Stock	Buy / Sell	Thesis	Current Price	Target Price
CBRL	BUY	Cracker Barrels is currently suffering from industry related effects. These harsh conditions did not help CBRL meet FQ4 earnings estimates. However, mid to long term CBRL has a foreseeable growth outlook, especially when compared to its competitors. CBRL is down nearly 30% since late June of 2016 and is trading at EV/EBITDA of below its EV/EBITDA of 11.21 in June. In the mist of harsh restaurant market conditions CBRL has illustrating better margins than its competitors. Since it is trading at low multiples and under valued currently CBRL has mid to long term potential as a growth stock with managements 2017 planned initiatives.	$ 135.19	$ 154.00
FSLR	BUY	First Solar is probably the leader in providing Solar panels in the United States and is most certainly viewed as a pioneer in the market regarding the fact the most of its competitors are 10 years old companies on average. The company manages to offer an excellent quality at a excellent price. The industry average is around $3/watt when FSLR manages to achieve of an historical average cost of $2.90/watt.	$ 42.08	$ 51.25
GERN	BUY	I suggest that we should buy this stock because at the low price of $2.12 it is not a high risk. The potential for growth is also high because if the company can continue to perform well and get positive results for the clinical trials, they will get more agreements such as the multimillion dollar deal they received from Johnson & Johnson. I think we should jump in on the stock at $2.00 and sell at $4.00.	$ 2.12	$ 4.38
URBN	BUY	A declining apparel industry and economic uncertainties was no match for Urban Outfitters as they are coming off a record setting level of second quarter sales of $890.6 million. Even with high mark ups, customers are buying the latest fashions, accessories, and home goods at Urban Outfitter brand stores because of its superior shopping conditions. Plans to expand organically and geographically enable operating and logistical cost reductions and position the company to outperform its competitors in the following years. The company is financially sound and has favorable credit terms that will allow growth to occur.	$ 33.58	$ 42.00

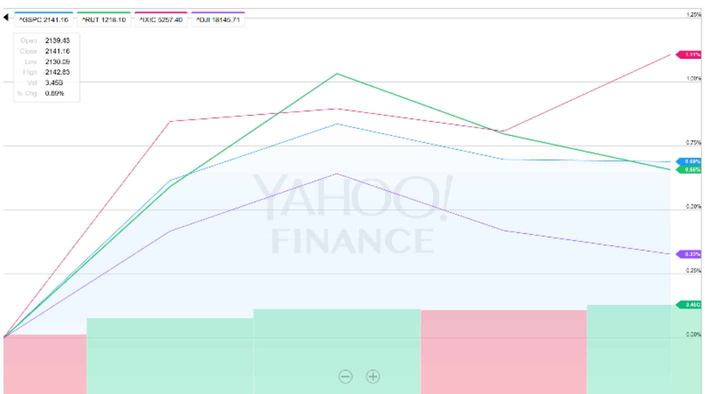
IDTI	BUY	IDT lost, in August 2016, its Huawei contract worth $12M in revenues per quarter. The stock price dropped by 12% on the day, which shows an overreaction to the news, according to analysts.To compensate for the loss, it has many products in R&D, for which patents were granted in September 2016, and some of which will start being marketed by end of 2017. The company also bought ZMDI in December 2015, which is said to be reorganized and fully incorporated in their revenue stream by the end of 2016. This acquisition will bring new revenues from the automotive and industrial business, for which ZMDI is a market leader.	$ 20.31	$ 27.00
JBLU	BUY	Management is rapidly deleveraging their balance sheet freeing up room for some future large purchases. Jet Blue has been aggressively repaying its debt; they reduced their total debt by 29% by the end of 2015 and are expected to continue reducing debt through 2016. Their future costs of debt have also been greatly reduced to more attractive rates.	$ 18.24	$ 23.00
LHCG	BUY	LHCG is the best in class in its industry in both quality of service provided and financial ratio comparison with competitions. That being said LHCG has room to grow in this rapidly growing industry with large amounts of future demand. Within this industry one of the keys to success is managing operating cost. LHCG is positioning itself to lower operating cost and increase the bottom line. With a Q3 earnings call on the horizon and the stock trading near 52 week lows this could be an ideal time to purchase shares.	$ 36.37	$ 42.40

Macroeconomic Overview

U.S. Markets

	Index	Weekly % Change	YTD % Change
SPX Index	S&P 500	0.38%	4.76%
INDU Index	Dow Jones Industrial	0.04%	4.14%
CCMP Index	NASDAQ Composite	0.83%	4.99%
RTY Index	Russell 2000	0.47%	7.24%
VIX Index	VIX	-17.25%	-26.74%

Stocks were broadly higher on the week as the Dow Jones Industrial Average increased marginally, the S&P 500 inched higher, and the technology-heavy NASDAQ posted solid gains outperformed the other benchmarks, helped by solid gains in both Netflix and Microsoft following earnings reports. Indeed, Microsoft stock managed finally to break through the record high it established in 1999. Macroeconomic concerns seemed to play only a small role, although rising oil prices and reassuring signals on the Chinese economy seemed to boost energy and materials shares. The week brought little significant economic data, but conviction appeared to grow that the Federal Reserve would raise interest rates by the end of the year. On Wednesday, New York Fed President William Dudley told a gathering that a quarter-point increase by the end of the year "is not really that big of a deal." With other central banks still on hold, expectations of a rate hike helped the U.S. dollar reach its highest level in eight months by the end of the week. Uncertainty surrounding the upcoming elections may have also continued to influence sentiment, with more attention now turning to control of the House of Representatives and Senate. US Federal Reserve Vice-Chair Stanley Fischer said this week that the central bank is very close to achieving its twin goals of full employment and inflation near 2%.



Commodities: Crude prices closed higher Friday, reversing earlier losses as a stronger U.S. dollar failed to subdue optimism over a tightening market. Gold prices shuffled between gains and losses Friday, as investors weighed the pressures of a stronger dollar against an expected surge of demand from India.

Gold for December delivery closed broadly flat at $1,267.70 a troy ounce on the Comex division of the New York Mercantile Exchange. Prices were as low as $1,261.70 a troy once earlier in the session. Silver for December delivery was recently down 0.17% at $17.49 a troy ounce, platinum was down 0.3% at $932.30 a troy ounce, and palladium was down 1.9% at $620.75 a troy ounce

Specific news: AT&T's blockbuster $85.4 billion deal to buy Time Warner Inc. promises to reshape the media landscape—if the companies can navigate a series of obstacles, including possible opposition from U.S. antitrust authorities and objections by lawmakers and media and telecom rivals.

Next week ahead: Next week, manufacturing and service PMI reports will be released on Monday and Wednesday, respectively. Then on Friday, GDP for the third quarter will be reported.

International Markets

	Index	Weekly % Change	YTD % Change
BE500 Index	BE 500	1.44%	-6.44%
SXXP Index	Stoxx Europe 600	1.28%	-5.88%
DAX Index	DAX	1.23%	-0.30%
UKX Index	FTSE 100	0.10%	12.47%
CAC Index	CAC 40	1.46%	-2.18%
NKY Index	Nikkei 225	1.72%	-9.68%
SHCOMP Inde	Shanghai Composite	1.67%	-12.63%
SZCOMP Inde	Shenzhen Composite	1.26%	-11.08%

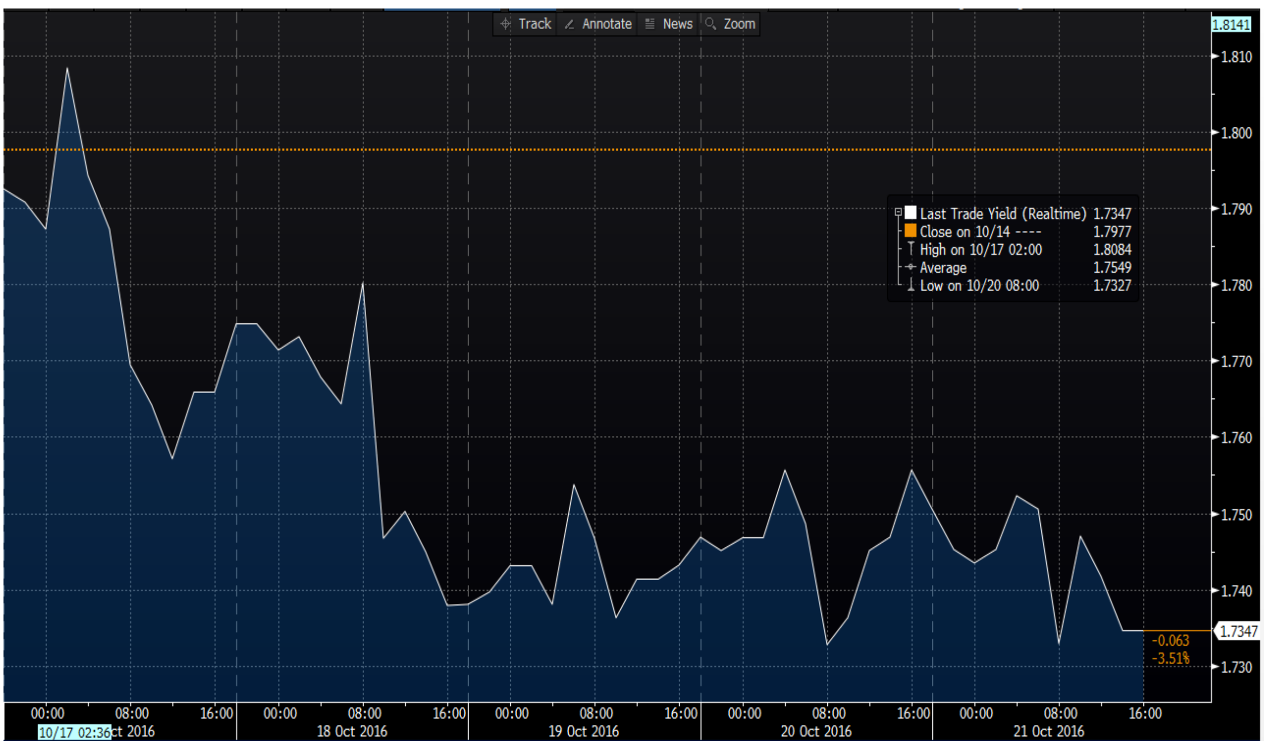
Europe: European stocks ended the week higher, supported partly by better-than-expected earnings updates from some eurozone companies, including SAP, the region's largest software firm. The Pan-European benchmark Stoxx 600, London's FTSE 100, and Frankfurt's DAX all recorded gains. The European Central Bank (ECB) kept interest rates and its monetary stimulus program unchanged at its October monetary policy meeting during the week. At a press conference following the announcement, ECB President Mario Draghi left the door open to extending the central bank's quantitative easing measures at its December meeting. The euro fell to a seven-month low against the dollar. Inflation in the United Kingdom rose 1% in September, the fastest annual rate in two years. While the Office for National Statistics said there was no explicit evidence that the fall in the pound's exchange rate had pushed up prices, economists expect higher import costs resulting from the currency's post-Brexit depreciation to underpin inflation in coming months. Matching an 11-year low, the UK unemployment rate held steady at 4.9% in the three months ended 31 August. Labor markets have largely shrugged off Brexit concerns thus far, though the process of leaving the European Union has yet to officially begin.

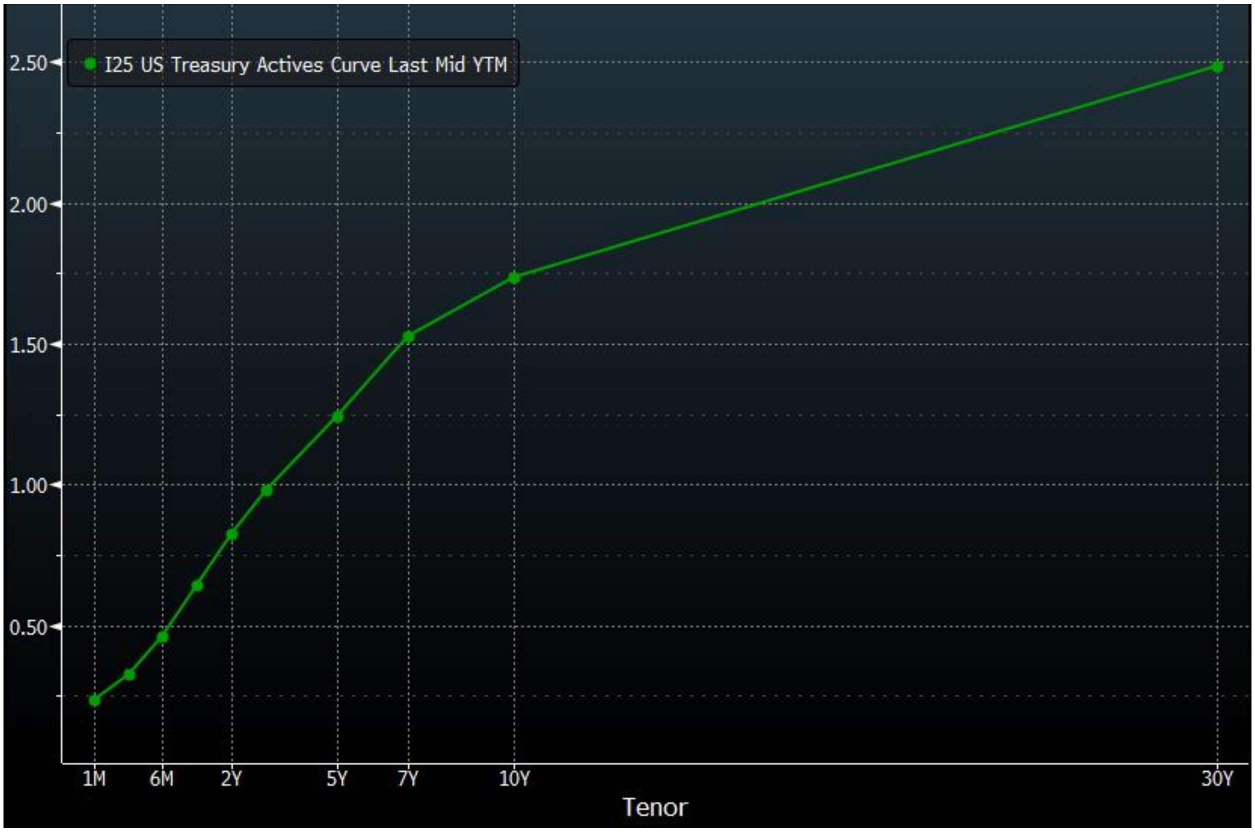
Asia: Japanese stocks rallied for the week on the back of strong corporate earnings and a weaker yen, but suffered a modest setback on Friday after an earthquake rocked Western Japan. On the week, the Nikkei 225 gained 1.9% and closed at 17,184.59. Japan's low rate environment has sparked a decline in equity financing in favor of bond issuance. The Nikkei reported Japan's listed companies bought back a record ¥4.35 trillion ($41.8 billion) of their own shares from January to September. The move was driven by a push to improve capital efficiency and corporate governance.

China's economy grew 6.7% in this year's third quarter from a year ago, reassuring analysts worried about a steep slowdown that could hurt global demand. The latest quarter's growth matched China's economic expansion rate in the first and second quarters and puts China on track to meet its official 2016 growth target of 6.5% to 7.0%

Bond Report

This week, the US Treasury yields fell from past week's four month high. This is a result from disappointing reports on inflation and housing market. Lower-than-expected inflation rate for September, as well as deceleration of new home constructions helped weigh on yields this week. Additionally, lack of guidance from the ECB on the future of its bond-buying program drove investors back into government debt. On Monday, investors slowly returned to the Treasury bond market after the large selloff from the past weeks, making Treasury prices rise and pushing yields lower. On Tuesday, even though the Consumer Price Index showed an increase of 0.3% for September, in line with expectations, the core inflation was only 0.1% for the month. Therefore, yields fell as investors adjusted to lower expectations. On Wednesday, investors sold U.S government bonds to hedge their credit risk in prevision of the $17.5 billion offering of Saudi Arabian debt. Therefore, Treasury prices fell and yields climbed in the first half of the day. Later in the day, data showing that new home construction rate slowed down to its lowest pace in a year and a half contributed to move yields sharply lower. On Thursday, data suggesting a cooling U.S. Housing Market pushed short-term treasury yields higher. Statement from Mario Draghi suggesting that the ECB bond-buying program could be extended made yields on long-term Treasuries fall in sympathy with European markets. Overall, the two-year Treasury fell by 1.1 basis point to 0.827% over the course of the week. The 10-year Treasury saw its yield fall by 5.2 basis points from its four-month high to end Friday's session at 1.740%. Regarding the long-term 30-year Treasury bond, its yield fell by as much as six basis points through the week to 2.493%.





What's next and key earnings

On Tuesday, the Consumer Price Index data for September was released. Consumer prices rose at a 0.3 percent rate over the month, in line with economists' expectations. It was mainly driven by energy surging by as much as 2.9 percent. However, the core inflation data, which excludes energy and food (flat this month), was only 0.1%. It suggested that even if inflation is growing steadily, it is not as spectacular as expected. Still on Tuesday, the Housing Market Index was released and was 63, down 2 from September Index of 65, but in line with consensus expectations. The main concern is the lack of new homes coming on the market and a lack of first-time buyers. The new home market is a major highlight of the economy right now, where expansion is being limited by construction constraints but is still pointing to spill over into the still muted resale market. For the coming week, several announcements are of interest. First, the Consumer Confidence Index is to be released on Tuesday. It will give an overview of consumers' mindset and perception of the economy for the months to come. Then, on Wednesday, data about New Home Sales is to be released. Last but not least, data about third-quarter's GDP will be released on Friday morning. It is expected to have grown by as much as 2.5% over the quarter, and Consumer Spending is also expected to be solid.

Cracker Barrel Old Country Store, Inc.

NASDAQ: CBRL

Analyst: Austin Bitzas
Sector: Consumer Discretionary

BUY

Price Target: $154

Key Statistics as of 10/21/2016

Market Price:	$135.19
Industry:	Restaurants
Market Cap:	$3,174.9 M
52-Week Range:	$118.01-172.89
Beta (levered):	0.48
P/E:	17.45
EV/EBITDA:	9.75
High (2015):	12.99
Low (2015)	9.18
ROIC:	2.04

Catalysts:

- **Short term:** FQ1 2017 earnings on Nov. 22nd 2016
- **Mid-term:** Restaurant industry gains traction again
- **Mid to Long-term:** Implementation of growth expansion plan

Company Description:

Cracker Barrel Old Country Store, Inc. (NASDAQ: CBRL) operates under the "Cracker Barrel Old Country Store" and "Holler & Dash Biscuit House" concept in the United States. Cracker Barrel was founded in 1969, where it is headquartered in Lebanon, Tennessee. Cracker Barrel Stores consist of a full serviced restaurant that serves breakfast, lunch, and dinner and a gift shop. The company's gift shops have a variety of foods, decorative and functional items centered on the rustic old country atmosphere. The company's restaurants offer home-style country cooking featuring various recipes.

Thesis

Cracker Barrels is currently suffering from industry related effects. These harsh conditions did not help CBRL meet FQ4 earnings estimates. However, mid to long term CBRL has a foreseeable growth outlook, especially when compared to its competitors. CBRL is down nearly 30% since late June of 2016 and is trading at EV/EBITDA of below its EV/EBITDA of 11.21 in June. In the mist of harsh restaurant market conditions CBRL has illustrating better margins than its competitors. Since it is trading at low multiples and under valued currently CBRL has mid to long term potential as a growth stock with managements 2017 planned initiatives.

Restaurant Industry Outlook

Restaurants are losing sales growth as a result of soft consumer spending. Due to high competition and low consumer spending many restaurants are suffering. It must also be stated that due to lower grocery prices consumers are favoring grocery shopping versus dining out. However, discounting is being extended due to ongoing demand and favorable commodity prices for some products, mostly eggs. This results in lower input costs have helped make these discounts easier and offset higher restaurant wages. Restaurant chains are now focusing on ways to drive traffic and sales growth in such a competitive market. Chains are using technology and optimizing economics to increase traffic and sales while offsetting rising labor costs.

Business Model

CBRL stores are centered on a unique mix of restaurant and retail. With a 47 year old successful growth history and financial success. CBRL business model is currently focused around enhancing its core business:

This involves protecting its current guest base while expanding top new generations such as millennials by:

- Growing off premise business
- Maintaining brand differentiation
- Investing in digital and social capabilities
- Shift to external driven marketing strategy to drive incremental frequency.

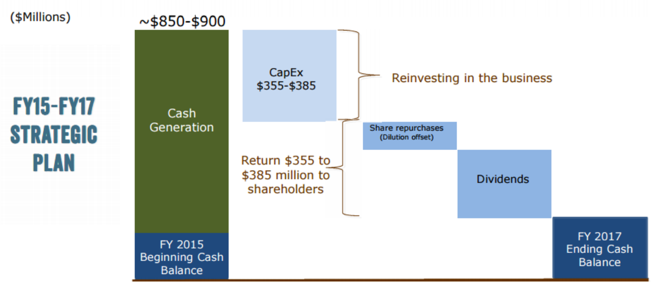
This will also be done by improving the current business model by enhancing its business externally through expansion of profitable stores as well as extending its brand through growing Holler and Dash.

Currently, CBRL has 641 stores and plans to open 7 to 8 new stores during in Fiscal 2017. All CBRL stores are strategically located off-interstate or near tourist destinations. This is to capitalize on brand recognition associated with travelers. However, the company believes in moving towards certain local markets where guests live and work, including locations outside of its existing core markets.

In 2016, the company launched, Holler and Dash Biscuit House, its new fast casual concept. It offers biscuit-inspired entrees and a wide variety of alcoholic and non-alcoholic beverage options. These are smaller locations limited to breakfast and lunch. These stores are part of management's initiative to extend its core business to the fast-casual restaurant segment.

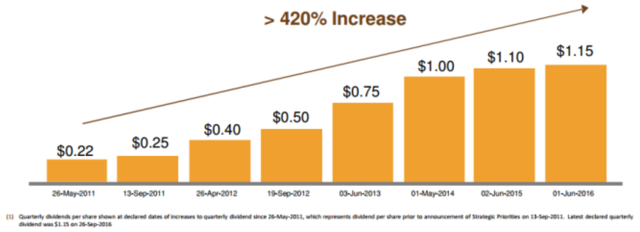
Marketing is centered on outdoor advertising, which is the largest marketing vehicle used to attract travelers and local guests. CBRL is among the industry leaders in billboard advertisers. Increase in media exposure in 2016 was also used to advertise. The company plans to increase marketing from 2.7% in 2016 to 2.9% in 2017. CBRL will also focus on its exclusive music program that drives awareness for their brand and builds cultural relevance and affinity to their guests.

Exhibit 1:



As scene in Exhibit 1 the company has a maintained a balanced approach to capital allocations from Fiscal 2015 to 2017. Management plans on increasing the ending cash balance in 2017. This will be done through continuing to invest a large portion of profits back in to the business. There are also plans however to repurchase shares and pay sufficient dividends to return returns back to shareholders. On September 26, 2016 CBRL announced a quarterly dividend of $1.15 per share and new share repurchases for up to $25million of outstanding common stock for the company. This new strategic plan to balance capital allocation will give CBRL a higher ending cash balance and focuses on growth as well as supplying its shareholders with value through high dividends as scene in Exhibit 2.

Exhibit 2:



Company Initiatives

1. **To cut cost, which will drive operating margins:**
   CBRL is expected to receive $15 to $20 million in reduced expenses as a result of managements cost saving initiatives. These initiatives are include targeted food management, new LED lighting technology, and food processors. These cost saving initiatives will be in addition to cost saving seen through lower commodity prices as well. In 2016 the company was able to achieve $7 million in reduced operating expenses.

2. **Adopt Omni-channel business extending to fast casual concept:**
   This will be accomplished by expanding the Holler & Dash restaurant brand. The combination of comp store sales and new stores is expected to drive sales about 3 to 4% annually over the next 2years. This will be done by adding new digital technology as a way to add convenience and enhance the guest experience. The company will also test online waitlist capabilities through new dining and management system. As well as launch the Cracker Barrel Games App. Despite the fast-casual style of dining the company will still stay true to its rustic old country atmosphere.

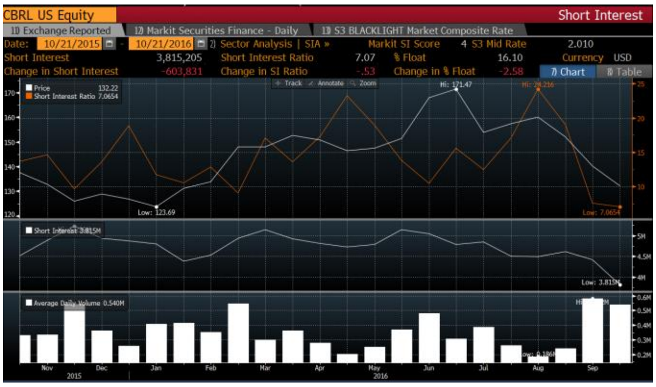
3. **CBRL has begun and will continue a fully integrated marketing campaign including revamping its music program to increase brand awareness:**
   Through partnerships, CBRL offers new album releases and sells music and related items online and in company stores. As in the company's latest album under its Spotlight Music Program release "Tennessee Christmas" partnering with Amy Grant, a six-time Grammy Award-winning signer. The result is that it increases attraction and connection with country music fans, leading to an increase in sales. Through targeted advertising and this music program CBRL is able to target millennials, which are the largest current living generation, to expand the company's customer base.

4. **Growth and Expansion Plan 2017:**
   The company plans on opening 7 to 8 new Cracker Barrel stores and 4 to 5 new Holler & Dash stores in 2017, according to its Q4 earnings estimates. CBRL plans to extend not only into off interstate location but also populated local areas were customers live and work. Management feels this will build brand awareness increasing sales.

Ownership

As illustrated in Exhibit 3 CBRL's short interest has begun to plummet from all-time highs in mid-August and then just recently has begun to decline once again in the last few weeks to all-time lows with an increase in volume. This indicates that investors are selling off their short positions, which could indicate that they believe the share price has bottomed out and will gain traction once again. A declining short interest ratio further supports the claim for a buy position in CBRL.

Exhibit 3:



Financials

Exhibit 4:

ROIC /WACC	History	LFY
cbrl	1.40	2.06
Competitors	1.04	1.38

Unlevered Beta	History	LFY
cbrl	0.68	0.45
Competitors	0.86	0.61

ROIC	History	LFY
cbrl	13.3%	17.8%
Competitors	9.9%	13.5%

Capitalization (Debt/Equity)	History	LFY
cbrl	0.18	0.11
Competitors	0.17	0.15

WACC	History	LFY
cbrl	9.8%	8.6%
Competitors	9.5%	9.7%

COR/Revenue	History	LFY
cbrl	67.4%	66.4%
Competitors	74.5%	73.2%

Kd	History	LFY
cbrl	7.4%	3.4%
Competitors	4.9%	4.4%

Ke	History	LFY
cbrl	13.4%	9.4%
Competitors	10.9%	10.4%

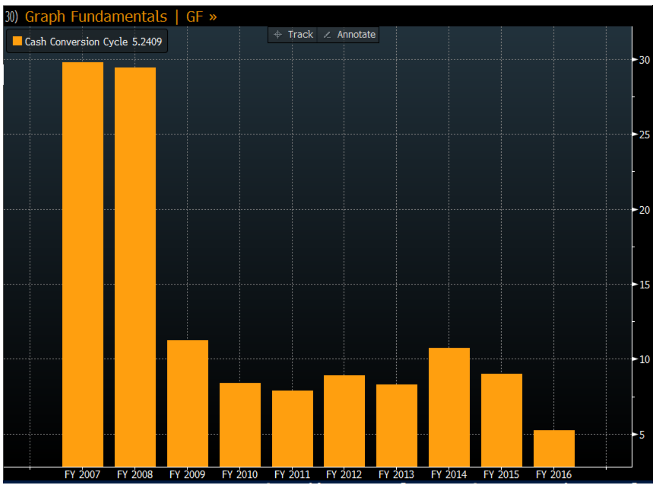
As seen in Exhibit 4 CBRL was compared to its close industry competitors, as seen in Exhibit 5. CBRL outperforms its competitors and therefore is an industry leader according to margins. CBRL's return on invested capital (ROIC) is far above its competitors meaning that it is efficiently generating returns above its competitors. In addition, ROIC has improved from 13.3% historically to 17.8% in the last fiscal year, which just ended for CBRL. Further, CBRL has a slightly lower risk than its competitors as seen in its weighted average cost of capital (WACC) of 8.6% when compared to its competitors of 9.7% for the last fiscal year. Moreover, CBRL is generating more value than its competitors as illustrated with its ROIC/WACC of 2.04 versus its competitor's average of 1.38. CBRL has been able to do so at lower risk than its competitors as also expressed through its lower unlevered beta. Unlevered beta allows one to compare the risk of these companies without the beneficial effects gained by adding leverage to a firm's capital structure. Further, as part of the firm's capital structure is the cost of debt and the cost of equity, which again shows that CBRL is less risky than its competitors. The last metric used was to express CBRL's capitalization through its debt to equity ratio. CBRL's debt to equity ratio has been declining and now is below the levels of its competitors. This indicates CBRL has been decreasing the amount of debt it has been using to finance its assets relative to the amount of value represented in shareholder's equity making CBRL less risky than its competitors.

Exhibit 5:

COMPETITORS	SYMBOL
Brinker International, Inc.	NYSE:EAT
The Cheesecake Factory Incorporated	NasdaqGS:CAKE
Panera Bread Company	NasdaqGS:PNRA
Chipotle Mexican Grill, Inc.	NYSE:CMG
Darden Restaurants, Inc.	NYSE:DRI
Buffalo Wild Wings Inc.	NasdaqGS:BWLD
Texas Roadhouse, Inc.	NasdaqGS:TXRH
Bloomin' Brands, Inc.	NasdaqGS:BLMN
The Wendy's Company	NasdaqGS:WEN
Jack in the Box Inc.	NasdaqGS:JACK

The company has also been able to lower its cash conversion cycle as scene in Exhibit 5. This is a positive sign as it implies the company has been able to improve how fast management can turn cash on hand into inventory and accounts payable, through sales and accounts receivable, and then back into cash. Therefore, a low cash conversion cycle ratio implies a healthy company with low liquidity risk. It must be considered that historically CBRL has had a slightly higher cash conversion cycle then industry competitors as the company relies on about 20% of its sales from retail. It is still an optimistic sign that the company has drastically decreased its cash conversion cycle over the years signifying positive management decisions.

Exhibit 5:



According to Exhibit 6, which shows CBRL's price to earnings and enterprise value to EBITDA multiples that support the claim to buy at the current price. The company's current P/E ratio is 17.45 which means that the stock is priced below 3 year historic lows. CBRL's EV/EBITDA is 9.75 right around 3 year historic lows. EV/EBITDA is a true measure of company's value as it takes into account a company's debt. A low multiple could indicate that the company is undervalued, with consideration to other factors.

Exhibit 6:

In Millions of USD except Per Share	FY 2014	FY 2015	FY 2016	Current
12 Months Ending	08/01/2014	07/31/2015	07/29/2016	10/21/2016
P/E	17.54	22.26	20.34	17.45
Average	20.61	23.68	21.27	
High	23.90	29.17	25.24	
Low	17.54	17.57	17.60	
EV/EBITDA	9.33	11.52	11.21	9.75
Average	10.10	12.28	11.02	
High	11.54	14.93	12.99	
Low	9.33	9.35	9.18	

Valuation

To get a deeper understanding of CBRL's sales drivers a 10 year historical valuation of new store to sales growth and comparable stores to sales growth was done using past 10k. CBRL's historical new store sales growth was 1.54% and comparable sale growth was 1.25% giving a total average sales growth of 2.79%. Sales per new store were $3,018,000 whereas sales per comparable stores were $53,400. A four year forecast was then created off using historical data and Q4 2016 earnings guidance. In 2016, comparable sales growth was 2.3% and management gave guidance that it would continue at a rate of 1-2% for 2017. Therefore, a moderate assumption of 1.5% for 2017 was used in the forecast. For the 2018 to 2020 a 2% comparable sales growth was used based on the assumption that the restaurant industry will have recovered by then and sales growth will level off to GDP growth in the long run.

The next forecast driver used was sales per new store. In 2016 sales per new store was $947,000 far below the historic average of $3,018,000. The low sales growth of 2.9% year to date for 2016 was due to industry related slowing of growth as seen through out the chain restaurant industry. With the low estimate that sales growth per new store will continue at a low rate going into 2017 it was assumed that 2017 sales per new store was $1,000,000. For the years 2018 to 2020 it was assumed through a low estimate sales per new store would gradually increase to reach the historic average of $3,018,000 by 2020. The last forecast driver was the amount of new store CBRL would add in 2017. Using Q4 2016 earnings guidance of 7 to 8 new stores a low estimate of 7 new stores was used do to the current status of the restaurant industry. Using this model under the noted forecast drivers and assumptions for 2017 total sales would equal $2,963,036,000 a 1.7% growth rate and then continue to reach CBRL's historic average growth rate of 2.79% by 2020.

This means that even using low estimates for CBRL sales growth will continue to increase and adding new stores is still profitably. Therefore, CBRL's plan to broaden its footprint and expand stores will be profitably in the future to drive sales especially if the restaurant industry recovers to historic growth rates.

Further as scene in Exhibit 7, one can see that in 2011 the S&P 500 index(blue), S&P supercomposite index (white), and CBRL (green) declined slightly. According to historical data in the model created there was a decline in sales per new store of 1.20% in 2010 to 0.90% in 2011. Moreover, as the resteraunt industry improved into 2012 sales per new stores rose to 3.90% more than double the historic average of 1.54%. In 2013 a similar trend was sceen with the stagnation of the resteraunt industry. This being said currently the resteraunt industry is suffering from a minor "recession" worse than that in 2011 and 2013. Therefore, if sales per new store was 1.10% in 2015 and 0.20% in 2016 if historic evidence proves true then we can expect sales per new store to increase with the recovery of the resteraunt industry.

Exhibit 7:

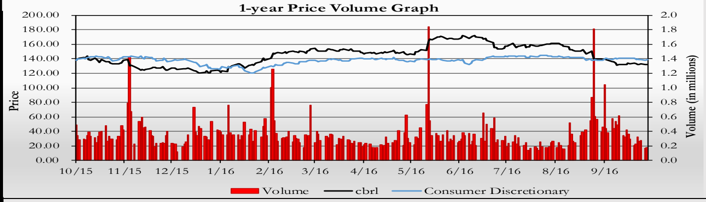
Conclusion

Cracker Barrels is currently suffering from industry related effects. These harsh conditions did not help CBRL meet FQ4 earnings estimates. However, mid to long term CBRL has a foreseeable growth outlook, especially when compared to its competitors. With a current market price of $135.19 and an intrinsic value of $145.56 CBRL is undervalued at this time. My current one year target price is $154. CBRL is undervalued currently and a buy at its current price for these reasons. CBRL has a promising future supported by strong financials when compared to competitors and will return stock value with the health of the restaurant industry.

CENTER FOR GLOBAL FINANCIAL STUDIES

Cracker Barrel Old Country Store, Inc. (cbrl) — **BULLISH**

Analysis by Austin Bitzas	Current Price:	$135.19	Intrinsic Value	$146.56	Target 1 year Return: 17.73%
10/21/2016	Divident Yield:	3.4%	Target Price	$154.57	Probability of Price Increase: 90.5%



Description

Cracker Barrel Old Country Store, Inc. develops and operates the Cracker Barrel Old Country Store concept in the United States.

General Information

Sector	Consumer Discretionary
Industry	Hotels, Restaurants and Leisure
Last Guidance	November 3, 2015
Next earnings date	November 22, 2016
Estimated Country Risk Premium	6.00%
Effective Tax rate	40%
Effective Operating Tax rate	39%

Market Data

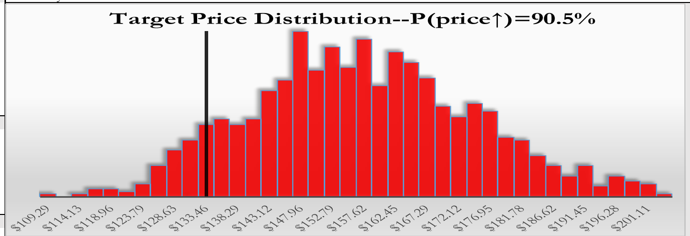
Market Capitalization	$3,174.90
Daily volume (mil)	0.46
Shares outstanding (mil)	24.03
Diluted shares outstanding (mil)	24.07
% shares held by institutions	80%
% shares held by investments Managers	59%
% shares held by hedge funds	23%
% shares held by insiders	1.16%
Short interest	15.88%
Days to cover short interest	10.90
52 week high	$172.89
52-week low	$118.01
Levered Beta	0.48
Volatility	20.97%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
7/31/2015	-0.90%	8.01%
10/30/2015	-1.18%	4.86%
1/29/2016	-0.91%	-1.23%
4/29/2016	-1.44%	1.63%
7/29/2016	-0.67%	0.88%
Mean	-1.02%	2.83%
Standard error	0.1%	1.6%

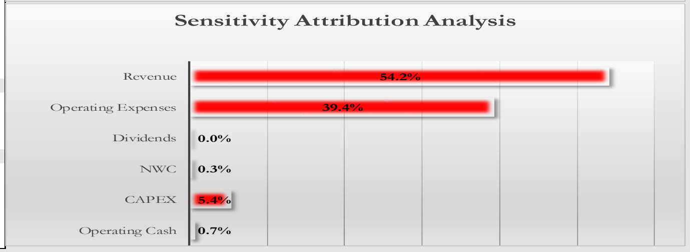
Peers

Brinker International, Inc.
The Cheesecake Factory Incorporated
Panera Bread Company
Chipotle Mexican Grill, Inc.
Darden Restaurants, Inc.
Buffalo Wild Wings Inc.
Texas Roadhouse, Inc.
Bloomin' Brands, Inc.

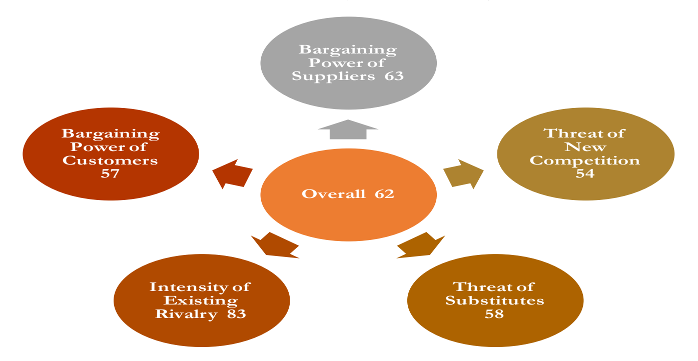


Management	Position	Total compensations growth	Total return to shareholders
Cochran, Sandra	Chief Executive Officer, Pre	15.12% per annum over 6y	0.64% per annum over 6y
Golder, Jill	Chief Financial Officer and	N/M	N/M
Flanagan, Nicholas	Senior Vice President of Ope	-6.59% per annum over 4y	15.92% per annum over 4y
Carmichael, Beverly	Chief People Officer and Sen	N/M	N/M
Daily, Laura	Senior Vice President of Ret	N/M	N/M
Wilson, Jeffrey	Principal Accounting Officer	N/M	N/M

Profitability	cbrl (LTM)	cbrl (5 years historical average)	Industry (LTM)
ROIC	16.8%	12.91%	27.99%
NOPAT Margin	8%	6.02%	12.2%
Revenue/Invested Capital	2.20	2.14	2.29
ROE	19.4%	17.51%	37.09%
Adjusted net margin	7%	5.00%	8.8%
Revenue/Adjusted Book Value	2.73	3.50	4.21
Invested Funds	**cbrl (LTM)**	**cbrl (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	11.0%	12.4%	21%
Estimated Operating Cash/Total Capital	11.0%	11.4%	N/A
Non-cash working Capital/Total Capital	-12.0%	-11.8%	-30%
Invested Capital/Total Capital	99.7%	98.9%	87%
Capital Structure	**cbrl (LTM)**	**cbrl (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.19	0.33	0.36
Cost of Existing Debt	3.41%	5.56%	3.98%
Estimated Cost of new Borrowing	2.04%	2.22%	3.98%
CGFS Risk Rating	AA	AA	CCC
Unlevered Beta (LTM)	0.43	0.63	0.80
WACC	6.22%	7.25%	8.28%



Porter's 5 forces (scores are out of 100)



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	2.5%	7.6%	2.70
7/29/2017	2.2%	7.4%	2.54
7/29/2018	3.3%	7.4%	2.38
7/29/2019	3.2%	7.9%	2.47
7/29/2020	3.1%	8.4%	2.20
7/29/2021	2.9%	8.8%	2.23
7/29/2022	2.8%	9.3%	2.26
7/29/2023	2.7%	9.7%	2.29
7/29/2024	2.5%	10.2%	2.31
7/29/2025	2.4%	10.6%	2.33
7/29/2026	2.3%	11.1%	2.35
Continuing Period	2.1%	11.6%	2.39

Period	Invested Capital	Net Claims	Price per share
Base Year	$1,188.11	$920.55	$145.95
7/29/2017	$1,226.32	$877.87	$153.20
7/29/2018	$1,229.05	$782.38	$161.60
7/29/2019	$1,301.64	$902.31	$170.72
7/29/2020	$1,321.90	$788.69	$181.47
7/29/2021	$1,365.71	$521.85	$198.55
7/29/2022	$1,436.00	$393.43	$209.85
7/29/2023	$1,465.47	$247.14	$221.86
7/29/2024	$1,731.68	$82.51	$234.59
7/29/2025	$1,790.20	-$100.83	$248.07
7/29/2026	$1,848.26	-$303.19	$262.30
Continuing Period			

Siena Market Line
3rd week of October 2016

First Solar, Inc.

NASDAQ:FSLR

Analyst: Alexandre Thiam
Sector: Energy

BUY

Price Target: $51.25

Key Statistics as of 10/21/2016

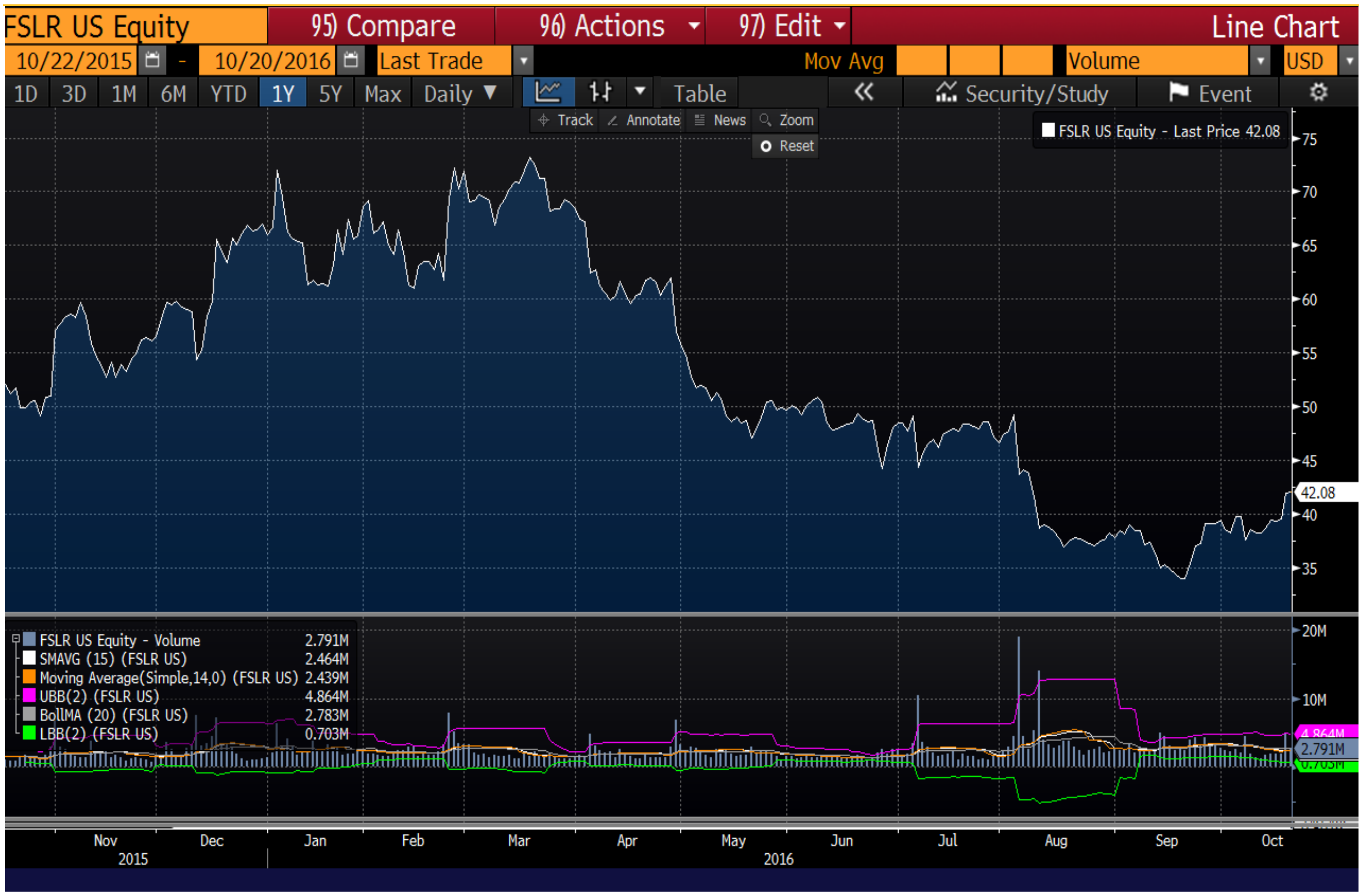
Market Price:	$42.08
Industry:	Semiconductor Equipment
Market Cap:	$4.28B
52-Week Range:	$33.74-$74.29
Beta:	1.75

Catalysts:

- **Short-term:** The Elections: Clinton is a pro-Solar so elections will have an impact on price.
- Earning call release date 10/27/2016
- **Medium-term:** Increase or stabilization in number of bookings/installations per year.

Company Description:

First Solar, Inc is a leading provider of comprehensive photovoltaic, also referred as PV and solar energy solutions. It is a 26 year old company that was rebranded in 1999 as First Solar,Inc. The company design, manufacture, and sell PV solar unit to residential and non-residential clients and is based in Tempe, Arizona. First Solar specializes in thin-film semiconductor technology and sell Solar panels that uses this designed technology. The company also operate maintenance of these PV systems and also any type of solar installations from a different manufacturer. First Solar is the Largest Photovoltaic solar module producer. The company operates in different countries such as Germany, Malaysia and Honduras. First Solar went public 10 years ago in 2006 priced at $28.30 and reached a peak in April 2008 trading at $291.99.



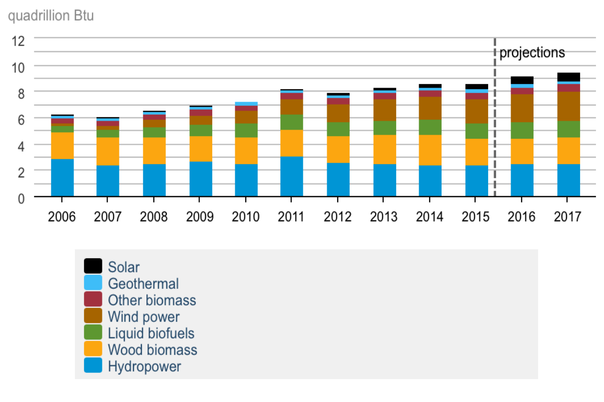
Thesis

- First Solar is probably the leader in providing Solar panels in the United States and is most certainly viewed as a pioneer in the market regarding the fact the most of its competitors are 10 years old companies on average. The company manages to offer an excellent quality at a excellent price. The industry average is around $3/watt when FSLR manages to achieve of an historical average cost of $2.90/watt.
- The industry relies solely on the number of bookings that the solar energy solutions provider receives, and this is probably the key data that analyst and investors would be looking for on the call (earnings).
- The business of Solar panel pulled back these recent years and is set to be higher within the next years. Concerns over nuclear are back in highlight and the solar industry innovated to offer more viable and affordable technologies and systems.

Industry Outlook

The Semiconductor and Solar panel industry is expected to take another turn in the coming years. This industry is still viewed as a growing industry but the boom period is yet to be determined as the industry did not really flourished so far. Yet, the industry is already generating billions of dollars even though most of the major players are not profitable at this point. As mentioned earlier most of the company that composes the industry are rather new and therefore still in aggressive growth mode. There are other factors that make those company so poorly profitable and it is actually not showing wrong business models, more some industry symptoms, but we will get on to that later. The projections for the coming years are rather positive and encouraging. Utility-scale solar generating capacities are set to increase to 27Gw in 2017 from 10Gw in 2014. This represent an annual average growth rate of 39%, which is the highest pace among renewable electricity solutions (Wind power, Geothermal, Hydropower etc.)

U.S. Renewable Energy Supply



On an international level, the portion of semiconductor solar supply in the US is growing at a much faster pace than any other places in the world. Installations are expected to grow from 5Gw in 2015 to 12.6 in 2016 and nearly 40Gw by 2012. The graph below shows the expected growth of PV landscape by 2021.

As you can see North America represent a major part of the scale and 4 companies account for 72% of the total amount of trackers(Plants) in 2015, those companies are Sunpower(SPWR), NEXtracker, Array Tech, and obviously First Solar,Inc.

Business Model

First Solar defines its business model as vertically Integrated. In other word the company acquired plant and other ventures in order to now be able to design, produce, sell and install its thin-film PV technology throughout the US and abroad.

"Our Vertically integrated expertise is maximizing energy and lowering your LCOE" (Levelized Cost of Electricity). The model is said to be based on "More value, less risk"

FIRST SOLAR'S MODEL

First Solar, provide 2 different types of products and one service that could be used separately or when purchasing one of the product.

The first product is called Photovoltaic (PV) "modules". First Solar defines it as being a leading-edge technologies and offer these products to residential customers and rather small facilities. The product has power output warranty of 25 years and 10-year workmanship and material warranty.

The company also offers PV power plants and project for bigger facilities. In other terms FSLR is selling its designed and manufactured product in an integrated way. Most of the time the company is leasing those power plants and project, so the payout is to be collected in multiple years.

The service that the company offers is "O&M" understand Operating and Maintenance. This basically result in offering maintenance to all PV and solar panel owner even it is not FSLR installations. The company Maintains 55,000,000+ in the U.S. and 5,000+ from 10+ different manufacturer and 40+ different models. The company implemented automated monitoring in their devices to signal any potential failure in the module installed. Basically FSLR intervene each time the device indicates a need for maintenance, and the clients call one of the support centers of First Solar. The company is stating that this monitoring system helps saving an average of $5k a week due to critical failure. The system is even helping to find critical issues before they occur.

Financials

What's interesting about First Solar, is that it's a mature company that operates within an upcoming market, let me explain. The Solar market is similar to the real estate market in terms of financing. Indeed, it takes a lot of capital to supply and install PV plants as the company is not collecting cash before it delivers the product/service. First Solar and its competitors needs to finance almost all their installations beforehand, and receive the payout in decades. Understand that more than 70% of the competitors are currently unprofitable mostly due to the fact that they are in an early stage of their maturities. Now as a mentioned earlier FSLR is a matured company compared to most of the other players in that market (26 years old). The company already stabilized its financials and has been showing profitability for the past 4 years. With that being said the company still have a lot of room for improvement and potentially more than competitors. The company is still in growth mode and even claims to be the best-in-class and spend more than all the competitors in R&D. In other words, this means that FSLR is maximizing its chances to come with a cutting-edge/break-through innovation, in terms of Solar and PV energy. The industry average for R&D expenditures is around $42.01M when FSLR re-invested a larger portion with $130.59M in 2015.

ROC /WACC		
	History	*LFY*
FSLR	**0.54**	**0.75**
Competitors	**0.21**	**0.42**

The table shows that the industry forces company to most likely destroy than add value. Here FSLR is considerably destroying less value than competitors. The company has much higher WACC with roughly 12.7% when competitors have around 9.7% but on the other also much higher ROIC with approximatively 7% when industry generate 1.4%.

Valuation

	Name (BI Peers)	Sales Growth (%)	Gross Margin (%)	Operating Margin (%)	Pre-Tax Margin (%)	Profit Margin (%)	Return on Assets (%)	Return on Equity	Return on Capital (%)
	Average	16.56%	15.63%	-12.31%	-100.87	-16.03%	-1.42%	1.83%	-3.63%
100)	FIRST SOLAR INC	5.54%	29.27%	19.86%	829.44	19.18%	10.69%	14.14%	13.75%
101)	GCL-POLY ENERGY HOLDI...	1.13%	34.01%	26.28%	575.61	15.35%	3.48%	15.99%	7.05%
102)	CANADIAN SOLAR INC	17.12%	16.53%	6.97%	262.81	5.40%	4.36%	22.22%	8.32%
103)	SUNPOWER CORP	-47.92%	11.59%	-20.04%	-375.25	-21.37%	-6.98%	-23.52%	-12.68%
104)	REC SILICON ASA	-33.08%	--	-60.01%	-146.80	-17.39%	-4.06%	-5.52%	-3.92%
105)	SHUNFENG INTERNATION...	22.39%	22.85%	11.95%	-4.40	-0.25%	-0.08%	-0.30%	3.12%
106)	SUNEDISON INC	23.75%	17.65%	-34.04%	-1.22k	-48.44%	-5.83%	-101.03%	-5.20%
107)	LDK SOLAR CO LTD -ADR	13.71%	-37.84%	-96.97%	-1.61k	-274.66%	-40.72%	--	-89.45%
108)	HAREON SOLAR TECHNOL...	22.79%	20.26%	6.38%	9.49	1.56%	0.64%	2.09%	--

(Accounting adjustments: Adjusted for abnormal items, when applicable) 10) Analyze List

1-yr EPS growth are at 28.78% with and industry average of 4.48% and Sunpower (one major competitor) at -18.11%. The company also beat estimates during 5 consecutive quarters and is set to remain above forecast for upcoming earnings call in late October.

Sales Growth are at 5.54%, below industry average at 16.56% which is a comprehensive patent regarding the maturities of the firms relative to proportion of sales. The Profit Margin is the best metric to express the difference in maturity. The industry average is navigating around the -16% neighborhood while FSLR is currently at 19.18%. GCL-Poly Energy which one the biggest competitors is doing worst on both Sales Growth and Profit Margin as shown on the table above.

P/E at 5.59 could be showing extreme undervaluation knowing that the company and the entire industry are traded at bottom/near all-time lows these days. (Market avg. 19.40)

	Name (BI Peers)	Sales Growth Yoy (%)	EBITDA Margin	Mkt Cap	Sales	Net Income	TTM EPS	Operating Profit	R+D Exp	Capex
	Average	16.56%	5.17%	1.00B	1.67B	-21.74M	-0.37	29.72M	42.01M	-343.22
100)	FIRST SOLAR INC	5.54%	22.11%	4.27B	3.58B	515.35M	7.47	533.48M	130.59M	-166.44
101)	GCL-POLY ENERGY HOLDI...	1.13%	35.81%	2.56B	3.46B	385.98M	0.02	715.56M	40.93M	-1.48k
102)	CANADIAN SOLAR INC	17.12%	10.70%	906.65M	3.47B	199.04M	3.20	276.98M	17.06M	-642.77
103)	SUNPOWER CORP	-47.92%	-2.95%	1.28B	1.58B	-172.83M	-2.44	-184.47M	99.06M	-230.05
104)	REC SILICON ASA	-33.08%	42.13%	364.66M	329.90M	48.23M	-0.07	-146.70M	8.10M	-54.70
105)	SHUNFENG INTERNATION...	22.39%	26.73%	483.82M	1.12B	10.57M	0.00	146.10M	20.77M	-42.69
106)	SUNEDISON INC	23.75%	-1.95%	53.10M	2.48B	-871.59M	-3.13	-405.80M	61.70M	-1.74k
107)	LDK SOLAR CO LTD -ADR	13.71%	0.51%	4.52M	680.26M	-266.87M	-6.27	-159.17M	16.77M	-82.27
108)	HAREON SOLAR TECHNOL...	22.79%	13.71%	1.70B	964.07M	15.29M	0.00	47.57M	56.34M	-263.93

(Accounting adjustments: Adjusted for abnormal items, when applicable) 10) Analyze List

As shown on the table above FSLR has indeed more R&D, but also less CAPEX than the industry and the best competitors. This demonstrate the difference in model where FSLR is actually leasing a lot of its plant and uses monitoring to avoiding critical failure and additional expenditures. The industry average is at $343.22 million and FSLR is at $166.44 million This gives an appropriate level of operating profit as compared to others. If you pay a closer attention to the table above operating profit is lower than GCL results, yet the Net Income is considerably higher for FSLR with $515.35 against $385.98 million for GCL and $199.04 million for Canadian Solar. It is also important to stress that these companies are having the exact same numbers of sales ranging around $3.5 billion. This shows that FSLR is clearing better a converting sales into cash.
Regarding the EBITDA margin, once again FSLR outperforms the industry with 22.11% against 5.17% on average. This shows that the company is not having financial issues as compared to competitors. The EBITDA for 2015 was above breakeven by approximatively $780M.

Important Dates and Catalysts

- **Elections/Debate – Forecasts and polls.**

The Solar panels and renewable energies were cited at least twice over the national debates that took place in the past 2 months. This is actually a context that put the Solar solutions back under the spotlight after 2 rough years. On the day following the first debate no clear moves occurred in the price as the potential winner of the elections could not be determined based on the poor quality of the arguments made. Later on mid-October the stock jumped a stunning 5.9% on the back of assumptions that candidate Clinton was the most likely winner as she apparently won the final debate vs. candidate Trump. This shows the tremendous importance in the elections that are coming, and I do expect the price to fluctuate quite a bit based on the coming address of both candidates whether official or unofficial (Tweets, press release, interviews etc.)

- **IEA (International Energy Agency) report.**

The organization annually release their Medium-Term Renewable Energy Market Report, where the agency announces the numbers realized to the continuing period (2016) and also gives a forecast and an estimate on where the market should be same period next year and the next 5 years. The agency is continually upgrading forecast if required from a year to another. This report is supposed to be released on October 25th 2016 in Singapore. Now is it a big deal? Well, specialist and the IEA said the numbers could be "significantly" higher for its outlook on the back of more countries adopting climate change policies.

- **Earnings call - (10/27/2016)**

Not long after the coming IEA market report, will come the earning release for FSLR. The previous results showed revenues missed estimates short by $118.13M in Q1 2016. However, the company continuously beats estimates regarding EPS for the four quarters. For the coming Q3 results analyst are confident that the company will at least meet its guidance and potentially exceed estimates.

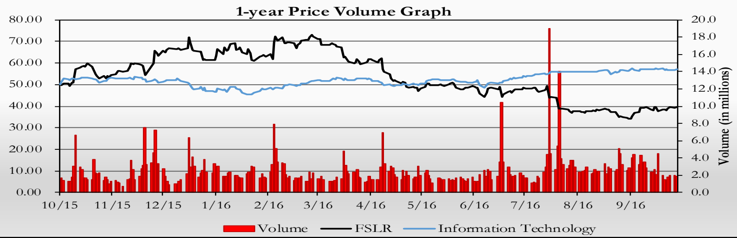
Summary

This is an unprofitable industry as a whole but FSLR is showing profit thanks to the level of maturity of the firm. Investors have to keep in mind that that market is causing companies to be unprofitable within the first decades of operations. However, FSLR did not reached a top simply based on the fact the company is playing in a growing market that has not boomed yet, when the growth of the sector will occur, First solar, being a best-in-class in many area would probably be the first in line to enjoy the profit realized. This is even truer when one looks at its R&D expense and the will of the firm to come up with a technological breakthrough. I am expecting the company to consolidate its booking therefore future payout at faster pace than its competitors.

Siena Mark
3rd week of Octobe

First Solar, Inc. (FSLR) — CENTER FOR GLOBAL FINANCIAL STUDIES — BULLISH

Analysis by	Current Price:	$41.78	Intrinsic Value	$45.85	Target 1 year Return: 21.39%
10/21/2016	Divident Yield:	0.0%	Target Price	$50.72	Probability of Price Increase: !



Description

First Solar, Inc. provides solar energy solutions in the United States and internationally.

General Information

Sector	Information Technology
Industry	Semiconductors and Semiconductor Equipment
Last Guidance	November 3, 2015
Next earnings date	October 30, 2016
Estimated Country Risk Premium	5.88%
Effective Tax rate	39%
Effective Operating Tax rate	38%

Market Data

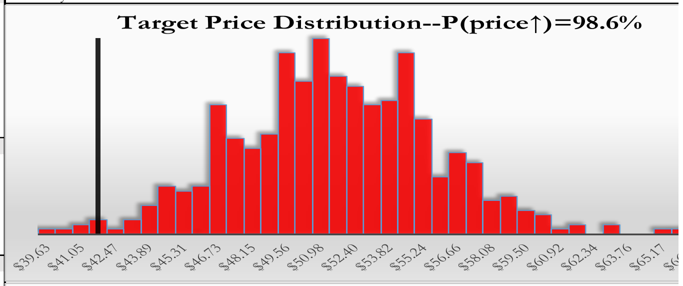
Market Capitalization	$4,307.29
Daily volume (mil)	0.89
Shares outstanding (mil)	102.36
Diluted shares outstanding (mil)	102.64
% shares held by institutions	74%
% shares held by investments Managers	45%
% shares held by hedge funds	11%
% shares held by insiders	0.69%
Short interest	13.13%
Days to cover short interest	4.15
52 week high	$74.29
52-week low	$33.74
Levered Beta	1.92
Volatility	59.98%

Past Earning Surprises

uarter ending	Revenue	EBITDA
30/2015	10.37%	65.49%
30/2015	3.08%	75.43%
/31/2015	-5.70%	24.39%
31/2016	-33.42%	4.71%
30/2016	-9.11%	6.66%
ean	-6.96%	35.33%
andard error	7.4%	14.8%

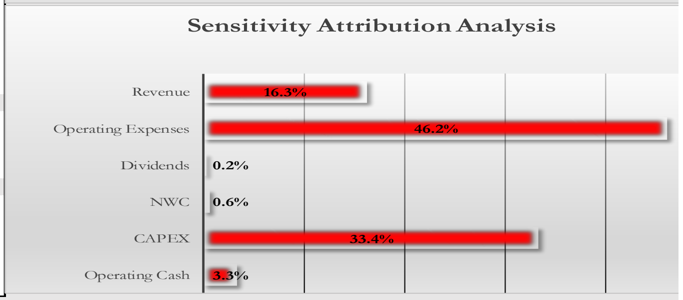
Peers

SunPower Corporation
Trina Solar Limited
Canadian Solar Inc.
JinkoSolar Holding Co., Ltd.
SolarCity Corporation
JA Solar Holdings Co., Ltd.
Cree, Inc.
Yingli Green Energy Holding Co. Ltd.

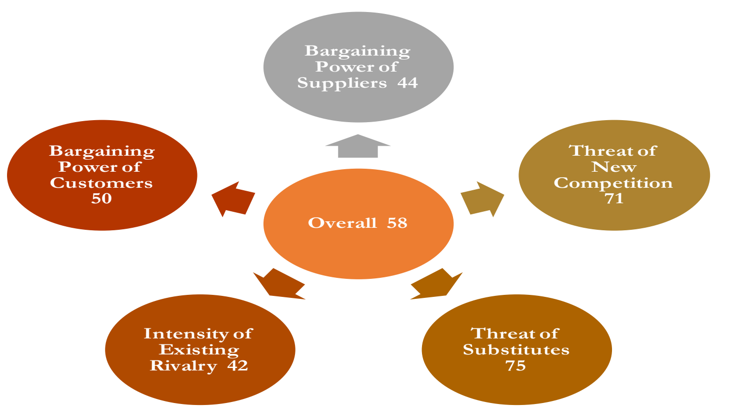


lanagement	Position	Total compensations growth	Total return to shareholders
idmar, Mark	Chief Executive Officer and	-11.2% per annum over 4y	3.35% per annum over 4y
arabedian, Raffi	Chief Technology Officer	-3.15% per annum over 2y	9.9% per annum over 2y
itoun, Georges	Chief Commercial Officer	-28.29% per annum over 3y	24.85% per annum over 3y
adley, Alexander	Chief Financial Officer	N/M	N/M
e Jong, Tymen	Chief Operating Officer	N/M	N/M
humaker, Bryan	Chief Accounting Officer	N/M	N/M

ofitability	FSLR (LTM)	FSLR (5 years historical average)	Industry (LTM)
DIC	9.4%	7.00%	10.09%
OPAT Margin	14%	11.93%	16.7%
evenue/Invested Capital	0.66	0.59	0.60
DE	8.3%	7.25%	11.34%
djusted net margin	14%	11.77%	15.4%
evenue/Adjusted Book Value	0.60	0.62	0.74
vested Funds	FSLR (LTM)	FSLR (5 years historical average)	Industry (LTM)
otal Cash/Total Capital	22.0%	25.3%	41%
stimated Operating Cash/Total Capital	12.1%	15.9%	N/A
on-cash working Capital/Total Capital	7.0%	7.9%	8%
vested Capital/Total Capital	83.4%	85.2%	55%
apital Structure	FSLR (LTM)	FSLR (5 years historical average)	Industry (LTM)
otal Debt/Common Equity (LTM)	0.09	0.12	0.15
ost of Existing Debt	8.55%	4.16%	3.14%
stimated Cost of new Borrowing	4.48%	4.16%	3.14%
GFS Risk Rating	CCC	B	CCC
nlevered Beta (LTM)	1.84	1.71	1.23
ACC	14.68%	12.94%	10.78%



Porter's 5 forces (scores are out of 100)



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	22.5%	14.1%	0.64
6/30/2017	-19.2%	5.5%	0.24
6/30/2018	-12.6%	8.8%	0.40
6/30/2019	30.3%	11.1%	0.71
6/30/2020	21.1%	11.8%	0.77
6/30/2021	12.3%	11.7%	0.75
6/30/2022	7.9%	12.0%	0.75
6/30/2023	5.0%	12.2%	0.75
6/30/2024	4.8%	12.6%	0.78
6/30/2025	4.5%	13.0%	0.81
6/30/2026	4.3%	13.3%	0.83
Continuing Period	4.1%	13.7%	0.86

Period	Invested Capital	Net Claims	Price per share
Base Year	$5,133.27	-$603.90	$44.82
6/30/2017	$5,064.06	-$1,733.97	$50.04
6/30/2018	$5,130.49	-$2,501.28	$54.47
6/30/2019	$5,238.73	-$2,048.20	$58.98
6/30/2020	$6,025.57	-$1,765.22	$64.73
6/30/2021	$6,317.24	-$1,796.50	$71.49
6/30/2022	$5,440.46	-$2,066.50	$79.08
6/30/2023	$4,984.26	-$2,519.35	$87.15
6/30/2024	$5,952.87	-$3,021.29	$95.58
6/30/2025	$6,891.58	-$3,590.82	$104.45
6/30/2026	$7,584.56	-$4,224.81	$113.72

Siena Market Line
3rd week of October 2016

Geron Corporation

NASDAQ:GERN

Analyst: Christian Henderson
Sector: Biopharmaceutical

BUY

Price Target: $4.38

Key Statistics as of 10/21/2016

Market Price:	$2.12
Industry:	Biotechnology
Market Cap:	$332.6M
52-Week Range:	$1.84 -5..30
Beta:	2.82

Catalysts:

- IMbark has a higher-dose 9.4 mg/kg of a drug that will be testing further because of encouraging efficacy data trends, which should be available during the second quarter of 2017
- Johnson & Johnson is funding a drug called IMerge that may enter phase 3 of trials by mi 2017

Company Description:

Geron Corporation is a biotechnology company located in Menlo Park, California that specializes in developing and commercialization of therapeutic products for cancer that inhibit telomerase. The company was incorporated in 1990 and began doing business in 1992. It begun publicly trading July 31, 1996. The company gets revenue from signing contracts with big pharmaceutical sale companies. This company has $46 thousand in net income, a remarkable increase from its negative $35,670 thousand in 2014. Geron has also drastically increased revenue to $36,731 million due to a multimillion dollar deal with Johnson and Johnson for a clinical trial drug.

Thesis

I suggest that we should buy this stock because at the low price of $2.12 it is not a high risk. The potential for growth is also high because if the company can continue to perform well and get positive results for the clinical trials, they will get more agreements such as the multimillion dollar deal they received from Johnson & Johnson. I think we should jump in on the stock at $2.00 and sell at $4.00. I synthesize my thesis based on two particular causes:

- There is a disease and cancer treatment drug, called IMbark, which has shown encouraging interest. This will prove to generate revenue for the company if the trials go as planned.
- The further the company goes in the commercialization of all of their drugs, the more funds they will receive and stock price will increase.

Business Model

The company began and operates as a clinical stage biopharmaceutical company focused on the development of a cancer cell inhibitor. They had initial success creating the drug, called IMetelstat, which targets and stops the enzyme within cancer cells to impede cell proliferation. The results of this drug also suggest that it has disease modifying activities that can reverse bone marrow fibrosis.

In Q4 of 2014, Geron Corp. entered an exclusive agreement with Janssen Biotech Inch to develop and commercialize the IMetelstat drug. They received an upfront payment of $35 million and a potential total of $900 million as well as the opportunity for royalties on worldwide net sales.

Macro Environment

The environment of the biotechnology industry is focused more towards research and development and not typical pharmaceutical companies that profit off of individual sale and consumption of drugs. These companies are funded by large pharmaceutical capital investors, and do not finance much internally generated cash flows. Geron and its competitors are at the direct effect of:

- weak economic growth (less interest by the struggling investors)
- drug approval from FDA
- patents on drugs and how efficiently they financially benefit from them

Industry Outlook

There are a lot of companies that are also focused on these disease and cancer treatments. Some are starting up in developing drugs and others in the clinical trial phase as Geron is. However, there are many types of different cancers and diseases that cannot be all treated by the same treatment. The industry for biotech companies surrounds the efficacy of their clinical trials. Only companies that prove to perform well and are innovative with drugs get further funding and increase their company value.

Porters Five Forces

Intensity of competition

There is moderate intensity amongst existing competitors within the biotechnical industry. The competitors in this industry are other therapeutic companies and laboratories working on drugs to help combat all types of cancer and other diseases. The competition is not really involved with actively trying to steal consumers or anything that typical competition organizations engage in. This type of competition competes with high quality results and lives are at stake. Thus, competition is less of a factor.

Threat of Substitution

The threat of substitution is low because the company is working on treatment for life threatening diseases and illnesses. There are not many substitutions for the same potential results of the drug, because different drugs work for different levels of cancer. Also different drugs react differently in a patient's body.

Barriers to New Entry

The threat of new competition is low. There is a high initial investment capital requirement to enter the market. Also, there is an intelligence requirement needed by scientist and chemists. Barriers are also results, if results are not positive or even worse negative then it is more difficult for a company to gain market relevance.

Bargaining power of suppliers

Bargaining power of suppliers is low to moderate. There is moderate cost of switching suppliers which makes supplier competition minimal but intense. The volume of the materials for the drugs is important.

Bargaining power of consumers

Bargaining power of consumers is low because the drug is not a product out for purchase as of yet. The consumers are the patients in the clinical trials, and the trials are voluntary. In the reasonable hope that the various drugs the company develops are accepted and entered into commercialized practices, consumers become large hospitals and the government. They will have a higher budget to purchase because of their large capital. They also will purchase a lot of volume for their patients and will pay the price, or close, offered by Geron Corp.

Product Differentiation

The company offers drugs that are therapeutic to cancer treatment, and bone marrow disorders specifically myelofibrosis and cancers related to this disease. Their product will only prove to be highly differentiated if the clinical trials yield positive results. This issue will be addressed upon termination of the current trials of the three main drugs.

Social and Moral Responsibility

It is a strong influence of investors to want to choose companies that are socially and morally responsible and growth positive. This company is doing well in this department. They are mission driven and their responsibility to help ease certain harmful illnesses and diseases is above all. Bigger funding companies are in charge of selling the drug upon completion, but Geron Corp. can grow by performing well and continuing to improve their drugs.

Financials

They have just become income positive as of 2015. They are debt free and being backed by Johnson & Johnson for the clinical trial procedures of their newest drug. The fact that they are being backed by such a positive company should give some support for potential investors. They also have dropped their operating expenses to negative amount, but as a biotechnology company much of the expenses are covered by the cash granted through big agreements and contracts.

Valuation

The Bloomberg software overvalues this company because of the 3,000% increase in revenue from 2014 to 2015. However, in the company's annual report they acknowledge that their anticipated financial success is highly dependent on the success of IMerge and IMbark and the commercialization of IMetelstat. A more accurate forecast would be $4.38.

Important Dates and Catalysts

Important dates and catalysts for this company are the second quarter of 2017 and mid-2017. The second quarter of 2017 will reveal the results of clinical trials of the IMbark drug. Although it is a business risk of the company to put a lot of emphasis on their forecasted success on one drug and one clinical trial, it is a risk that could be assumed.

By mid-2017, Johnson and Johnson will determine if IMerge will enter phase 3 of its trial period. If J&J elects to move forward then the amount of patients in this clinical trial increase by more than 5 times. This will be one of the final stages of the drugs testing and it will be closer to being commercialized.

Summary

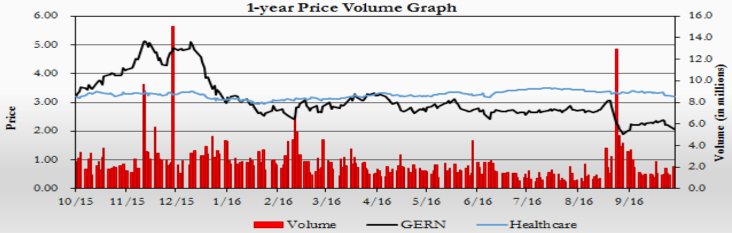
In conclusion I believe it will be in our interest to assume the risk and invest in this company. The company is near the 52-week low of $1.86. I will suggest to wait until the stock drops to $2.00 to maximize return. We should purchase 1,500 stocks in this company for a cost of $3,000. Johnson & Johnson and Geron Corp.'s working bond is growing stronger the better Geron performs and they will get more funding to increase their revenue which will increasing stock price.

CENTER FOR GLOBAL FINANCIAL STUDIES

Geron Corporation (GERN) — **BULLISH**

Analysis by P.C. Principal	Current Price:	$2.09	Intrinsic Value	$16.21	Target 1 year Return: 1274.94%
10/21/2016	Divident Yield:	0.0%	Target Price	$28.74	Probability of Price Increase: 99.2%

1-year Price Volume Graph



Description

Geron Corporation, a clinical stage biopharmaceutical company, focuses on the development of telomerase inhibitor, imetelstat, for treating hematologic myeloid malignancies.

General Information

Sector	Healthcare
Industry	Biotechnology
Last Guidance	November 3, 2015
Next earnings date	November 3, 2016
Estimated Country Risk Premium	8.40%
Effective Tax rate	40%
Effective Operating Tax rate	40%

Market Data

Market Capitalization	$332.60
Daily volume (mil)	1.21
Shares outstanding (mil)	159.14
Diluted shares outstanding (mil)	163.23
% shares held by institutions	115%
% shares held by investments Managers	35%
% shares held by hedge funds	1%
% shares held by insiders	0.50%
Short interest	17.13%
Days to cover short interest	14.98
52 week high	$5.30
52-week low	$1.84
Levered Beta	2.82
Volatility	89.65%

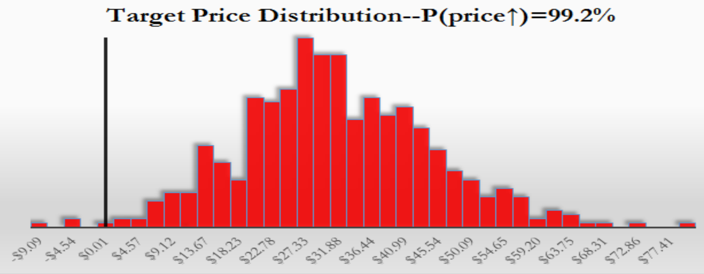
Past Earning Surprises

Quarter ending	Revenue	EBITDA
6/30/2015	-53.35%	N/A
9/30/2015	0.17%	N/A
12/31/2015	-41.33%	N/A
3/31/2016	133.33%	N/A
6/30/2016	-71.90%	N/A
Mean	-6.62%	#DIV/0!
Standard error	36.9%	#DIV/0!

Peers

Inovio Pharmaceuticals, Inc.
Cytokinetics, Incorporated
Sangamo Biosciences Inc.
Concept Therapeutics Incorporated
TRACON Pharmaceuticals, Inc.
Tesaro, Inc.
Rigel Pharmaceuticals, Inc.
Incyte Corporation

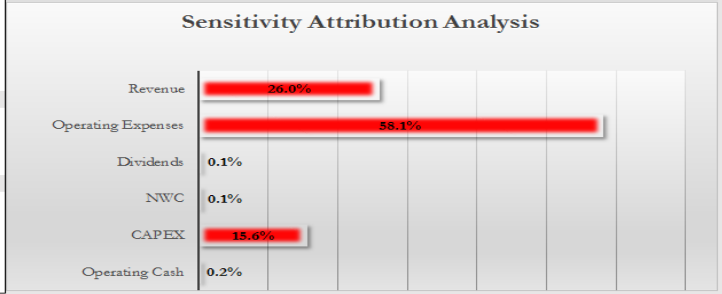
Target Price Distribution--P(price↑)=99.2%



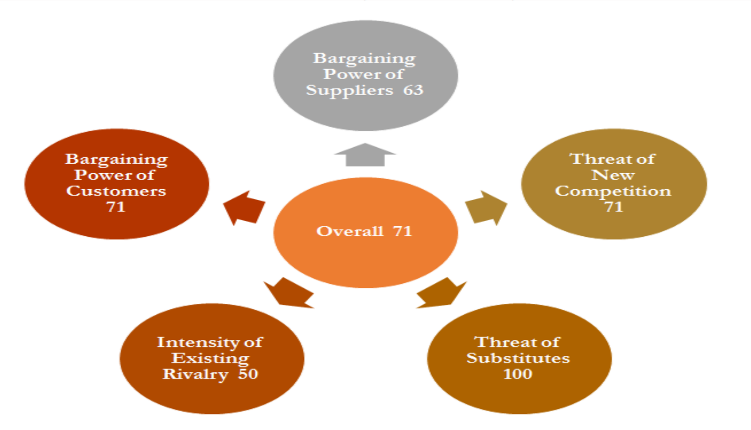
Management	Position	Total compensations growth	Total return to shareholders
Scarlett, John	Chief Executive Officer, Pre	21.62% per annum over 4y	9.39% per annum over 4y
Bloom, Olivia	Chief Financial Officer, Exe	16.97% per annum over 4y	9.39% per annum over 4y
Grethlein, Andrew	Executive Vice President of	16.22% per annum over 3y	50.32% per annum over 3y
Rosenfield, Stephen	Executive Vice President, Ge	-1.49% per annum over 3y	50.32% per annum over 3y
Behrs, Melissa	Executive Vice President of	3.18% per annum over 5y	-20.78% per annum over 5y
Krassowska, Anna	Senior Director of Investor	N/M	N/M

Profitability	GERN (LTM)	GERN (5 years historical average)	Industry (LTM)
ROIC	6.2%	-36.17%	12.69%
NOPAT Margin	9%	-1633.87%	22.6%
Revenue/Invested Capital	0.70	0.02	0.56
ROE	1.6%	-17.46%	14.17%
Adjusted net margin	8%	-1647.60%	20.1%
Revenue/Adjusted Book Value	0.20	0.01	0.71
Invested Funds	**GERN (LTM)**	**GERN (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	60.8%	64.1%	30%
Estimated Operating Cash/Total Capital	3.3%	8.1%	N/A
Non-cash working Capital/Total Capital	-3.3%	-8.1%	6%
Invested Capital/Total Capital	29.7%	35.6%	60%
Capital Structure	**GERN (LTM)**	**GERN (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.02	0.02	0.17
Cost of Existing Debt	4.48%	5.53%	6.30%
Estimated Cost of new Borrowing	3.73%	4.12%	6.30%
CGFS Risk Rating	BB	B	CCC
Unlevered Beta (LTM)	2.81	1.70	1.03
WACC	27.54%	17.00%	12.08%

Sensitivity Attribution Analysis



Porter's 5 forces (scores are out of 100)



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	3145.4%	8.8%	0.22
6/30/2017	64.5%	25.0%	1.06
6/30/2018	1.6%	9.2%	0.30
6/30/2019	-96.8%	-1274.2%	-1.24
6/30/2020	1013.6%	44.7%	0.91
6/30/2021	110.4%	30.3%	0.65
6/30/2022	115.4%	30.6%	0.82
6/30/2023	68.7%	25.1%	1.83
6/30/2024	60.4%	23.6%	1.87
6/30/2025	85.3%	27.1%	2.77
6/30/2026	-34.7%	-15.7%	-0.65
Continuing Period	4.1%	7.8%	0.42

Period	Invested Capital	Net Claims	Price per share
Base Year	$100.82	-$107.95	$0.43
6/30/2017	$82.82	-$123.54	$0.50
6/30/2018	$54.67	-$130.38	$0.50
6/30/2019	$54.20	-$111.94	$0.24
6/30/2020	$51.90	-$87.16	$0.27
6/30/2021	$54.11	-$43.05	$0.36
6/30/2022	$75.11	-$180.69	$0.67
6/30/2023	$84.33	-$206.33	$0.94
6/30/2024	$47.44	-$243.80	$1.39
6/30/2025	$101.58	-$324.17	$2.44
6/30/2026	$184.36	-$252.00	$2.01
Continuing Period			

Integrated Device Technology, Inc.

NASDAQ:IDTI

Analyst: Audrey Barrucand
Sector: Technology

BUY

Price Target: $27

Key Statistics as of 10/21/16

Market Price:	$20.31
Industry:	Semiconductor Devices
Market Cap:	$2.73 B
52-Week Range:	$16.22 - $29.04
Beta:	1.66

Catalysts:

- Q2 2017 Earnings Announcement
- New contracts lead to new revenues
- New product introductions on the market & in the revenue stream

Company Description:

Integrated Device Technology (IDT) is a technology company specialized in designing, developing, and manufacturing semiconductor products used to optimize customers' applications. Market-leading products include radio-frequency (RF), timing, wireless power transfer, serial switching, interfaces, and sensing solutions. These products are used in the development of 5G infrastructure, network communications, cloud datacenters, and power management for computing and mobile devices. IDT markets its products worldwide, especially in Hong Kong and the rest of Asia (3/4 of their revenues), North America, including the United States, and Europe.

Thesis

- IDT lost, in August 2016, its Huawei contract worth $12M in revenues per quarter. The stock price dropped by 12% on the day, which shows an overreaction to the news, according to analysts.
- To compensate for the loss, it has many products in R&D, for which patents were granted in September 2016, and some of which will start being marketed by end of 2017.
- The company also bought ZMDI in December 2015, which is said to be reorganized and fully incorporated in their revenue stream by the end of 2016. This acquisition will bring new revenues from the automotive and industrial business, for which ZMDI is a market leader.

Macro Environment

With IDT having 3/4 of its revenues coming from Asia, it is important to look at the Asian environment. According to the World Bank, developing East Asian growth is projected to grow at 5.8% this year and 5.7% in 2017-2018. Domestic demand is also expected to remain robust across much of the region.

Table 1. Overview of the *World Economic Outlook* Projections

(Percent change unless noted otherwise)

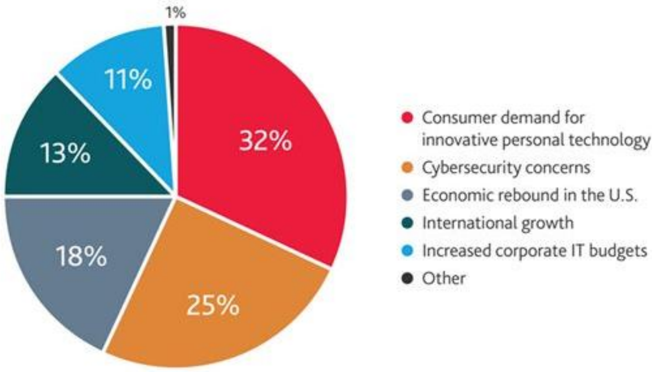
	YEAR OVER YEAR				Difference from April 2016 WEO Projections 1/		Q4 OVER Q4		
		Estimates	Projections				Estimates	Projections	
	2014	2015	2016	2017	2016	2017	2015	2016	2017
World Output 2/	3.4	3.1	3.1	3.4	-0.1	-0.1	3.0	3.2	3.5
United States	2.4	2.4	2.2	2.5	-0.2	0.0	2.0	2.5	2.3
Euro Area	0.9	1.7	1.6	1.4	0.1	-0.2	1.7	1.4	1.5
Emerging and Developing Asia	6.8	6.6	6.4	6.3	0.0	0.0	6.8	6.3	6.3

According to the IMF from July 2016, the above table shows a 2017 growth of 2.5% in the US, 1.4% in Europe and 6.3% in Asia.

Industry Outlook

Looking at the technology sector and the semiconductors industry, they are both highly driven by consumer demand. Growth in the technology sector is expected to be around 4-5% for 2016 and 2017.

MOST IMPORTANT FACTOR DRIVING GROWTH IN THE TECH INDUSTRY



According to the World Semiconductor Trade Statistics (WSTS), the semiconductor industry is predicted to grow as follows:

Spring 2016	Amounts in US$M				Year on Year Growth in %			
	2015	2016	2017	2018	2015	2016	2017	2018
Americas	68,738	**63,706**	**64,892**	**66,260**	-0.8	-7.3	1.9	2.1
Europe	34,258	**34,229**	**34,778**	**35,337**	-8.5	-0.1	1.6	1.6
Japan	31,102	**30,563**	**30,908**	**31,447**	-10.7	-1.7	1.1	1.7
Asia Pacific	201,070	**198,683**	**203,130**	**207,894**	3.5	-1.2	2.2	2.3
Total World - $M	335,168	**327,180**	**333,708**	**340,938**	-0.2	-2.4	2.0	2.2
Discrete Semiconductors	18,612	**18,711**	**19,211**	**19,735**	-7.7	0.5	2.7	2.7
Optoelectronics	33,256	**33,860**	**35,535**	**36,758**	11.3	1.8	4.9	3.4
Sensors	8,816	**9,484**	**9,831**	**10,137**	3.7	7.6	3.7	3.1
Integrated Circuits	274,484	**265,126**	**269,131**	**274,308**	-1.0	-3.4	1.5	1.9
Analog	45,228	45,666	47,075	48,412	1.9	1.0	3.1	2.8
Micro	61,298	61,647	62,275	63,288	-1.2	0.6	1.0	1.6
Logic	90,753	88,477	88,658	89,661	-1.0	-2.5	0.2	1.1
Memory	77,205	69,336	71,123	72,947	-2.6	-10.2	2.6	2.6
Total Products - $M	335,168	**327,180**	**333,708**	**340,938**	-0.2	-2.4	2.0	2.2

For years 2017 and 2018, the Asia Pacific semiconductor industry is expected to grow by 2.2% and 2.3%, respectively. Growth in Europe is expected to remain constant and growth in Americas is expected to increase by 2.1% by 2018.

Looking at specific products in the industry, integrated circuits (IC) are expected to grow by 1.5% in 2017, compared to discrete semiconductors by 2.7%, and sensors by 3.7%. Total products are forecasted to grow by 2.0% in 2017 and 2.2% in 2018.

Huawei contracts

Integrated Device Technology and Huawei have been collaborating successfully for many years. Huawei has been using IDT's RapidIO technology in multiple generations of its product line (telecommunications) for many reasons, including its best in class overall energy efficiency. IDT also received the "Best Collaboration Award" for Year 2013 from Huawei. On April 27th 2016, Huawei announced it selected IDT's RapidIO technology to help deliver superior video quality for its new video platform, through top-shelf high-definition video solutions.

After a long collaboration, on August 2nd 2016, Huawei announced it was going to internally source a key base station component for its next generation LTE platforms, meaning that IDT will no longer provide Serial RapidIO (SRIO) in Huawei's 4G base stations. The rest of the services IDT provides to Huawei, including the new April contract, will remain.

What this decision means for IDT is a loss in revenues of $12 million quarterly, meaning Q2 communications sales will be down by 14%. The stock price of the company dropped by almost 12% on the day, which according to analysts, was an overreaction to the news. According to the company, this loss does not change IDT's plans for the future and does not change its operating model. The remaining SRIO business is expected to pull in $14 million to $17 million per quarter. As well, since a third of the segment is from non-base station clients, the segment becomes less risky. IDT also has plans to grow its business by expanding its other segments, which will be discussed later in this paper.

Other contracts

Concerning IDT's other contracts, the company has been providing products to international companies such as Apple, Samsung, MSI (IT Corporation based in Taiwan) and Intel. The company also has a collaboration with IBM with the goal of driving advances in 5G networking by combining IDT and IBM technology. So far, this collaboration has been a success and both companies are expecting to completely transform the infrastructure for mobile edge computing. These advances in technology could provide IDT with higher exposure to international companies and allow them to obtain more contracts in the near future.

As for IDT's RapidIO, it is still in high demand, even after Huawei's announcement. Nokia uses RapidIO for some of its products, though the impact on IDT's revenues in 3 to 4 times smaller. As well, on October 3rd 2016, ZTE, the Chinese telecommunications giant, announced it selected IDT's new generation RapidIO for its new stage of wireless base stations. In the past, ZTE has brought IDT $3 to $4M in revenues, but it is expected to bring at least twice that amount for the next quarters.

Looking at other products, on September 7th 2016, Samsonite, the American luggage manufacturer and retailer, selected IDT as exclusive IC provider for its first generation products enabling wireless charging. Samsonite plans to introduce the products in Europe in the first quarter of 2017, followed by global availability. The success of the new product launch will allow IDT to gain a new revenue stream beginning of next year.

IDT also has less risky contracts with non-base stations customers such as Siemens Medical, GE Medical, Lockheed Martin, and General Dynamics. The contracts are expected to remain in the revenue stream.

Acquisition of ZMDI

On December 7th 2015, Integrated Device Technology acquired ZMDI (Zentrum Mikroelektronik Dresden AG) for $307 million. ZMDI is a German company specialized in automotive and industrial businesses, and in high-performance programmable power devices and signal conditioning solutions. They are the first company in their field.

By acquiring this company, IDT saw an opportunity to expand its product line by bringing in a highly regarded automotive and industrial company. ZMDI also brought with them intellectual property that will help the company grow in the semiconductor industry. Moreover, IDT benefits from the customer relationships ZMDI has, especially in Europe, where IDT has plenty of opportunities to expand its business. The company will be taken seriously as a committed automotive supplier.

Automotive and industrial provides a significant new growth opportunity for IDT. Through the development of automotive sensors and new designs in wireless charging, power management, and timing and signal conditioning, IDT gained immediate leverage. IDT will also expand its products to heavy duty industrial sensors, which are part of a vibrant and quick moving market. Their product and technology position has expanded significantly. Since the acquisition, IDT has been focused on restructuring ZMDI's margin structure to fit IDT's. They have not yet incorporated revenues from ZMDI's business in their revenue stream, which should be included by end of year 2016.

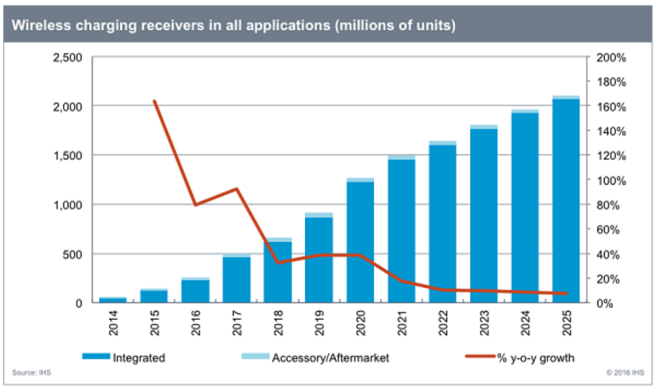
On August 8th 2016, IDT and ZMDI announced the expansion of its automotive capabilities through the TS 16949 certification of a second test and production facility. The first facility is located in Dresden, Germany (facility originally from ZMDI) and the new one is located in Penang, Malaysia. The TS 16949 certification is a two-stage certification for automotive backend manufacturing that fits the International Standard for Automotive

Quality Management Systems. The Dresden facility has been certified since 2004 and successfully passed re-certification in June 2016. These two facilities will offer two sources for automotive capabilities and will give IDT the ability for additional manufacturing and bigger loading flexibility between the two sites. It will help the company meet global high-volume customers and avoid potential disruptions in supply. The Penang facility is expected to be fully operational by the end of 2016, which will bring new revenues to the company.

Products

In addition, IDT already provides the following products such as clocks & timing, interface & connectivity, memory & logic, power management, RF, and sensors. These products are used for automotive applications, high-performance computing, industrial, mobile & personal electronics, network communications, and wireless infrastructure. Some of these products and applications have not yet been introduced to the market and are still in R&D phase, such as already mentioned automotive and industrial sensors. IDT has 12 operating R&D facilities across the USA, Canada, Europe, and China.

IDT is the market leader for wireless charging technology. It had a smartphone exposure of $21 M in revenues through its wireless charging components. Looking at their power management ICs (PMIC) product in that category, IDT has won in that category for the past few years already as they took the next-generation high-end enterprise SSD and took them to the next level. For example, IDT has been developing a PMIC for Intel's next generation products. It is expected to reach the market in the next year, which will bring new revenues. Wireless charging is projected to keep growing, at a slower pace than the past year, but the demand for such products will keep increasing.



As for another application for wireless charging technology, IDT is starting to look at applying the technology in the automotive industry.

IDT is also working on mobile sensing technology. It is expected to impact the company and its revenues in less than 2 years. Most of the sensors are in R&D phase but tests have proven successful so far. A small part of the sensors are already in the revenue stream, which shows outperformance in the consumer segment. As for the new mobile sensors products, the company will have a more precise model in two quarters. These products are expected to provide higher margins than wireless charging technology, which is already on the market. IDT is also looking at brand new application spaces where sensors are not being used today.

As for the RF business, product revenue has reached another record in the past quarter. At the time of the launch of the product last year, IDT said they expected revenues of $70 million in 3 years. A year later, they are a little ahead of schedule and should achieve that earlier than predicted, meaning that, in less than two years, the company is looking at adding dozens of millions of dollars to their financial statements. This product is also making higher gross margins than the company's average, so the company is looking at developing it further in the near future.

As previously stated, IDT acquired ZMDI last year in order to develop its automotive business. End of July 2016, they have secured major Tier 1 automotive power designs that will go into automotive infotainment. Those designs are expected to roll into the revenue stream as early as late next year. For the company, it brings a very secure and very large design win, which means near-certain revenues.

When trying to decide what products to develop, IDT has a very simple strategy: they go where there is real revenue.

Intellectual Property

Integrated Device Technology has been filing many patents over the years, up to a total of 140 since 2009.

Most recently, IDT has filed for patents on wireless power transfer, on October 6th and on September 29th, and on memory interface, on October 6th. These recent patents show that the company keeps innovating and finding new products to develop and manufacture. They are also trying to improve existing products through R&D.

IDT also has a lot of intellectual property, especially on wireless charging, where they have developed proprietary algorithms and features that allow them to develop their products.

Financials

Integrated Device Technology is healthy financially. The company had a bad year in FY 2013, with negative revenue growth and a negative operating margin. From then to FY 2016, the company has been growing in revenues at a rate of 18% in FY 2015 and 22% in FY 2016. Its operating margin for FY 2016 is at 19.59%. This shows that the company is in a growth period that should keep going for another few years.

Looking at ROIC, the company's is at 23.09%, and has been growing since FY 2013. As for debt, the company has always had very little to no debt, but in FY 2016, it issued $272 M in order to buy ZMDI.

In Millions of USD except Per Share 12 Months Ending	FY 2011 04/03/2011	FY 2012 04/01/2012	FY 2013 03/31/2013	FY 2014 03/30/2014	FY 2015 03/29/2015	FY 2016 04/03/2016
Return on Invested Capital	14.92	3.29	-0.39	4.47	14.32	23.09
Margins						
Gross Margin	54.34	53.26	55.68	56.29	60.27	60.46
EBITDA Margin	17.97	10.66	6.86	15.81	23.83	24.43
Operating Margin	11.70	3.96	-1.53	6.39	19.40	19.59

Looking at operating expenses, the company projects a decline from $66.1 M for Q1 2017 to around $64.5 M for the September quarter (Q2 2017), an additional decline of $1 M for Q3 2017, and another $1.5 M decline for Q4 2017. Following the Huawei loss, management made a commitment towards a 30% operating margin in the March quarter (Q4 2017) even with $12M less in revenues. It implies that they believe the company will reach $205M in revenues for that quarter. By the end of FY 2017, operating expenses are then expected to make 30% of revenues, from 38% for FY 2016. Their goal is to reach this operating margin without having to further cut their operating expenses, meaning they believe they will soon bring in new revenue streams.

IDT has also been increasing its investments in R&D to $37.7 M for Q1 2017, which shows their commitment to growth and to developing new or improved products.

Risks

There are always risks when investing in technology companies. Because IDT's stock price is highly sensitive to revenues, there is always a risk that a loss of contract or a decrease in customer demand will negatively impact the stock price. But especially since the loss of the Huawei contract, IDT has been even more focused on developing and rolling out new products and on securing new contracts with multinational companies. Because the company provides many products to many large US and International companies, it has little chance of losing most of its revenues.

Important Dates and Catalysts

An important time to remember is the end of year 2016, which is when the Penang facility will become operational and will start bringing revenues to the company.

The Q2 2017 earnings announcement on November 31st 2016 will either have a positive or a negative impact on the stock price, depending if the company beats estimates.

Moreover, the stock price will move depending on new product launches, new contracts, and revenue increases from these two catalysts.

Summary

Integrated Device Technology is a BUY because of its focus on growth and of all the products it has under R&D that are expected to be introduced to the market in the next year or two. The company has worked very hard on expanding its products through the acquisition of ZMDI, which will bring a new stream of revenues at the end of this year. The company is also financially sound and is expected to have high growth in the next year or two.

Because IDT's stock price is highly sensitive to the revenues of the company, new revenue streams and increased revenues are key factors to the increase in the company's stock price.

Siena Market Line
3rd week of October 2016

Integrated Device Technology, Inc. (IDTI)

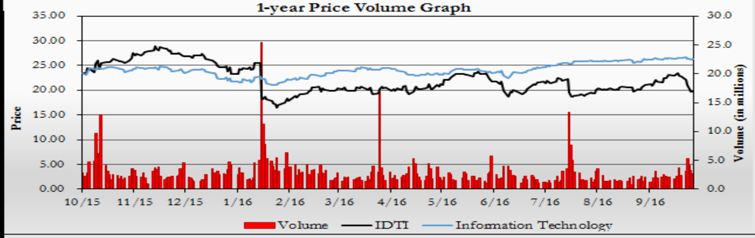
CENTER FOR GLOBAL FINANCIAL STUDIES

NEUTRAL

Analysis by Audrey Barrucand	Current Price:	$20.24	Intrinsic Value	$19.34
10/20/2016	Divident Yield:	0.0%	Target Price	$23.01

Target 1 year Return: 13.68%
Probability of Price Increase: 93.4%

1-year Price Volume Graph



Description

Integrated Device Technology, Inc. designs, develops, manufactures, and markets a range of semiconductor solutions for the communications, computing, consumer, automotive, and industrial end-markets worldwide.

General Information

Sector	Information Technology
Industry	Semiconductors and Semiconductor Equipment
Last Guidance	November 3, 2015
Next earnings date	October 31, 2016
Estimated Country Risk Premium	4.33%
Effective Tax rate	22%
Effective Operating Tax rate	37%

Market Data

Market Capitalization	$2,706.64
Daily volume (mil)	0.89
Shares outstanding (mil)	134.32
Diluted shares outstanding (mil)	143.74
% shares held by institutions	92%
% shares held by investments Managers	70%
% shares held by hedge funds	10%
% shares held by insiders	2.83%
Short interest	5.32%
Days to cover short interest	3.05
52 week high	$29.04
52-week low	$16.22
Levered Beta	2.06
Volatility	40.79%

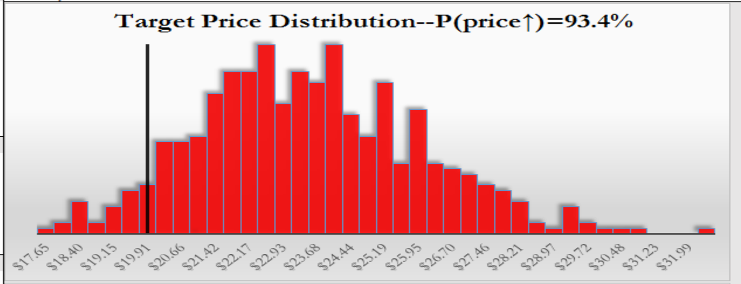
Past Earning Surprises

Quarter ending	Revenue	EBITDA
6/28/2015	-0.61%	-14.57%
9/27/2015	0.06%	-8.19%
1/3/2016	-0.78%	-29.48%
4/3/2016	0.51%	-19.72%
7/3/2016	0.41%	-41.59%
Mean	-0.08%	-22.71%
Standard error	0.3%	5.9%

Peers

- Cavium, Inc.
- Silicon Laboratories Inc.
- Cypress Semiconductor Corporation
- Skyworks Solutions Inc.
- Monolithic Power Systems, Inc.
- MACOM Technology Solutions Holdings, Inc.
- NVIDIA Corporation
- Linear Technology Corporation

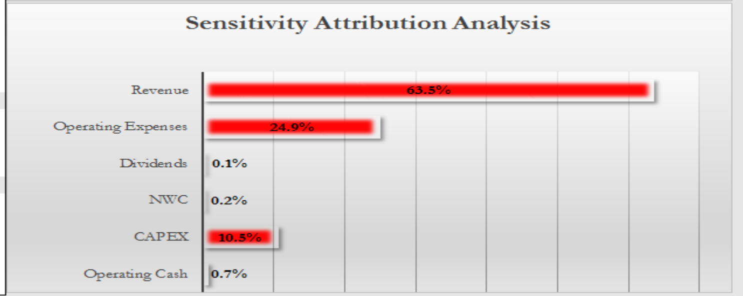
Target Price Distribution--P(price↑)=93.4%



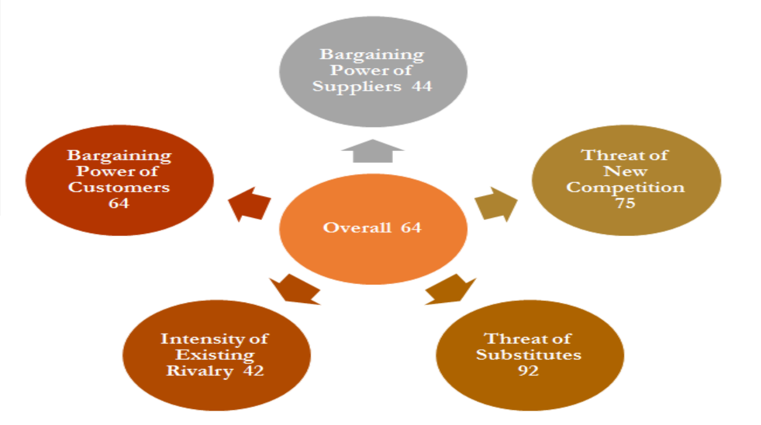
Management	Position	Total compensations growth	Total return to shareholders
Waters, Gregory	Chief Executive Officer, Pre	32.51% per annum over 3y	18.5% per annum over 3y
White, Brian	Chief Financial Officer and	48.76% per annum over 3y	18.5% per annum over 3y
Chittipeddi, Sailesh	Chief Technology Officer and	-6.69% per annum over 2y	0.42% per annum over 2y
Fan, Xianzhi	Vice President and General M	12.62% per annum over 3y	18.5% per annum over 3y
Shepard, David	Vice President and General M	N/M	-3.86% per annum over 1y
Brandalise, Matthew	Vice President, General Coun	N/M	N/M

Profitability	IDTI (LTM)	IDTI (5 years historical average)	Industry (LTM)
ROIC	15.4%	21.18%	12.84%
NOPAT Margin	13%	15.79%	21.2%
Revenue/Invested Capital	1.20	1.34	0.60
ROE	17.0%	12.97%	14.43%
Adjusted net margin	11%	15.38%	19.4%
Revenue/Adjusted Book Value	1.48	0.84	0.74
Invested Funds	**IDTI (LTM)**	**IDTI (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	27.3%	38.0%	41%
Estimated Operating Cash/Total Capital	11.8%	12.2%	N/A
Non-cash working Capital/Total Capital	4.0%	4.4%	8%
Invested Capital/Total Capital	51.1%	48.8%	55%
Capital Structure	**IDTI (LTM)**	**IDTI (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.11	0.04	0.15
Cost of Existing Debt	5.44%	7.80%	3.14%
Estimated Cost of new Borrowing	5.30%	5.30%	3.14%
CGFS Risk Rating	C	C	CCC
Unlevered Beta (LTM)	1.90	1.89	1.21
WACC	12.14%	12.01%	9.07%

Sensitivity Attribution Analysis



Porter's 5 forces (scores are out of 100)



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	19.9%	12.8%	1.27
7/3/2017	5.6%	27.8%	2.80
7/3/2018	5.5%	26.9%	2.60
7/3/2019	5.3%	25.9%	2.51
7/3/2020	5.2%	24.9%	2.45
7/3/2021	5.0%	24.0%	2.41
7/3/2022	4.8%	23.5%	2.41
7/3/2023	4.7%	22.9%	2.41
7/3/2024	4.5%	22.3%	2.41
7/3/2025	4.4%	21.6%	2.40
7/3/2026	4.2%	21.0%	2.40
Continuing Period	4.1%	20.4%	2.43

Period	Invested Capital	Net Claims	Price per share
Base Year	$355.75	$127.26	$18.79
7/3/2017	$429.70	-$29.46	$21.29
7/3/2018	$418.97	-$222.66	$23.92
7/3/2019	$470.94	-$417.52	$26.59
7/3/2020	$606.18	-$634.46	$29.44
7/3/2021	$656.23	-$825.52	$32.14
7/3/2022	$742.16	-$1,018.40	$34.88
7/3/2023	$802.37	-$1,212.43	$37.66
7/3/2024	$858.58	-$1,406.44	$40.45
7/3/2025	$913.21	-$1,599.48	$43.25
7/3/2026	$966.14	-$1,791.19	$46.04
Continuing Period			

JetBlue Airways Corp

NASDAQ: JBLU

Analyst: Andrew Cote
Sector: Services

BUY

Conservative Price Target: $23

Key Statistics as of 10/18/2016

Market Price:	$ 18.24
Industry:	Regional Airlines
Market Cap:	$5.78 B
52-Week Range:	$14.76-$27.09
Beta:	0.59
ROIC	13.04%
ROE	23.59%
P/E	7.87x
High (2015)	38.73x
Low (2015)	11.57x
D/E	.33

Catalysts: 1+ years

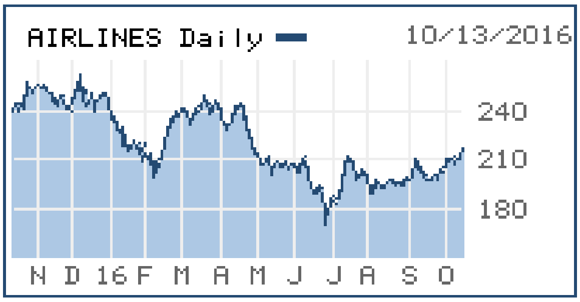
- Faster than expected revenue growth from West Coast Expansion.
- Increased traffic to Cuba and Latin America
- Changing aircraft orders to the longer-range variant
- International license approval from Long Beach, CA airport gives JetBlue access to more Latin American opportunities from the west coast and the beginning of possible Transpacific Flights
- JetBlue building on momentum and taking advantage of their east coast presence to offer Transatlantic routes

Company Description:

JetBlue Airways Corporation (JetBlue), incorporated on August 24, 1998, is a passenger carrier company. The Company provides air transportation services across the United States, the Caribbean and Latin America. The Company operates various types of aircrafts, including Airbus A321, Airbus A320 and Embraer E190. It also provides premium transcontinental product called Mint. The Company is a point-to-point system carrier, with the its routes touching approximately one of its six focus cities, including New York, Boston, Fort Lauderdale-Hollywood, Orlando, Long Beach and San Juan, Puerto Rico. The Company's network serves approximately 90 BlueCities in over 30 states, the District of Columbia, the Commonwealth of Puerto Rico, the United States Virgin Islands, and approximately 20 countries in the Caribbean and Latin America.

Industry Outlook

The U.S airline industry is extremely competitive and susceptible to external factors including domestic and international economic conditions, weather, disease, and terrorism. Currently the demand in the airline industry is weak and cutting operating costs drive the value. Consolidation of airline companies has been a trend recently to create cost synergies. Spreading viruses in the Latin American region have slowed travel into South America. Terrorism and threats of terrorism have lead some travelers to change travel plans. Hurricanes and other natural disasters have caused cancellations in high traffic locations. Overall, Airlines have been underperforming YTD and are trading currently at the lower end of their multiple range.



Business Model

Management has placed JetBlue in high traffic airports along the east coast and use those as focus cities to base their point-to-point flights out of. These focus cities include New York, Boston, Ft Lauderdale, and strategic cities in the Caribbean and Latin America. Management focuses on high traffic areas that are underserved which is typically represented by higher ticket prices. JetBlue's cost discipline gives them the ability to operate and gain market share in these underserved locations.

Financial Breakdown

Revenue

	2013	2014	2015
Passenger Rev. Growth	9.3%	7.5%	10.3%
Other Revenue Growth	8.8%	0.9%	10.3%
Total Growth	9.2%	6.9%	10.3%

Analysts expect 3.2% and 5.8% revenue growth for 2016 and 2017 respectively. The bearish expectation of growth by analysts is due to relatively low historical growth and macroeconomic pressures. The majority of their operations are domestic. 70% of capacity is allocated to the faster growing domestic operations and 30% to Latin America and the Caribbean. Other Revenue derives from income from their recent co-branded credit card with Barclaycard and MasterCard.

Operating Statistics

In the airline industry, it is common to represent operating data as a fraction of Available Seat Miles (ASM's) or seats available to passengers multiplied by the number of miles those seats are flown.

	2013	2014	2015
ASM's	42824	44,994	49.258
Load Factor	83.7%	84.0%	84.7%
Passenger Rev/ASM (Cents)	11.61	11.88	11.96
Operating Rev./ASM	12.71	12.93	13.03
Operating Exp/ASM excluding fuel and related taxes	7.28	7.53	7.82
Operating Exp/ASM	11.71	11.78	10.56
Average operating aircraft	185.2	196.2	207.9
Avg. fuel cost per gallon	3.14	2.99	1.93

(Expected avg. cost of fuel for 2016 is $1.56/ gallon)

JetBlue has struggled to speed up capacity growth historically. Per the 2015 10-k, Management has been refitting existing aircraft cabins to a higher density layout while continuing to receive new aircraft orders. In 2016, they have made additions to their order book for new aircraft that alludes to faster growth around 2019. The increasing average age of the fleet is 7 years old and the expected useful life of the aircraft are between 20 and 25 years. Some of the amended orders may contributable to the increasing fleet age.

Aircraft Orders

	Order Book as of 2015	Amendment to Orderbook
2016	10	-
2017	10	15
2018	7	11
2019	15	21
2020	25	28
2021	23	27
2022	23	27
2023	2	6

CAPEX

	2011	2012	2013	2014	2015
CAPEX/ Passenger Revenue	11.8%	11.9%	12.4%	13.7%	14.2%
CAPEX/ Total Revenue	6.5%	18.5%	15.3%	13.8%	8.9%

JetBlue has consistently increased capital expenditure year over year to sustain growth and is expected to increase faster based on the amended order book and 2015 guidance of $870 million for 2016 most of which are prepayments for new aircraft.. The majority of capital expenditures are on new aircraft purchases followed by the buyout of aircraft leases, deposits of flight equipment, and additions/upgrades to property. We will begin to see CAPEX drastically increase starting in 2019.

Capital Structure: D/E- .33

Typically, airlines have very high leverage but lately management has been rapidly paying down their long term debt and are increasingly using short term debt to fund operations. Long term debt has been aggressively payed down over the past few years and management plans to continue to repay debt and prepay deliveries of flight equipment. They lease their slots in airports and also lease some aircraft with the option to buy out the leases. The lease payments on aircraft have remained relatively stable and average $127 million per year.

	2013	2014	2015
LT Debt and Cap. Leases	$2,116.00	$1,968.00	$1,395.00
Current maturities of long-term debt and capital leases	$469.00	$265.00	$448.00
Other accrued liabilities	$229.00	$287.00	$267.00
Rent payment	$13.00	$14.00	$15.00

JetBlue vs Competitors

JetBlue has lagged behind competitors historically in many aspects and they have improved in many and excel in others.

They have struggled to increase passenger revenue relative to available seat miles. In the last fiscal year competitors have documented $0.14 of revenue from core operations per ASM compared to JetBlue at $0.12 per ASM. It is important to note that JetBlue is the cheaper alternative in the mid-full service airline industry so naturally revenues compared to competitors at similar ASM's are going to be less.

JetBlue is earning more per dollar of revenue than its direct competitors. In the LFY, JetBlue has an EBITA Margin of 20.6% vs 17.9%.

Currently, JetBlue's cost of capital is higher than competitors at 14% vs 11.7%. The high cost of capital is mostly due to the size and risk premium associated with the industry and type of Business. Also, their cost of debt is higher than the competition. JetBlue has been locked into higher rates of borrowing because of their highly leveraged capital structure in the past. After the debt repayment by management future costs of borrowing will be dramatically less. Their current cost of debt is 5.9% vs 4.3% of direct competitors.

Overall, the high cost of capital is why JetBlue returns less per dollar of invested capital compared to competitors.

Thesis

Management is rapidly deleveraging their balance sheet freeing up room for some future large purchases. Jet Blue has been aggressively repaying its debt; they reduced their total debt by 29% by the end of 2015 and are expected to continue reducing debt through 2016. Their future costs of debt have also been greatly reduced to more attractive rates.

Revenue growth is one of the main drivers in JetBlue's value. Management's expansion plans are beginning to develop. They have begun to offer more routs to the West Coast including San Francisco, Long Beach, Seattle, and San Diego. All of which are routs people typically pay a premium for. They are increasing their Latin America presence with the first routs offered by a commercial American airline to multiple cities in Cuba. JetBlue has applied for an international license for their airport in Long Beach, California. In 2014 they completed a separate terminal at JFK airport in New York specifically for international use. At the end of 2017 they have the option to change an order of Airbus A321neo aircraft to a long-range variant. Per the Q2 earnings call, management has noted that they have an interest in Transatlantic routes but say that it one of their options. Their dominant East Coast positioning in high traffic cities including JFK, Ft Lauderdale, and the metropolitan market in Boston give them great leverage for a Transatlantic expansion. JetBlue will beat analysts' estimates in the long run and rapidly expand their international market share.

Risk

- The cost of fuel is the main driver of expenses so an increase in fuel costs will decrease margins.

- Weather conditions are always a risk as they lead to cancellations and delays.
- Disease spread is a concern as it leads to less people traveling to specific destinations. At the moment, disease in Latin America is a concern for JetBlue because they have a strong presence in that area.
- Difficulty taking market share in new area.

JetBlue Airways Corporation (JBLU)

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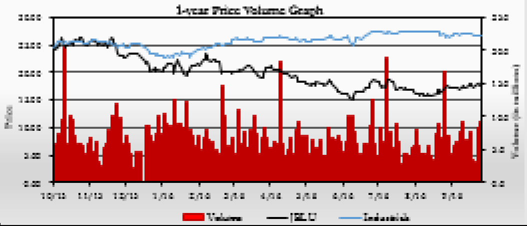
BULLISH

Analysis by Andrew Cote	Current Price:	$18.24	Intrinsic Value	$21.00	Target 1 year Return: 26.16%
10/19/2016	Divident Yield:	0.0%	Target Price	$23.01	Probability of Price Increase: 99.3%



Description

JetBlue Airways Corporation, a passenger carrier company, provides air transportation services.

General Information	
Sector	Industrials
Industry	Airlines
Last Guidance	November 5, 2015
Next earnings date	October 25, 2016
Estimated Country Risk Premium	10.02%
Effective Tax rate	36%
Effective Operating Tax rate	24%

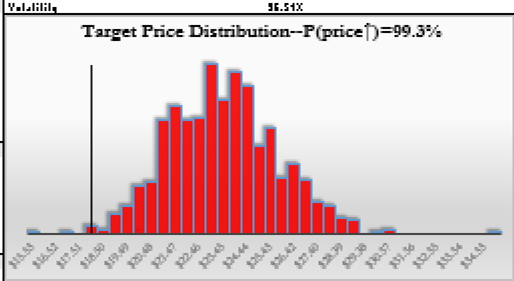
Market Data	
Market Capitalization	$5,904.50
Daily volume (mil)	4.10
Shares outstanding (mil)	323.72
Diluted shares outstanding (mil)	342.95
% shares held by institutions	83%
% shares held by investments Managers	69%
% shares held by hedge funds	13%
% shares held by insiders	0.90%
Short interest	4.40%
Days to cover short interest	2.40
52 week high	$27.00
52-week low	$14.76
Levered Beta	0.57
Volatility	35.54%

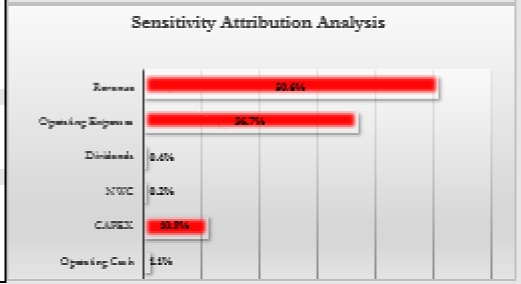
Past Earning Surprises		
Quarter ending	Revenue	EBITDA
6/30/2015	-1.25%	-15.60%
9/30/2015	-0.06%	-0.50%
12/31/2015	0.12%	-14.12%
3/31/2016	-1.04%	-3.33%
6/30/2016	-0.53%	-4.02%
Mean	-0.74%	-0.05%
Standard error	0.2%	2.2%

Peers
Alaska Air Group, Inc.
Southwest Airlines Co.
Spirit Airlines, Inc.
American Airlines Group Inc.
United Continental Holdings, Inc.
Virgin America Inc.
Delta Air Lines, Inc.
Allegiant Travel Company

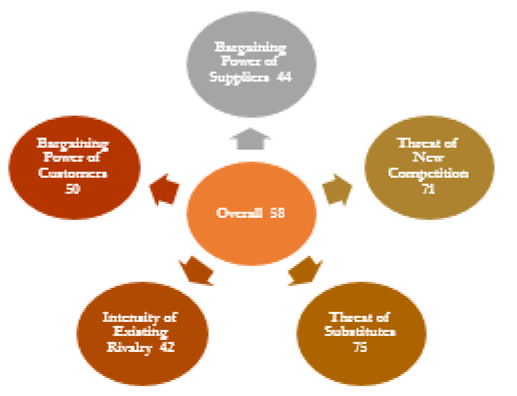
Management	Position	Total compensation growth	Total return to shareholders
Hayes, Robin	Chief Executive Officer, Pre	26.23% per annum over 5y	-2.0% per annum over 5y
Powers, Mark	Chief Financial Officer and	16.72% per annum over 4y	10.20% per annum over 4y
Chalkwaite, Alexander	Chief Accounting Officer, Vi	N/M	0% per annum over 0y
Hnal, James	Executive Vice President of	6.74% per annum over 5y	-2.0% per annum over 5y
St. George, Martin	Executive Vice President of	N/M	0% per annum over 0y
Martin, Jeff	Executive Vice President of	N/M	N/M

Profitability	JBLU (LTM)	JBLU (5 years historical average)	Industry (LTM)
ROIC	13.4%	10.00%	22.06%
NOPAT Margin	14%	10.60%	12.5%
Revenue/Invested Capital	0.97	0.94	1.77
ROE	24.3%	21.55%	38.44%
Adjusted net margin	12%	0.10%	11.0%
Revenue/Adjusted Book Value	2.06	2.66	2.50
Invested Funds	**JBLU (LTM)**	**JBLU (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	13.0%	12.5%	29%
Estimated Operating Cash/Total Capital	12.2%	5.6%	N/A
Non-cash working Capital/Total Capital	-20.3%	-16.6%	-46%
Invested Capital/Total Capital	91.0%	91.1%	99%
Capital Structure	**JBLU (LTM)**	**JBLU (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.79	1.50	0.49
Cost of Existing Debt	4.49%	4.91%	4.20%
Estimated Cost of new Borrowing	2.09%	3.72%	4.20%
CGFS Risk Rating	A	BB	BB
Unlevered Beta (LTM)	0.42	0.36	0.60
WACC	7.52%	6.24%	10.40%





Porter's 5 forces (scores are out of 100)



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	7.1%	13.0%	1.79
6/30/2017	3.2%	5.3%	0.63
6/30/2018	5.0%	5.0%	0.54
6/30/2019	-0.3%	3.3%	0.42
6/30/2020	0.2%	4.7%	0.50
6/30/2021	0.0%	5.6%	0.80
6/30/2022	1.3%	6.6%	1.11
6/30/2023	1.3%	7.6%	1.55
6/30/2024	2.4%	0.6%	2.20
6/30/2025	3.0%	0.4%	3.19
6/30/2026	3.5%	10.4%	10.45
Continuing Period	4.1%	11.5%	26.72

Period	Invested Capital	Net Claims	Price per share
Base Year	$6,427.63	$3,617.07	$20.67
6/30/2017	$6,197.19	$3,615.00	$22.33
6/30/2018	$6,235.33	$3,301.20	$24.33
6/30/2019	$6,265.32	$2,504.19	$26.61
6/30/2020	$6,734.31	$1,654.02	$28.37
6/30/2021	$6,955.02	$778.19	$31.50
6/30/2022	$6,356.17	-$121.35	$34.23
6/30/2023	$6,690.42	-$1,194.54	$37.14
6/30/2024	$5,633.46	-$2,204.05	$40.21
6/30/2025	$4,799.34	-$3,620.63	$43.19
6/30/2026	$3,975.37	-$4,570.21	$46.33
Continuing Period			

LHC Group, Inc.

NASDAQ:LHCG

Analyst: Eric Crown
Sector: Healthcare

BUY

Price Target: $42.40

Key Statistics as of 10/21/2016

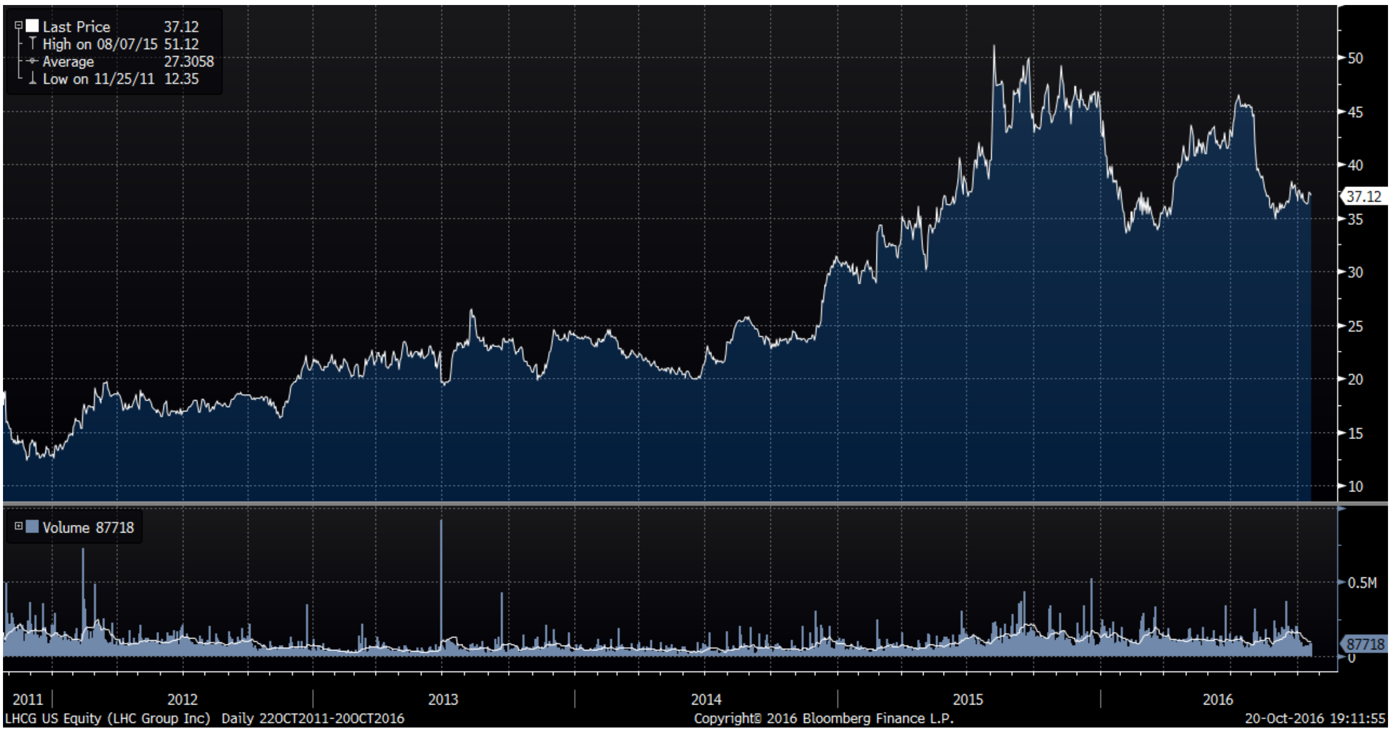
Market Price:	$36.37
Industry:	Healthcare Providers and Services
Market Cap:	$673.85M
52-Week Range:	$32.77-49.34
Beta:	0.51

Catalysts:

- Short Run: Q3 Earnings
- “Mid” Run: Managing Operating Cost
- Long Run: Industry Outlook

Company Description:

Louisiana Health Care Group (LHCG) provides post-acute health care services to patients. They operate in four primary segments home health services, hospice services, community-based services, and facility-based services. With the home health service segment being the largest. LHCG focuses on providing care in rural areas of the United States because these area lack acute medical facilities. As of June 30, 2016, LHC Group operated 283 home health services locations, 62 hospice locations, 11 community-based service locations and six Long-Term Acute Care Hospitals with eight locations.

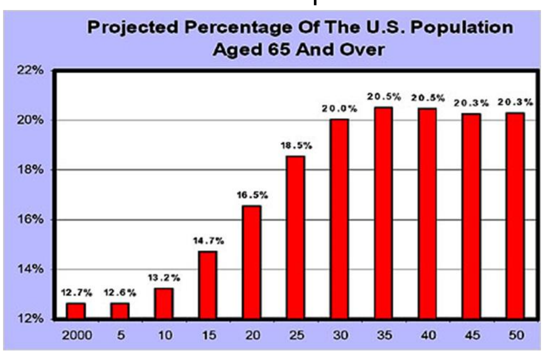


Thesis

LHCG is the best in class in its industry in both quality of service provided and financial ratio comparison with competitions. That being said LHCG has room to grow in this rapidly growing industry with large amounts of future demand. Within this industry one of the keys to success is managing operating cost. LHCG is positioning itself to lower operating cost and increase the bottom line. With a Q3 earnings call on the horizon and the stock trading near 52 week lows this could be an ideal time to purchase shares.

Industry Outlook

LHC group operates in the healthcare providers and services industry, with an emphasis in “at home health care services”. At home health care is an effective and less expensive alternative to standard long term care facilities. A wide range of medical conditions can be treated in the comfort of the patients own home. An upwards of 70% of revenues are from patients who are beneficiaries of the federal government Medicare program. Medicare reimburses LHCG based on the setting which the service is provided, length of time service is required, and the specific medical condition of the patient. This fixed payment system is the standard for the healthcare services industry. This means that it is extremely important for companies in this industry to be able to manage operating cost, to help increase profitability margins. However it is important for companies to still maintain quality care for the patients. The common age for Medicare beneficiaries is 65 and up.



As can be seen in the graph above, the U.S. has an aging population because of the baby boomers reaching their elderly years. This leads to an interesting long term prospect for the industry. There is a quickly growing long term demand for the services, specifically at home care, provided by LHC group. In the long run this could be a factor that leads to an increase of the value of LHC Group’s stock price.

Financials

LHCG recorded a net income of 33.73 million off a revenue of 854 million. This resulted in an operating margin of 8%. Which when compared to the industry average of around 4% shows LHCG is effectively managing their cost. These numbers are brought down significantly from the operating cost. Specifically SG&A which took up 30% of the revenue.

Best in Class

LHCG is amongst the top of its peers both qualitatively and quantitatively. The Center for Medicare and Medicaid (CMS) gives a star rating for quality of care to every home health service company. In 2015 LHCG was rewarded with the highest ranking in the industry. They were 20 basis points above the nearest public competitor and 85 basis points above the national average. This shows that LHCG offers a quality service which is a huge selling point to customers in this industry. Financially LHCG also outperformed its competitors. LHCG recorded a ROIC/WACC ratio of 1.02 compared to the healthcare industry average of .79. LHCG had a higher return on invested capital then its peers and a lower WACC then said peers. The debt to equity of LHCG is .14 compared to the .42 of the competitors. This shows LHCG dos not need as much debt to sustain growth compared to other companies in the industry. Finally, LHCG outperformed competitors in terms of EBITA margin. Recording 8.2% in comparison to competitors 7.3%. All these factors show that even though LHCG is not the biggest company in the industry, it is out preforming its peers making it best in class. If it can sustain these margins as its grows it could be a very profitable company to invest in.

Segments

LHCG provides acute health services to patients in four main segments: at home nursing care, hospice, community-based services, and long-term acute care hospitals. At home care is the largest segment which focuses on providing patients with routine checkups, administration of medications and technically trained staff. The hospice segment is generally administered at home and helps provide patients and family with spiritual, medical, and pain relief support. The community based service segment is for patients with long term medical conditions that need assistance with daily activities. Finally the Long term acute care segment is for patients whom conditions are too severe for home treatment.

Type of Segment	2015	2014	2013
Home Health Services:	75.1%	77.0%	79.5%
Hospice Services:	10.5%	9.2%	8.5%
Community-based services:	5.1%	3.8%	0.5%
Facility-based services:	9.3%	10.0%	11.5%
	100.0%	100.0%	100.0%

As can be seen in the table above Home health service makes up a majority of the business. It is important to note the growth in the hospice segment. This segment is slightly more profitable with an operating margin of 9% compared to 8% of at home services. As well the CMS plans to boost hospice rates by 2% by the end of 2016. This would mean that LHCG is growing one of its more profitable segments which could potentially lead to lots of value creation. Based on management discussions the two segments mostly represented in the pipeline are the hospice and at home care segments. This shows me that LHC Group wants to make a cash cow out of the hospice segment and continue to grow the at home care segment to accommodate the growing elderly U.S. population.

Porters Five Forces

Bargaining Power of Suppliers: 50
LHCG scored a neutral score for bargaining power of suppliers. This is because the medical equipment and medication is from a limited suppliers. However most of their cost are associated with SG&A.

Bargaining Power of Customers: 79
LHCG scored fairly highly on bargaining power of customers. This is mostly due to the fact that their customers are usually paying through Medicare and have no desire to negotiate pricing. Also considering the service being provided the price is usually not discussed upfront as much as other goods or services.

Intensity of Existing Rivalry: 50
LHCG scored moderately for existing rivalry. This is because there are a lot of other competitors providing similar services. However this industries demand is large and growing, leaving market space for LHCG.

Threat of Substitution: 83
LHCG scored very high for threat of substitution. This is because the service they are providing is a universal one and there is no realistic substitute for it.

Threat of New Competition: 67
LHCG had a good score in threat of new competition because there is a large capital cost to entering the industry as well as government loop holes to jump through.

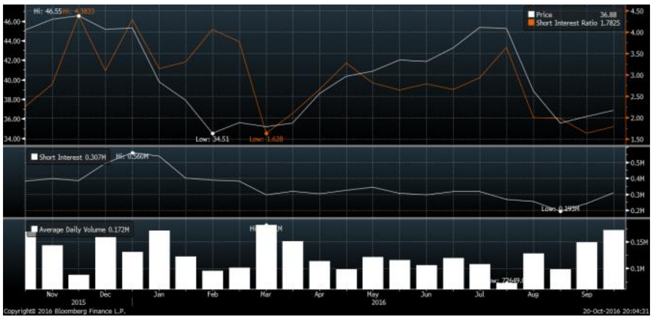
Ownership

Top Ownership Type (%)

54) Ownership Type	10/16/16	Curr	Change
41) Investment Advisor	71.31	71.32	+0.01
42) Hedge Fund Manager	12.03	12.04	+0.01
43) Family Office/Trust	6.24	6.24	0.00
44) Individual	5.29	5.30	+0.01
45) Government	1.62	1.62	0.00
46) Insurance Company	1.54	1.54	0.00
47) Pension Fund	1.48	1.48	0.00
48) Unclassified	0.17	0.17	0.00
49) Brokerage	0.12	0.12	0.00

Q3 – Earnings Call

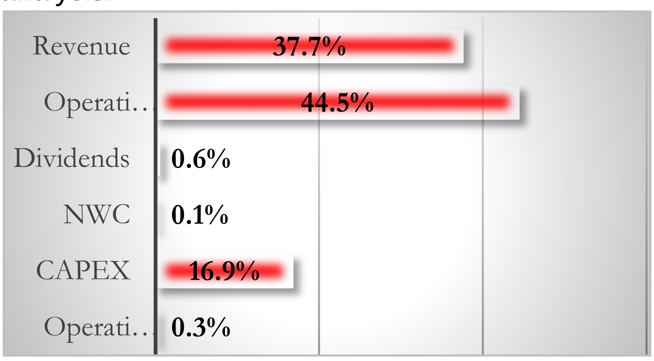
LHCG Quarter 3 earnings will be released on Thursday, November 3rd 2016. I believe this will be a major catalyst in the price short term. Management expects general and administrative expense as a percent of revenues to be in the range of 29% to 30%. This range is 1% lower than previously reported and could help benefit profit margins. Now would be a good time to purchase shares because the stock is trading near 52 week lows. This creates more upside potential on good results and less downside on lack luster results. Another indicator of good earnings is the lack of short interest in the stock two weeks before earnings.



This shows that analyst believe that the stock is not overly valued and that analyst are not expecting bad earnings results.

Managing Operating Cost

As stated before operating cost is a major factor in the profitability of companies in this industry. As can be seen in the pro-forma's sensitivity analysis:



This makes controlling these cost more important than ever. One of the biggest of these cost is the SG&A expense. Considering the nature of the service provided this comes as no surprise.

However when comparing LHCG to its competitors it appears there is room for improvement. LHCG has an SG&A margin of 31% compared to competitors of 14%. This shows there is huge room for improvement in general and administrative cost. LHCG would be very desirable if they could come close to the industry average on this front paired with their above average industry margins. Management has been taking steps to help lower these SG&A expenses. Some of these steps are joint venture strategies and steady growth through tactical acquisitions.

Growth

Management has expressed their goals for growth and how they intend to reach said goals. They intend to grow in existing markets by increasing the number of health care providers from whom they receive referrals. Their strategy to achieve this goal is to continue their high level of quality work and educate health providers of the benefits of working with LHCG. Management intends to expand into new markets by acquiring existing Medicare and/or Medicaid certified agencies in attractive markets throughout the United States. As well management wishes to continue joint ventures/ partnerships with hospitals because it provides a good stream of revenue without the high G&A expenses.

Valuation

A majority of the continuing value inputs were set to industry averages. The selected peers for comparison all had very similar business models, making them effective for forecasting.

Summary

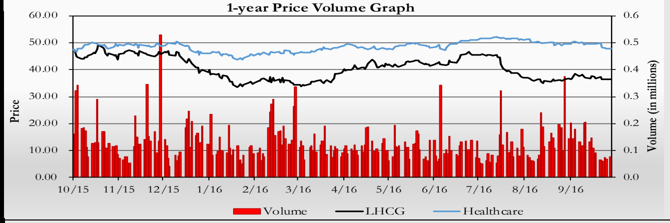
I recommend a **BUY** on LHCG. They are a top tier company in terms of quality of service provided, which is the most important selling point to customers in this industry. The company is steadily growing while maintaining some of the best industry margins. In the short run there is potential for gains with a earnings report in two weeks. If management continues to take steps to lower operating profit the company will increase net income. The industry is rapidly growing and will continue to grow for years to come. As well the stock is trading near a 52 week low of $36.37 with the analyst median price target being $46. Overall I believe this is a quality company at a low price in a very attractive industry.

Siena Market Line
3rd week of October 2016

LHC Group, Inc. (LHCG) — CENTER FOR GLOBAL FINANCIAL STUDIES — NEUTRAL

Analysis by Eric Crown	Current Price: $37.12	Intrinsic Value $36.29	Target 1 year Return: 14.28%
10/21/2016	Divident Yield: 0.1%	Target Price $42.40	Probability of Price Increase: 74.8%

1-year Price Volume Graph



Description

LHC Group, Inc., together with its subsidiaries, provides post-acute continuum of care primarily for Medicare beneficiaries in the United States.

General Information

Sector	Healthcare
Industry	Healthcare Providers and Services
Last Guidance	November 3, 2015
Next earnings date	November 2, 2016
Estimated Country Risk Premium	6.25%
Effective Tax rate	40%
Effective Operating Tax rate	38%

Market Data

Market Capitalization	$677.48
Daily volume (mil)	0.09
Shares outstanding (mil)	18.15
Diluted shares outstanding (mil)	17.61
% shares held by institutions	79%
% shares held by investments Managers	66%
% shares held by hedge funds	13%
% shares held by insiders	11.62%
Short interest	1.69%
Days to cover short interest	2.63
52 week high	$49.34
52-week low	$32.77
Levered Beta	0.82
Volatility	34.51%

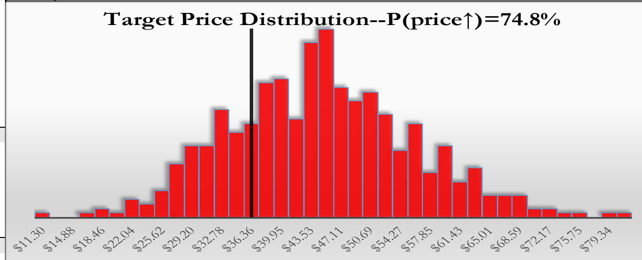
Past Earning Surprises

Quarter ending	Revenue	EBITDA
6/30/2015	-2.56%	17.83%
9/30/2015	-1.82%	4.98%
12/31/2015	-0.87%	-0.16%
3/31/2016	0.86%	5.88%
6/30/2016	-1.49%	-16.71%
Mean	-1.17%	2.36%
Standard error	0.6%	5.6%

Peers

Amedisys Inc.
BioScrip, Inc.
Almost Family Inc.
Providence Service Corp.
Civitas Solutions, Inc.
Chemed Corp.
National HealthCare Corporation
Healthways, Inc.

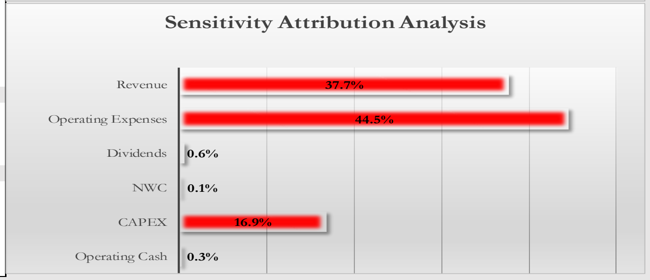
Target Price Distribution--P(price↑)=74.8%



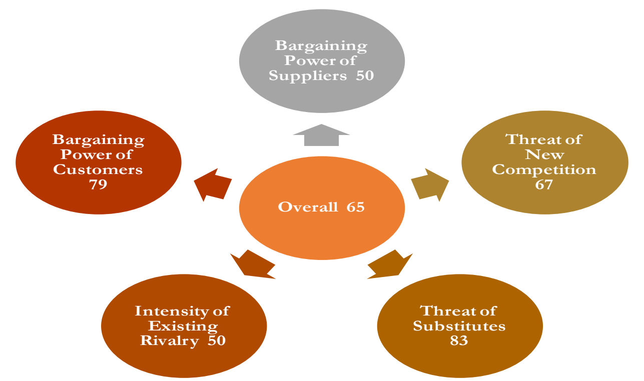
Management	Position	Total compensations growth	Total return to shareholders
Myers, Keith	Co-Founder, Chairman and Chi	18.08% per annum over 5y	-12.82% per annum over 5y
Stelly, Donald	President and Chief Operatin	10.25% per annum over 5y	-12.82% per annum over 5y
Proffitt, Joshua	Chief Financial Officer, Exe	50.28% per annum over 2y	37.26% per annum over 2y
Indest, John	Consultant, Director and Cha	40.03% per annum over 4y	17.73% per annum over 4y
Thompson, John	Chief Information Officer an	N/M	N/M
Macip, Marcus	Chief Administrative Officer	N/M	N/M

Profitability	LHCG (LTM)	LHCG (5 years historical average)	Industry (LTM)
ROIC	14.6%	14.64%	10.01%
NOPAT Margin	8%	9.95%	5.1%
Revenue/Invested Capital	1.74	1.47	1.98
ROE	28.3%	23.02%	12.71%
Adjusted net margin	8%	9.39%	4.2%
Revenue/Adjusted Book Value	3.67	2.45	3.00
Invested Funds	**LHCG (LTM)**	**LHCG (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	2.1%	1.3%	20%
Estimated Operating Cash/Total Capital	0.8%	0.7%	N/A
Non-cash working Capital/Total Capital	6.8%	8.3%	1%
Invested Capital/Total Capital	57.4%	58.8%	75%
Capital Structure	**LHCG (LTM)**	**LHCG (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.32	0.32	0.37
Cost of Existing Debt	4.12%	5.16%	4.37%
Estimated Cost of new Borrowing	4.79%	4.99%	4.37%
CGFS Risk Rating	CC	CC	C
Unlevered Beta (LTM)	0.70	0.90	0.68
WACC	7.65%	8.46%	7.87%

Sensitivity Attribution Analysis



Porter's 5 forces (scores are out of 100)



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	12.9%	8.4%	1.91
6/30/2017	6.3%	7.1%	1.60
6/30/2018	5.9%	7.1%	1.60
6/30/2019	5.7%	6.9%	1.51
6/30/2020	5.5%	6.8%	1.51
6/30/2021	5.3%	6.7%	1.46
6/30/2022	5.1%	6.6%	1.44
6/30/2023	4.9%	6.5%	1.42
6/30/2024	4.7%	6.5%	1.40
6/30/2025	4.5%	6.4%	1.39
6/30/2026	4.3%	6.3%	1.38
Continuing Period	4.1%	6.3%	1.22

Period	Invested Capital	Net Claims	Price per share
Base Year	$366.06	$255.78	$35.65
6/30/2017	$363.55	$193.82	$41.28
6/30/2018	$386.68	$139.49	$47.15
6/30/2019	$434.17	$67.64	$53.07
6/30/2020	$489.54	$9.35	$59.05
6/30/2021	$529.09	-$55.16	$65.11
6/30/2022	$563.57	-$121.08	$71.21
6/30/2023	$611.35	-$188.33	$77.35
6/30/2024	$640.00	-$256.85	$83.51
6/30/2025	$684.55	-$326.55	$89.67
6/30/2026	$723.15	-$397.34	$95.82
Continuing Period			

Urban Outfitters Inc.

NASDAQ:URBN

Analyst: Justin Capuano
Sector: Consumer Disc.

BUY

Price Target: $42

Key Statistics as of 10/21/2016

Market Price:	$33.58
Industry:	Specialty Apparel Stores
Market Cap:	$3.92B
52-Week Range:	$19.26-$37.82
Beta:	0.67

Catalysts:

- Execution of opening new store openings in Europe
- Results from expanding store size and product diversification
- Q3 FY2017 Earnings Report

Company Description:

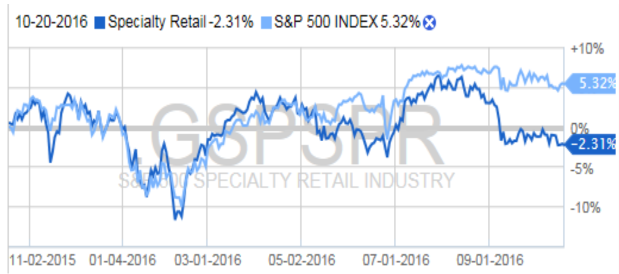
Founded in 1970 in Philadelphia, Pennsylvania, Urban Outfitters Inc. is a leading lifestyle specialty retail company that operates under the brands Urban Outfitters, Anthropologie, and Free People and a wholesale operation under the Free People brand. The company retails women's and men's fashion apparel, intimates, footwear, beauty, home and apartment goods, active-wear, and electronics to young adults aged 18 to 28 under the Urban Outfitters brand: and an assortment of fashionable women's apparel, accessories, wedding dresses, home goods, jewelry and more for women aged 20-40 under the Anthropologie brand; and a merchandise mix of casual women's apparel, home products, and more for women aged 25-30 under its Free People retail and wholesale brand. Urban Outfitters core strategy is to provide unified environments that establish emotional bonds with the customers. In addition to brick and mortar retail stores, they sell and market their products directly to the consumer through e-commerce websites, mobile applications, and catalogs.

Thesis

A declining apparel industry and economic uncertainties was no match for Urban Outfitters as they are coming off a record setting level of second quarter sales of $890.6 million. Even with high mark ups, customers are buying the latest fashions, accessories, and home goods at Urban Outfitter brand stores because of its superior shopping conditions. Plans to expand organically and geographically enable operating and logistical cost reductions and position the company to outperform its competitors in the following years. The company is financially sound and has favorable credit terms that will allow growth to occur.

Industry Outlook

The specialty retail industry is highly competitive and is extremely dependent on finding ways to cater to the evolving shopping patterns of the consumer. The emergence of online shopping has disrupted the conventional business model as consumers are turning away from buying products in brick and mortar stores. E-commerce growth has resulted in many store closings around the world and is a large factor for the increased level of consolidation among the industry's competitors in order to reduce operating costs and price competition. Today's customers are expecting high quality and on-demand customized products at fast shipping speeds. Awareness and execution in determining the latest and next seasons fashion trends to attract target customers are important factors in differentiating the top companies within the industry. The specialty retail industry has exceedingly outperformed the S&P 500 benchmark over the past 5 years. However, the industry has underperformed the market in the past year due to macro events like suppressed consumer spending on clothing, product cost inflation, volatility in commodity costs, and currency factors.



Business Model

Retail stores are placed in locations that put an emphasis on heavy foot traffic such as large metropolitan areas, select college communities, enclosed malls, and upscale urban and suburban streets. Each store is creatively designed to incorporate the tastes of the dynamic urban millennial. Merchandise is distributed to its stores throughout the world from the URBN owned and operated distribution and fulfillment centers in Gap, Pennsylvania and Reno, Nevada to cover North American stores and leased centers in England to cover all European orders. Although a small portion of total sales, the Free People wholesale segment operates using a shop within shop sales model in over 1,800 department stores including Macy's, Nordstrom, and Bloomingdale's. The shop within shop strategy strengthens the brands image and benefits the entire company by providing insight on what styles and products are popular with customers shopping in other retail stores. Urban Outfitters markets its merchandise and brand name by using an omni-channel strategy that integrates all available shopping channels, including brick and mortar stores, websites, mobile applications, and hard copy catalogs. Fully functional omni-channel systems are necessary because of the growing importance of e-commerce and reliance on capturing large portions of the target customer base. Strategic plans to invest in omni-channel marketing and technology advancements are currently in place to improve inefficiencies and to provide the optimal shopping experience to the customer.

Expansion

Distribution Facilities: In June 2015, the company opened a 1 million square foot fulfillment center in

Gap, Pennsylvania, adding to the state of the art 291 thousand square foot distribution center in the same town. The new building will provide cost reductions for inventory hold and shipments. Compared to the old fulfillment facility in South Carolina, the Gap facility is conveniently located near major cities in the north east United States, allowing for overnight shipping to meet customer demand. The benefit of cost reductions and improved margins will increase over time as the transition to the new building is complete.

European Stores: The impact of the lower consumer spending in US stores is being felt by the specialty retail industry as a whole. Urban Outfitters plans to combat the weak domestic store sales by expanding their presence in Europe. At the end of Q2 2017, there were 499 stores in the US, 53 in Europe, and 36 in Canada, totaling 588. Domestically, the busy city streets are flooded with retail stores. The plan for the end of FY 2017 is to open at least 1 Urban Outfitters, 3 Anthropologie stores, and 2 additional Free People stores in Europe. European expansion provides a diversification safety net if the rate of consumer spending continues to decline in future years and establishes a foreign footing for potential expansion in to Asia in future years.

Products:

Product diversification provides Urban outfitters with a competitive advantage because they do not have an independent reliance on apparel sales, and also, a large portion of their product lines are exclusive to the company. Different and exclusive products attract an increase in foot traffic to stores and more website hits because the wide variety of products are not offered at competing locations. Over 90% of all women's apparel in Q2 2017 was exclusive to the namesake brand. The Home and Apartment category has the most potential for future growth within all of the brands because millennials are shopping at Urban Outfitters fulfil their college dorm room and first apartment needs. The company is well positioned to take on the extra growth and transition its focus towards the Home and Apartment product line. Anthropologie displayed a surprising positive (exact rate was not disclosed) growth rate in Q2 2017.

Anthropologie: Urban Outfitters acquired Vetri Family in Q1 2017, a small chain of family owned Italian restaurants, in $10 mill all cash deal to add flavor to its Anthropologie stores. They will open 2 standalone restaurants and 2 will be attached to the newly expanded Anthropologie stores to improve the customer shopping experience. Anthropologie is experimenting by remodeling 2 of its store fronts to measure around 25,000 square feet compared to the average of 7,000 square feet. The test provided positive results because each store reported a greater value of sales per square feet (value not disclosed) than the average of $.20 per square foot for normal Anthropologie stores. This increase may be attributed to the hype and excitement around the openings of the restaurant chain and the newly expanded stores, but management must be impressed because there are plans to expand the size of more stores in late FY 2017.

Financials and Competitors

	Statistics		
	2014	2015	2016
Revenue Growth	10.40%	7.70%	4.00%
Gross Profit Margin	37.60%	35.40%	35.10%
Operating Margin	13.83%	11.00%	10.26%
S, G, & A Margin	23.80%	24.40%	24.60%

It is important to remember that Q2 of FY2017 produced the highest level of quarterly sales in the history of the company as a result of the exclusivity of the products and high markups. The company's products are currently in high demand even at higher prices. However, the snapshot of the Urban Outfitters' financials display a year over year decay in growth and margins. Macro level effects like a decline in consumer spending on apparel, high competition within the retail industry, the emergence of online sales, and currency fluctuations played a large role in the decline in past performance. However, in 2016, Urban Outfitters is outperforming its competitors in terms of revenue growth, 4% compared to the 3.08% industry average. In 2014, management set the goal of doubling sales to $6 billion by 2020, requiring double digit revenue growth every year until then. Urban Outfitters has produced greater returns from its operations based on the industry average 9.67% operating margin. S,G,&A plays the biggest role in the diminishing operating margin due to the increase in administrative costs from expanding internationally and from the additional labor expenses. This trend will continue if management stays at its desired level of growth, but growth in revenue will offset the added expenses.

ROIC /WACC		
	History	*LFY*
URBN	2.52	2.10
Competitors	1.94	1.80

WACC		
	History	*LFY*
URBN	10.1%	9.5%
Competitors	12.3%	11.9%

ROIC		
	History	*LFY*
URBN	22.4%	20.1%
Competitors	23.1%	21.4%

Historically, Urban Outfitters has created more value compared to its competitors with respective ROIC to WACC values of 2.10 and 1.8 for the past fiscal year. Even with a high debt to equity ratio compared to the industry, 0.45 and 0.24 respectively, the company has favorable costs of debt. A high amount of debt is attributed toward the financing of the 1 million square foot distribution facility, an investment that is sure to pay itself off in the long run. The additional value added may signal that the company is undervalued because it is behind its peers in sales growth and other metrics. They are efficiently using cash and long term debt to finance future growth while never acquiring short term debt.

Summary

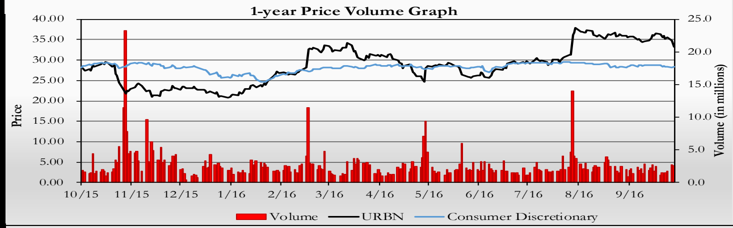
There is heavy risk involved in trying to expand in a declining market. However, Urban Outfitters is positioned to steal customers away from its competitors. Customers are the ultimate driver of value and they are recognizing the brand is selling the latest trends at the highest quality. Due to Urban Outfitter's plans for growth, cost reductions, and superior product lines, I propose that the stock will be a fitting addition to the portfolio with a BUY at $33.00.

Urban Outfitters Inc. (URBN)

CENTER FOR GLOBAL FINANCIAL STUDIES

BULLISH

Analysis by Justin Capuano	Current Price:	$33.64	Intrinsic Value	$36.81	Target 1 year Return: 25.33%
10/21/2016	Divident Yield:	0.0%	Target Price	$42.16	Probability of Price Increase: 95%



Description

Urban Outfitters, Inc., a lifestyle specialty retail company, engages in the retail and wholesale of general consumer products.

General Information

Sector	Consumer Discretionary
Industry	Specialty Retail
Last Guidance	November 3, 2015
Next earnings date	November 22, 2016
Estimated Country Risk Premium	6.77%
Effective Tax rate	36%
Effective Operating Tax rate	46%

Market Data

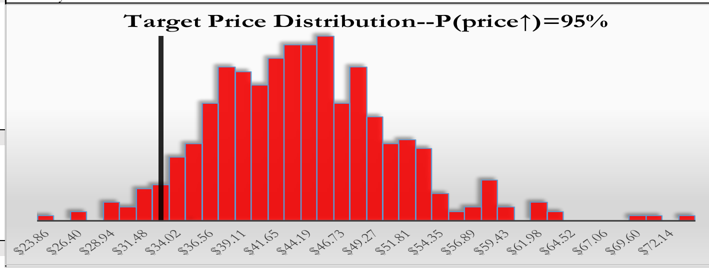
Market Capitalization	$3,943.50
Daily volume (mil)	0.92
Shares outstanding (mil)	117.23
Diluted shares outstanding (mil)	119.29
% shares held by institutions	80%
% shares held by investments Managers	65%
% shares held by hedge funds	9%
% shares held by insiders	23.91%
Short interest	8.63%
Days to cover short interest	4.32
52 week high	$37.82
52-week low	$19.26
Levered Beta	1.03
Volatility	34.36%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
7/31/2015	-4.59%	-1.51%
10/31/2015	-7.30%	-9.56%
1/31/2016	-3.12%	2.88%
4/30/2016	-5.27%	-1.70%
7/31/2016	-4.25%	2.54%
Mean	-4.91%	-1.47%
Standard error	0.7%	2.2%

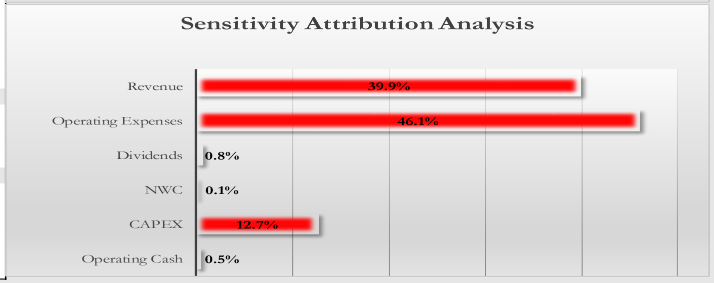
Peers

Abercrombie & Fitch Co.
American Eagle Outfitters, Inc.
Chico's FAS Inc.
The Gap, Inc.
L Brands, Inc.
Genesco Inc.
Michael Kors Holdings Limited
Express Inc.

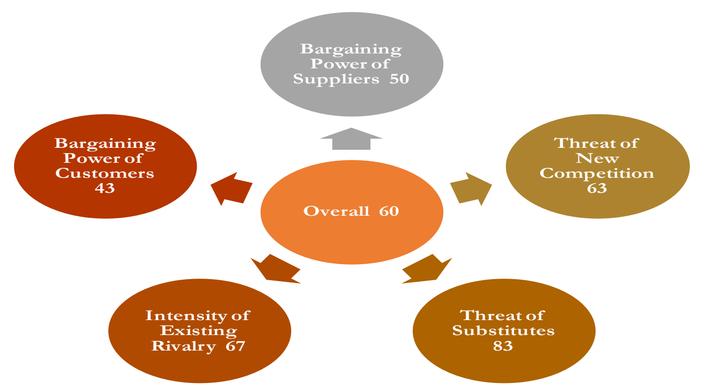


Management	Position	Total compensations growth	Total return to shareholders
Hayne, Richard	Co-Founder, Chairman of The	-32.01% per annum over 6y	-2.61% per annum over 6y
McCreight, David	President and Chief Executiv	-16.02% per annum over 5y	8.9% per annum over 5y
Belair, Scott	Co-Founder, Director and Mem	-4.78% per annum over 6y	-2.61% per annum over 6y
Conforti, Francis	Chief Financial Officer	22.01% per annum over 5y	8.9% per annum over 5y
Hollinger, Calvin	Chief Operating Officer	-13.48% per annum over 3y	-3.4% per annum over 3y
Hayne, Margaret	Chief Creative Officer, Pres	-23.3% per annum over 3y	-3.4% per annum over 3y

Profitability	URBN (LTM)	URBN (5 years historical average)	Industry (LTM)
ROIC	8.2%	15.18%	21.85%
NOPAT Margin	7%	13.06%	7.5%
Revenue/Invested Capital	1.17	1.16	2.92
ROE	10.5%	15.91%	26.05%
Adjusted net margin	5%	11.95%	6.8%
Revenue/Adjusted Book Value	1.96	1.33	3.86
Invested Funds	**URBN (LTM)**	**URBN (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	9.7%	12.5%	19%
Estimated Operating Cash/Total Capital	7.8%	6.9%	N/A
Non-cash working Capital/Total Capital	6.4%	5.7%	19%
Invested Capital/Total Capital	97.7%	90.2%	82%
Capital Structure	**URBN (LTM)**	**URBN (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.45	0.33	0.24
Cost of Existing Debt	5.85%	5.60%	7.24%
Estimated Cost of new Borrowing	6.08%	5.77%	7.24%
CGFS Risk Rating	D	D	D
Unlevered Beta (LTM)	0.74	0.89	0.94
WACC	8.28%	9.54%	10.08%



Porter's 5 forces (scores are out of 100)



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	1.7%	7.0%	0.99
7/31/2017	3.3%	9.9%	1.38
7/31/2018	4.4%	10.2%	1.45
7/31/2019	9.2%	11.6%	1.64
7/31/2020	10.1%	12.4%	1.82
7/31/2021	9.3%	12.2%	1.77
7/31/2022	8.4%	11.8%	1.66
7/31/2023	7.5%	11.4%	1.59
7/31/2024	6.7%	11.1%	1.51
7/31/2025	5.8%	10.7%	1.44
7/31/2026	4.9%	10.4%	1.37
Continuing Period	4.1%	10.0%	1.30

Period	Invested Capital	Net Claims	Price per share
Base Year	$2,211.84	$1,534.33	$36.49
7/31/2017	$2,289.09	$1,160.80	$41.40
7/31/2018	$2,549.09	$969.52	$46.69
7/31/2019	$2,733.96	$567.17	$52.39
7/31/2020	$2,976.03	$236.09	$58.29
7/31/2021	$3,049.72	-$49.04	$64.44
7/31/2022	$3,119.29	-$394.87	$70.84
7/31/2023	$3,425.02	-$764.38	$77.48
7/31/2024	$3,622.22	-$1,158.68	$84.35
7/31/2025	$3,976.06	-$1,578.58	$91.45
7/31/2026	$4,409.72	-$2,024.47	$98.77
Continuing Period			