a new niche in the form of Non-Hotel revenue which management suggests still has a lot of potential to grow as it is still relatively new to the company's business. Although we have seen large increase in expenses from various forms of operating costs, the risk-reward could be well worth it. For our long-run assumptions we turn to the next section – Model Results.

Model Results

Values are contained in the P-DCF and MC tabs of the accompanying spreadsheet

The assumptions on the P-DCF tabs are as follows.

For Hotel revenue we took into consideration that the instant booking feature monetized at a lower rate than expected during 2016. However, during the 2nd half of 2016, click and transaction based growths did improve. This improvements during the latter half of 2016 indicates strong growth into 2017 and in the long run. We cannot expect significant growth (like we do in the Non-Hotel segment) because this segment is well established as a part of TRIP but we can assume that solid growth rates continue onto the next decade. For these reasons along with management's guidance that includes steady revenue streams due to better economic situations next year and various obstacles that were experienced in 2016 that will not be repeated, we set Hotel revenue growth to 13%.

Non-hotel revenue is a relatively new segment for TripAdvisor and is where we expect a bulk of the large growth rate occurring. The 27% growth from 2016 indicates where TRIP believes it should be. Management guidance suggests that the revenue growth seen in 2016 is not unexpected or an anomaly but rather will be the norm for the next few years as TRIP continues to grow their customer base through increased services in this sector. New services include: increased customer experience and building new inventory of global supply. We here set the assumption at 25%, then decrease the assumption to 20% for 2018 to 2019 and then assume 15% for 2020 and 2021, then finally assume a long-term growth rate at 13.64% (equivalent to Hotel segment long-term growth rate) starting in 2022.

Display-based advertisement has seemed to lose its traction in the past few years. Unlike click-based advertisements, management provided no growth reversal of the downward trend apparent in display-based advertisements over the past few years. Because of this lack of guidance, we estimate there be a lower growth rate from this segment. We do not zero-out this line because there is a believed increased in the overall growth of the hotel segment as TripAdvisor continues to grow their market share into the travel industry. This will, as a consequence, also naturally increase display-based advertisements.

Operating costs were kept as average values because trends that we have seen in the past are expected to continue in the future. With earlier discussion of these costs, we assume that with the growth of TripAdvisor business segments, there will be a slight upward trend in these costs.

Finally, while comparing the model Free Cash Flow Return on Invested Capital (FROIC), Potential Free Cash Flow Yield (PFCFY), Long Term Asset Turnover (LTAT), and Long Term Asset/Invested Capital (LTA/IC) we see that we are relatively within the bounds of historical values. Although our model pushes the historic average trends, we are hypothesizing a growth play. According to TRIP management, we can expect company growth especially in the Non-Hotel revenue segment as TRIP continues to show new growth initiatives through capitalizing on mobile and phone use and branching out into new segments (attractions, restaurants, and vacation rentals).

From figure 4 below we can see that average model FROIC has been pushed to 27.30% which hits the historical max. This can be justified by noticing the assumption on revenue growth. Because 2016 exhibited poor performance compared to the past four years, historic FROIC was brought down significantly. We expect an upward trend FROIC and believe that by letting average model FROIC be similar to historic highs we get a fair valuation of where the company is expected to grow.

PFCFY, LTAT, and LTA/IC all are within historic ranges. LTAT has been very stable since 2012 with a minimum of 1.03 and a maximum of 1.18. These stable conditions show that TripAdvisor has set a baseline for its growth yet expects stronger growth to come. Although PFCFY hit 25.56% in 2012, these rates have been decreasing ever since then. Slowing its downward trend in 2014, we expect stability in long run PFCFY rates at historical averages. Finally, LTA/IC has been on an upward trend ever since 2012. Starting at 90.58% in 2012, PFCFY has increased to over 100% by 2014 and still continues to rise. Because of this strong upward trend, we feel comfortable with a slightly high LTA/IC average in our model.

Model Tuning Parameters								
	Model				Historical			
	Min	Avg	Max	Trend	Min	Avg	Max	Trend
FROIC	19.70%	27.30%	35.16%		9.98%	19.32%	26.49%	
PFCFY	15.5%	17.7%	19.7%		8.11%	17.35%	25.56%	
LTAT	1.18	1.50	1.72		1.03	1.12	1.18	
LTA/IC	104.00%	105.43%	106.57%		90.58%	101.51%	108.90%	
%DCF in TV	67.21%							

Figure 4: Model Tuning Parameters

Compares various model tuning parameters (FROIC, PFCFY, LTAT, LTA/IC) between our model and historic data. Used to compare validity of our assumptions.

Source: Calculated through TRIP 10-K and 10-Q data

Lastly, the free cash flow per share obtained from these assumptions is $53.41. The current price upon this evaluation is $45.01 per share. This represents a 18.66% upside to this investment. To asses how well-determined these forecasted values were, we performed a Monte-Carlo (MC) Simulation (see figure 5).

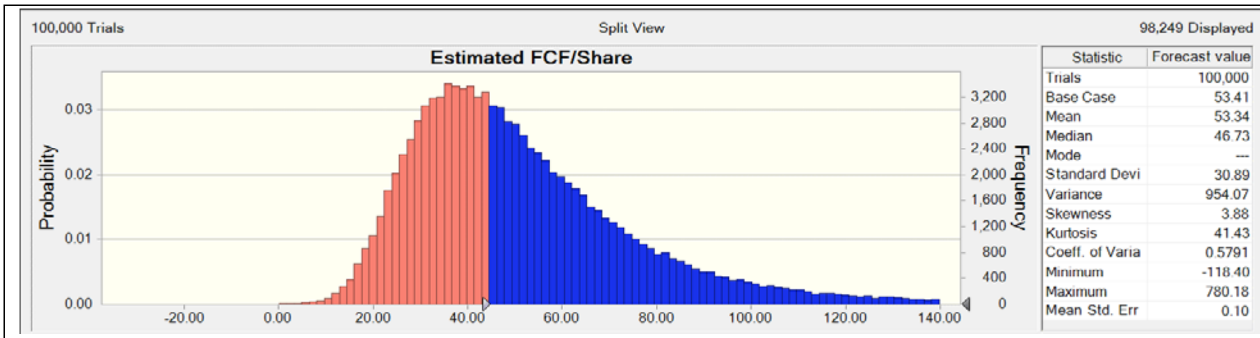

Figure 5: TRIP Monte Carlo Distribution Simulation

These are the results from 100,000 Monte-Carlo simulations of TRIP's P-DCF. The data ranges from -$40.00 per share to around $140.00 per share. The pink portion to the left indicates the probability of a stock price below the current market price. The blue portion represents the opposite, the probability of TRIP's stock price coming above the current market price.

Source: Monte-Carlo Simulation, Crystal Ball.

The current price during this analysis falls into the 53rd percentile of this simulation. This indicates that there is a 53% chance of long-term free cash flow per share exceeding today's market price. This shows that there is great potential value in an investment made today to see returns in the future. Because of these large margins that are observed, there seems to be a strong value proposition today as the value behind this Company is largely deflated by weak 2016 results.

Qualitative Analysis

A. Capital Sources Analysis

Although currently not highly leveraged, TripAdvisor uses debt to finance most of its deals and day to day activities. The company has a Net Debt/EV of -9.35%. This is a result of $746.0 million in cash and cash equivalents on its books versus its current $91 million in debt. Over the past half a decade, TripAdvisor has taken on about $461 million in revolving debt and $370 million came to maturity this past December (12-20-2016).

The Egan-Jones rating for TripAdvisor's senior unsecured loan is an A+. Total outstanding debt is currently $91 million. The company also has a $1 billion revolver agreement with JP Morgan Chase Bank since 6-26-2015. This revolver has a $3,500 transfer fee with a minimum transfer amount set to $5,000,000 and a Commit Fee of 20 basis points. No further debt has been taken on by TripAdvisor.

Figure 6: Debt Distribution

The current portion of the revolver being used (dark green, bottom) is a small portion of the total available revolver (light green, top). Further, debt is minimal and is accessed only through a credit revolver.

Source: Bloomberg <DDIS> Accessed 2/28/2017

From previous years, we have seen that management is not afraid to take on debt and use their revolver to make important M&A deals happen. We have seen this occur when TripAdvisor took on $400 million in debt on 12-27-2013 in anticipation of their acquisition of Viator Inc. This deal was TripAdvisor's largest acquisition at $200 million in cash. Further, in October of 2016 TripAdvisor paid $15.5 million in cash to acquire Eatigo. Although no explicit plans of future acquisitions have been stated, through looking at historic acquisitions we expect that TripAdvisor will continue to grow through mostly bolt-on acquisitions.

TripAdvisor also uses Credit Facilities to finance many of their operations. These Credit Facilities are credit agreements that allow for immediate borrowing by TripAdvisor as well as repayment date set by the lender or lenders. Further, no interest will accrue unless there is outstanding debt taking on by TripAdvisor after the date of the repayment is set by the lenders. The 2015 Credit Facility took on a $290 million value that was immediately borrowed which was used to pay of the 2011 Credit Facility. More recently, the 2016 Credit Facility provided a $73 million unsecured revolving debt. Chinese Credit Facilities in addition to the 2015 and 2016 Credit Facilities provide short term borrowings of $7 million in 2016 and $1 million in 2015 (see figure 6, above).

Inspection of the equity reveals that extra equity has been added to the company. We must be careful in assessing TripAdvisor's equity growth as with increasing number of investors, an investment made today might be diluted tomorrow due to offering of more shares. The company seems to have offered additional shares since its IPO through the "Amended 2011 Plan" which has stated that up to 32,400,000 shares will be awarded with the Compensation Committees' discretion to directors, officers, employees, and consultants of TripAdvisor. This initiative will be used as a stock option compensation program to help garner support in the company by internal members. As a disclaimer, according to the DEF-14A filling for TRIP, the "exercise price may not be less than the fair market value"[1] which essentially means that these shares may appreciate but cannot depreciate in value. This additional shares award program will not dilute any equity stake that we may take in this company as this was strictly a one-time program closely correlated with TripAdvisor's IPO.

B. Historical Allocation Analysis

Here, we focus our attention to Fiscal Year End 2013 and 2014. In 2013, we first notice a large decrease in Working Capital. This is likely a result of the introduction of the $370 million loan they took on through the revolver debt. With this debt we notice a large increase in cash which increases the "Cash and Cash equivalents" line in figure 7 below. With a higher cash value and considering that "Working Capital = Current Assets – Current Liabilities – Cash and Cash Equivalents", our Working Capital is brought down by the addition of more cash (which decreases the value of Current Assets – Cash). Next, we notice a large increase in long-term assets as a result of an increase in marketable securities, goodwill, and PP&E from a number of smaller acquisitions and debt acquisitions in 2013. CAPEX and Invested Capital also follow in these footsteps, resulting in large upward swings (see figure 7).

---

[1] TripAdvisor (2017). *Form DEF-14A 2016.* Retrieved from SEC Edgar website https://www.sec.gov/edgar/

Additional Calculations Required	2012	2013	2014	2015	2016	2016E
Working Capital Calculation						
Current Assets	632	630	737	865	950	966
Current Liabilities	196	243	381	312	423	450
Cash and Cash Equivalents	368	351	455	614	612	611
Working Capital	69	36	-99	-61	-85	-95
Change in Working Capital		-33.339	-135	38	-24	-10
Capital Expenditures (CAPEX) Calculation						
Long-Term Assets	667	843	1211	1263	1288	1311
Depreciation and Amortization	26	36	65	93	101	93
CAPEX		212.3	433	145	126	116
Invested Capital (IC) Calculation						
Invested Capital	736	879	1112	1202	1203	1216

Figure 7: Additional Calculations
This figure shows the calculation of Working Capital and Change in Working Capital, Capital Expenditures, and Invested Capital.

Source: TRIP 10-K

As mentioned previously, TripAdvisor has a history of mostly doing bolt-on acquisitions which allows them to add new services to their existing platform. Some of their key acquisitions are Viator in July of 2014 and Eatigo in October of 2016. Viator was a $200 million cash deal that allowed TripAdvisor to expand its reach. Unfortunately, no information about its market premium has been released, however with such a seamless transition into TripAdvisor, Viator was able to create a positive impact on TripAdvisor (seen through a jump in revenue and sales numbers). Eatigo, Bangkok's number one dining deals and restaurant reservation portal, has not only allowed TripAdvisor to expand on their services into the food industry but has also created a new customer base. Through tapping further into the Thailand and Singapore markets, TripAdvisor more deeply exemplifies its tendency to do vertical integration bolt-on acquisitions rather than horizontally expanding their business line and diving into completely new industries.

Finally, we must also note that in December 2012, Liberty Interactive Corp acquired 4.8 million shares of TRIP. This was a result of Barry Diller's stepping down as the chairman of TripAdvisor as he sold his stake in the company. Liberty Interactive paid $300 million in cash which is around $62.50 a share (about a 63% premium over the current $38.39 stock price).

It is also worth noting that TripAdvisor does not give out dividends on their TRIP common stock. However, in February of 2013, the board of directors did authorize the repurchase of $250 million in common stock under the repurchase program. A total of 1,651,957 common shares were repurchased at an average price of $50.76. Further, as of December 31, 2016, there have been a total of 4,123,065 common shares repurchased at an average price of $60.63. Lastly, on January 25, 2017, Board of Directors authorized a $250 million stock repurchase under a new share repurchase plan. Next we will discuss whether certain compensation techniques lead to specific business related decisions.

C. Compensation and Corporate Governance

To introduce the executive officers that will be mentioned throughout this section of the investment thesis we turn to figure 8 below that reveals the names of the Chief Executive Officer (CEO) and other Names Executive Officers (NEO) followed by their role or title in the company.

Name	Principal Position
Stephen Kaufer	President and Chief Executive Officer
Ernst Teunissen	Senior Vice President, Chief Financial Officer, and Treasurer
Seth J. Kalvert	Senior Vice President, General Counsel and Secretary
Dermot M. Halpin	President, Vacation Rentals
Barrie Seidenberg	Chief Executive Officer, Attractions
Julie M.B. Bradley	Former Senior Vice President, Chief Financial Officer and Treasurer

Figure 8: Executives and respective titles
Figure displays the names of all executives who are mention in TRIP's DEF-14A and their corresponding titles to the right of their names.

Source: TRIP DEF-14A

TripAdvisor takes pride in not only portioning their compensation through variable means but also through long-term incentive devices. The CEO, Stephen Kaufer, has a compensation plan that is 96% variable and 4% fixed annually. Other NEOs lean a bit more towards fixed compensation at around 19% but still mainly rely on their 81% variable compensation. These statistics show that TripAdvisor tries and keeps management on their toes with each year's compensation uniquely adjusted as per guidelines and metrics that will be explained later.

Further, the long-term growth and stability is better protected through high stakes in long-term compensation. The CEO's compensation is 96% long-term whereas NEO's compensation is about 85% long-term. This suggests that TripAdvisor is cautious with taking risk for short-term gains in the company. Whether these short- and long-term metrics correctly align with our analysis beliefs, we will see in the next few paragraphs.

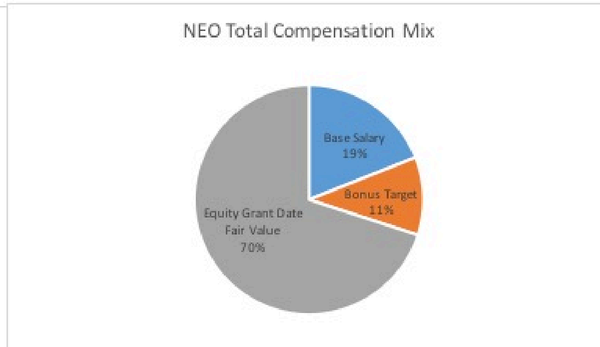

Figure 9: Compensation Mix
The pie chart on the left represents the percentage of CEO pay that aligns with the specific compensation type whereas the right pie chart represents the NEO percentage per compensation type.

Source: TRIP DEF-14A

TripAdvisor executives are mostly compensated through equity positions through stock options and Restricted Stock Units (RSU). The figure above (figure 9) displays the large percent of compensation that is allocated to these equity compensation devices. RSUs hold specified vesting time periods, strict performance criteria, and or have requirements to stay employed with TripAdvisor for a longer period of time. Vesting period for each executive's compensation is handled on a case by case basis however it cannot last longer than 10 years and is usually set to around four years. Longer vesting periods around four years or more suggest good long-term incentives for executives. Equity awards are granted after review of the following factors:

1. TRIP business and financial performance
2. Dilution rates
3. Non-cash compensation as a percentage of EBITDA
4. Peer company equity compensations (see figure 10 for peer companies)
5. General economic conditions
6. Competitive market compensation

The list above is shown for illustration purposes of the vague nature with which TripAdvisor describes their exact criteria. Although not disclosed, stock options are adjusted with major changes each year in accordance with figure 11 that summarizes overall compensation by year. Large dips in stock award for a majority of NEOs in 2015 suggest that compensation is aligned with performance.

B to C Internet Companies	Software Companies
Expedia, Inc.	Akamai Technologies, Inc.
Groupon, Inc.	ANSYS, Inc.
Homeaway.com, Inc.*	Citrix Systems, Inc.
IAC/InterActiveCorp.	Intuit
LinkedIn Corp.	NetSuite Inc.
Netflix Inc.	RedHat, Inc.
Pandora Media, Inc.	VeriSign, Inc.
The Priceline Group, Inc.	Workday, Inc.
Shutterfly, Inc.	
Twitter	
Wayfair	
Zillow Group	

Figure 10: TripAdvisor Peer Group
Figure lists the competitive peer group that TripAdvisor uses to make market-competitive compensation decisions.

Source: TRIP DEF-14A

Since TripAdvisor does provide a large amount of equity based compensation, there is a Clawback policy in place. TripAdvisor reserves the right to reclaim equity securities of common stock or demand for the repayment of the aggregate value of all shares of common stock. Transitioning to cash awards, we see more clarity with exact targets.

Cash bonuses are based on TripAdvisor's "pay for performance philosophy". This suggests that all aspects of compensation are based on the company's performance during the given period. Short-term incentives and eligibility for Annual Cash Bonus is allocated if two requirements are met:

1. "The revenues of TripAdvisor in any of the three consecutive calendar quarters beginning with the second quarter of 2015 must be at least 10% higher than the revenues in the corresponding calendar quarter 12 months before, excluding the benefit of any acquisitions by TripAdvisor during this period"[2]
2. "The closing price per share of TripAdvisor common stock must be at least 5% higher than the closing price of TripAdvisor's common stock on February 5, 2015, which was $70.58 per share, on any 30 trading days during the period beginning February 6, 2015 and ending December 31, 2015"[3]

As a quick note of the metrics used, TripAdvisor uses no adjusted metrics in their calculation of Qualified Performance-Based Compensation under Code Section 162(m). Although the exact

[2] TripAdvisor (2017). *Form DEF-14A 2016.* Retrieved from SEC Edgar website https://www.sec.gov/edgar/
[3] TripAdvisor (2017). *Form DEF-14A 2016.* Retrieved from SEC Edgar website https://www.sec.gov/edgar/

guidelines for the current fiscal year can be a bit vague, the metrics they use are GAAP measurements and not adjusted.

Although exact compensation metrics and targets are a bit vague, exact compensation values based on TripAdvisor's techniques are exhibited in the figure below. An overall summary of management compensation from 2013 to 2015 are outlined in figure 11. We can see that in August 2013, Mr. Kaufer was awarded $38,054,126 in stock options. Although seemingly alarming, Mr. Kaufer has elected to not participate in equity awards until the end of fiscal year 2017. Further, his shares will vest in equal installments of 4 and 5 years to keep long-term equity awards protected.

Name and Principal Position	Year	Salary ($)	Bonus ($) (1)	Stock Awards ($)(2)	Option Awards ($)(2)	All Other Compensation ($)(3)	Total ($)
Stephen Kaufer	2015	700,000	630,000	—	—	8,110	1,338,110
President and Chief Executive Officer	2014	500,000	700,000	—	—	7,960	1,207,960
	2013	500,000	450,000	—	38,054,126	10,101	39,014,227
Ernst Teunissen(4) Senior Vice President, Chief Financial Officer, and Treasurer	2015	61,712	53,125	1,999,940	4,999,156	5,508	7,119,441
Seth J. Kalvert	2015	398,475	236,694	799,934	799,906	13,110	2,248,119
Senior Vice President, General Counsel and Secretary	2014	385,000	192,500	384,482	1,152,948	7,960	2,122,890
	2013	346,923	166,250	—	1,147,338	6,847	1,667,358
Dermot M. Halpin(5)	2015	433,177	211,336	374,986	374,948	274,020	1,668,467
President, Vacation Rentals	2014	498,425	229,276	374,983	948,928(7)	248,110	2,299,722
Barrie Seidenberg	2015	350,000	175,000	749,972	749,896	5,160	2,030,028
Chief Executive Officer, Attractions	2014	97,436	136,875	1,513,205	504,539	160	2,252,215
Julie M.B. Bradley(6)	2015	363,614	179,989	1,661,519(8)	1,539,604(9)	342,010	4,086,736
Former Senior Vice President, Chief Financial Officer and	2014	397,000	235,818	526,469	1,578,757	8,835	2,746,879
Treasurer	2013	355,385	216,810	—	1,889,028	8,665	2,469,888

Figure 11: Summary of Executive Compensation
Figure displays executive total compensation broken down into various segments. Compensation is displayed for 2013, 2014, and 2015.

Source: TRIP DEF-14A

The top 18 shareholders of TRIP stock are listed in figure 12 below. This figure shows that Liberty TRIP, Baillie Gifford and Company, Vanguard, Jackson Square Partners, and BlackRock are the top five shareholders owning 13.82%, 9.45%, 7.95%, 7.29%, and 6.23%, respectively. Further we notice that there has not been a great deal of insider trading recently. A detailed timeline of all open market insider trading over the last 12 months are detailed in figure 13 below.

	Holder Name	Portfolio Name	Source	Opt	Position	% Out	Latest Chg	File Dt
1	LIBERTY TRIPADVISOR HOLDI		13D		18,159,752	13.82	0	06/23/16
2	BAILLIE GIFFORD AND COMPAN	BAILLIE GIFFORD & COMP	13F		12,417,263	9.45	-211,132	12/31/16
3	VANGUARD GROUP		13G		10,442,791	7.95	0	12/31/16
4	JACKSON SQUARE PARTNERS L		13G		9,578,589	7.29	0	12/31/16
5	BLACKROCK		ULT-AGG		8,177,547	6.23	-1,237,362	02/28/17
6	BROWN ADVISORY INC		ULT-AGG		6,775,504	5.16	35,729	12/31/16
7	CARMIGNAC GESTION		ULT-AGG		5,687,803	4.33	3,888,312	12/31/16
8	BNY MELLON		ULT-AGG		4,767,764	3.63	-323,759	12/31/16
9	STATE STREET CORP		ULT-AGG		4,724,538	3.60	194,903	12/31/16
10	PAR CAPITAL MANAGEMENT IN	PAR CAPITAL MANAGEME	13F		3,259,490	2.48	21,500	12/31/16
11	T ROWE PRICE GROUP INC		ULT-AGG		2,999,166	2.28	33,089	12/31/16
12	HIGHFIELDS CAPITAL MANAGE	HIGHFIELDS CAPITAL MA	13F		2,555,542	1.95	1,000,000	12/31/16
13	MACQUARIE GROUP		ULT-AGG		2,437,220	1.86	14,253	12/31/16
14	FMR LLC		ULT-AGG		1,949,866	1.48	-2,139,681	12/31/16
15	THUNDERBIRD PARTNERS LLP	THUNDERBIRD PARTNERS	13F		1,654,816	1.26	297,598	12/31/16
16	SEI INVESTMENTS CO		ULT-AGG		1,610,975	1.23	131,164	01/31/17
17	FIRST TRUST		ULT-AGG		1,513,535	1.15	229,720	12/31/16
18	EMINENCE CAPITAL LP	EMINENCE CAPITAL LLC	13F		1,495,000	1.14	1,495,000	12/31/16

Figure 12: TRIP Institutional & Insider Shareholders

The figure shows TRIP's largest shareholders. TRIP has a total of 131.4 million shares outstanding

Source: Bloomberg <OWN> Accessed 3/1/2017

Figure 13: Insider Transactions

This figure shows TRIP's Open Market transactions for the trailing twelve months. The red flags indicate a sell transaction while the green flags indicate a buy transaction.

Source: Bloomberg <GPTR> Accessed 5/11/2017

Conclusion

We believe that TripAdvisor is a company with potential to increase their growth in the years to come. Today, TRIP is experiencing great changes within their company with major changes from new credit facilities, implementation of more non-hotel based revenue, as well as newer advertisement monetization technologies. Although this transitional period has resulted in weak results for 2016 it shows the company's ability to take risks and strive for long-term growth. 2016 has been burdensome on TripAdvisor through many macroeconomic situations occurring in domestic and international regions, that we expect not to reoccur during the coming years. In the end, the fundamental value of the company largely comes from its ability to tap into new segments and sustain their high-growth claims which we believe TRIP will have minimal trouble achieving.

For these reasons along with our P-DCF model calculating a 18.66% upside margin to an investment today, I rate TRIP a BUY.