Stock	Buy / Sell	Thesis	Current Price	Target Price
SUN	BUY	Sunoco LP is a well-established leading competitor in the oil and gas industry. Of the seventeen analysts covering SUN, the median target of free cash flow for 2016 is 170 million, compared to the 17.3 million generated in 2015. This is due to a number of reasons. Through strategic acquisitions Sunoco has generated substantial revenue growth and furthermore, has notably expanded margins. The price of crude oil as well as the market downturn in 2015 had a major impact on the company's stock price. Nevertheless, a reversion of this company's stock price to the increasing trend, which can be seen in the chart below, can be expected in the upcoming months. Lastly, the company's return on invested capital compared to its weighted average cost of capital proves significant value creation to shareholders. For the aforementioned reasons I am recommending a BUY on SUN.	$ 36.60	$ 43.95
FCEL	SELL	FuelCell Energy (FCEL) is a world leader in renewable energy creation and specializes in developing cleaner energy solutions. The company began expanding globally in 2007 through its partnership with POSCO Energy, and targeted markets in Southeast Asia, particularly South Korea. The renewable energy industry was rapidly growing until oil price began its steep decline. Cheaper oil prices decreased the appeal of more costly renewable energy solutions and caused declining revenue and prolonged projects for FuelCell Energy. Currently, FCEL is unable to produce energy in a profitable process given current market conditions and appears dependent on an innovative cost saving breakthrough or an increase in oil prices.	$ 6.53	$ 5.00
FLIR	BUY	FLIR Systems, a global leader in imaging systems reported mix results during its latest earnings call, and the stock went down 10.9% since 04/26/2016. Is that price sustainable? Is this correction in the stock price temporary? Did investors overreacted? Or is it a great opportunity to buy the stock?	$ 30.21	$ 36.00

ELY	BUY	Callaway Golf Co. is one of the premier golf brands in the world, commanding a 21% share of the U.S. golf market. It is also the leading American golf brand in both Japan and Europe. On a constant currency basis, Callaway saw net sales, gross margins, pre-tax income, and earnings per share increase in 2015. After its Q1 2016 earnings call, Callaway revised estimates on the upside, with investors anticipating increased revenue and EPS for both Q2 and FY2016. To compound this, the golf industry is on the brink of booming like never before due to the growing number of younger players. With bolstered margins and increasing market share, Callaway stands ready to capitalize on the rapidly expanding golf market, making now the perfect time to buy a very bullish stock.	$ 9.35	$ 11.02
RGR	BUY	Ruger is the last firearm producers in the U.S that kept all its production and selling apparels within the country. Among one of the best recognized brand in the firearms industry today, Sturm, Ruger & Co has been able to create and distribute new appealing products to both domestic and international markets over years. The presidential election in the last quarter of 2015 as well as the recent terrorist attacks also signal that demand for firearms is most likely to increase in 2016. In addition, the company forecasts to decrease its capital expenditures in 2016, and it has a proven record of higher value creation than its competitors with an historical ROIC/WACC ratio three times higher.	$ 64.03	$ 68.50
SAM	SELL	Boston Beer Company has brought higher standards to the beer industry for the last 32 years. Between 2010 and 2015, the firm hired more than 650 people. It proved its ability to improve its market shares and revenues thanks to a strategy based on volume growth. However, this strategy has led management to put aside the necessary improvements in efficiency that operations have needed to stay at the same level than the competition. In addition, to the inefficiency of its operations, the company is evolving in a very competitive environment that it has never experienced before. Customers appeal for craft beer products is also shifting towards more local and "authentic" brands. In order to understand all the challenges that the company is facing, it is important to first understand the industry in which it evolved.	$ 156.08	$ 110.00

BKS	SELL	Barnes & Noble has tried to adapt to a changing market by developing their web and digital presence. This effort made by the company does not have any success as the weight of revenue generated by the Nook tablet keeps decreasing year by year. With the expect failure of the Nook tablet we can expect the company to soon collapse as they fail to compete with their online competitors such as Amazon. In the United-States but the company is burdened by their strong physical presence. Furthermore in the last years the company's cash flows has suffered from strong expenses related to the purchase of Plants and equipment.	$ 11.75	$ 9.86
BJ	BUY	Bj's Restaurant has been expanding rapidly for the past few years, with an average of 8 stores per year. They have 60 stores in over 35 states, but there is still room for growth. They are expecting to grow 18 stores in 2016, and that number should increase in 2017. They also have some of the best margins in the industry thanks to their beverage sales. They also have exclusive items that you can only get there, such as some of their brews, which will help get customers to come back.	$ 44.60	$ 60.39
SCOR	BUY	ComScore, Inc. is a global leader in analyzing the digital world based on their number of users, product development, and access to advanced technology. With the recent merger between comScore and Rentrak, comScore market share has increased exponentially. A recent overreaction in the market has driven down the price of this stock, despite comScore consistently outperforming earnings estimates and improving top and bottom line growth.	$ 30.62	$ 38.50
CROX	SELL	Crocs was once a highly successful and popular shoe company, however, the rubber clog fad has come to an end, leaving Crocs in a very precarious financial situation. Its unclear patent situation opens the door to competition and poses a serious threat to Croc's revenue stream. Crocs margins continue to shrink, as its shrinking top-line cannot sustain expenses, and is causing serious negative income implications. These declining margins, paired with a shrinking ROIC/WACC, mean value destruction for the once iconic shoe brand. The market is overly optimistic on Croc's operating cost/revenue, the largest driver in its stock value. When this is adjusted to a more appropriate level, it becomes clear that Crocs is significantly overpriced, making it a SELL.	$ 9.83	$ 7.42

TWTR	BUY	Twitter is a unique product in the social media space, which fulfills a critical purpose: live information. Since it was founded ten years ago, the platform has become essential for people looking for the latest news. Thanks to its constantly updating live feed, Twitter has often proven its superiority over mainstream media for initial reporting of important news. With its current market capitalization of $11 billion, Twitter is dramatically undervalued compared to its peers and is a very attractive takeover target in the tech media sector. With Yahoo! (YHOO) putting its core business up for sale, Twitter could be next.	$ 14.61	$ 21.00
MDT	BUY	Currently priced at $79.15, MDT has the potential to reach $92 a share in 2016, providing shareholders a 12-15% return on investment (including the 1.9% annual dividend). Medtronic's diversified business portfolio allows the upside potential of this stock to exceed the downside risk. Not only are they currently holding the largest market share in the medical devices industry, they are continuing to grow revenue through innovation and increased global exposure. The integration of Covidien, acquired in June 2014, is finally complete and the addition to Medtronic has provided considerable synergies and benefits.	$ 79.15	$ 92.00

Macroeconomic Overview

U.S. Markets

Index	Weekly % Change	YTD % Change
S&P 500	-1.26%	+1.05%
Dow Jones Industrial	-1.28%	+2.00%
NASDAQ Composite	-2.67%	-4.63%
Russell 2000	-1.38%	-0.44%
VIX	+18.76%	-13.78%

Markets saw a lot of economic data releases this week as well as many earnings reports for the first quarter. One third of the S&P 500 reported their earnings so far. The trend in the U.S markets was mostly flat until late Thursday. On Monday, New Home Sales was released under consensus, which stood at 520,000, at 511,000 sales. On Tuesday, Core Durable Goods (MoM) order dropped by -0.2% for a consensus estimate at 0.5%. The Conference Board Consumer Confidence report also fell under consensus at 94.2 for a 96.0 forecast. On Wednesday, Pending Home Sales (MoM) were recorded at 1.4%, which was better than last month, and Crude Oil Inventories were below expectations of 2.366M barrels at 1.999M. The same day, the Fed delivered its decision regarding interest rates. The Federal Reserve Open Market Committee decided not to increase the rates yet, and deleted a paragraph that showed its concerns regarding foreign economic and financial prospects. This was considered as a hawkish sign by most investors, and the market is still expecting the next hike rates in June. On Thursday, markets entered a bearish trend that saw selloff until the closing on Friday. The S&P 500 and the Dow Jones Industrial were on the same path and lost 1.26% and 1.28% over the week, and they finished the week at 2,065.30 and 17,773.64 points respectively. The VIX increased by 18.76% from a level of 13.95 to 15.70 by Friday afternoon. These movements were mostly due by the announcement of a slowdown in the American economy, with a GDP report for the first quarter at 0.5% against a consensus of 0.7%. Despite a good Initial Jobless Claims down by 3,000 claims at 257,000, markets stayed focus on GDP slowdown, and the NASDAQ Composite finished the week with a 2.67% loss for a year to date change of -4.63%. In the same time, the Russell 2000 was slightly less affected and gave in 1.38% weekly for an almost flat performance year to date. Oil markets were not far from recording their best weekly gain in seven years. WTI contracts for delivery in June increased by 7.69% and finished the week at $45.92/barrel while Brent contracts were up by 6.69% at $48.13/barrel. As volatility increased, gold and silver increased by 5.19% at $1293.53/ounce and by 5.18% at $17.84/ounce respectively. In the corporate news, DreamWorks Animation was bought by NBCUniversal for $3.8 billion, which values the company almost 50% above its trading price prior to announcement. Next week, Manufacturing PMI, employment data and retail sales will be release.

S&P 500, DJIA, NASDAQ Composite, Russell 2000 5-day chart.

International Markets

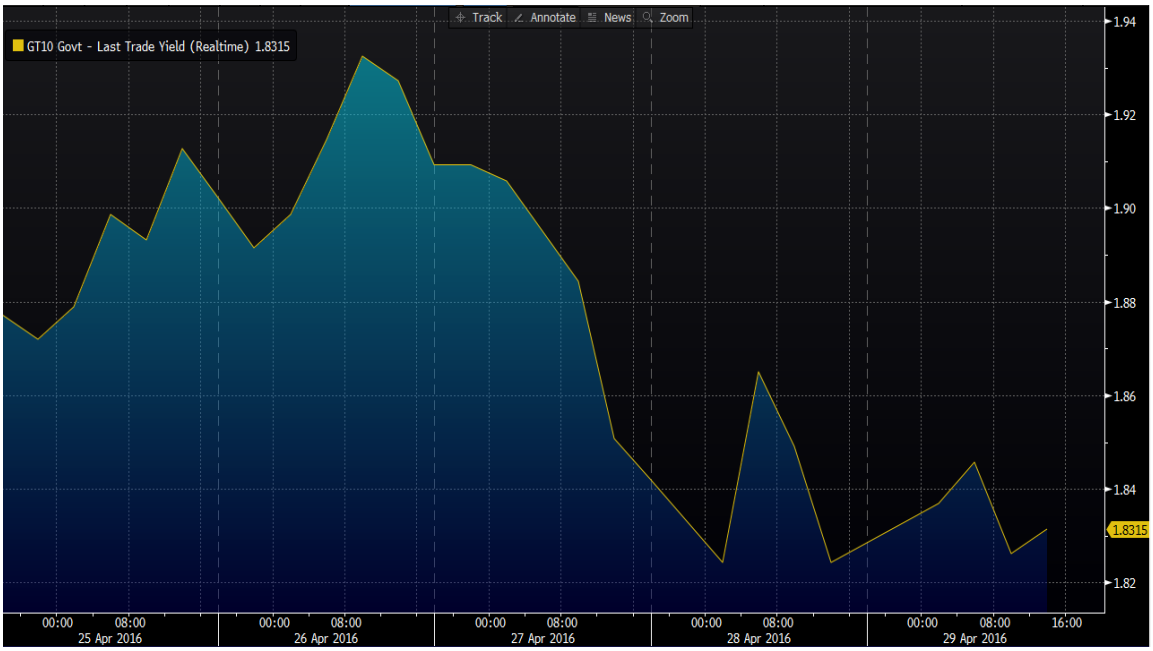
Index	Weekly % Change	YTD % Change
BE 500	-1.78%	-6.81%
Stoxx Europe 600	-2.00%	-6.65%
DAX	-3.22%	-6.55%
FTSE 100	-1.09%	-0.01%
CAC 40	-3.08%	-4.49%
Nikkei 225	-4.02%	-12.44%
Shanghai Composite	-0.71%	-16.98%
Shenzhen Composite	+0.34%	-18.84%

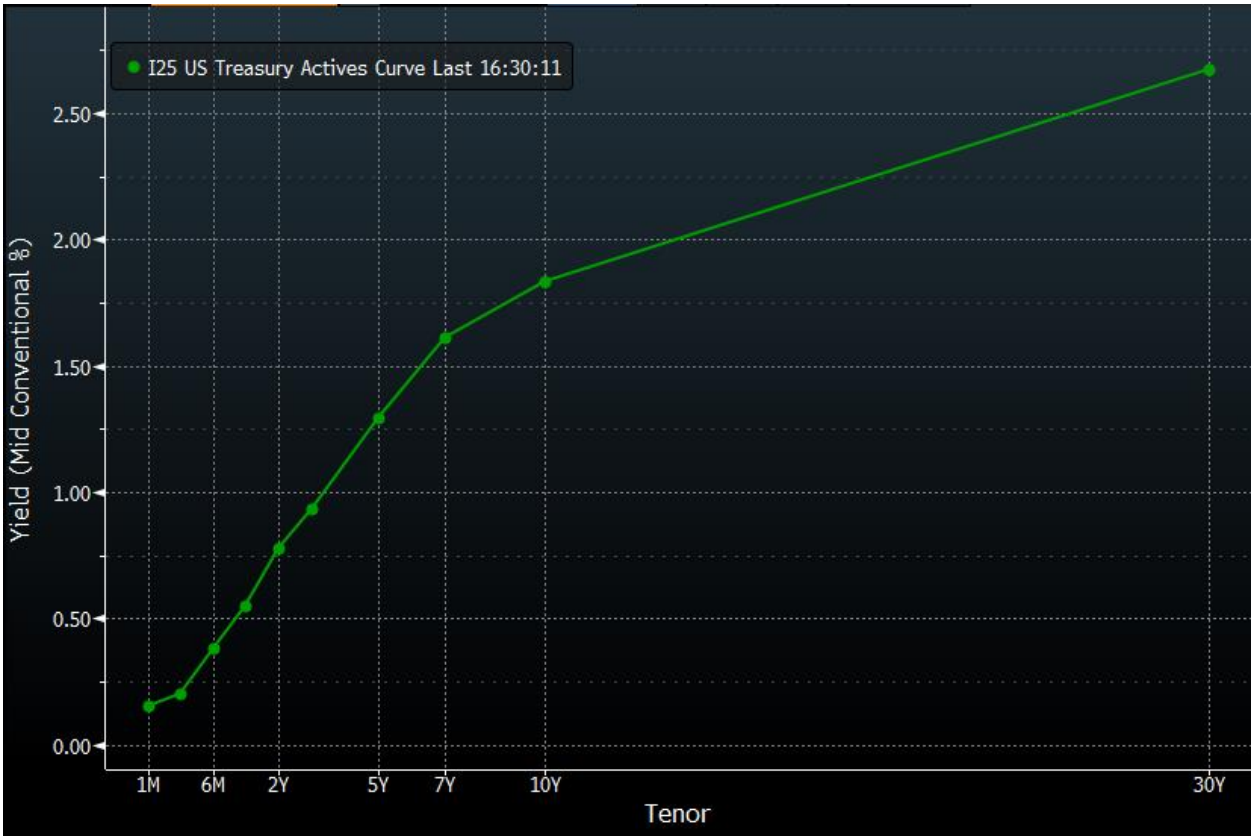
International equity markets dropped this week. Despite a European Q1 GDP report at 0.6%, above the 0.4% expectations, the Core CPI was at -0.2% for a -0.1% consensus. The European banks also reported disappointing earnings this week, and the Stoxx Europe 600 fell by 2.00%, for a year to date loss of 6.65%. The Bloomberg European 500 index also followed a bearish trend with a weekly drop of 1.78% and year to date performance almost reaching a negative 7.0% at 6.81%. On Monday, the German Ifo Business Climate index came out below expectations at 106.6, and despite improvement in the job market, with German unemployment report at 2.700M against 2.800M expected, the DAX finished the week at 10,038.97 points for a loss of 3.22%. The CAC 40 also followed the same trend and finished the week at -3.08% for a year to date performance of -4.49%. In the U.K, the Q1 GDP growth was up by 2.1% year over year, but the FTSE 100 finished the week on a 1.09% loss amid concerns about the Brexit referendum.

In Asia, the Bank of Japan surprised investors this week as it announced no extension of its monetary stimulus. Paired up with disappointing earnings and yen strengthening, the Nikkei 225 ended the week with a 4.02% loss. Meanwhile in China, the Shanghai Composite and the Shenzhen Composite ended the week with a drop of 0.71% and an increase of 0.34% respectively. The Central Bank of China increased the yuan peg by 0.56% on Friday, and global markets remain concerned about the credit growth and many defaults of Chinese companies. Next week, Chinese CPI will be reported on Monday, U.K's manufacturing production on Wednesday, Interest rate decision of the Bank of England is expected for Thursday while Germany will release Q1 GDP on Friday.

Bond Report

This week, the U.S. Treasury yields plummeted after their highest climb in a month early this week. The Federal Reserve left interest rates unchanged and followed a passive wait-and-see approach of a future interest rate hike. This points to the Fed's fears about the weakening in economic growth of the U.S. On Monday, Treasury yields pushed higher in anticipation for the Federal Reserve meeting beginning on Tuesday. A 23% probability of a rate hike for June marks the Fed's expectations. The Treasury yield climb still continues to reflect a desire for riskier assets, such as equities and oil, by investors despite the Fed's dovish stance. Also, with the stabilization of the equity market and rebound in oil futures, pressure has been taken off bond investing leading Treasury yields to rise. Continuing Monday's trend Treasury yields rose to their highest level in over a month, on Tuesday. Investors continue to brace for Federal Reserve monetary-policy announcement on Wednesday. The yearning for riskier assets has led investors to sell assets perceived as safe, including bonds, driving Treasury prices down and yields higher. Short-term Treasury yields will be dependent on any changes to the Fed's rate. While long-term Treasury yields will not necessarily be affected as they typically move based on growth and inflation. On Wednesday, the upward trend in Treasury yields scene early in week broke as the Fed took a wait-and-see approach of any future interest rate hikes. Demand for assets perceived as safe were driven by selling pressures in the equity market pushing Treasury yields down. A selloff of Apple Inc. (NASDAQ: AAPL) was the leading driver. The Fed also acknowledged that there is weakening in the economy's growth. With the Fed's modest rate hike approach a rate hike for April was ruled out. On Thursday, the downward trend from the previous day continued to push Treasury yields to one-week lows. Pessimistic news that the first quarter GDP only rose 0.5%, was below analyst estimates, thus being a significant driver in Treasury yields. The market's expectations for the Fed for a June rate hike also decreased from 23% to 19%. On Friday, Treasury yields fell for the third straight session. As a result, Treasury yields reached their lowest levels since April 19. Inflation remained in the market's expectations leading to Treasury selling. The main focus being on how global inflation data will affect future Fed policy. Thus, growth in crude oil futures drove Treasury yields up slightly as oil prices affect long-term inflation. Overall, the two-year Treasury rose to 0.865%, and gained 4.1bps over the month to finish at 0.774%. The 10-year Treasury yield also climbed to reach 1.931% on Tuesday, and gained 3.6bps over the month to finish at 1.821%. While the 30-year Treasury yield reached 2.760% on Tuesday, and rose 4.6bps over the month to finish at 2.666%.





What's next and key earnings

On Monday, in March, orders for durable goods increased by 0.8%. Also a gauge for pending home sales rose 1.4%, in March, which is its second monthly increase. While a rise again in March to a 10-month high was scene in an index that tracks home contract signings, as low interest rates encourage home buying. This optimism will encourage a solid spring season for the housing market. On Tuesday, consumer confidence report for April fell more than 2 points to 94.2. Although, an improvement in jobs that are hard to get was sizable and will encourage a solid employment report. On Wednesday, a portion of the international trade in goods report for March showed that trade activity has declined. Trade is down to $56.9 billion, from February's $62.9 billion. Exports fell 1.7% parallel with declines for industrial supplies, autos, and foods. This weakening in cross-border activity is having a negative effect on the global economy. The EIA petroleum status report show oil inventories continue to rise. Oil inventories reached a new record at 540.6 million barrels last week. Gasoline went up 1.6 million barrels, while distillates are down 1.7 million. On Thursday, the Fed's preferred PCE index, a measure of inflation, rose at a negligible 0.3% annual rate over Q1. While core inflation, which excludes food and energy, rose at a 2.1% rate, above the Fed's 2% target. Continued strength in the labor market was reflected in the number of Americans who have applied for unemployment benefits remain around a four decade low. On Friday, personal income and outlays report showed spending is weak but income is solid. Spending is partially being pulled down by poor car sales this year. While wages and salaries rose at a solid rate with an increase in savings. This increase in consumer income is a positive for the economic outlook. Consumer sentiment fell to 89.0 in the end April from 89.7 earlier in the month. This decline was driven by developing uncertainty over future job and income prospects.

SIENAcollege

Siena Market Line
1st week of May 2016

BJ's Restaurant Inc.
NASDAQ: BJRI

Analyst: Mark Gruber
Sector: Consumer Disc.

BUY

Price Target: $60.39

Key Statistics as of 4/29/2016

Market Price:	$44.60
Industry:	Hotels, Restaurants, and Leisure
Market Cap:	1.02 Billion
52-Week Range:	$38.49-53.91
1 Year Beta:	1.08

Thesis Points:

- Low Oil Prices lead to more business
- Focusing on the alcohol sales, which have the best margins in the restaurant industry
- Focus on a healthy menu that caters to the health kick that has recently taken place in the United States
- BJ's reward card helps bring customers back

Company Description:

BJ's Restaurant Inc. owns and operates casual dining restaurants in the United States. Restaurants under the BJ's Restaurant Inc. name include BJ's Restaurant and Brewhouse, BJ's Pizza and Grill, and Bj's Restaurant and Brewery. They were founded in 1978 in Huntington Beach, California. Since then they have grown to over 170 locations in 20 states.

Thesis

The low oil prices is a big plus for the restaurant industry. When prices are low, consumers are much more likely to drive their car and go out to places rather than just eating meals at home. The oil industry is expected to be oversaturated over the next few years, which means that oil prices should continue to stay low. Another reason why they are growing more than others in the industry is due to their alcohol sales. The alcohol margin is much higher than there food margin, and they get more sales in that segment than most in the industry. The average in the industry is between 12-14% for alcohol sales mix. Bj's is in the mid 20's which is significantly higher than their peers. Margins in the alcohol segment range between 200% and 600% which is much higher than the margins in the food segment. They also brew their own beers, and some of them are exclusive to BJ's. This helps drive people back to the restaurant, because it is the only place that serves it. Lastly they have been focusing on healthier eating with many choices under 1000 calories. Over the past decade the health kick has really taken over in the United States. Now, more than ever people care about what they are eating, and creating dishes that taste good and are good for you, with help them create an additional competitive edge over their competition. One their menu they have a section called Bj's EnLIGHTened Entrees with 12 items under 795 calories.

Promotions

Another big advantage that helps BJ's Restaurants stay ahead of the competition, is by the numerous promotions they ran, including their BJ's reward card. For every $1 you spend, you get one reward point. Once you get 75 points you get $5 off your next meal. This helps by incentivizing people to come back. They also have other promotions run throughout the year such as lunch specials. They also have an app where they offer many promotions to help attract new customers, and get their existing customers to come back.

Industry Outlook

The restaurant industry is a highly competitive industry with steady revenue streams. The past few years has seen the restaurant industry take a hit, but due to the low oil prices, demand has started to steadily increase.

Financials

BJ's Restaurant has seen their revenues steadily increase over the last few years. They have gone from 775.1 million in 2013 to 919.6 in 2015. They have also increased their gross margin and ebitda margin over the last few years.

	2012	2013	2014	2015
EBITDA, Adj	84.5	81.0	95.2	122.5
Margin %	11.9	10.5	11.3	13.3

In 2014 the company decided to take on debt. They had 58 million in 2014 and the number grew to 100.5 million in 2015. The biggest reason for them taking on this much debt, is because they are planning on growing 18 stores in the next year, and they needed more cash to be able to finance these new buildings. They have also steadily been increasing their earnings per share and net income over the past few years. They have also been steadily creating additional value as shown by the graph below.

	2011	2012	2013	2014	2015
ROIC/WACC Ratio	0.80	0.78	0.58	1.13	1.26

Management

Bj's Restaurant is led by CEO, Gregory Trojan. He has been with the company since 2012 where he was the President, and then become the CEO on February 1, 2013. Prior to working at BJ's he served as CEO for Guitar Center for two years and was the Vice President for them before that. Greg Levin is the company's CFO and executive Vice President. He has been with the company since February 2004. Prior to working at BJ's Levin was the CFO of SB Restaurant Company where he gained extensive knowledge of the restaurant industry. Lastly Kevin Mayer, is the CMO of BJ's Restaurant. He has been with BJ's since 2013. Prior to working at Bj's Mayer worked at Volkswagen of America where he served as Vice President of Marketing for two years, and worked as the General Motors Director of Global Advertising and Promotions for Chevrolet. In that role he got experience in how to promote their products, and has carried that expertise over to Bj's Restaurant.

Porters Five Forces

The restaurant industry is a highly competitive industry. The threat of new entrants is medium. There are always new restaurants being built, however it is highly capital intensive. The bargaining power of suppliers is low because there are many suppliers that provide food and televisions. The threat of substitute products is high, because it does not cost anything to switch suppliers. The bargaining power of buyers is high, because there are many options for people to choose from when they go out to eat. Not only of their many restaurants but there are also fast food places, or grab and go places such as gas stations and convenience stores. The intensity of rivalry is also extremely high, because once again there is high competition in the restaurant industry. Restaurants are constantly running promotions to help entice customers to switch.

Conclusion

Bj's Restaurant has been expanding rapidly for the past few years, with an average of 8 stores per year. They have 60 stores in over 35 states, but there is still room for growth. They are expecting to grow 18 stores in 2016, and that number should increase in 2017. They also have some of the best margins in the industry thanks to their beverage sales. They also have exclusive items that you can only get there, such as some of their brews, which will help get customers to come back.

SIENAcollege

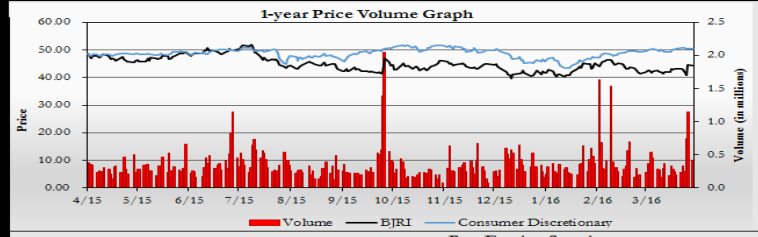
Siena Market Line
1st week of May 2016

BJ's Restaurants, Inc. (BJRI)

CENTER FOR GLOBAL FINANCIAL STUDIES

BULLISH

Analysis by Mark Gruber	Current Price:	$44.63	Intrinsic Value	$54.78	Target 1 year Return: 35.33%
4/28/2016	Divident Yield:	0.0%	Target Price	$60.39	Probability of Price Increase: 100%



Description

BJ's Restaurants, Inc. owns and operates casual dining restaurants in the Unites States.

General Information

Sector	Consumer Discretionary
Industry	Hotels, Restaurants and Leisure
Last Guidance	November 3, 2015
Next earnings date	July 21, 2016
Estimated Country Risk Premium	6.00%
Effective Tax rate	40%
Effective Operating Tax rate	44%

Market Data

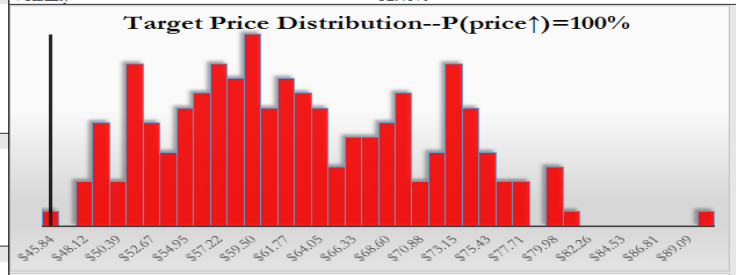
Market Capitalization	$1,073.57
Daily volume (mil)	0.07
Shares outstanding (mil)	24.13
Diluted shares outstanding (mil)	25.67
% shares held by institutions	78%
% shares held by investments Managers	67%
% shares held by hedge funds	20%
% shares held by insiders	3.97%
Short interest	5.13%
Days to cover short interest	3.26
52 week high	$52.37
52-week low	$38.49
Levered Beta	1.00
Volatility	32.46%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
3/31/2015	-2.78%	4.45%
6/30/2015	-4.05%	0.08%
9/29/2015	-0.64%	-0.33%
12/29/2015	-3.72%	-0.06%
3/29/2016	-1.85%	-1.48%
Mean	-2.61%	0.53%
Standard error	0.6%	1.0%

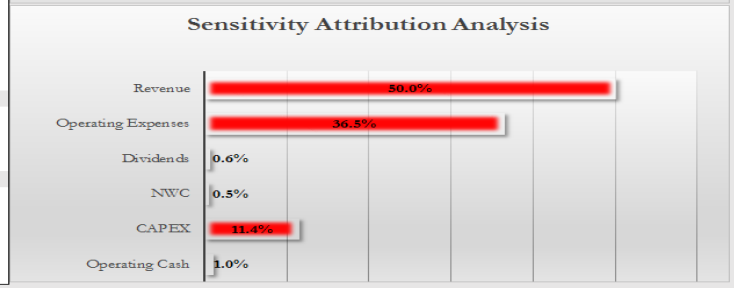
Peers

Dunkin' Brands Group, Inc.
Buffalo Wild Wings Inc.
The Cheesecake Factory Incorporated
Texas Roadhouse, Inc.
Sonic Corp.
Panera Bread Company
Darden Restaurants, Inc.
Dave & Buster's Entertainment, Inc.

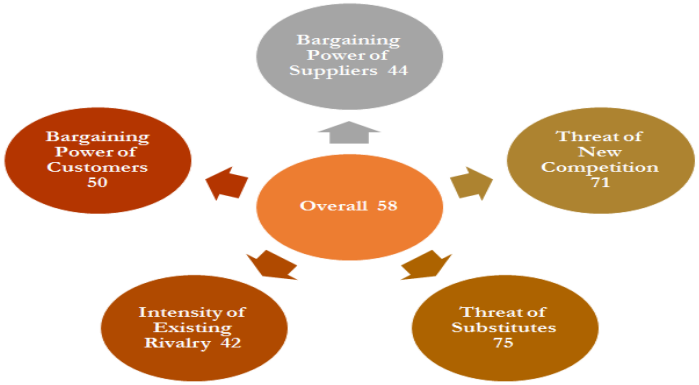


Management	Position	Total compensations growth	Total return to shareholders
Trojan, Gregory	Chief Executive Officer, Pre	-9.68% per annum over 4y	-6.05% per annum over 4y
Levin, Gregory	Chief Financial Officer, Pri	9.77% per annum over 5y	2.72% per annum over 5y
Ledwith, Lon	Executive Vice President of	20.06% per annum over 3y	4.27% per annum over 3y
Lynds, Gregory	Chief Development Officer an	5.13% per annum over 5y	2.72% per annum over 5y
Krakower, Brian	Chief Information Officer an	-100% per annum over 1y	-10.97% per annum over 1y
Miller, Kendra	Senior Vice President, Gener	N/M	0% per annum over 0y

Profitability	BJRI (LTM)	BJRI (5 years historical average)	Industry (LTM)
ROIC	7.2%	8.35%	26.95%
NOPAT Margin	6%	6.67%	12.2%
Revenue/Invested Capital	1.23	1.25	2.21
ROE	9.1%	9.55%	34.37%
Adjusted net margin	5%	6.30%	9.1%
Revenue/Adjusted Book Value	1.73	1.52	3.77
Invested Funds	**BJRI (LTM)**	**BJRI (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	4.1%	4.5%	15%
Estimated Operating Cash/Total Capital	4.1%	3.8%	N/A
Non-cash working Capital/Total Capital	0.0%	-5.7%	-13%
Invested Capital/Total Capital	100.0%	99.1%	89%
Capital Structure	**BJRI (LTM)**	**BJRI (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.40	0.27	0.30
Cost of Existing Debt	2.54%	2.60%	3.79%
Estimated Cost of new Borrowing	2.87%	2.70%	3.79%
CGFS Risk Rating	A	A	B
Unlevered Beta (LTM)	0.83	0.90	0.90
WACC	7.97%	8.45%	8.93%



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



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	8.5%	5.8%	0.90
3/29/2017	9.6%	6.0%	0.90
3/29/2018	9.9%	5.9%	0.98
3/29/2019	9.0%	6.8%	1.15
3/29/2020	8.2%	7.5%	1.25
3/29/2021	7.3%	8.3%	1.35
3/29/2022	6.4%	9.1%	1.45
3/29/2023	5.6%	9.7%	1.40
3/29/2024	4.7%	10.4%	1.49
3/29/2025	3.9%	11.1%	1.58
3/29/2026	3.0%	11.8%	1.66
Continuing Period	2.1%	12.5%	1.73

Period	Invested Capital	Net Claims	Price per share
Base Year	$554.77	$460.06	$54.61
3/29/2017	$603.70	$451.90	$59.03
3/29/2018	$664.45	$426.80	$65.75
3/29/2019	$716.84	$429.47	$72.74
3/29/2020	$762.11	$415.43	$80.04
3/29/2021	$851.57	$387.44	$87.66
3/29/2022	$867.71	$463.22	$95.75
3/29/2023	$927.41	$388.96	$104.65
3/29/2024	$1,027.79	$288.31	$113.99
3/29/2025	$1,121.66	$159.93	$123.70
3/29/2026	$1,214.41	$3.07	$133.73
Continuing Period			

SIENAcollege

Siena Market Line
1st week of May 2016

Callaway Golf Co.

NYSE:ELY

Analyst: Joseph Gonyeau
Sector: Consumer Goods

BUY

Price Target: $11.02

Key Statistics as of 2/18/2016

Market Price:	$9.35
Industry:	Sporting Goods
Market Cap:	$881.88M
52-Week Range:	$7.97-$10.30
Beta:	1.26

Thesis Points:

- Bolstered margins, net income, and EPS on a current currency basis show that Callaway is poised for long term value creation
- Golf is becoming more popular for younger generations, enabling Callaway to tap into a growing market
- Callaway is utilizing its large cash balance to make acquisitions which will spark long-term revenue growth

Company Description:

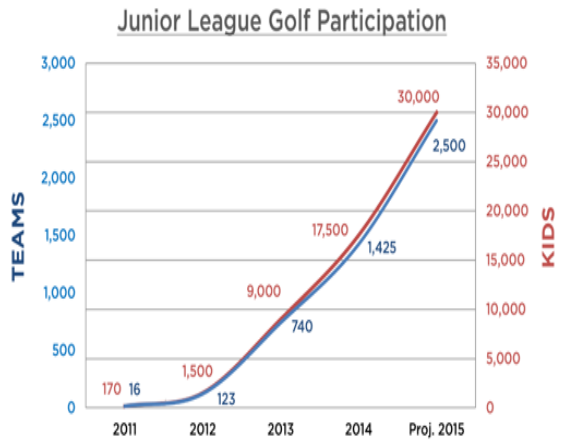
Headquartered in Carlsbad, California, Callaway Golf designs, manufactures and sells premium quality golf balls, golf clubs, golf bags, and a variety of other golf accessories. Callaway's golf products are designed for players of all skill levels, both amateur and professional; their products are technologically advanced and thus they invest a considerable amount into research and development. Callaway's revenues are generally derived from two dominant sources, golf clubs and golf balls, and it sells its products directly to golf retailers, sporting goods retailers, mass merchants, and to third-party distributors in the United States, as well as roughly 100 countries. Callaway has seen its stock price move sporadically between $7.97 and $10.30 throughout the year, before recently returning to a price around $9.40; however, a strong 2015 paired with revised earnings estimates to the upside of FY2016 indicate that Callaway is in a great position to tap deeper into the growing golf market. This paired with their large cash balance and growing market share signal that the stock is very bullish.

Thesis

Callaway Golf Co. is one of the premier golf brands in the world, commanding a 21% share of the U.S. golf market. It is also the leading American golf brand in both Japan and Europe. On a constant currency basis, Callaway saw net sales, gross margins, pre-tax income, and earnings per share increase in 2015. After its Q1 2016 earnings call, Callaway revised estimates on the upside, with investors anticipating increased revenue and EPS for both Q2 and FY2016. To compound this, the golf industry is on the brink of booming like never before due to the growing number of younger players. With bolstered margins and increasing market share, Callaway stands ready to capitalize on the rapidly expanding golf market, making now the perfect time to buy a very bullish stock.

Industry Outlook

Golf is a $70 billion per year industry employing nearly 2 million Americans with $55.6 billion in annual wage income. The future of the industry is very bright as consumer confidence has returned to pre-recession levels and participation in golf has stabilized, evidenced as rounds per playable day increased last year. To compound this, according to the National Golf Foundation, rounds played were up 2% since 2014. Golf has traditionally been labelled as an "old-man's game," yet popular players such as Jordan Spieth (age 22) and Rickie Fowler (age 27) are rebranding the game and encouraging younger generations to follow and play golf. Currently, more youth golfers age 6-17 are joining the game, with more than 3 million participants in this age group. Evidenced through junior league golf participation, the number of youths playing golf has increased by over 500,000 participants from 2010 to 2015, outpacing other major sports, as can be seen in the graph below from the National Golf Foundation.



As of last year, there were roughly 30,000 junior league golfers on 2500 teams throughout the country, a figure that PGA CEO Pete Bevacqua anticipates to triple in the next few years. To add to this, Millenials aged 18-34 are also active in the game, accounting for an estimated 6.3 million golfers. As this $70 billion dollar industry is set to expand, Callaway is in perfect position to see bolstered revenues through its commanding 21% United States market share.

Business Model

Callaway has two reportable operating segments that are organized on the basis of products: the golf clubs segment and the golf balls segment. The golf clubs segment consists of Callaway Golf woods, irons, hybrids and wedges, and Odyssey putters. The golf clubs segment also includes other golf-related accessories, royalties from licensing of the Company's trademarks and service marks. The golf balls segment consists of Callaway Golf and Strata balls that are designed, manufactured and sold by Callaway. Products are typically sold through retailers, both directly and through their wholly-owned subsidiaries, as well as to their third-party distributors. The Golf Clubs segment is the dominant revenue driver, accounting for 83% of revenues (including "Accessories and other") in 2015. Callaway brands itself as a high quality golf company that strives to be the best at premium total performance golf equipment and balls. Much of their major marketing is done through their pro sponsorships, including legendary golfer Phil Mickelson, a 42 time PGA tour event winner. Callaway generates slightly more than 50% of its revenues overseas, predominantly in Japan and Europe, where it is the top-selling American golf brand. When reported in US dollars, unfavorable exchange rates from 2013 through 2015 had a significant negative impact on Callaway's net

sales. Callaway's golf products, including irons, putters, golf balls, and accessories compete at a variety of prices within each category, striving to be the top quality product.

People

Callaway has struggled since the death of their founder Ely Callaway in 2001. Following his death, shares fell by more than $15 in a three year period. In August of 2005, Callaway hired former Revlon executive George Fellows, but after seven years of struggling, hired. Chip Brewer to take control of Callaway. Before Callaway, Brewer spent a decade as the CEO of Adams Golf, achieving tremendous success. During his time at Adam's golf, Brewer undertook a number of acquisitions, with one of the most successful being a $1.6 million acquisition of Yes! Golf, a company that makes putters. Since he began in 2012, Brewer has implemented an old-school turnaround strategy revolved around building better products, energizing the company's culture and touting performance in advertising. Brewer has also put his previous acquisition experience to good use, as under his management Callaway has made successful acquisitions that are set to help revive the brand.

Acquisitions

Recently, Callaway acquired a 20% stake for $50 million in TopGolf, a growing golf centered entertainment facility headquartered in Dallas, Texas, with locations throughout the United States and the UK. TopGolf helps players hone their skills, while simultaneously turning practice into a fun game. Their platform includes a game that utilizes microchip technology inside golf balls which are shot into a variety of targets with real clubs to earn points. The balls track the distance, trajectory, and accuracy of each ball. The company considers itself to be much more than just a sports venue, offering a full bar and restaurant at each venue. TopGolf's fun and innovative atmosphere has proven to be a success, drawing more than 8 million patrons in 2015. To add to this, TopGolf also has a very ambitious plan to expand internationally, to areas including Australia, France, South Africa, Dubai, Russia, and Spain. Through its partnership, Callaway will have a massive built-in marketing opportunity, as every location exclusively offers Callaway balls and clubs. Analyst estimates maintain that Callaway's 20% stake in TopGolf is now valued between roughly $120 and $160 million. Callaway also recently announced that it had settled on a joint venture with TSI Groove & Sports Co., a Japanese clothing maker. Their previous partnership only allowed TSI to license the Callaway brand name; the new relationship will help bolster Callaway's international reputation.

Financials

Callaway currently generates more than 50% of its revenue from foreign sales, predominantly in Japan and Europe. When reported in US dollars, unfavorable exchange rates ultimately caused revenues to take a serious hit; however, this is no indication of any form of operational deficiency on Callaway's part. In fact, on a constant currency basis, Callaway saw net sales, pre-tax income, gross margins, and EPS all increase in 2015. More promising than this is their commitment to improving operations and bolstering margins. From 2014 to 2015, gross profits rose over 500 basis points, and are expected to jump another 160 basis points throughout 2016. Analyzing their trend in costs, we can see that Callaway is dedicated to bolstering its profit margins, with cost of revenue down 17% since 2012. As of Wednesday, Callaway had its seventh consecutive earnings beat. After their Q1 2016 earnings call, Callaway revised estimates to the upside, with investors anticipating Q2 revenue between $238 and $245 million, and an increase in anticipated EPS of $0.33 to $0.37. Based on proforma valuation and the growing golf industry, I anticipate Callaway's revenues to grow around 4.06% from FY2016 to FY2017. I anticipate growth to increase to around 4.85% by 2021, before slowly tapering off to a continuing period growth of 2.13%. Furthermore, based on my proforma valuation and Callaway's history of bolstering margins, I anticipate operating costs/revenue to be 94% in FY 2016. I then anticipate them to decline to the low 90s for the next few years, before tapering off to an industry average around 81%. Based on the proforma, I have an intrinsic value for Callaway at $9.33, just $.01 below their current post earnings price of $9.34. I believe that Callaway

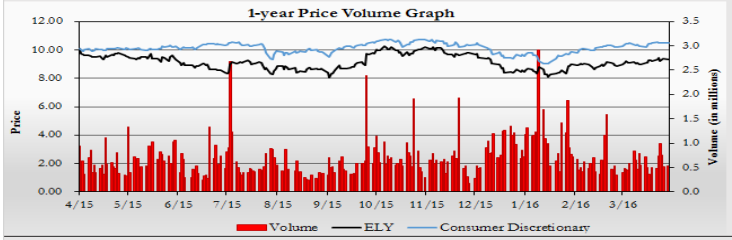
will smash its 52-week high, and have a 1-year target price of $11.02, for a 1-year return of 18.34%.

Conclusion

Although exchange rates have hurt Callaway of late, they in no way indicated poor operational performance. When analyzing Callaway on a current currency basis, we can see that their net income, earnings per share, and gross margins have actually increased. Along with this, their share in TopGolf, which is valued between $120 and $160M, will provide global marketing that Callaway has never seen before, putting them in a great position to tap into a growing market. Golf is a lifelong game, and the whole industry has been benefiting from players getting involved at younger ages. Players like Rickie Fowler and Jordan Spieth are changing the game and making it more appealing to younger players, evident as the number of kids participating in golf has increased by over 500,000 participants since 2010. Strong operational performance, growing brand awareness, and successful acquisitions leave Callaway Golf poised to tap into the expanding $70 billion golf industry. Thus, now is the perfect time to enter into a 1 year position on a very bullish stock.

Callaway Golf Co. (ELY) — CENTER FOR GLOBAL FINANCIAL STUDIES — BULLISH

Analysis by Joseph Gonyeau	Current Price:	$9.35	Intrinsic Value	$10.49	Target 1 year Return: 119.02%
4/29/2016	Divident Yield:	0.5%	Target Price	$20.44	Probability of Price Increase: 100%



Description

Callaway Golf Company, together with its subsidiaries, designs, manufactures, and sells golf clubs, golf balls, golf bags, and other golf-related accessories.

General Information

Sector	Consumer Discretionary
Industry	Leisure Products
Last Guidance	November 3, 2015
Next earnings date	July 28, 2016
Estimated Country Risk Premium	5.63%
Effective Tax rate	29%
Effective Operating Tax rate	33%

Market Data

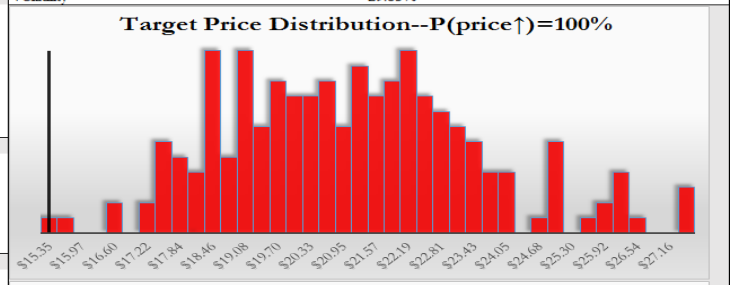
Market Capitalization	$874.85
Daily volume (mil)	2.51
Shares outstanding (mil)	93.77
Diluted shares outstanding (mil)	87.17
% shares held by institutions	78%
% shares held by investments Managers	64%
% shares held by hedge funds	16%
% shares held by insiders	0.81%
Short interest	2.72%
Days to cover short interest	3.37
52 week high	$10.30
52-week low	$7.97
Levered Beta	0.86
Volatility	29.85%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
3/31/2015	-11.36%	-20.24%
6/30/2015	-3.15%	-1.93%
9/30/2015	-1.47%	50.30%
12/31/2015	2.22%	-202.92%
3/31/2016	-8.65%	16.09%
Mean	-4.48%	-31.74%
Standard error	2.5%	44.4%

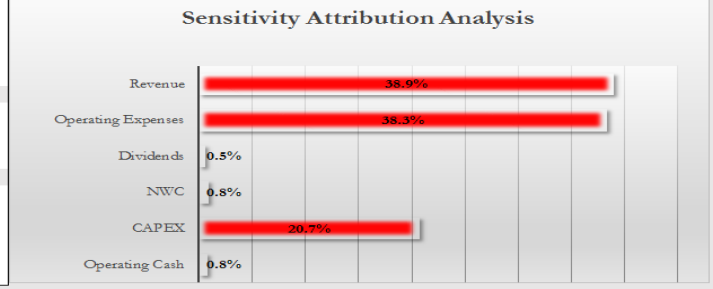
Peers

Nautilus Inc.
Malibu Boats, Inc.
Brunswick Corporation
Arctic Cat Inc.
Marine Products Corp.
Escalade Inc.
Black Diamond, Inc.

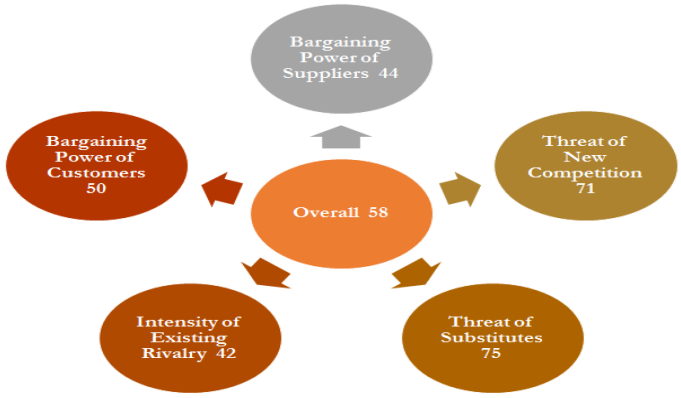


Management	Position	Total compensations growth	Total return to shareholders
Brewer, Oliver	Chief Executive Officer, Pre	-0.61% per annum over 3y	11.44% per annum over 3y
Julian, Robert	Chief Financial Officer and	N/M	0% per annum over 0y
Leposky, Mark	Senior Vice President of Glo	14.03% per annum over 2y	6.21% per annum over 2y
Howie, Neil	Managing Director of Europe,	13.43% per annum over 3y	11.44% per annum over 3y
Hocknell, Alan	Senior Vice President of Res	-100% per annum over 1y	22.86% per annum over 1y
Thomas, Jennifer	Chief Accounting Officer and	N/M	N/M

Profitability	ELY (LTM)	ELY (5 years historical average)	Industry (LTM)
ROIC	3.5%	3.25%	11.92%
NOPAT Margin	4%	7.02%	9.9%
Revenue/Invested Capital	0.84	0.46	1.20
ROE	3.1%	2.21%	13.35%
Adjusted net margin	3%	6.11%	9.0%
Revenue/Adjusted Book Value	0.95	0.36	1.49
Invested Funds	**ELY (LTM)**	**ELY (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	2.9%	3.8%	23%
Estimated Operating Cash/Total Capital	2.9%	3.5%	N/A
Non-cash working Capital/Total Capital	24.5%	18.2%	21%
Invested Capital/Total Capital	95.6%	96.3%	77%
Capital Structure	**ELY (LTM)**	**ELY (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.21	0.37	0.17
Cost of Existing Debt	6.34%	6.81%	5.32%
Estimated Cost of new Borrowing	2.87%	3.61%	5.32%
CGFS Risk Rating	A	BB	BB
Unlevered Beta (LTM)	0.78	0.55	0.88
WACC	8.40%	7.42%	8.65%



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



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	5.9%	4.1%	0.41
3/31/2017	4.1%	5.9%	0.55
3/31/2018	4.7%	8.5%	0.76
3/31/2019	4.9%	8.6%	0.75
3/31/2020	5.0%	9.4%	0.79
3/31/2021	4.9%	10.1%	0.83
3/31/2022	4.5%	10.7%	0.85
3/31/2023	3.8%	11.2%	0.86
3/31/2024	3.3%	12.0%	0.88
3/31/2025	2.4%	12.6%	0.89
3/31/2026	2.3%	13.4%	0.92
Continuing Period	2.1%	14.2%	0.95

Period	Invested Capital	Net Claims	Price per share
Base Year	$999.04	$136.84	$9.20
3/31/2017	$1,090.72	$77.53	$10.87
3/31/2018	$1,045.71	-$24.62	$12.82
3/31/2019	$1,013.69	-$124.56	$14.87
3/31/2020	$1,028.35	-$233.55	$17.05
3/31/2021	$1,147.65	-$354.81	$19.37
3/31/2022	$1,207.79	-$484.25	$21.76
3/31/2023	$1,266.32	-$625.70	$24.24
3/31/2024	$1,332.16	-$781.41	$26.80
3/31/2025	$1,401.95	-$952.85	$29.42
3/31/2026	$1,474.18	-$1,136.54	$32.10
Continuing Period			

SIENAcollege

Siena Market Line
1st week of May 2016

FLIR Systems, Inc.

NASDAQ:FLIR

Analyst: Pierre Riffard
Sector: Capital Goods

BUY

Price Target: $36

Key Statistics as of 04/04/2016

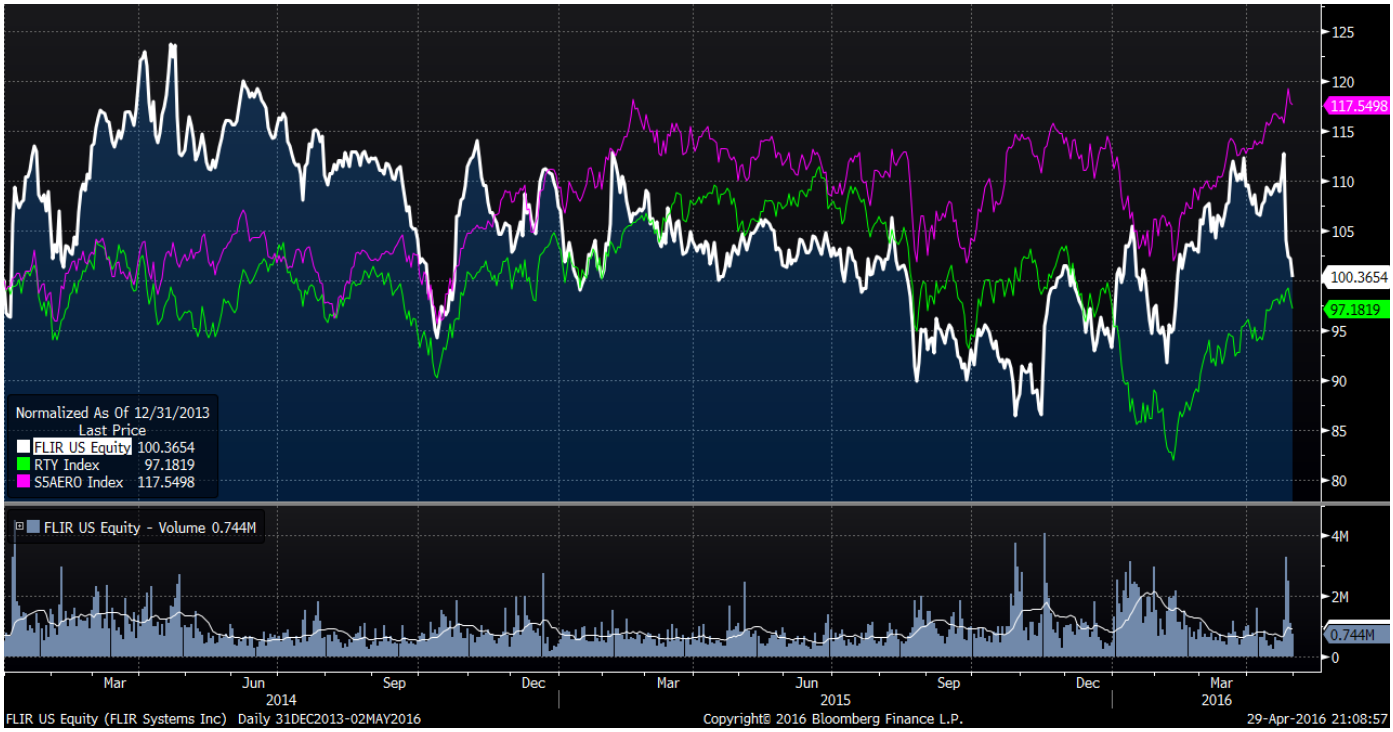
Market Price:	$30.21
Industry:	Aerospace & Defense
Market Cap:	$4.16B
52-Week Range:	$25.12 - $34.08
Beta:	0.94

Thesis Points:

- Market leader with better margins and sales growth than peers.
- Strong market outlook, record backlog, important R&D investments and a focus on cost reduction foresee improved performance.
- Recent drop in price after mixed Q1 2016 earnings made the stock attractive.

Company Description:

FLIR Systems, Inc. (NYSE:FLIR) is a global leader in designing and manufacturing thermal imaging and detection camera systems, and advanced sensors. The customer base of the company is very large and includes military, commercial, industrial, and consumer markets and governments from around the world. The company has been founded in 1978, and is headquartered in Wilsonville, OR. FLIR had approximately 1,726 employees in the United States and 1,277 employees abroad including Canada, Brazil, Belgium, Sweden, UK, Germany, Italy, Spain, Russia, UAE, Australia, New Zealand, China, India, Japan, and Korea. The mission statement of the company is to enable customers to benefit from the valuable information produced by advanced sensing technologies and to deliver sustained and superior financial performance for shareholders.



Thesis

FLIR Systems, a global leader in imaging systems reported mix results during its latest earnings call, and the stock went down 10.9% since 04/26/2016. Is that price sustainable? Is this correction in the stock price temporary? Did investors overreacted? Or is it a great opportunity to buy the stock?

The earnings were disappointing but the revenue were surprisingly high. The company expected to have a difficult quarter, but the full-year guidance remained unchanged and they expect improvement in margins during the second-half of the year. The fundamentals are solid, and the company is the most profitable among its peers. Its current earnings expectations are quite strong, with a positive market outlook. The company has very low risks given its R&D investments, and well-diversified and very large portfolio of products and patents. The company is selling worldwide to thousands of customers. Even if the actual earnings of the first quarter of the year disappointed, it was not enough to drag the price down by 10%.

Product Portfolio

The company is divided into six segments:

The biggest segment is *Surveillance*. It provides imaging and recognition solutions to military, law enforcement, public safety, and governments. It also manufactures hand-held and weapon-mounted thermal imaging systems. Products price ranges from below $2,000 for hand-held systems to over $1 million for the most advanced targeting systems. Revenue from that activity accounted for 32% of total sales, with a 29% operating margin for FY2015.

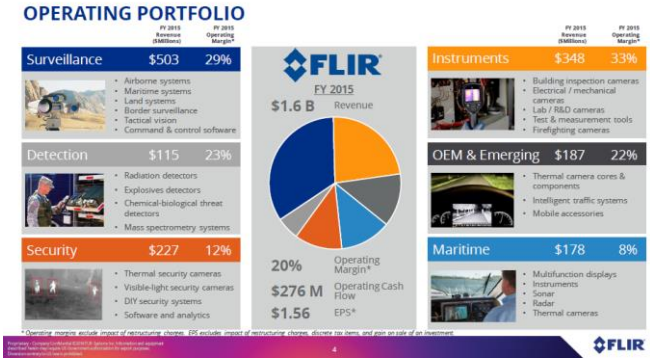
The second most important segment in terms of revenue is *Instruments*. It provides devices that image, measure, and assess thermal energy, gases, electricity, and other environmental elements. Such devices are used for commercial, industrial, and scientific applications and by the firefighting, and safety and health sectors. It accounted for 22% of total revenue, with a 33% operating margin in FY2015.

The third segment is *Security*. It develops a large range of camera and video recording systems for commercial, critical infrastructure, and home monitoring applications. It accounted for 15% of total revenue, with a 12% operating margin in FY2015.

The next segment is *OEM (Original Equipment Manufacturer) & Emerging Markets*. This segment manufactures thermal imaging camera components used by third parties to manufacture imaging systems. It also develops emerging technologies like intelligent traffic systems, imaging solutions for the smartphone market, and thermal imaging solutions for commercial-use unmanned aerial systems. It accounted for 12% of total revenue with a 22% operating margin in FY2015.

The least profitable segment is *Maritime*. It provides electronics (control systems and communications equipment) and imaging instruments for the recreational and maritime market. It accounted for 11% of total revenue, with an 8% operating margin in FY2015.

The smallest segment in terms of sales is *Detection*. It provides sensors, instruments, and integrated platform solutions for the detection, identification, and suppression of chemical, biological, radiological, nuclear, and explosives threat used for military, homeland security, first responders, and commercial applications. This segment had the best revenue growth, and accounted for 7% of total sales, with a 23% operating margin.



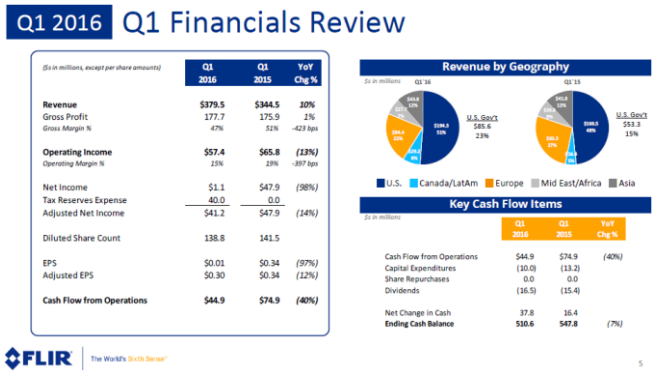
Activity Outlook

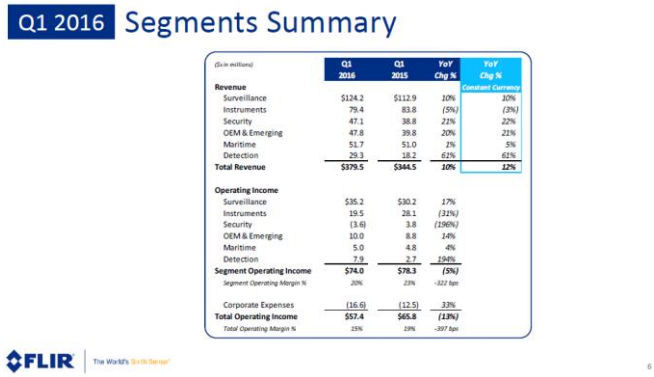
The overall market outlook for companies like FLIR is very good. The company expects a 3% to 6% growth in activity. According to Bloomberg estimates, revenue are going to increase by 5.5%, 4.5%, and 5.9% in 2016, 2017, and 2018 respectively. Over Q1 2016, revenue from all segments, except *Instruments*, went up. The *Instruments* revenue actually went up by 5% but foreign exchange negatively impacted earnings by approximately $2 million. The recent resurgence in national threats all over the world associated with the increase in military expenditures by non-ally countries are pushing governments (primarily United States, key European states, Asia, and Saudi Arabia) to increase their respective defense budgets with a primary focus on the detection of threats. The demand for detection and security high-end systems is booming following

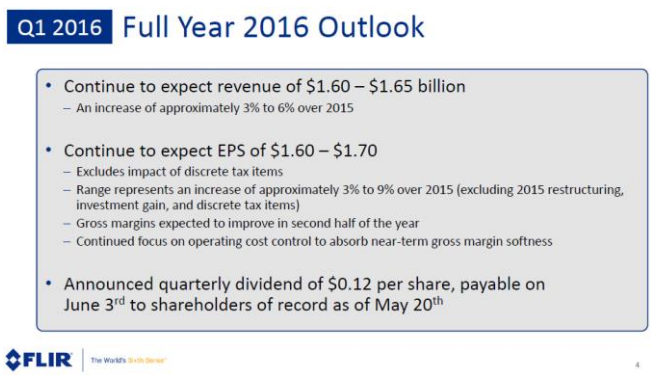
recent bombing attacks in Paris and Brussels. The threat level is currently extremely high, governments are increasing security, and that situation is not going to stop over the next years. As the company is also acting as a supplier for competitors, the OEM segment is directly going to benefit from the rise in demand for thermal imaging, detection, and security systems. The company can also benefit from regulations. A recent American regulation imposes to any nuclear facilities to have a 24/7 video surveillance system. Due to the terrorist threats, governments and private companies are going to increase surveillance and detection systems. The products FLIR are selling respond to a need to detect what cannot be observed to enhance perception and awareness, and the current geopolitical situation is making that already essential need even more important.

Q1 2016 Earnings Call

On 04/26/2016, the company reported mixed results: revenue was strong at $379.472 vs estimate of $360.75, and EPS was $0.01 vs estimate of $0.318. The EPS had been negatively impacted by a $40 million charge to establish reserves booked in the quarter. As a result, the stock went down by 7.7% to $31.31, and followed the market the next three days to finally reach $30.21 at the closing bell on 04/29/2016. Here, I think there was an overreaction following the earnings call, and that based on fundamentals and expectations, the stock will go back to $34. The adjusted EPS was $0.30 vs estimate of $0.32, but EBITDA was $111.316 million vs estimate of $75.967, that is a 46.5% positive surprise. The company recorded a $613 million backlog, which is a 10% increase over the prior year and the highest since 2008. The total revenue went up by 10% compared to prior year. The main drivers of the revenue growth came from the *Detection, Security, OEM and Emerging and Surveillance* segments that went up by 61%, 21%, 20% and 10% respectively. Revenue to Canada and Latin America went up by 78%, and sales in the US increased by 17%. Operating profit went down by 13% compared to prior year. The company was expecting a decrease in margins for the first half of the FY2016. During the earnings conference, the management explained they forecast a strong second half of the year with better margins as programs within the *Surveillance* activity will be done, and they maintained their full-year guidance. The management of the company will also focus on operating cost management The company expect a revenue growth rate of 3-6%, and a 3-9% increase in adjusted EPS.



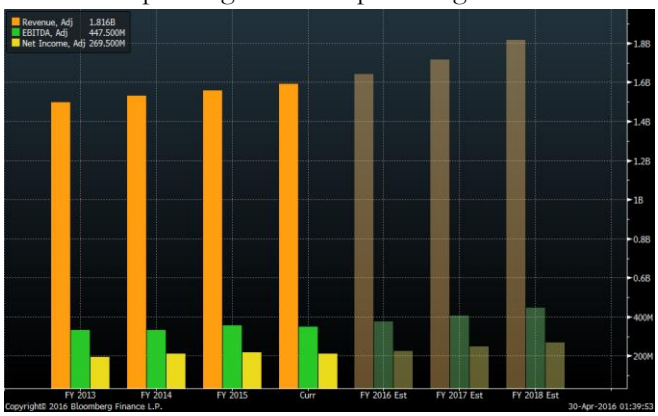


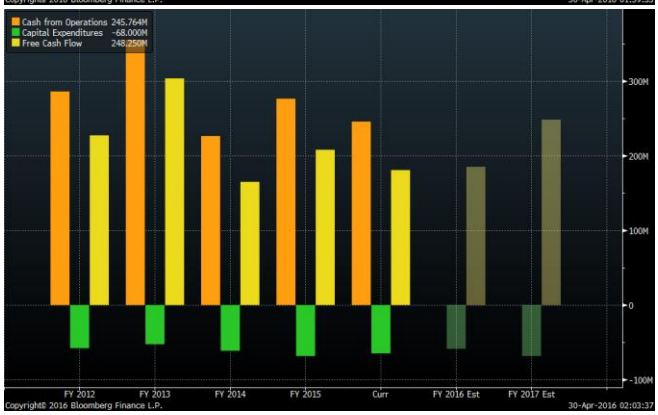


Financials

The financials of FLIR are among the best of the industry. Over the last three years, revenue, EBITDA, and net income constantly went up. The company is following a vertical manufacturing integration, which has made FLIR the most profitable company among its peers. Key acquisitions, cost management policies, and growth in revenue will create more synergies in the following years. The 2015 EBITDA margin was 7% higher than competitors at 22.82%. The 2015 Profit margin was 5.5% higher at almost 14%. The $518.5k sales per employees was much higher than any

competitors. The Free Cash Flow margin was also well better than the peers' average. Bloomberg estimates EBITDA to improve by 5%, 8.4%, and 10% in 2016, 2017, and 2018 respectively to reach $447.5 million.
The current level of cash and free cash flow will enable the company to increase its share repurchase program and its dividends to return more and more to shareholders. The Capital Expenditures are stable since 2012, and are not expected to increase over the next two years. As a result, free cash flow is expected to follow the operating cash flow positive growth.





Name	EBITDA to Net Sales:Y	SI/Empl:Y	PM:Y	P/EBITDA:D-1	P/S:D-1	Dvd Yld:Y	FCF Margin
Average	15.98%	315.72k	8.45%	11.76	1.85	2.02%	9.43%
FLIR SYSTEMS INC	22.82%	518.50k	13.99%	12.25	2.68	1.57%	13.33%
GENERAL DYNAMICS CORP	14.81%	315.01k	9.37%	9.53	1.42	2.01%	6.13%
RAYTHEON COMPANY	15.06%	381.10k	7.44%	11.72	1.63	2.10%	8.40%
UNITED TECHNOLOGIES C...	16.32%	284.76k	10.01%	9.91	1.55	2.66%	8.38%
SAFRAN SA	16.32%	286.66k	0.64%	8.80	1.44	2.18%	11.02%
LOCKHEED MARTIN CORP	14.01%	366.13k	8.11%	11.09	1.50	2.83%	9.02%
AGILENT TECHNOLOGIES ...	19.19%	342.20k	12.20%	16.78	3.38	1.06%	9.73%
ROCKWELL COLLINS INC	24.03%	268.92k	12.51%	9.92	2.30	1.54%	10.01%
SUNNY OPTICAL TECH	10.53%	106.26k	7.14%	19.19	2.02	1.39%	13.48%
SCIENCE APPLICATIONS I...	6.70%	287.67k	3.07%	8.44	0.57	2.84%	4.77%

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

Competitive Advantages

An important part of FLIR's business is its research & development. For FY2015, internally funded R&D was $133 million. R&D are used to innovate and make available new technologies capable to bring additional revenues, or simply to maintain or increase the market share by constantly updating devices. It can also be used to reduce costs during the manufacturing process. That part is especially important for FLIR as another major competitive advantage is its vertical manufacturing integration. FLIR is not only manufacturing some of the components needed to manufacture its own imaging devices, but it is also selling such components to competitors. As a result, in addition to reducing costs and gaining sales, FLIR has some bargaining power over competitors and at the same time, it has less pressure from its suppliers. The company is currently a leader developer of highly reliable, accurate and effective advanced sensor systems. The company has achieved penetration into a very wide variety of customers (thousands of commercial and government customers) worldwide offering lots of potential for future sales. The product and patent portfolio is one of the largest currently available covering civil, military, detection, surveillance maritime, unmanned, scientific, firefighting, rescuing, law enforcers, and federal agencies operations.

Conclusion

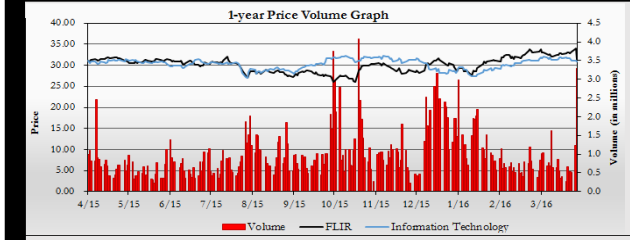
FLIR has an exceptional market position with better-than-peers financial performance. With its portfolio diversification, its very wide base of customers, and its important R&D investments and expertise, the company is better prepared to improve both top- and bottom-lines than competitors. The missed earnings is partially offset by the strong expectations, and the surprisingly high revenue. Cost reductions will come with growth in sales. The future of this company is looking good, especially in the current and expected geopolitical situation. The 10% drop in price is not sustainable and may offer good returns over the next months. I would recommend a buy as the stock is below $31.30 with a one-year target between $35 and $37.50.

FLIR Systems, Inc. (FLIR)

CENTER FOR GLOBAL FINANCIAL STUDIES

NEUTRAL

Analysis by Pierre Riffard	Current Price:	$30.21	Intrinsic Value	$31.44	Target 1 year Return: 18.84%
4/30/2016	Divident Yield:	1.5%	Target Price	$35.44	Probability of Price Increase: 98.2%



Description

FLIR Systems, Inc. designs, develops, manufactures, and markets thermal imaging, visible-light imaging systems, locater systems, measurement and diagnostic systems, and threat-detection solutions worldwide.

General Information

Sector	Information Technology
Industry	Electronic Equipment, Instruments and Components
Last Guidance	November 3, 2015
Next earnings date	July 26, 2016
Estimated Country Risk Premium	7.04%
Effective Tax rate	26%
Effective Operating Tax rate	26%

Market Data

Market Capitalization	$4,155.66
Daily volume (mil)	0.74
Shares outstanding (mil)	137.56
Diluted shares outstanding (mil)	140.10
% shares held by institutions	94%
% shares held by investments Managers	84%
% shares held by hedge funds	4%
% shares held by insiders	0.96%
Short interest	2.25%
Days to cover short interest	3.27
52 week high	$34.09
52-week low	$25.12
Levered Beta	0.58
Volatility	27.85%

Past Earning Surprises

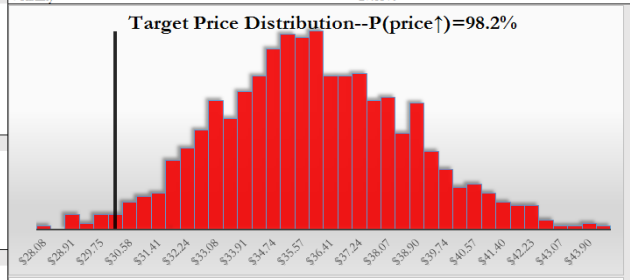
Quarter ending	Revenue	EBITDA
3/31/2015	-6.82%	-12.71%
6/30/2015	2.32%	-10.60%
9/30/2015	-3.71%	-11.66%
12/31/2015	-0.87%	-9.62%
3/31/2016	2.01%	-16.10%
Mean	-1.42%	-12.14%
Standard error	1.7%	1.1%

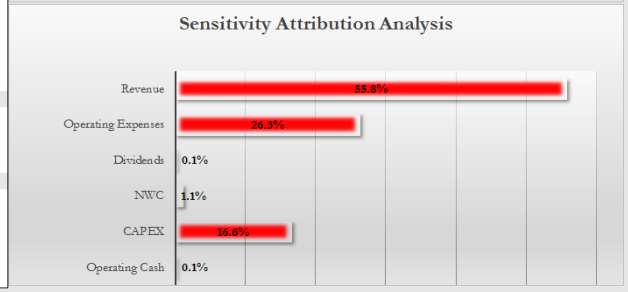
Peers

National Instruments Corporation
Rockwell Collins Inc.
AeroVironment, Inc.
FEI Company
Raytheon Company
MTS Systems Corporation
General Dynamics Corporation

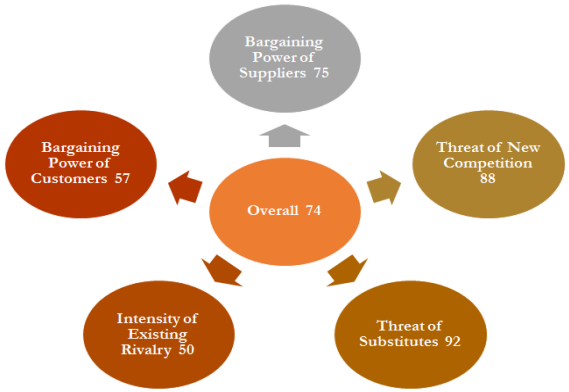
Management	Position	Total compensations growth	Total return to shareholders
Teich, Andrew	Chief Executive Officer, Pre	38.47% per annum over 5y	-3.22% per annum over 5y
Singhi, Amit	Chief Financial Officer and	N/M	0% per annum over 0y
Surran, Thomas	Chief Operating Officer and	31.01% per annum over 2y	-2.08% per annum over 2y
Muessle, David	Chief Accounting Officer and	N/M	0% per annum over 0y
DuChene, Todd	Chief Ethics & Compliance Of	23.13% per annum over 1y	-11.76% per annum over 1y
Frank, Jeffrey	Senior Vice President of Glo	29.12% per annum over 1y	-11.76% per annum over 1y

Profitability	FLIR (LTM)	FLIR (5 years historical average)	Industry (LTM)
ROIC	12.2%	17.01%	10.19%
NOPAT Margin	19%	22.82%	13.1%
Revenue/Invested Capital	0.64	0.75	0.78
ROE	11.9%	16.19%	11.43%
Adjusted net margin	18%	22.12%	12.1%
Revenue/Adjusted Book Value	0.65	0.73	0.94
Invested Funds	**FLIR (LTM)**	**FLIR (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	17.2%	17.4%	16%
Estimated Operating Cash/Total Capital	2.1%	2.2%	N/A
Non-cash working Capital/Total Capital	17.1%	18.9%	16%
Invested Capital/Total Capital	85.0%	84.7%	82%
Capital Structure	**FLIR (LTM)**	**FLIR (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.10	0.11	0.16
Cost of Existing Debt	3.64%	4.13%	3.49%
Estimated Cost of new Borrowing	2.85%	2.68%	3.49%
CGFS Risk Rating	A	A	BBB
Unlevered Beta (LTM)	0.54	0.73	1.02
WACC	7.52%	8.94%	10.68%





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



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	4.5%	19.0%	1.62
3/31/2017	4.3%	19.3%	1.62
3/31/2018	4.0%	19.7%	1.59
3/31/2019	3.9%	19.7%	1.54
3/31/2020	3.8%	19.6%	1.50
3/31/2021	3.7%	19.6%	1.47
3/31/2022	3.5%	20.1%	1.48
3/31/2023	3.4%	20.5%	1.49
3/31/2024	3.3%	20.9%	1.49
3/31/2025	3.2%	21.4%	1.49
3/31/2026	3.1%	21.7%	1.49
Continuing Period	3.0%	22.1%	1.50

Period	Invested Capital	Net Claims	Price per share
Base Year	$1,728.06	-$5.67	$31.36
3/31/2017	$2,048.22	-$419.36	$35.37
3/31/2018	$2,193.12	-$861.19	$39.36
3/31/2019	$2,336.66	-$1,306.19	$43.40
3/31/2020	$2,486.82	-$1,756.80	$47.48
3/31/2021	$2,528.40	-$2,211.91	$51.60
3/31/2022	$2,654.25	-$2,681.45	$55.86
3/31/2023	$2,744.67	-$3,163.61	$60.24
3/31/2024	$2,830.35	-$3,657.93	$64.74
3/31/2025	$2,907.15	-$4,162.74	$69.35
3/31/2026	$2,974.05	-$4,675.85	$74.05
Continuing Period			

SIENAcollege

Siena Market Line
1st week of May 2016

comScore, Inc. (SCOR)

NASDAQ: SCOR

Analyst: Zach Collins.

BUY

Price Target: $38.50

Key Statistics

Market Price:
$30.62
Industry:
Digital Technology Services
Market Cap: $1.75B
52 Week Range:
$26.21 – $65.00
Beta: 0.82

Thesis Points:

- Recent merger with Rentrak will provide significant value creation and long term growth
- Recent partnership with Facebook will provide a catalyst for revenue growth and improved marketing
- Market overreaction has led to the undervaluation of this stock
- High growth industry

Company Description:

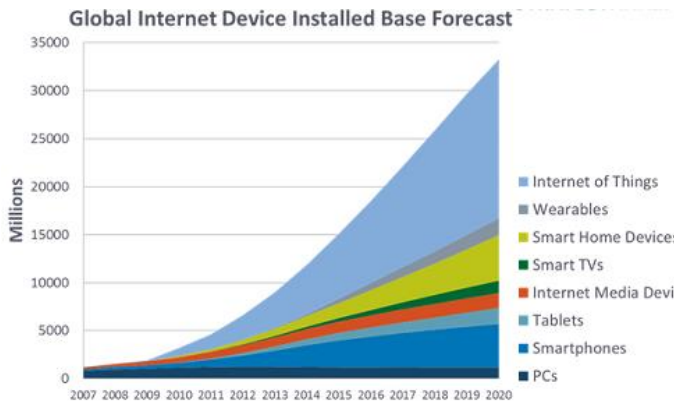
comScore, Inc. provides trusted, independent, data, metrics, products, and services to clients in the media, advertising, and marketing industries. ComScore delivers digital media analytics that help content owners and advertisers understand the composition of consumer media audiences. This allows their consumers to understand the performance and effectiveness of their advertising to their targeted audiences. This is a technology driven company that measures what people do as they navigate the digital world across multiple technology platforms and devices including smartphones, tablets, televisions, and desktop computers. Their products measure consumer interactions with digital media, including web sites, apps, video programming and advertising. This company was founded in 1999 and is headquartered in Reston Virginia. The primary consumers for ComScore are located in the United States, Europe, Canada, Latin America and Asia. Since the recent merger with Rentrak on February 1st 2016, this unified company now operates in more than 75 countries with more than 3,200 consumers within their global clientele.

Thesis

ComScore, Inc. is a global leader in analyzing the digital world based on their number of users, product development, and access to advanced technology. With the recent merger between comScore and Rentrak, comScore market share has increased exponentially. One of the primary focuses for top management at com Score is brand recognition, and with the recent partnership with Facebook, their marketing efforts will be significantly improved. The long term partnership with Kantar will continually provide comScore with access to critical television related advertising data. This partnership also provides comScore with the ability to collaborate on certain cross-media analytics. The digital technology services industry is a high growth industry, and comScore has positioned themselves with the potential to achieve high growth within the industry. A recent overreaction in the market has driven down the price of this stock, despite comScore consistently outperforming earnings estimates and improving top and bottom line growth.

Industry Outlook

It is important to understand in recent years, the movement towards a more digital society. Almost everything you can think of can be done digitally now a days, and this trend is only going to continue in the upcoming future. The following graph depicts the growth of global internet devices up to 2020.



Source: Strategy Analytics, October 2014

As you can see from this graph, every globally installed internet device is forecasted to rise up to 2020. Of which comScore has access to digital data and metrics for each segment of these internet devices. The need for the services of comScore will increase as the number of globally installed internet devices continues to rise. The primary factors of growth for this industry include rapid advancements in technology as well as the increase in global internet devices per consumer. By the end 2014, nearly 12 Billion devices had access to the internet. Approximately 1.7 devices with internet access per person globally. This number is forecasted to rise to 4.3 devices per person by 2020, approximately 33 billion devices worldwide. The outlook of this industry provides a catalyst for high growth potential for comScore.

Rentrak Merger

The recent merger with Rentrak announced on February 1, 2016 allows comScore to develop an improved model for dynamic, cross-platform measurement on a massive scale. This acquisition is forecasted to increase top and bottom line growth down the income statement for comScore. ComScore paid just over $800 million in cash considerations, at a premium of 19.11% above market price for Rentrak. This merger brings together two entrepreneurial and highly innovative companies within the digital technology industry.

This acquisition has not only increased market share for comScore, but has provided them access to valuable census and demographic data and technology at Rentrak. Specifically in the areas of television and movie advertisements. This increase in data storage, along with the improvement in analyzing and precisely measuring digital data will help create long term value for comScore as they provide more accurate information to their target consumers.

Market Overreaction

On March 4th, comScore was trading at a price above $40 per share. The following Monday, (March 7th) comScore announced a delay in the release of their 10k as a result of accounting discrepancies. This is an announcement that wall street does not take lightly, as shares of comScore plummeted 28% on this news to $27 per share. Since then the stock has slowly shown signs of recovery, however, is still only trading slightly above their 52 week low. Despite the delayed 10k and recent decline in price, the short interest in comScore is only 7%. As comScore continues to outperform earnings estimates at this low valuation, this stock

presents an attractive buying opportunity. And when their 10k is released, this stock has the potential to realize large gains.

Facebook Partnership

On April 20, 2016, comScore announced a partnership with Facebook. This partnership will allow comScore to report viewable data directly in the Ad Validation module of validated Campaign Essentials (vCE) directly to Facebook. This module measures gross rating points, demographics, and behavioral profiles of audiences reached by video campaigns. As well as the extent to which the video ads were made viewable for the target audience. This global partnership includes viewability metrics for video and display campaigns running on Facebook, for both desktop and mobile platforms. This independent ad verification partnership will ensure to advertisers that their digital data is accurate

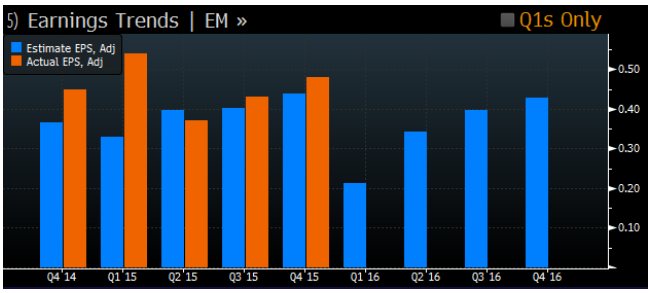
The partnership permits the clients of comScore to gain access to this data in the vCE platform, and provides these clients with a more complete view of the overall performance of their campaign. This partnership will enable advertisers to minimize their advertising spending, and ensure that these ads are reaching their target audience. Facebook is one of the most well-known companies on the planet. This partnership will further promote the services of comScore.

Financials

A brief look at the financials for comScore show an improvement in profitability in terms of overall sales revenue, as well as EBITDA and net margins.

Revenue, Adj	255.2	286.9	329.2	368.8	368.8	520.3	625.4
Growth %, YoY	9.8	12.4	14.7	12.1	12.1	41.1	20.2
Gross Profit, Adj	168.8	196.9	231.7	252.7	252.7	353.4	433.6
Margin %	66.2	68.6	70.4	68.5	68.5	67.9	69.3
EBITDA, Adj	20.4	33.3	28.4	47.1	47.1	124.1	161.9
Margin %	8.0	11.6	8.6	12.8	12.8	23.8	25.9
Net Income, Adj	-8.7	1.2	1.8	2.5	2.5	67.6	96.9
Margin %	-3.4	0.4	0.5	0.7	0.7	13.0	15.5
EPS, Adj	-0.26	0.03	0.05	0.06	0.03	1.30	1.95
Growth %, YoY	-181.6	–	63.6	20.4	-47.9	1,915.4	50.5
Cash from Operations	44.9	44.6	49.5	59.9	59.9		
Capital Expenditures	-7.6	-4.6	-7.6	-7.1	-7.1	-10.9	-10.1
Free Cash Flow	37.3	40.0	41.8	52.8	52.8	78.3	115.8

As you can see from these financials, comScore has increased their level of profitability through both top and bottom line growth. A trend that analysts' are forecasting to continue.



As you can see from this chart of past earnings performance, comScore has continually outperformed earnings estimates in terms of earnings per share. A trend that is likely to continue as the financial strength of comScore improves.

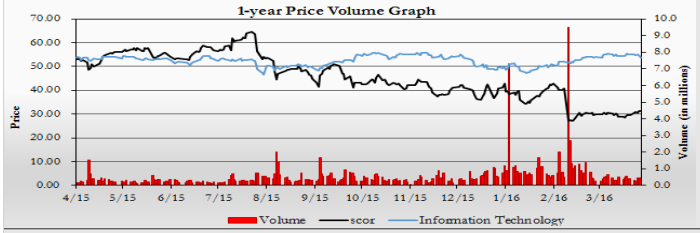
ComScore also possess a clean balance sheet, with minimal long term debt. This shows that comScore has little financial risk as they don't have to worry about large interest payments.

Conclusion

After taking into consideration the high growth of the digital technology services industry, as well as the acquisition of Rentrak and recent partnership with Facebook, comScore shows signs of significant growth potential. The markets over reaction on the news of the delayed 10k provides a catalyst for high returns when their 10k is released. The financial improvement of comScore as well as little debt on hand, and a 7% short interest in the market shows this a relatively low risk company. Based on the analysis of their financials and high growth potential, I recommend a buy on comScore.

comScore, Inc. (scor) — CENTER FOR GLOBAL FINANCIAL STUDIES — NEUTRAL

Analysis by Zach Collins	Current Price:	$31.05	Intrinsic Value	$27.61	Target 1 year Return: 13.07%
4/30/2016	Divident Yield:	0.0%	Target Price	$35.11	Probability of Price Increase: 84%



Description

comScore, Inc. operates as a cross-platform measurement company that measures audiences, brands, and consumer behavior worldwide.

General Information

Sector	Information Technology
Industry	Internet Software and Services
Last Guidance	November 3, 2015
Next earnings date	May 1, 2016
Estimated Country Risk Premium	4.84%
Effective Tax rate	35%
Effective Operating Tax rate	58%

Market Data

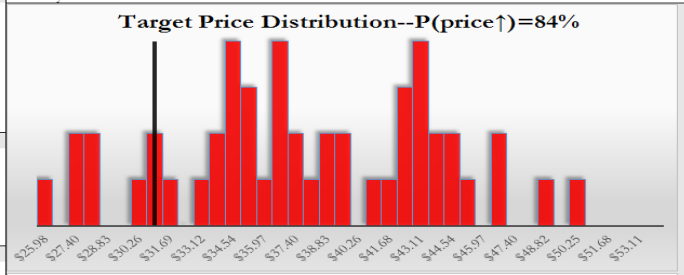
Market Capitalization	$1,717.07
Daily volume (mil)	0.20
Shares outstanding (mil)	56.67
Diluted shares outstanding (mil)	37.88
% shares held by institutions	78%
% shares held by investments Managers	54%
% shares held by hedge funds	7%
% shares held by insiders	2.01%
Short interest	5.54%
Days to cover short interest	3.22
52 week high	$65.00
52-week low	$26.21
Levered Beta	1.88
Volatility	46.06%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
12/31/2014	3.30%	-86.29%
3/31/2015	-1.69%	-114.46%
6/30/2015	-0.30%	-47.81%
9/30/2015	-2.79%	-51.03%
12/31/2015	-4.45%	-41.70%
Mean	-1.18%	-68.26%
Standard error	1.3%	13.9%

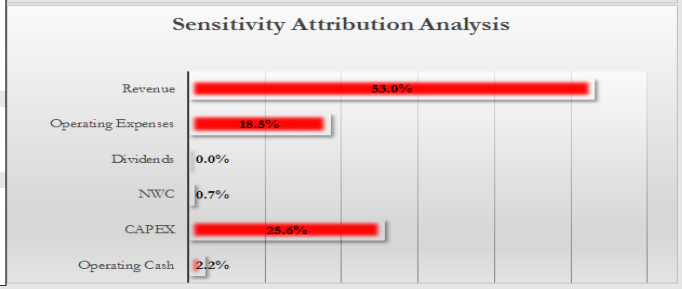
Peers

Bankrate, Inc.
QuinStreet, Inc.
Angie's List, Inc.
Cornerstone OnDemand, Inc.
WebMD Health Corp.
Box, Inc.
Rocket Fuel Inc.
Monster Worldwide, Inc.

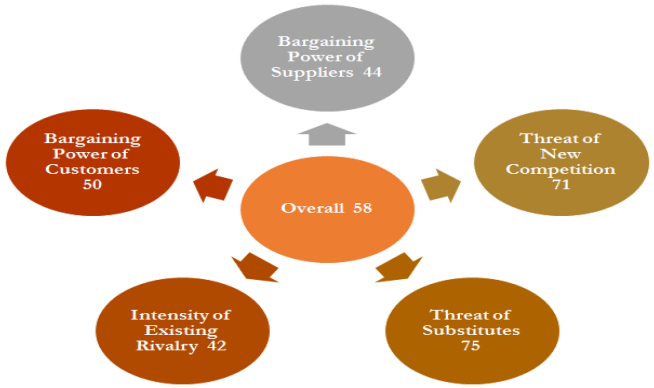


Management	Position	Total compensations growth	Total return to shareholders
Abraham, Magid	Co-Founder and Executive Cha	12.05% per annum over 5y	4.98% per annum over 5y
Matta, Serge	Chief Executive Officer and	244.95% per annum over 2y	83.56% per annum over 2y
Fulgoni, Gian	Co-Founder and Executive Cha	2.04% per annum over 5y	4.98% per annum over 5y
Wesley, Melvin	Chief Financial Officer and	N/M	0% per annum over 0y
Meierhoefer, Cameron	Chief Operating Officer	89.36% per annum over 2y	83.56% per annum over 2y
Lin, Christiana	Chief Privacy Officer, Execu	-100% per annum over 3y	6.06% per annum over 3y

Profitability	scor (LTM)	scor (5 years historical average)	Industry (LTM)
ROIC	2.9%	16.01%	13.83%
NOPAT Margin	5%	23.40%	18.6%
Revenue/Invested Capital	0.59	0.68	0.74
ROE	2.7%	16.69%	14.95%
Adjusted net margin	4%	22.75%	17.1%
Revenue/Adjusted Book Value	0.64	0.73	0.88
Invested Funds	**scor (LTM)**	**scor (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	15.5%	11.5%	71%
Estimated Operating Cash/Total Capital	7.4%	6.3%	N/A
Non-cash working Capital/Total Capital	0.0%	-1.9%	-13%
Invested Capital/Total Capital	92.0%	94.8%	45%
Capital Structure	**scor (LTM)**	**scor (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.06	0.08	0.09
Cost of Existing Debt	4.36%	5.52%	2.92%
Estimated Cost of new Borrowing	3.77%	3.93%	2.92%
CGFS Risk Rating	BB	BB	BB
Unlevered Beta (LTM)	1.82	1.32	1.08
WACC	12.60%	10.70%	9.00%



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



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	12.1%	4.8%	0.23
12/31/2016	40.2%	29.6%	1.43
12/31/2017	17.7%	29.9%	1.34
12/31/2018	12.8%	30.7%	1.33
12/31/2019	20.6%	30.6%	1.43
12/31/2020	14.0%	29.4%	1.36
12/31/2021	13.2%	28.2%	1.32
12/31/2022	11.2%	27.1%	1.27
12/31/2023	9.1%	25.9%	1.22
12/31/2024	7.1%	24.5%	1.15
12/31/2025	5.0%	23.2%	1.08
Continuing Period	3.0%	21.7%	1.01

Period	Invested Capital	Net Claims	Price per share
Base Year	$282.48	$73.07	$29.89
12/31/2016	$386.30	$33.62	$37.44
12/31/2017	$478.66	-$68.10	$45.57
12/31/2018	$584.20	-$226.36	$54.33
12/31/2019	$621.38	-$375.02	$64.12
12/31/2020	$871.35	-$558.40	$74.64
12/31/2021	$1,122.60	-$763.85	$85.78
12/31/2022	$1,335.40	-$1,000.57	$97.48
12/31/2023	$1,523.20	-$1,255.44	$109.52
12/31/2024	$1,785.86	-$1,531.45	$121.64
12/31/2025	$2,043.73	-$1,822.79	$133.56
Continuing Period			

SIENAcollege

Siena Market Line
1st week of May 2016

Barnes & Noble

NASDAQ:BKS

Analyst: Pierre Gouesclou
Sector: Retail

Sell

Price Target: $9.86

Key Statistics as of 04/30/2016

Market Price:	$11.75
Industry:	Specialty retail
Market Cap:	$877.9M
52-Week Range:	$7.25-18.99.
Beta:	1.18

Thesis Points:

- Barnes & Noble operates in a saturated market
- Too much Property, Plant & Equipment
- Their sales in store is decreasing
- Misses most of their estimates
- Barnes & Noble struggles to generate return on Investment

Company Description:

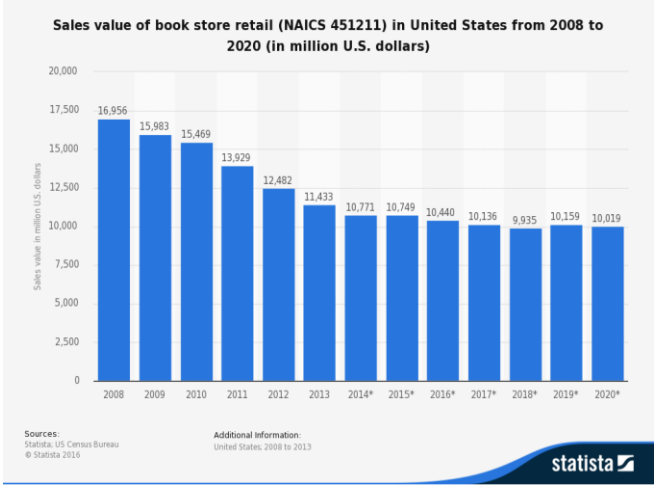
Barnes & Noble is a company operating in hardcover book and EBook retail mostly in the United-States. The New York City based company went public in 1993 with a stock price of $6.5 per share and has been familiar with success in the past. Recently, with the increasing weight of digital reading methods the company's revenues has been falling drastically, driving the stock price down from $18 to $12.55 a share. In order to overcome this existential threat the company began to launch digital products to appeal to the developing market of Book retailing. Since its issuance in 2009 the Nook tablet had been upgraded and the company created several partnerships to enhance the attractiveness and efficiency of the device.

Thesis

Barnes & Noble has tried to adapt to a changing market by developing their web and digital presence. This effort made by the company does not have any success as the weight of revenue generated by the Nook tablet keeps decreasing year by year. With the expect failure of the Nook tablet we can expect the company to soon collapse as they fail to compete with their online competitors such as Amazon. In the United-States but the company is burdened by their strong physical presence. Furthermore in the last years the company's cash flows has suffered from strong expenses related to the purchase of Plants and equipment.

Industry Outlook

The book retail industry has always been a very competitive market with low margins to be made by companies. In the last year with the rise of online retail and the creation of EBooks the competition increased massively leading to more competitive retail prices between the companies. This high competition triggered a reduction of margins for the companies that can prove fatal for brick and mortar companies such as Barnes & Noble. Companies that were able to adapt efficiently to this moving market were able to drain the sales from more traditional companies.



Porter's 5 Forces

Global Observations: Barnes & Noble has a very low porter's 5 Forces of 33 out of 100. This low score shows the danger of the company regarding the several attributes of their products and their presence on the market.

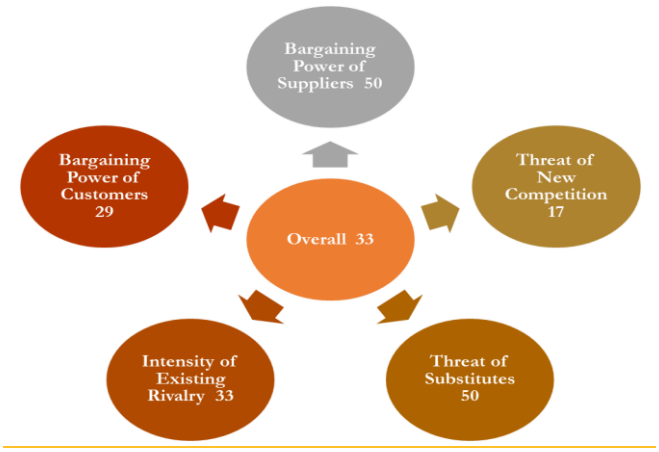
Bargaining power of suppliers: With a score of 50 the bargaining power of suppliers is the best force for Barnes & Noble. Given their line of Business the company pursues their business with suppliers of a very broad and diversified segment. In other word the suppliers of such goods are in number and proposes important amounts of products. Furthermore the cost of switching suppliers is very low and therefore Barnes & Noble can have more flexibility on this aspect of their business.

Bargaining Power of Customers: On the other hand Barnes & Noble is suffering deeply from the customers bargaining power with a score of 29/100. In a saturated and diversified market such as this one the customer is able to find substitutes with an equal quality. With the rise of the E-commerce and the digital reading the customer also gained in bargaining power.

Intensity of Existing Rivalry: The Existing Rivalry in this industry is massive given the important amount of competitors and the small government control over these operations. In addition given the important costs of having an inventory in storage, Barnes & Noble can prove to be very sensitive towards this segment.

Threat of Substitutes: With a score of 50 Barnes & Noble has an average sensitivity towards this aspect of their business. Given the huge amount of substitutes with no specific differentiations, the company is not sensitive to this aspect.

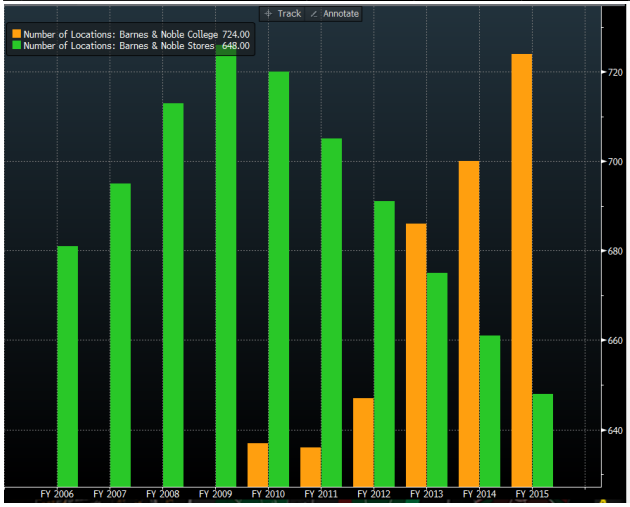
Threat of New Competition: The threat of New Competition is important for Barnes & Noble. With an industry with such low barriers to entry and technological requirements the company can truly suffer if new companies were to enter the market. This phenomenon was illustrated in the past when several companies such as amazon entered the hardcopy and digital book retailing.



Book segment

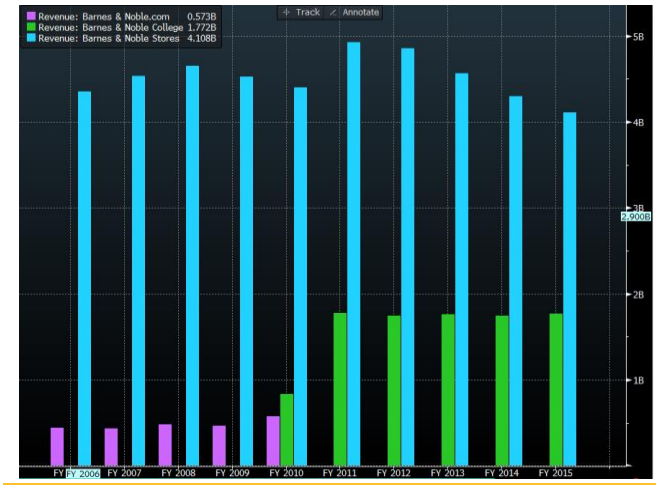
As mentioned earlier Barnes & Noble has encountered issues regarding their hardcopy book retailing segment. To counter this trend the company began concentrating their expansion efforts on their recent Barnes & Noble College Segment which consist in on campus bookstores for text books and other supplies.

In Millions of USD except Per Share	FY 2012		FY 2013		FY 2014		FY 2015	
12 Months Ending	04/28/2012		04/27/2013		05/03/2014		05/02/2015	
Revenue	7,129.2	100.0%	6,839.0	100.0%	6,381.4	100.0%	6,069.5	100.0%
Barnes & Noble Retail	4,852.9	68.1%	4,568.2	66.8%	4,295.1	67.3%	4,108.2	67.7%
Barnes & Noble College	1,743.7	24.5%	1,763.2	25.8%	1,748.0	27.4%	1,772.4	29.2%
NOOK	933.5	13.1%	780.4	11.4%	505.9	7.9%	263.8	4.3%
Elimination	-400.8	-5.6%	-272.9	-4.0%	-167.7	-2.6%	-75.0	-1.2%
Video-Game and Entertainment-S...	–		–		–		–	
Number of Locations	1,338.00	100.0%	1,361.00	100.0%	1,361.00	100.0%	1,372.00	100.0%
Barnes & Noble College	647.00	48.4%	686.00	50.4%	700.00	51.4%	724.00	52.8%
Barnes & Noble Stores	691.00	51.6%	675.00	49.6%	661.00	48.6%	648.00	47.2%



(Source: Bloomberg.)

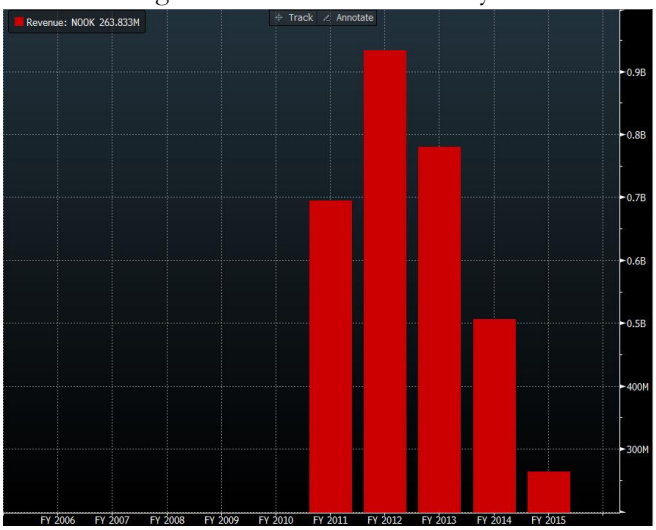
These charts illustrate the strategy launched by Barnes & Noble in order to reverse the downward trend of the firm. Since their first college store in 2009 the company has been increasing their number of location and their revenues generated by these stores. On the other hand when we look closer to the return on investment from these stores we can clearly see that even if the number of stores are increasing the revenue growth does not follow. Given the decrease from all their sources of revenue the company will require to enter a new market in order to survive.



(Source: Bloomberg.)

The Nook

The Nook tablet has been a very important product for Barnes & Noble when they first launched on October 2009. This product was supposed to counterbalance the reduction of revenue related to hard copies in the years to follow. After reaching its revenue peak of almost a Billion dollars in 2012 the Nook tablet constantly decreased to reach less than 300 million dollars of revenue in 2015. This downfall is due to a combination of an increasing competition and the weight of the Amazon product (Kindle) in the markets. Barnes & Noble who failed to prove itself as the leader in EBooks is currently suffering the price. The Nook has been included in several partnerships in the last year including a big partnership with Microsoft. This old partnership included the access to eBook platform to Microsoft clients and was ended in 2014 when Barnes & Noble bought back the shares owned by Microsoft.



(Source: Bloomberg.)

In the current situation the company can clearly not rely on the Nook tablet to optimize their revenues in the short or long term. If anything, as a technological product the Nook required research & development expenses that could be invest towards more promising goals. In addition as shown below the Nook tablet is creating a negative operating income for the company.

(Source: Bloomberg.)

Valuation

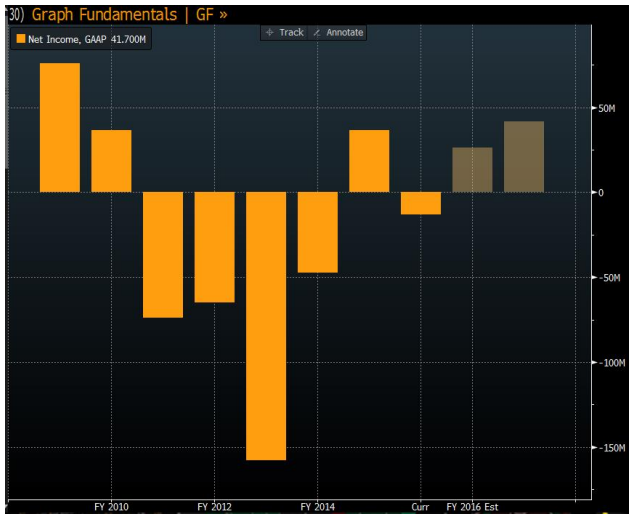
Several variables were to be set before undertaking the valuation of a company on the decline such as Barnes & Noble.

General Assumptions: In order to valuate Barnes & Noble I decided to set the tax rate at 40% and the risk Premium at 6% according to the data for the United-States of America. Even if the company started selling several products in the U.K. its main source of revenue is the United-States of America. The Beta of the company has been set at a 1 year Beta value of 1 which is slightly higher than the base year beta. In order to maintain a conservative vision of the company the cost of debt (kd) has been fixed at the last period data of 1.18%.

Valuation: To perform this valuation I decided to focus on a neutral approach following the current trends of the company. In this case I assumed that the company would follow the same trend they had in the past years without big difference. The SG&A of the company was capitalized at 20% given their management. Furthermore I applied an Additional premium of 2.26% given their potential risk in the years to come. This conservative valuation mode generated a relative decrease in the value of the company in a 1-year time period.

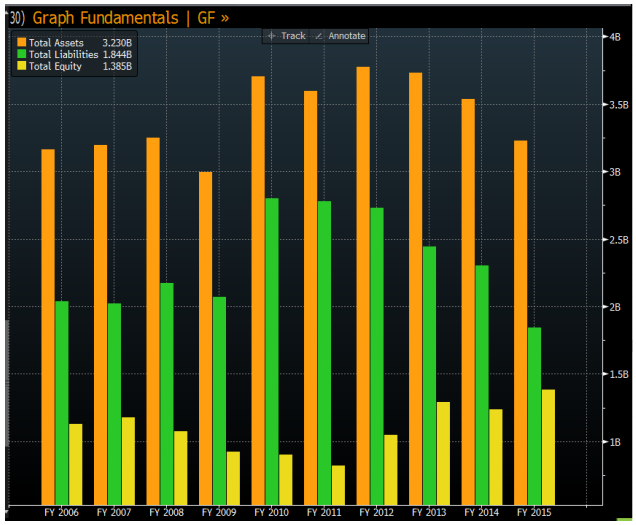
Financials

Income Statement: In the last years the company has suffered several years of negative Net income due to important drops in Sales. Between 2011 and 2015 the sales of the company decreased by 13%. Considering the threat of declining sales Barnes & Noble reduced their Total Operating costs (including COGS) by 6% against a reduction of revenue of 5%. This restructuration triggered an increase of their operating income of 88%. In addition to these cost reduction Barnes & Noble payed 40% less Interest expenses and did not have to pay Restructuring Charges in 2015. The company improved their Net income from $-47.3 million to $36.6 million between 2014 and 2015.



(Source: Bloomberg.)

Balance Sheet: In 2015 Barnes 7 Noble encountered a 9% reduction of their Total Assets. This decrease is mostly due to their Cash & cash Equivalent reduction of 78% in the last year. This decrease is related to two expenses contracted by the company: Reacquisition of preferred membership interest in Nook ($76.2 million) and the Repayment of Junior Seller note ($127.3 million). Furthermore given the reduction of their activities the company decreased their Net Property, Plant & Equipment by 8% in the year. On the Liability and Equity side it can be observed that the company is seeking to balance their capital structure by increasing Equity and Lowering debt. This desire to restructure is mostly related to their higher risk and lower solvency that might bring their interest rates up if the they were to borrow cash.



(Source: Bloomberg.)

Overall Barnes & Noble reduced all the liability lines of their income statement leading a decrease of their Total Liabilities of 20%. On the other hand the company

nearly doubled their Equity in the past year with an increase of 81%. Although Barnes & Noble is still repurchasing treasury stocks it has also been benefiting massively from issuing stocks through the Additional Paid In Capital. In 2015 the company has acknowledged an increase of Paid in Capital of 38% and reported an increase of their Total equity of 12%.

Conclusion

Barnes & Noble has suffered from a decreased in revenue in the last years, forcing them to modify their operations and customer focus. This refocus is not efficient enough and the company is failing its expansion in other segments of this saturated market. In addition the company is currently "too expensive" to be considered for an acquisition by any of their competitors. Given this data I recommend a Sell of Barnes & Noble with a 1-year target price of $9.86, with a probability of price increase of 53%. This price target implies a loss of value of 12.35% .

SIENAcollege

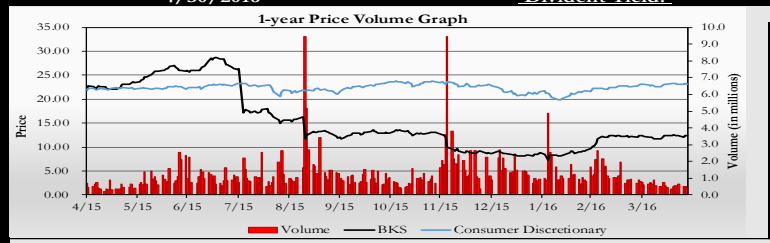
Siena Market Line
1st week of May 2016

Barnes & Noble, Inc. (BKS) — CENTER FOR GLOBAL FINANCIAL STUDIES — NEUTRAL

Analysis by Pierre Gouesclou
4/30/2016

Current Price:	$11.75	Intrinsic Value	$10.57
Divident Yield:	3.8%	Target Price	$9.86

Target 1 year Return: -12.35%
Probability of Price Increase: 53.4%



Description

Barnes & Noble, Inc. retails books, textbooks, magazines, newspapers, and other contents in the United States.

General Information

Sector	Consumer Discretionary
Industry	Specialty Retail
Last Guidance	November 3, 2015
Next earnings date	June 23, 2016
Estimated Country Risk Premium	6.00%
Effective Tax rate	40%
Effective Operating Tax rate	51%

Market Data

Market Capitalization	$877.61
Daily volume (mil)	0.66
Shares outstanding (mil)	74.69
Diluted shares outstanding (mil)	69.79
% shares held by institutions	78%
% shares held by investments Managers	53%
% shares held by hedge funds	26%
% shares held by insiders	22.80%
Short interest	6.84%
Days to cover short interest	4.73
52 week high	$29.00
52-week low	$7.25
Levered Beta	1.79
Volatility	61.96%

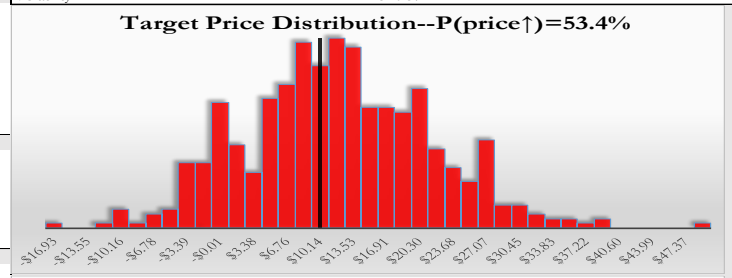
Past Earning Surprises

Quarter ending	Revenue	EBITDA
1/31/2015	-25.15%	-24.44%
5/2/2015	-1.00%	-47.17%
8/1/2015	-3.13%	-46.90%
10/31/2015	N/A	N/A
1/30/2016	-0.70%	-9.30%
Mean	-7.49%	-31.95%
Standard error	5.9%	9.2%

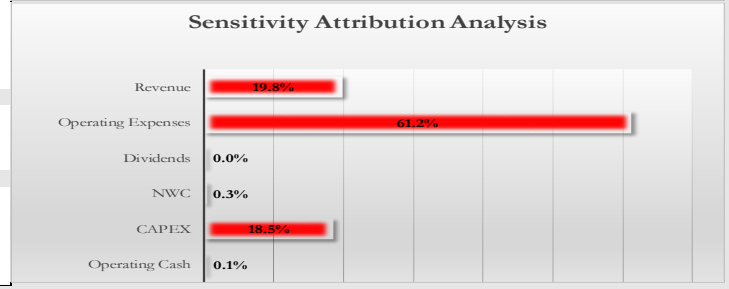
Peers

News Corporation
Quad/Graphics, Inc.
Hubbell Inc.
R.R. Donnelley & Sons Company
TEGNA Inc.
Acuity Brands, Inc.
Scholastic Corporation
Whole Foods Market, Inc.

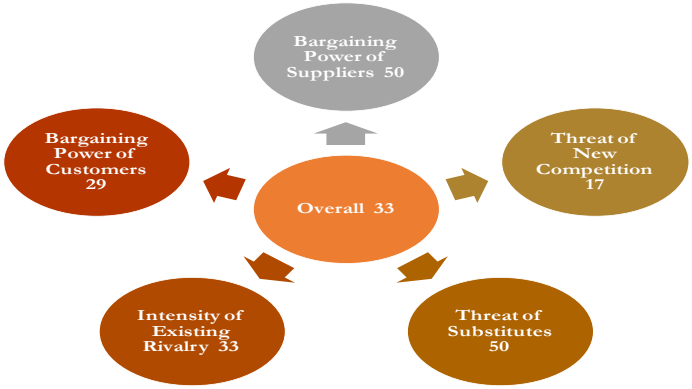
Management	Position	Total compensations growth	Total return to shareholders
Riggio, Leonard	Founder and Executive Chairm	-14.51% per annum over 5y	-11.45% per annum over 5y
Lindstrom, Allen	Chief Financial Officer	-7.48% per annum over 3y	14.06% per annum over 3y
Klipper, Mitchell	Special Advisor	-24.21% per annum over 5y	-11.45% per annum over 5y
Boire, Ronald	Chief Executive Officer and	N/M	N/M
Carey, Jaime	Chief Operating Officer	N/M	0% per annum over 0y
Herpich, Peter	Principal Accounting Officer	N/M	N/M



Profitability	BKS (LTM)	BKS (5 years historical average)	Industry (LTM)
ROIC	3.4%	4.57%	19.87%
NOPAT Margin	4%	5.17%	6.8%
Revenue/Invested Capital	0.84	0.88	2.91
ROE	11.7%	17.59%	23.30%
Adjusted net margin	3%	4.04%	6.4%
Revenue/Adjusted Book Value	3.35	4.36	3.62
Invested Funds	**BKS (LTM)**	**BKS (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	1.0%	2.2%	18%
Estimated Operating Cash/Total Capital	1.0%	1.4%	N/A
Non-cash working Capital/Total Capital	0.0%	1.8%	17%
Invested Capital/Total Capital	102.9%	104.7%	83%
Capital Structure	**BKS (LTM)**	**BKS (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	7.18	3.94	0.22
Cost of Existing Debt	1.18%	3.53%	7.01%
Estimated Cost of new Borrowing	0.97%	2.68%	7.01%
CGFS Risk Rating	AAA	A	A
Unlevered Beta (LTM)	0.64	0.30	0.91
WACC	4.25%	3.69%	9.00%



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



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	26.8%	4.0%	0.79
1/30/2017	-11.6%	5.2%	1.07
1/30/2018	-1.4%	3.8%	0.45
1/30/2019	-1.3%	5.5%	0.94
1/30/2020	-1.2%	5.8%	0.96
1/30/2021	-0.6%	5.6%	0.89
1/30/2022	-0.1%	5.4%	0.86
1/30/2023	0.3%	5.3%	0.82
1/30/2024	0.8%	5.2%	0.79
1/30/2025	1.2%	5.1%	0.80
1/30/2026	1.7%	5.0%	0.75
Continuing Period	2.1%	4.8%	0.72

Period	Invested Capital	Net Claims	Price per share
Base Year	$5,829.17	$5,011.74	$4.60
1/30/2017	$6,443.14	$4,458.29	$10.19
1/30/2018	$6,475.97	$2,535.67	$13.53
1/30/2019	$6,685.85	$2,203.13	$16.30
1/30/2020	$7,143.65	$1,959.07	$19.20
1/30/2021	$6,876.78	$1,631.89	$22.14
1/30/2022	$6,789.61	$1,336.45	$25.07
1/30/2023	$4,961.64	$1,067.10	$27.98
1/30/2024	$4,894.38	$822.73	$30.90
1/30/2025	$4,937.63	$654.32	$33.84
1/30/2026	$4,884.69	$451.18	$36.83
Continuing Period			

SIENAcollege

Siena Market Line
1st Week of May 2016

Crocs, Inc.

NASDAQ: CROX

Analyst: Marianne Staudt
Sector: Consumer Disc.

SELL

Price Target: $7.42

Key Statistics as of 4/27/2016

Market Price:	$9.83
Industry:	Textile-Apparel Footwear
Market Cap:	$717.69M
52-Week Range:	$8.09-16.05
Levered Beta:	.81

Thesis Points:

- Unclear patent situation opens the door to competition and poses a serious threat to Croc's revenue stream.
- Crocs is destroying value through shrinking margins and a shrinking ROIC/WACC.
- Market is overly optimistic on Croc's operating cost/revenue.

Company Description:

Crocs, Inc. (CROX) designs and manufactures shoes for men, women, and children. It was founded in 2002 in Boulder, Colorado as the maker of a simple rubber clog. Since the company's founding, it has developed several other shoe designs, all of which maintain the soft, lightweight, non-marking, slip and odor-resistant qualities that made the original Crocs so successful.

Thesis

Crocs was once a highly successful and popular shoe company, however, the rubber clog fad has come to an end, leaving Crocs in a very precarious financial situation. Its unclear patent situation opens the door to competition and poses a serious threat to Croc's revenue stream. Crocs margins continue to shrink, as its shrinking top-line cannot sustain expenses, and is causing serious negative income implications. These declining margins, paired with a shrinking ROIC/WACC, mean value destruction for the once iconic shoe brand. The market is overly optimistic on Croc's operating cost/revenue, the largest driver in its stock value. When this is adjusted to a more appropriate level, it becomes clear that Crocs is significantly overpriced, making it a SELL.

Competition

Over the last five years, Crocs has underperformed when compared to its major competitors, as well as the Nasdaq Composite Index.

The chart above compares Crocs five year stock performance to that of Nike (red), Michael Kors (green) and VF Corporation (pink). While the competitors have seen some significant growth over the years, Crocs has remained stagnant.

The Chart below demonstrates Crocs underperformance relative to the Nasdaq composite index. The index has grown 100% over the last five years, while CROX price has only grown 14% (and has declined since this chart was created).

Patent Litigation

A recent decision by a patent examiner denied Croc's sole claim in its design patent covering overall shape and design of the clogs. The design patent was rejected because Crocs had made the shoes available for sale more than a year before seeking patent protection.

This is a big problem for crocs, because without this patent, many other companies can pop up, offering a very similar product under a different name, potentially for less, causing a further decline in sales. Dan Hart, the chief legal and administrative officer, told Bloomberg BNA that the company is prepared to appeal to the U.S. Court of Appeals for the Federal Circuit. Meanwhile, the Crocs competitor that initiated the re-examination proceeding said it would continue to fight Crocs in pending federal district court proceedings, in which it is arguing not only that the design patent is invalid and unenforceable, but also that Crocs has violated antitrust law in taking action against other footwear companies.

This continuing litigation battle will come at a high price, which is a serious problem for a company with already shrinking margins. When asked about this in its 2015 earnings call, executives stated it was a "non-issue," and refused to answer exactly what the patent covered or what percentage of sales is related to this particular patent.

The fact that management feels this is not an issue, to me, is alarming, as both the possibility of increased competition and high legal fees would have a significant impact in the bottom line, which they are not projecting or addressing. Because they are not acknowledging this potential loss, it is likely Crocs will miss on earnings moving forward, causing a further decline in stock price.

Losing Revenue

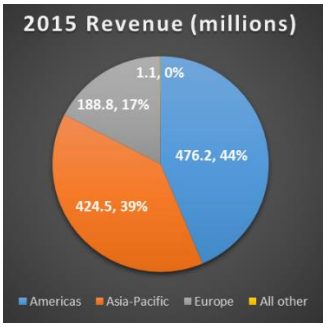
During the last five years, Crocs has been showing lower-than-average results. Its revenue growth has decreased from 27% in 2011 to almost 0% in fiscal 2014, while the recent quarter statements show a negative 8% revenue growth and a more than 6% decline in gross profit. Net income has also decreased to sub-zero values. I expect this trend to continue in the future.

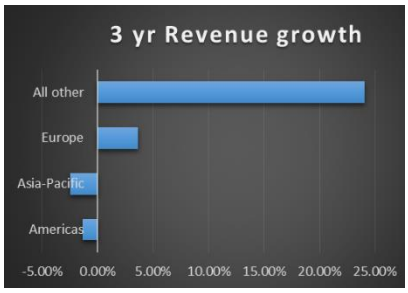
In 2016, Crocs plans on closing several stores, which will undoubtedly impact their top line, as fewer stores means fewer sales. Crocs revenue is already too low to support its operations, so store closures could have some very serious implications.

Additionally, Croc's South Africa operations were held for sale as of December 31, 2015, and subsequently sold on January 19, 2016. Management estimated that South

African sales revenue for 2016 would be double-digit, so Crocs will be losing more revenue.

Additionally, Management expects to see a decline in growth in Europe, which is the only significant revenue stream that is currently experiencing positive growth (sales in "all other" regions are growing rapidly, but still only make up $1.1M, a fraction of 1% of sales).

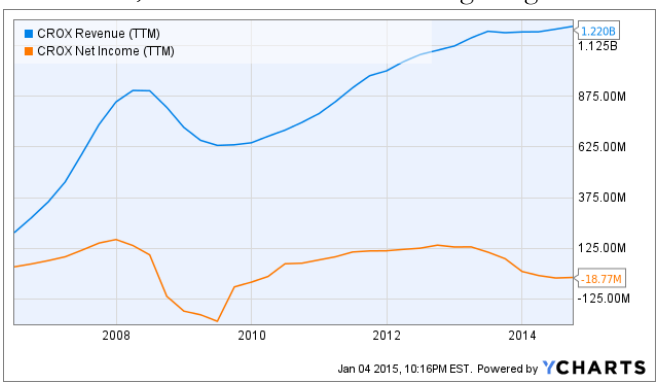




The company's assumption that revenue will growth in the high single-digit percentage range through 2018 is overly optimistic given recent performance as well as the difficult global retail environment. Crocs has had an "uninspiring" early-spring sales outlook, and early spring U.S. retail checks aren't suggestive of building brand momentum.

Shrinking Margins

In addition to shrinking revenues, Crocs margins have been declining, and will continue to do so in the future. The chart below shows the growing gap between revenue and income, which is a result of declining margins.



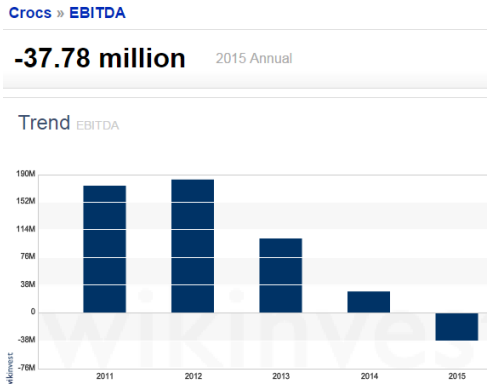
I expect this trend to continue moving forward, as management acknowledged they may be overly optimistic for the first half of fiscal 2016, and projects 2016 Q1 margins to be negatively impacted.

Additionally, future growth and openings will be exclusively focused on outlets. Outlets offer extreme price discounts, which will have a further negative impact on profit margins.

Financials

With a 5-year ROIC/WACC below the industry average (1.63 vs. 2.02, respectively), and falling dramatically (fallen below 1 to .63 in last twelve months), Crocs is not only creating less value than its competition, but it is destroying value.

Additionally, EBITDA has been steadily declining since 2012, and fell to -$37.78M in 2015, leading to a negative bottom line. This negative earnings is unsustainable, and poses a serious threat to Croc's financial stability.



Valuation

The market is currently pricing Crocs according to its historical operating costs/revenue of 87.5%, however, I believe this to be too low. Last year operating costs were 99.6% of revenue. While I do not believe this will always be the case, I think assuming the ratio will resort back to historical levels while revenue continues to decline is overly optimistic and unreasonable. Realized revenues have been approximately 1.5% lower than expectations over the last several quarters. Assuming this trend continues and operating costs remain approximately in line with estimates, operating cost/revenue, perhaps the largest value driver for Crocs, will remain high. I added a 1.5% premium to the ratio the market it using to price Crocs, to get operating costs/revenue of around 89%. I then added an additional 1% premium to factor in the revenue decline that will come as a result of the selling of the South African business and the closure of retail locations, as well as increased legal fees. This 90% operating cost/revenue ratio dropped the intrinsic value down to $5.43 and a 1 year target price of $7.42.

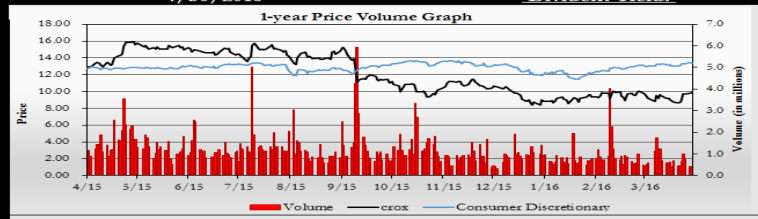
Conclusion

While Crocs has had some success diversifying away from its trademark rubber clogs, ultimately the company seems to be a bit of a one-hit wonder, and is likely to continue struggling to find meaningful sales and profit growth. The company's weaknesses can be seen in multiple areas, such as its deteriorating revenue and net income, declining

margins, value destruction, and overall poor stock performance. With a current price of $9.83, and a 1 year target price of $7.42, Crocs offers a negative return of 24.47%, making it a definite SELL.

Crocs, Inc. (crox) — CENTER FOR GLOBAL FINANCIAL STUDIES — BEARISH

Analysis by P.C. Principal 4/30/2016	Current Price:	$9.83	Intrinsic Value	$5.43	Target 1 year Return: -24.47%
	Divident Yield:	0.0%	Target Price	$7.42	Probability of Price Increase: 25%



Description

Crocs, Inc., together with its subsidiaries, designs, develops, manufactures, markets, and distributes casual lifestyle footwear and accessories for men, women, and children worldwide.

General Information

Sector	Consumer Discretionary
Industry	Textiles, Apparel and Luxury Goods
Last Guidance	November 3, 2015
Next earnings date	May 6, 2016
Estimated Country Risk Premium	6.00%
Effective Tax rate	31%
Effective Operating Tax rate	18%

Market Data

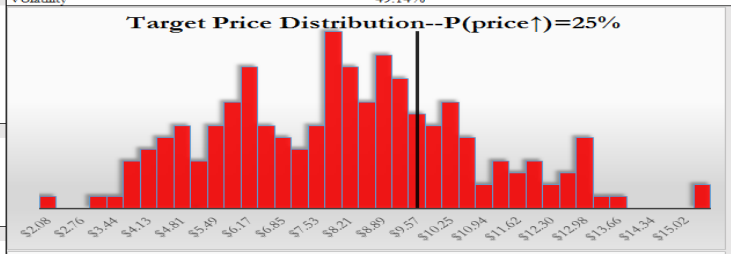
Market Capitalization	$717.69
Daily volume (mil)	0.66
Shares outstanding (mil)	73.01
Diluted shares outstanding (mil)	75.60
% shares held by institutions	78%
% shares held by investments Managers	95%
% shares held by hedge funds	8%
% shares held by insiders	2.64%
Short interest	12.15%
Days to cover short interest	10.94
52 week high	$16.05
52-week low	$8.09
Levered Beta	0.81
Volatility	49.14%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
12/31/2014	-1.67%	-356.00%
3/31/2015	-1.28%	-21.04%
6/30/2015	-0.87%	-32.84%
9/30/2015	-1.82%	-118.42%
12/31/2015	2.04%	-257.44%
Mean	-0.72%	-157.15%
Standard error	0.7%	65.2%

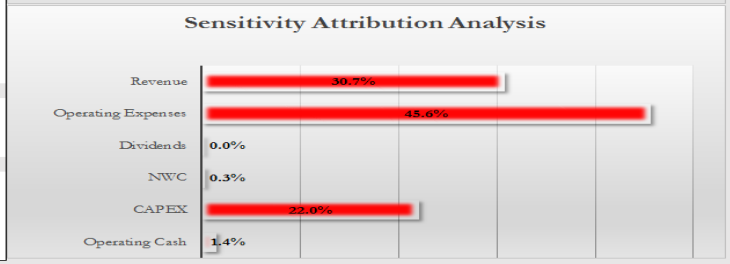
Peers

Steven Madden, Ltd.
Wolverine World Wide Inc.
Deckers Outdoor Corp.
Finish Line Inc.
Genesco Inc.
Skechers U.S.A., Inc.
NIKE, Inc.
Foot Locker, Inc.

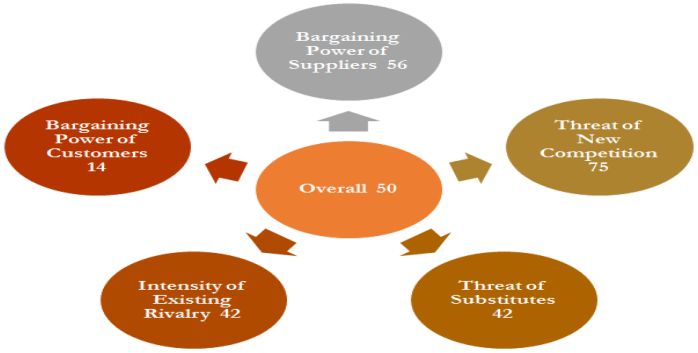


Management	Position	Total compensations growth	Total return to shareholders
Ribatt, Gregg	Chief Executive Officer and	2139.33% per annum over 1y	-18.01% per annum over 1y
Rees, Andrew	President	-25.19% per annum over 1y	-18.01% per annum over 1y
Hart, Daniel	Chief Legal & Administrative	N/M	N/M
Teffner, Carrie	Chief Financial Officer, Exe	-4.06% per annum over 6y	19.29% per annum over 6y
Reilly, Terence	Chief Marketing Officer and	N/M	N/M
Sullivan, Greg	Senior Vice President of Glo	N/M	N/M

Profitability	crox (LTM)	crox (5 years historical average)	Industry (LTM)
ROIC	5.1%	17.52%	16.98%
NOPAT Margin	7%	15.26%	9.9%
Revenue/Invested Capital	0.71	1.15	1.72
ROE	5.2%	20.74%	18.77%
Adjusted net margin	4%	13.65%	9.4%
Revenue/Adjusted Book Value	1.48	1.52	2.00
Invested Funds	**crox (LTM)**	**crox (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	11.5%	20.7%	19%
Estimated Operating Cash/Total Capital	11.5%	19.6%	N/A
Non-cash working Capital/Total Capital	11.3%	12.2%	29%
Invested Capital/Total Capital	114.6%	104.8%	81%
Capital Structure	**crox (LTM)**	**crox (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.79	0.41	0.13
Cost of Existing Debt	9.69%	7.30%	3.85%
Estimated Cost of new Borrowing	3.77%	1.95%	3.85%
CGFS Risk Rating	BB	AA	A
Unlevered Beta (LTM)	0.58	1.13	0.76
WACC	8.13%	10.76%	8.35%



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



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	-9.0%	7.2%	0.63
12/31/2016	3.8%	10.4%	1.27
12/31/2017	4.4%	11.6%	1.09
12/31/2018	8.3%	12.2%	1.17
12/31/2019	2.1%	12.8%	1.15
12/31/2020	2.1%	12.3%	1.04
12/31/2021	2.1%	12.1%	0.98
12/31/2022	2.1%	11.8%	0.94
12/31/2023	2.1%	11.7%	0.90
12/31/2024	2.1%	11.5%	0.86
12/31/2025	2.1%	11.3%	0.83
Continuing Period	2.1%	11.3%	0.83

Period	Invested Capital	Net Claims	Price per share
Base Year	$757.76	$778.67	$5.26
12/31/2016	$923.26	$930.90	$7.73
12/31/2017	$1,213.94	$788.19	$10.25
12/31/2018	$1,388.93	$678.24	$12.81
12/31/2019	$1,533.61	$553.43	$15.35
12/31/2020	$1,424.47	$388.80	$17.88
12/31/2021	$1,804.72	$226.52	$20.37
12/31/2022	$1,884.66	$65.72	$22.84
12/31/2023	$2,014.13	-$93.49	$25.30
12/31/2024	$2,129.96	-$251.17	$27.76
12/31/2025	$2,193.19	-$407.20	$30.21
Continuing Period			

Siena Market Line
1st week of May 2016

FuelCell Energy Inc.

NASDAQ: FCEL

Analyst: Michael Post
Sector: Energy

SELL

Price Target: $5.00

Key Statistics as of 4/27/2016

Market Price:	$6.53
Industry:	Renewable Energy
Market Cap:	$195 M
52-Week Range:	$4.51 – 15.72
Beta:	2.04

Thesis Points:

1. FCEL must build more facilities and will continue to incur operational issues in the near term.
2. FCEL is losing money and shareholder value
3. FCEL is a deteriorating hyper inflated stock propped up on over promise and hopeful projects.

Company Description:

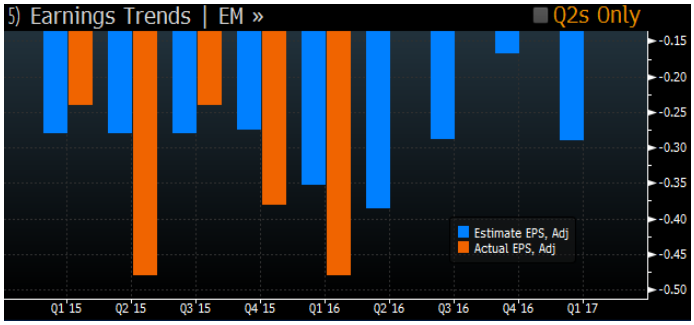
FuelCell Energy, Inc. (NASDAQ: FCEL) is an integrated fuel cell company that designs, manufactures, installs, operates and services stationary fuel cell power plants for distributed power generation. Its power plants electrochemically produce electricity and heat using various fuels including natural gas, biogas, methanol, diesel, coal gas, coal mine methane, and propane. The company serves utilities, independent power producers, governments, gas transmission control, industrial and data centers, commercial purposes, oil production and refining services, wastewater treatment, agriculture, and landfill gas sectors. The company operates in the United States, South Korea, England, Germany, Canada, Spain, and offers a comprehensive portfolio of services for fuel cell power plants. FuelCell Energy has specially trained technicians and engineers that remotely operate and maintain virtually all installed power plants globally, 24 hours per day, 365 days per year from the state-of-the-art Global Technical Assistance Center, located at Danbury, Connecticut (headquarters).

Company Review- FCEL

FuelCell Energy (FCEL) is a world leader in renewable energy creation and specializes in developing cleaner energy solutions. The company began expanding globally in 2007 through its partnership with POSCO Energy, and targeted markets in Southeast Asia, particularly South Korea. The renewable energy industry was rapidly growing until oil price began its steep decline. Cheaper oil prices decreased the appeal of more costly renewable energy solutions and caused declining revenue and prolonged projects for FuelCell Energy. Currently, FCEL is unable to produce energy in a profitable process given current market conditions and appears dependent on an innovative cost saving breakthrough or an increase in oil prices.

Thesis Point 1 – Ongoing Issues

FCEL's total backlog was $403.9 million as of January 31, 2016 compared to $337 million as of January 31, 2015. This change represents a roughly 20% increase over a one year period and exemplifies FCEL's inability to meet growing demand. Chief executive officer, Chip Bottone, considers the backlog increase to be a positive sign and thinks that after the completion of a few in progress facilities FCEL will be able to achieve overall profitability. While this may be ideally true, investors have only experienced and will continue to experience depressing revenue recognition from postponed unfinished plant projects and increased losses from prolonged associated costs. Management has justified decreasing revenue by glorifying increasing backlog but the repeated earning disappointments will continue to depreciate FCEL's stock price in 2016.



Quarter one of 2016 repeated this negative trend as FCEL posted wider than expected losses and missed revenue expectations again. Management responded to the negative results with forward looking statements that more revenue will be recognized in the second half of the year after the Beacon Falls Energy Park project is hopefully completed. This is a major indicator that investors can expect another negative quarter coming in Q2 of 2016.

Thesis Point 2 – Negative Trends

FCEL has posted net losses every year of operations and can only survive by draining equity investors through multiple secondary public offerings and reverse stock splits. The company most recently effected a 1-for-12 reverse stock split on December 3, 2015. In Q1 of 2016, FCEL posted an increased net loss of 11.7 million compared to 4.1 million a year ago in Q1 of 2015.

Chart Selected Items	3 months	3 months	3 months	3 months	3 months
	FQ1/CQ4	FQ2/CQ1	FQ3/CQ2	FQ4/CQ3	FQ1/CQ4
For the Fiscal Period Ending	Jan-31-2015	Apr-30-2015	Jul-31-2015	Oct-31-2015	Jan-31-2016
Currency	USD	USD	USD	USD	USD
Net Income	(4.1)	(9.9)	(6.5)	(8.9)	(11.7)

Accompanying this net loss, accrued expenses also increased from 14.9 to 24.8 million and long term debt increased to 36.9 million from 21 million comparing Q4 of 2015 to Q1 of 2016. In order to eliminate some liquidity issues, FCEL increased its debt by closing on a 25 million dollar loan planned for working capital purposes in 2016. Currently, FCEL has almost 77 million in cash on hand, but will soon enter a period of financial distress from continued capital expenditures for completing ongoing energy facility projects. Investors should expect another secondary offering to occur if FCEL cannot complete its energy facilities and achieve profitability from greater output and benefits associated with greater economies of scale. A secondary offering is most likely to occur when the loan become due in early 2018 at which point FCEL will most likely have drained the remainder of its cash balance from accrued losses over 2016 and 2017.

Thesis Point 3- Early & Overly Hyped

FuelCell Energy thrives on the growing potential of an industry with increasing demand but suffers from unfavorable market conditions and costly elongated construction projects. While the big picture remains intact, the road to success seems to be lined with investor suffrage that will continue until FCEL has established enough facilities to generate an overall profitable output. At this point, FCEL is in an unpredictable constructions phase with inaccurate project completion estimates and a growing backlog of unserved customers. The company's stock price has deteriorated throughout the course of this process and will continue to until the construction phase is complete and overall energy output is at profitable levels. Important to note, low oil prices are delaying

output levels and postponing contracts that otherwise would have already been completed. This is causing very unprofitable operations and will continue hurting the company in 2016 until FCEL can operate at a higher capacity and record more revenue. The information below shows how unprofitable the company has been and the long way of needed improvement that FCEL must achieve to become a successful company.

12 Months Ending	10/31/2013	10/31/2014	10/31/2015	01/31/2016
Operating Margin	-15.89	-15.15	-17.72	-22.78
Return on Invested Capital	-33.67	-22.67	-16.83	-19.85

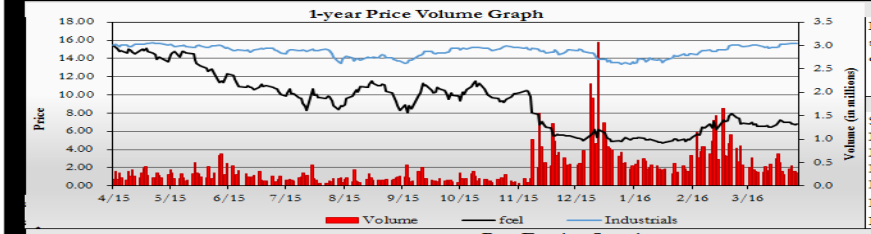
FCEL is projected to have lower operating margins in 2016 resulting from increased spending on ongoing energy facility projects. Return on invested capital is also projected to decrease because of postponed revenue recognition procedures. This all seems extremely negative but if successful will position the company for possible profitable growth in 2017 and beyond. However, the rest of 2016 will be a building period surrounded by uncertainty. Macroeconomic factors will most likely continue to prolong this building phase and investors will have to wait longer and suffer more losses.

Conclusion

FuelCell Energy is currently in a construction phase and has been for the past 8 years of operations. The company is attempting to create enough energy generating facilities to meet demand and produce at profitable levels. This mission is being prolonged by macroeconomic factors like cheap oil prices and is forcing FCEL to miss expectations and remain extremely unprofitable. I expect that this trend will continue for the rest of 2016 as it did in Q1, and optimistic FCEL investors will be disappointed by postponed project completion dates. Backlog will continue to increase in 2016 and revenue will continue to disappoint. Overall, I recommend FCEL as a short sale for the year of 2016 until the company can prove ongoing facility energy projects will be completed in a correctly estimated timely manner. I calculated an intrinsic value of $5.00 a share which represents an approximate 25% return based on its current stock price of $6.53.

FuelCell Energy Inc. (fcel) — CENTER FOR GLOBAL FINANCIAL STUDIES — NEUTRAL

Analysis by Michael Post	Current Price:	$6.53	Intrinsic Value	$5.00	Target 1 year Return: 3.14%
4/27/2016	Divident Yield:	0.0%	Target Price	$6.74	Probability of Price Increase: 66%



Description

FuelCell Energy, Inc., together with its subsidiaries, designs, manufactures, sells, installs, operates, and services stationary fuel cell power plants for distributed power generation.

General Information

Sector	Industrials
Industry	Electrical Equipment
Last Guidance	November 3, 2015
Next earnings date	June 3, 2016
Estimated Country Risk Premium	6.02%
Effective Tax rate	31%
Effective Operating Tax rate	31%

Market Data

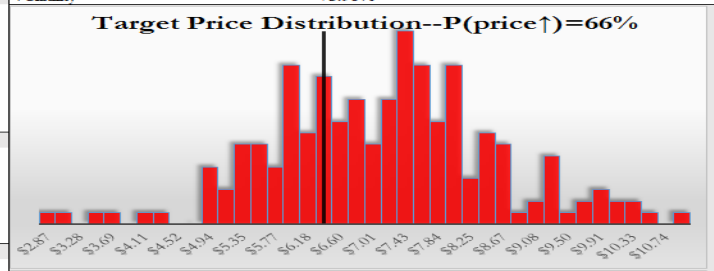
Market Capitalization	$192.44
Daily volume (mil)	0.31
Shares outstanding (mil)	28.98
Diluted shares outstanding (mil)	25.13
% shares held by institutions	20%
% shares held by investments Managers	15%
% shares held by hedge funds	3%
% shares held by insiders	2.03%
Short interest	11.98%
Days to cover short interest	6.42
52 week high	$15.72
52-week low	$4.51
Levered Beta	1.29
Volatility	73.90%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
1/31/2015	-19.85%	-228.53%
4/30/2015	-33.49%	-305.52%
7/31/2015	-12.92%	-278.59%
10/31/2015	9.81%	-262.27%
1/31/2016	-6.81%	-261.41%
Mean	-12.65%	-267.27%
Standard error	7.2%	12.6%

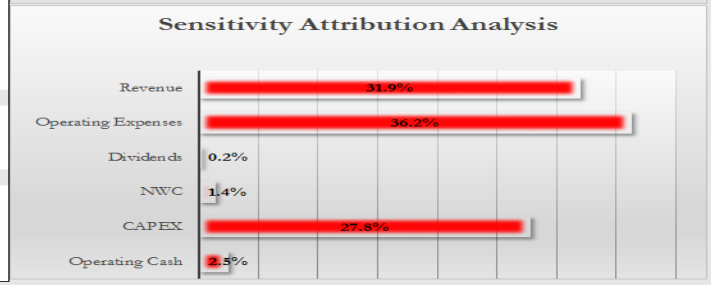
Peers

Plug Power Inc.
Energy Focus, Inc.
SolarCity Corporation
Acuity Brands, Inc.
Hydrogenics Corporation

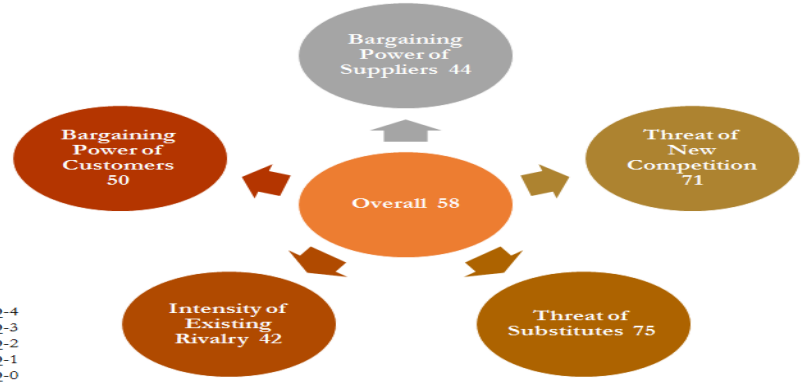


Management	Position	Total compensations growth	Total return to shareholders
Bottone, Arthur	Chief Executive Officer, Pre	24.3% per annum over 5y	-1.69% per annum over 5y
Bishop, Michael	Chief Financial Officer, Sen	10.55% per annum over 4y	-2.16% per annum over 4y
Rauseo, Anthony	Chief Operating Officer and	12.85% per annum over 5y	-1.69% per annum over 5y
Goddard, Kurt	Vice President of Investor R	N/M	N/M
Bradford, Darrell	Vice President of Human Reso	N/M	N/M
0 0		N/M	N/M

Profitability	fcel (LTM)	fcel (5 years historical average)	Industry (LTM)
ROIC	-1.1%	-5.72%	13.28%
NOPAT Margin	-2%	-6.27%	12.7%
Revenue/Invested Capital	0.56	0.91	1.05
ROE	-2.5%	-12.00%	15.29%
Adjusted net margin	-3%	-7.94%	11.8%
Revenue/Adjusted Book Value	0.73	1.51	1.30
Invested Funds	**fcel (LTM)**	**fcel (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	27.7%	32.6%	22%
Estimated Operating Cash/Total Capital	25.8%	30.9%	N/A
Non-cash working Capital/Total Capital	20.2%	22.8%	15%
Invested Capital/Total Capital	119.7%	126.8%	77%
Capital Structure	**fcel (LTM)**	**fcel (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.36	0.16	0.19
Cost of Existing Debt	9.20%	9.39%	4.24%
Estimated Cost of new Borrowing	6.13%	9.39%	4.24%
CGFS Risk Rating	D	D	BBB
Unlevered Beta (LTM)	1.17	1.12	1.19
WACC	11.19%	10.37%	10.68%



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



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	0.0%	-1.9%	-0.10
1/31/2017	20.0%	9.9%	0.58
1/31/2018	18.0%	12.1%	0.75
1/31/2019	15.0%	13.2%	0.81
1/31/2020	10.0%	14.0%	0.84
1/31/2021	8.0%	14.3%	0.84
1/31/2022	6.0%	14.4%	0.82
1/31/2023	5.0%	14.6%	0.82
1/31/2024	4.0%	14.8%	0.82
1/31/2025	3.0%	15.2%	0.83
1/31/2026	2.0%	15.5%	0.83
Continuing Period	2.0%	15.7%	0.84

Period	Invested Capital	Net Claims	Price per share
Base Year	$87.80	$105.25	$4.42
1/31/2017	$154.79	$112.78	$6.05
1/31/2018	$201.26	$116.37	$8.12
1/31/2019	$294.00	$108.02	$10.60
1/31/2020	$319.42	$82.32	$13.41
1/31/2021	$332.26	$46.94	$16.41
1/31/2022	$378.21	$2.56	$19.52
1/31/2023	$435.81	-$48.33	$22.69
1/31/2024	$493.53	-$106.61	$25.94
1/31/2025	$542.62	-$170.65	$29.22
1/31/2026	$586.36	-$240.99	$32.52
Continuing Period			

CQ-4
CQ-3
CQ-2
CQ-1
CQ-0

SIENAcollege

Siena Market Line
1st week of May 2016

Sturm, Ruger & Co. Inc.

NYSE:RGR

Analyst: Lionel Krupka
Sector: Defense Primes

BUY

Price Target: $68.50

Key Statistics as of 04/29/2016

Market Price:	$64.03
Industry:	Firearms manufacturer
Market Cap:	$1,214.2M
52-Week Range:	$48.10-78.09
Beta:	0.47

Thesis Points:

- Political and security environment is favorable to Ruger's financial performance for the coming year.
- Large amount of cash on hand and no debt guarantee freedom of action for future investments, stock repurchase programs or special dividends.
- Ability to decrease operating costs in the future while increasing revenue.

Company Description:

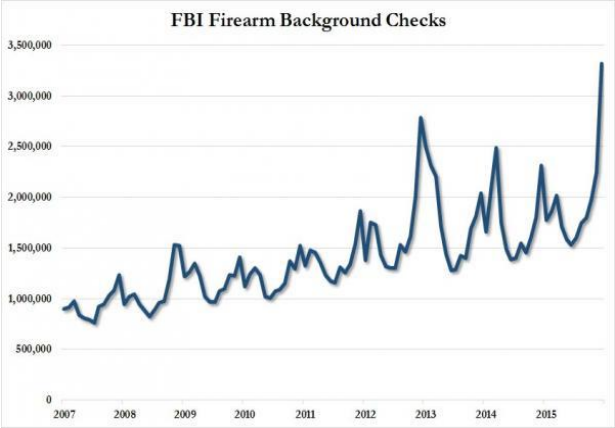
Sturm, Ruger & Co. Inc. (Ruger) is company with a 67 years history. It was founded in 1949 by Alexander Sturm and William Ruger with a $50,000 capital. Since its humble start in Connecticut, the company has grown and become one of the major players of the firearms manufacturing industry. It went public in 1969 and started to be traded on the New York Stock Exchange in 1990. Its leading position in the market today has not altered the quality of its products and its brand image. Ruger remains the only firearms manufacturer that have all of its production facilities still located in the United States. It operates in two different segments: firearms manufacturing and casting. Most of the revenues come from three different lines of firearm products: rifles (single-shot, autoloading, bolt-action, modern sporting categories), pistols (rimfire and centerfire autoloading) and single or double-action revolvers and accessories.

Thesis

Ruger is the last firearm producers in the U.S that kept all its production and selling apparels within the country. Among one of the best recognized brand in the firearms industry today, Sturm, Ruger & Co has been able to create and distribute new appealing products to both domestic and international markets over years. The presidential election in the last quarter of 2015 as well as the recent terrorist attacks also signal that demand for firearms is most likely to increase in 2016. In addition, the company forecasts to decrease its capital expenditures in 2016, and it has a proven record of higher value creation than its competitors with an historical ROIC/WACC ratio three times higher. The management, led by a CEO with military experience, has driven the growth of the company without taking any debts. No debts and the current high level of cash on hands is also an assurance of future flexibility regarding changes in the market environment. Management could also decide to reward shareholders with a special dividend or a stock repurchase program.

Macro Environment

According to the National Rifle Association, there are approximately 300 million privately owned firearms in the U.S, and this number increases on average by 10 million annually. The National Instant Background Check System (NICS), managed by the FBI, is considered as the most reliable proxy for monthly firearm sales. In 2015, the FBI processed an all-time record of 23 million checks.



Since 1998, two of the highest weeks for NICS checks were in January and February 2016, respectively ranked 9th and 7th. Background checks have increased by 25% in March 2016, compared with 2015 figures. It was the 5th highest monthly record since NICS' inception, leading the industry to a potential new record this year.

The growing American interest for gun purchases have been mainly driven by recent terrorist attacks in Paris in November and San Bernardino in December. Obama's administration will to expand background checks and gun control in general have also been key drivers for firearms sales expansion. This upward trend is not likely going to struggle by the end of the year. According to Real Clear Politics, polls show that the future democrat candidate has the most chances to win the presidential race. Both Hillary Clinton and Bernie Sanders are in favor of broader gun control policies. If consumers expect new regulations limiting access to firearms, they are going to stock up products, hence increasing future expected revenues for firearms manufacturers.

People

The executive officers of the company are all experienced professionals and very enthusiast about their business. The Chief Operating Officer, Christopher J. Killoy, has a military background. He graduated from the U.S Military Academy in 1981, and worked for Stinger System Inc, a manufacturer of non-lethal weapons for the law enforcement. Michael O. Fifer, the Chief Executive Officer, graduated from the Naval Academy in 1978 and served as a Submarine officer. He previously worked for Watts Water Technologies Inc., where he was able to turn inefficient business units into profitable divisions. Under is management, Ruger's stock has risen from $7 to $65, which is an increase of 779% in 10 years. Today, Ruger employs 1920 people across the U.S, and it has achieved to develop high commitment from its employees. For instance, there is no turnover among the engineering staff that counts 140 employees, hence creating value through designing and manufacturing expertise.

Operations

Historically, Ruger firearms sales have represented 99% of the revenue, and the casting activity has accounted for the remaining 1%. Ruger biggest advantage lies in its distribution channels. Even if it still sells directly to end customers, the company has achieved to limit costs and gain in efficiency by selecting a network of twenty independent and federally licensed wholesalers who resell the entire line of products to independent retailers

for the commercial market, twenty four for the law enforcement market and two for the Canadian market. The five largest customers have accounted for 57% of total sales in the last three years, which has allowed Ruger to limit the number of employee dedicated to customer service to fifteen.

Regarding production, the company has at its disposal four manufacturing facilities: Newport, New Hampshire (350,000 square feet owned), Prescott, Arizona (230,000 square feet leased), Mayodan, North Carolina (220,000 square feet owned, not fully operational) and Earth City, Missouri (35,000 square feet leased). Three other non-production facilities exists in Southport and Enfield (Connecticut) and one building of the Newport plant. Ruger does not have any debt related expenses regarding its owned facilities, enhancing the ability of the company to adapt to new market environment if necessary.

Porter's Five Forces

Bargaining power of suppliers: LOW

Even though Ruger does not have a much diversified distribution channel, the bargaining power of suppliers is low. There are many different suppliers for steel, walnut, birch, beech, ceramic material, maple and laminated lumber, metal alloys and other raw materials that are needed for the manufacturing operations of the company. There are also no signs that these raw materials could experience shortage within the investment horizon considered.

Bargaining power of customers: HIGH

The bargaining power of customers is relatively high for Ruger. Despite the fact that Ruger enjoys a good brand recognition, there are a lot of competitors in the marketplace today. Buyer choice is not limited because of this competition. In addition, the five largest customers, which are also distributors for the entire Ruger's line of products, represent a total of 57% of the revenues. Therefore, Ruger has a high dependency on its distributors.

Threat of substitutes: LOW

Ruger manufactures rifles, pistols, revolvers and various accessories related to firearms. There are no existing substitutes for firearms. One could think about the non-lethal weapons market as possible substitute for firearms, but it is not very diversified and does not respond to the same needs. Ruger is firstly targeting hunters, sportsmen, people interested in self-defense, law enforcement forces and government agencies. Ruger is also sitting on a designing and manufacturing experience of 67 years, which make its products unique for customers.

Existing rivalry: HIGH

The existing rivalry factor is high for Ruger. There are many other well-known firearm manufacturers present in the American market today. Smith & Wesson Holding Corporation, Vista Outdoor Incorporation or Taser International are possible companies that customers could prefer to Ruger when they consider buying weapons.

Barriers to Entry: HIGH

There are very high barriers to entry the firearms manufacturing industry. Production facilities, manufacturing and designing expertise, technology and brand recognition would not be easy to obtain for any new competitor. In addition, a new competitor will have tremendous difficulties against existing companies that have managed to use economies of scale as critical factor to success.

Financials

Sturm, Ruger & Co is evolving in a very competitive market. Since product differentiation is difficult to achieve in the firearms industry, brand recognition is a predominant aspect in Ruger's strategy as well as managing value creation, efficiency and margins.

ROC /WACC	History	LFY
RGR	6.16	3.43
Competitors	1.87	1.60

ROIC W/O GW	History	LFY
RGR	57.8%	30.9%
Competitors	45.0%	17%

ROIC	History	LFY
RGR	57.8%	30.9%
Competitors	35.5%	10.4%

WACC	History	LFY
RGR	9.0%	9.0%
Competitors	15.2%	6.5%

Capital Usage	History	LFY
RGR	5.30	3.0
Competitors	4.19	2.0

EBITA Margin	History	LFY
RGR	19.2%	17.2%
Competitors	11.4%	14.0%

Unlevered Beta	History	LFY
RGR	0.33	0.87
Competitors	0.84	0.52

COR/Revenue	History	LFY
RGR	65.8%	68.8%
Competitors	70.1%	72.4%

Table 1: Ruger - Industry comparison

Table 1 shows that Ruger outperforms its main competitors in the firearms production, Smith & Wesson (SWHC) and Vista Outdoors (VSTO), on a lot of different levels. Value creation is more important for

Ruger with a ROIC to WACC ratio of 6.16 historically compared with industry's 1.87. In the last fiscal year, the company created as much as twice more value than its competitors. WACC has stayed at 9.0% mainly because Ruger has achieved its growth without taking any debt. In addition, Ruger's engineers and designers have been able to create new products on short cycle of one to three years. These new products – less than two years old - have driven growth and represented $115.4 million (21%) of 2015 sales and $89.4 million (16%) in 2014. Consequently, EBITA is at 19.2% historically and 17.2% in the last fiscal year, against 11.4% and 14.0% for SWHC and VSTO. Inventory level decreased by 16,800 units from 430,900 in 2014 to 358,400 in 2015, driven by a strong demand in 2015 fourth quarter. The strong demand drove shortage for particular new products, such as the Precision Rifle. The company is deploying strong efforts to ensure that wholesalers and retailers keep more products in their inventories during the summer to avoid any inconvenience to customers. As a result and because of the political and security environment, it is reasonable to expect further growth in revenues in the coming year. Ruger's revenues increased by 1.2% in 2015 while Smith & Wesson's decreased by 11.9%. Historically, Sturm, Ruger & Co has also beaten revenue expectations by 5.93% and adjusted earnings per share consensus by 36.21%.

Moreover, Ruger is more efficient when it comes to capital management. Its capital usage ratio (revenues/invested capital without goodwill) was at 3.0 in the last fiscal year and at 5.30 historically compared to 2.0 and 4.19 for competitors. The cost of goods sold to revenue is also better on both horizons.

FY 2010 12/31/2010	FY 2011 12/31/2011	FY 2012 12/31/2012	FY 2013 12/31/2013	FY 2014 12/31/2014	FY 2015 12/31/2015
5.27	5.16	4.74	4.24	3.47	3.51

General & Administrative expenses to Revenues ratio

As the table above shows, Ruger has achieved to reduce its general and administrative expenses over the years. We can observe a slight increase in 2015 that is due to a new summer marketing campaign that did not exist before. At the same time, the management planned to decrease capital expenditures from their 2015 level at $28.7 million to $25 million in 2016. For the valuation process, all these elements lead to adjust operating expenses to revenues forecast in the continuing period to analyst forecasts at 71%.

Furthermore, Ruger is historically less risky than its competitors with a 5-year unlevered beta of 0.33 against 0.84 for the industry. It also have a lot of cash on hand with 69.2 million available at the end of 2015 compared to 42.2 million for Smith & Wesson, allowing management to enjoy freedom of action regarding the future of the company. It could easily decide to invest in new facilities or research and development, to repurchase shares or to provide shareholders with a special dividend.

FY 2010 12/31/2010	FY 2011 12/31/2011	FY 2012 12/31/2012	FY 2013 12/31/2013	FY 2014 12/31/2014	FY 2015 12/31/2015	CAGR
5.17	10.74	12.18	9.46	1.84	15.22	24.10%

Free Cash Flow Margin

The compound annual growth rate of free cash flow margin, at 24.10% over the last five years, proves the financial efficiency of the company.

Finally, unless Smith & Wesson and Vista Outdoors, Ruger distributes dividends and has a clear policy about them. It redistributes approximately 40% of the net income to shareholders every quarters for a twelve months dividend yield of 1.90%, and a five years dividend growth of 31.87%.

Conclusion

According to a Gallup poll released in last December, Americans listed terrorism as their first concern regarding their country future. Paired up with the presidential election, Sturm, Ruger & Co is currently experiencing a strong momentum for sales growth. Management proved its abilities to efficiently run and expand company's operations, both industrially and financially. Thanks to its large amount of cash on hand, and zero debts, the company has still a lot of leverage to adapt to future prospects of the market. All these elements makes Ruger the best in-class investment within a one year investment horizon, and led my valuation process to set the one year target price at $68.50. I would consider an entry point at $64.00 for a return of 8.47%.

SIENAcollege

Siena Market Line
1st week of May 2016

Sturm, Ruger & Co. Inc. (RGR)

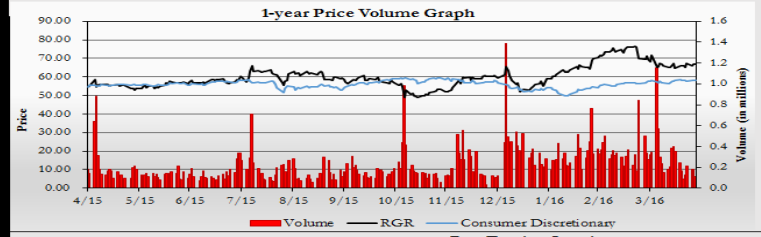
CENTER FOR GLOBAL FINANCIAL STUDIES

NEUTRAL

Analysis by Lionel Krupka
4/30/2016

Current Price:	$64.03	Intrinsic Value	$62.42
Divident Yield:	1.8%	Target Price	$68.29

Target 1 year Return: 8.47%
Probability of Price Increase: 84.5%



Description

Sturm, Ruger & Company, Inc. designs, manufactures, and sells firearms under the Ruger trademark in the United States.

General Information

Sector	Consumer Discretionary
Industry	Leisure Products
Last Guidance	November 3, 2015
Next earnings date	May 2, 2016
Estimated Country Risk Premium	6.00%
Effective Tax rate	39%
Effective Operating Tax rate	41%

Market Data

Market Capitalization	$1,214.20
Daily volume (mil)	0.26
Shares outstanding (mil)	18.96
Diluted shares outstanding (mil)	19.37
% shares held by institutions	71%
% shares held by investments Managers	63%
% shares held by hedge funds	8%
% shares held by insiders	3.11%
Short interest	9.12%
Days to cover short interest	5.33
52 week high	$78.09
52-week low	$48.10
Levered Beta	0.87
Volatility	39.17%

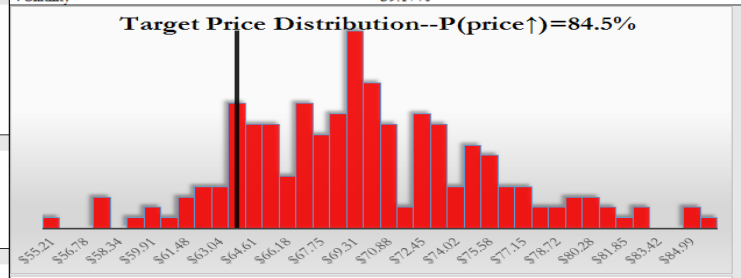
Past Earning Surprises

Quarter ending	Revenue	EBITDA
12/31/2014	-0.72%	2.73%
3/28/2015	11.62%	4.46%
6/27/2015	2.68%	-8.00%
9/26/2015	-7.52%	-16.85%
12/31/2015	7.55%	28.79%
Mean	2.72%	2.23%
Standard error	3.3%	7.7%

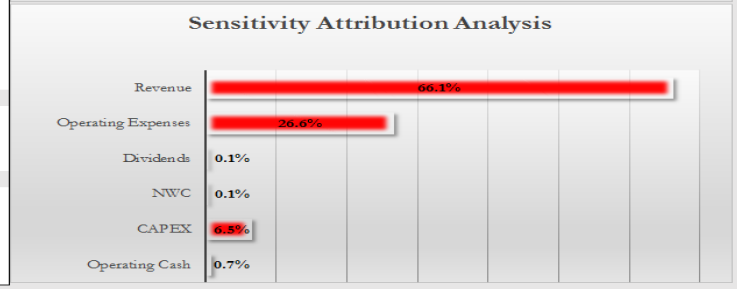
Peers

Smith & Wesson Holding Corporation
Vista Outdoor Inc.

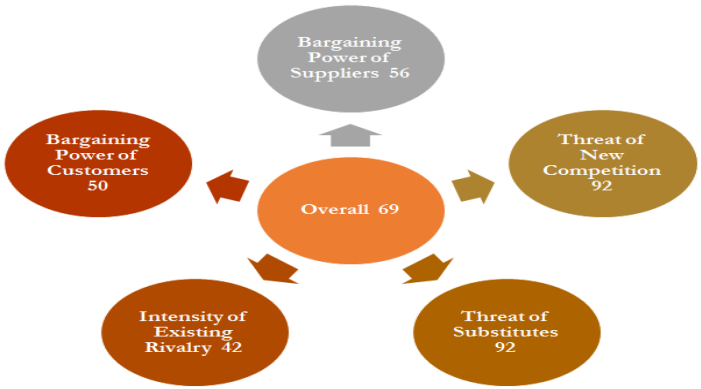
Management	Position	Total compensations growth	Total return to shareholders
Fifer, Michael	Chief Executive Officer and	8.59% per annum over 6y	11.62% per annum over 6y
Killoy, Christopher	President and Chief Operatin	11.35% per annum over 6y	11.62% per annum over 6y
Dineen, Thomas	Chief Financial Officer, Vic	7.08% per annum over 6y	11.62% per annum over 6y
Sullivan, Thomas	Vice President of Newport Op	6.44% per annum over 6y	11.62% per annum over 6y
Lang, Mark	Group Vice President	6.61% per annum over 6y	11.62% per annum over 6y
Reid, Kevin	Vice President, General Coun	N/M	N/M



Profitability	RGR (LTM)	RGR (5 years historical average)	Industry (LTM)
ROIC	34.6%	117.01%	10.76%
NOPAT Margin	15%	16.37%	8.5%
Revenue/Invested Capital	2.38	7.15	1.27
ROE	34.6%	73.58%	12.09%
Adjusted net margin	15%	16.35%	7.7%
Revenue/Adjusted Book Value	2.38	4.50	1.56
Invested Funds	**RGR (LTM)**	**RGR (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	25.2%	26.6%	23%
Estimated Operating Cash/Total Capital	15.7%	17.7%	N/A
Non-cash working Capital/Total Capital	13.9%	13.4%	21%
Invested Capital/Total Capital	90.6%	90.8%	77%
Capital Structure	**RGR (LTM)**	**RGR (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.00	-0.01	0.18
Cost of Existing Debt	202.51%	3.00%	5.32%
Estimated Cost of new Borrowing	0.99%	0.99%	5.32%
CGFS Risk Rating	AAA	AAA	BBB
Unlevered Beta (LTM)	0.87	0.47	0.89
WACC	9.36%	6.62%	8.86%



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



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	1.2%	14.5%	3.70
12/31/2016	6.9%	13.9%	3.49
12/31/2017	3.8%	13.8%	3.35
12/31/2018	3.6%	14.1%	3.41
12/31/2019	3.4%	14.5%	3.47
12/31/2020	3.2%	14.8%	3.54
12/31/2021	3.0%	15.1%	3.61
12/31/2022	2.9%	15.4%	3.68
12/31/2023	2.7%	15.7%	3.75
12/31/2024	2.5%	16.0%	3.83
12/31/2025	2.3%	16.3%	3.90
Continuing Period	2.1%	16.7%	4.02

Period	Invested Capital	Net Claims	Price per share
Base Year	$38.92	-$25.30	$61.68
12/31/2016	$64.20	-$91.73	$67.42
12/31/2017	$85.47	-$168.51	$73.42
12/31/2018	$206.69	-$249.33	$79.59
12/31/2019	$231.61	-$334.83	$85.97
12/31/2020	$248.68	-$423.63	$92.47
12/31/2021	$265.00	-$516.33	$99.12
12/31/2022	$273.16	-$612.81	$105.92
12/31/2023	$280.85	-$712.94	$112.84
12/31/2024	$288.03	-$816.57	$119.89
12/31/2025	$294.69	-$923.51	$127.05
Continuing Period			

SIENAcollege

Siena Market Line
1st week of May 2016

Boston Beer Company, Inc.

NYSE:SAM

Analyst: Lionel Krupka
Sector: Consumer Disc.

SELL

Price Target: $110

Key Statistics as of 04/29/2016

Market Price:	$156.08
Industry:	Alcoholic Beverages
Market Cap:	$1,982.7 M
52-Week Range:	$151.85-266.62
Beta:	0.80

Thesis Points:

- Shift in customers interests
- Tremendous increase in competition
- Past focus on volume growth has led to inefficiency

Company Description:

The Boston Beer Company Incorporation is a brewer that was founded in Boston in 1984 by Jim Koch and Rhonda Kallman. From its modest beginnings, the company has grown into one of the biggest players in the alcoholic beverage industry in the United States today. Its first product was a beer labelled as Samuel Adams Boston Lager, which was named after one of the founding fathers and introduced over Patriot's day. This first product is considered to be the pioneer in the craft beer industry. In 1995, the company went public on the New York Stock Exchange. Nowadays, it sells more than sixty beers under the Samuel or Sam Adams brands, forty beers under the Alchemy & Science tradenames, twelve flavored malt beverages under the Twisted Tea brand and ten hard cider beverages under the Angry Orchard.

Thesis

Boston Beer Company has brought higher standards to the beer industry for the last 32 years. Between 2010 and 2015, the firm hired more than 650 people. It proved its ability to improve its market shares and revenues thanks to a strategy based on volume growth. However, this strategy has led management to put aside the necessary improvements in efficiency that operations have needed to stay at the same level than the competition. In addition, to the inefficiency of its operations, the company is evolving in a very competitive environment that it has never experienced before. Customers appeal for craft beer products is also shifting towards more local and "authentic" brands. In order to understand all the challenges that the company is facing, it is important to first understand the industry in which it evolved.

Industry Outlook

According to the Brewer Association and the University of Colorado Boulder, the beer market represented a $105.9 billion market in 2015, which includes the $22.3 billion market for craft beer. Craft beer segment reached a level of 24,076,864 barrels last year. In 2014, the craft beer industry accounted for an estimated $55.7 billion to the U.S economy and for more than 424,000 jobs.

In terms of sales volume growth, the overall beer market increased by 0.2%, at 196,701,792 barrels, last year. Craft beers, Boston Beers' main market, increased by 12.8% (24,076,864 barrels), while import beers growth was at 6.2% (31,245,124 barrels), and export craft beers grew at 16.3% (446,151 barrels).

There are five different segments in the craft beer market: microbreweries, brewpubs, contract brewing companies, regional craft breweries and large breweries. Microbreweries, breweries that produce less than 15,000 barrels per year, accounted for 16.0% of the U.S production. Brewpubs are defined as restaurant-brewery that sell at least 25% of their production on-site, and represented 5.2% of American craft beer production. Regional craft breweries, defined by an annual production between 15,000 and 6,000,000 barrels, and large breweries accounted for 77.8%. Boston Beer fall in that last segment.

U.S. Brewery Count

	2012	2013	2014	2015
CRAFT	2,401	2,863	3,676	4225
Regional Craft Breweries	97	119	135	178
Microbreweries	1,149	1,464	2,041	2,397
Brewpubs	1,155	1,280	1,500	1,650
LARGE NON-CRAFT	23	23	26	30
OTHER NON-CRAFT	32	31	20	14
Total U.S. Breweries	**2,456**	**2,917**	**3,722**	**4,269**

In the recent years, the craft beers market have seen an exponential growth in the number of competitors. The number of breweries moves from 2,456 breweries in 2012 to 4,269 in 2015 (+73%), and James Koch himself said that "there could be as many as 10,000 craft breweries in the U.S".

Since Boston Beer is one of the biggest producer of craft beers, these numbers should be a positive signal as they indicate a growing interest of customers for that line of products. However, the situation is getting a little bit more complicated than that for the Boston based company. In the last earnings call, James Koch, himself, admitted that "Samuel Adams has lost share due to the increased competition and continued growth of drinker interest in variety and innovation."

Shift in customers' behaviors

As Boston Beer was the pioneer of craft beers in the U.S, it gained a lot of loyalty from customers who enjoyed that type of products in the past. However, it seems that there is a strong demand for variety and innovation in the market right now, as Koch stated it. As it has been observed in some other markets, such as retail food industry with organic food, there is a trend for customers to look for more "better for you" products. Therefore, the perception of Samuel Adams brand does not correspond to the current demand for more authentic and local beers. Microbreweries and brewpubs opening growth, respectively 108% and 43% over the last three years, is the fulfillment of this demand for new brands with different values.

Nonetheless, Boston Beer is an experienced company that has been the face of the craft beer industry for the last 32 years. It has been able to sustain its sales growth thanks to its innovations. For instance, in 2012, it

launched nationwide a hard cider beverage called Angry Orchard. After two mitigated years, sales grew impressively, and Angry Orchard captured more than 50% of the cider category. However, sales in the cider category have also decreased, especially because of the hard soda rising. Boston Beer was not able to address the changes in both the cider and craft beer markets despite the launch of a new line of products called Nitro and IPA beers.

Financials

Sales growth, which fell from 16.7% to 3.3% over the last twelve months was mainly driven by depletions, the rate at which shipments goes from a distributor to end users, in volume, down by 5% year to year. This trend is not going to reverse soon, as inventory level of distributors are considered to be at appropriate level, and the company forecasts depletions between -4.0% to 2.0% for 2016. Boston Beer reported a net income of $7 million in the last quarter. Down by 6.7 million year to year, net income declined by 48.9%. This declined was mainly driven by a decrease in revenue, margin and an increase in selling, general and administrative expenses.

Revenue was announced at $188.8 million for the first quarter, decreasing by 5.0% from the same period last year. Historically and in the last fiscal year, EBITA margin is also lower than for the industry, and cost of goods sold to revenue ratio is higher than for the industry. Indeed, the company has focused on increasing volume without taking care of its efficiency. Gross margin was down by 1.5% (from 50% to 48.5%) year to year because processing costs increased, and forecasted gross margin range for 2016 was reviewed to 51%-53% from 52%-54%. The company is also looking at increase in advertising up to $10 million after being originally forecasted at $20 million. Even if management guaranteed that they are focusing on adjusting cost and increase efficiency, it seems very complicated for them to increase short term earnings at the same time. With a free cash flow down by 58.0% year to year, and after buying back $75.7 million of shares in the first quarter, the company does not have a great margin of error. Management is not particularly enthusiast about acquisitions, whereas competitors have been acquiring regional brands. Furthermore, Boston Beer forecasted way higher growth for the first quarter, and it put in place 24 hours shift patterns and extra shift on certain lines, hired new employees (both in sales and production force) and planned important investments for each brands. Cancelling or mitigating all of these initiatives will come to a cost.

EBITA Margin	History	LFY
sam	16.3%	15.3%
Competitors	30.6%	30.7%

COR/Revenue	History	LFY
sam	47.7%	48.0%
Competitor	43.4%	41.9%

Finally, ROIC to WACC ratio of the firm is higher than the industry. A correction towards industry level has started, and the process is most likely to exceed the end of the year.

ROC /WACC	History	LFY
sam	3.19	2.10
Competitor	1.09	1.05

Porter's Five Forces

Barriers to Entry: LOW

As mentioned before, the competition has increased exponentially over the last years. It is cheap to open a brewery, and there is a low switching cost for customers.

Bargaining power of suppliers: HIGH

The company is buying its raw materials from a small number of suppliers. For Samuel lagers, the firm has to use "Noble hops", which grow only in specific areas such as Hallertau-Hallertauer, Tettnang-Tettnanger, Hersbruck-Hersbrucker and Spalt-Spalter in Germany and Saaz-Saazer in the Czech Republic.

Bargaining power of customers: HIGH

Customers have a very high bargaining power because switching costs for consumers are really low and they have more choices than in the past.

Threat of substitutes: LOW

There are many other options available for customers to choose from: other craft beers, regular beers, wines, liquors.

Existing rivalry: HIGH

Existing rivalry is high because there are many other regional brands on the market.

Conclusion

While there are no doubts that Boston Beers has the experience and expertise to handle changes in the craft beer market in the long-term, I do not believe that management will be able to turn the company around within one year. New brands did not offset the erosion in the craft and cider markets and led to higher spending. Boston Beer has to deal with cost adjustments, lower volume expectations, lack of efficiency and new customers' behaviors. Therefore, I expect the stock price to drop at $110 within one year, for a gain of 29.0%.

SIENAcollege

Siena Market Line
1st week of May 2016

The Boston Beer Company, Inc. (SAM)

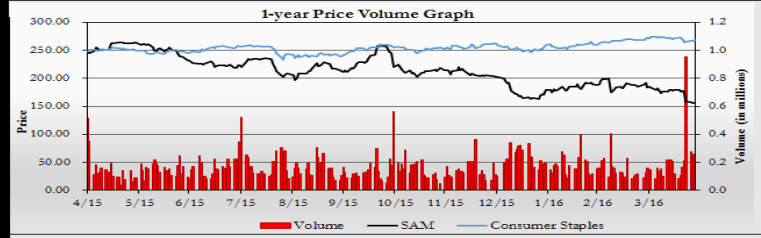
CENTER FOR GLOBAL FINANCIAL STUDIES

BEARISH

Analysis by Lionel Krupka
4/30/2016

Current Price:	$156.08	Intrinsic Value	$97.27
Divident Yield:	0.2%	Target Price	$110.43

Target 1 year Return: -29.02%
Price Increase's probability:0.8%



Description

The Boston Beer Company, Inc. produces and sells alcohol beverages primarily in the United States.

General Information

Sector	Consumer Staples
Industry	Beverages
Last Guidance	November 3, 2015
Next earnings date	July 19, 2016
Estimated Country Risk Premium	6.00%
Effective Tax rate	40%
Effective Operating Tax rate	40%

Market Data

Market Capitalization	$1,978.77
Daily volume (mil)	0.12
Shares outstanding (mil)	12.68
Diluted shares outstanding (mil)	13.38
% shares held by institutions	78%
% shares held by investments Managers	57%
% shares held by hedge funds	9%
% shares held by insiders	27.99%
Short interest	13.87%
Days to cover short interest	10.01
52 week high	$266.62
52-week low	$151.85
Levered Beta	0.80
Volatility	32.45%

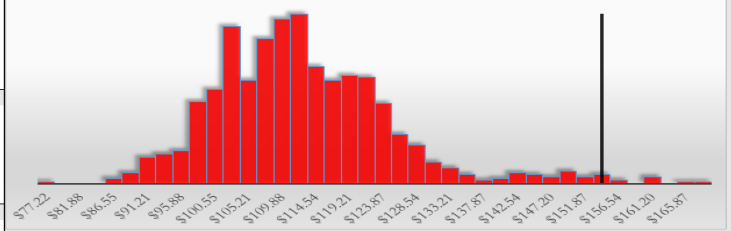
Past Earning Surprises

Quarter ending	Revenue	EBITDA
3/28/2015	-5.49%	23.85%
6/27/2015	-7.28%	7.48%
9/26/2015	0.07%	6.21%
12/26/2015	-6.46%	7.36%
3/26/2016	-9.65%	-22.70%
Mean	-5.76%	4.44%
Standard error	1.6%	7.5%

Peers

Molson Coors Brewing Company
Brown-Forman Corporation
Constellation Brands Inc.
Craft Brew Alliance, Inc.

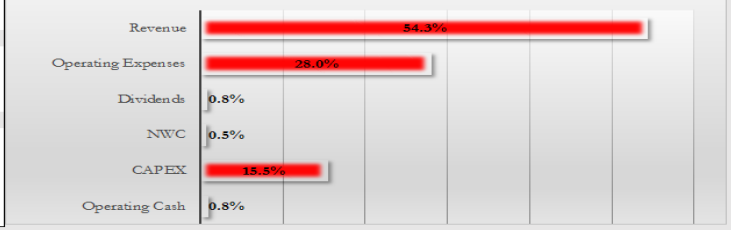
Target Price Distribution--P(price↑)=0.8%



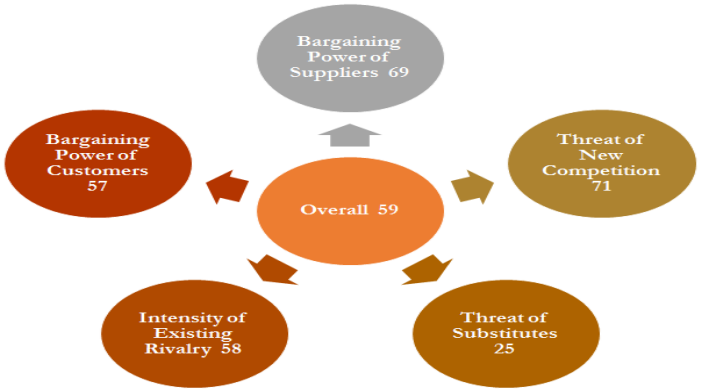
Management	Position	Total compensations growth	Total return to shareholders
Koch, C.	Founder and Chairman of the	-2.09% per annum over 5y	4.02% per annum over 5y
Roper, Martin	Chief Executive Officer, Pre	-4.11% per annum over 5y	4.02% per annum over 5y
Geist, John	Chief Sales Officer	2.67% per annum over 5y	4.02% per annum over 5y
Smalla, Frank	Chief Financial Officer	N/M	N/M
Murphy, Matthew	Chief Accounting Officer	N/M	N/M
Wade, Kathleen	Vice President of Legal and	N/M	N/M

Profitability	SAM (LTM)	SAM (5 years historical average)	Industry (LTM)
ROIC	14.5%	27.86%	11.26%
NOPAT Margin	10%	14.70%	14.5%
Revenue/Invested Capital	1.47	1.90	0.77
ROE	14.4%	27.40%	13.04%
Adjusted net margin	10%	14.70%	12.8%
Revenue/Adjusted Book Value	1.46	1.86	1.02
Invested Funds	**SAM (LTM)**	**SAM (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	8.1%	13.0%	19%
Estimated Operating Cash/Total Capital	8.1%	12.0%	N/A
Non-cash working Capital/Total Capital	4.7%	2.9%	8%
Invested Capital/Total Capital	100.0%	99.1%	76%
Capital Structure	**SAM (LTM)**	**SAM (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.00	0.00	0.19
Cost of Existing Debt	2.90%	1.83%	2.98%
Estimated Cost of new Borrowing	2.02%	1.40%	2.98%
CGFS Risk Rating	AA	AAA	B
Unlevered Beta (LTM)	0.80	0.70	0.61
WACC	8.93%	8.44%	7.33%

Sensitivity Attribution Analysis



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



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	3.3%	9.9%	1.62
3/26/2017	3.2%	9.4%	1.61
3/26/2018	3.1%	9.8%	1.58
3/26/2019	3.0%	10.2%	1.64
3/26/2020	2.9%	10.6%	1.69
3/26/2021	2.8%	11.0%	1.74
3/26/2022	2.7%	11.3%	1.80
3/26/2023	2.6%	11.7%	1.85
3/26/2024	2.5%	12.1%	1.91
3/26/2025	2.4%	12.5%	1.96
3/26/2026	2.2%	12.9%	2.01
Continuing Period	2.1%	13.3%	2.09

Period	Invested Capital	Net Claims	Price per share
Base Year	$264.59	$160.04	$96.85
3/26/2017	$319.81	$89.87	$109.30
3/26/2018	$433.14	-$23.68	$122.38
3/26/2019	$607.06	-$138.22	$135.46
3/26/2020	$647.51	-$410.26	$160.22
3/26/2021	$634.06	-$526.33	$173.21
3/26/2022	$691.60	-$643.20	$186.12
3/26/2023	$711.60	-$760.78	$198.92
3/26/2024	$731.18	-$878.98	$211.59
3/26/2025	$750.27	-$997.75	$224.09
3/26/2026	$768.84	-$1,117.01	$236.38
Continuing Period			

SIENAcollege

Siena Market Line
1st week of May 2016

Sunoco, LP
NYSE:SUN

Analyst: Kyle Ritchie
Sector: Energy

BUY on SUN

Price Target: $ 43.95

Key Statistics as of 4/27/16

Market Price:	$36.60
Industry:	Oil and Gas Storage/Transportation
Market Cap:	$3.8 billion
52-Week Range:	$22.86– $54.82
Unlevered Beta:	.85
Trading Volume:	380,000

Thesis Points:

- Exponential revenue growth that continues to beat analyst expectations
- Strategic acquisitions and dropdowns that have resulted in expanding margins
- ROIC/WACC ratio proves value creation

Company Description

Sunoco L.P. is a growth-oriented MLP and distributor of Sunoco-branded motor fuel to convenience stores, independent dealers, commercial customers and distributors. The company engagers in the wholesale distribution and retail sale of motor fuels primarily in Texas, New Mexico, Oklahoma, Louisiana, Kansas, Maryland, Virginia, Tennessee, Georgia, and Hawaii. The company also distributes other petroleum products such as propane and lubricating oils; and leases or subleases real estate properties used in the retail distribution of motor fuels. The company is headquartered in Houston, Texas.

Thesis

Sunoco LP is a well-established leading competitor in the oil and gas industry. Of the seventeen analysts covering SUN, the median target of free cash flow for 2016 is 170 million, compared to the 17.3 million generated in 2015. This is due to a number of reasons. Through strategic acquisitions Sunoco has generated substantial revenue growth and furthermore, has notably expanded margins. The price of crude oil as well as the market downturn in 2015 had a major impact on the company's stock price. Nevertheless, a reversion of this company's stock price to the increasing trend, which can be seen in the chart below, can be expected in the upcoming months. Lastly, the company's return on invested capital compared to its weighted average cost of capital proves significant value creation to shareholders. For the aforementioned reasons I am recommending a BUY on SUN.

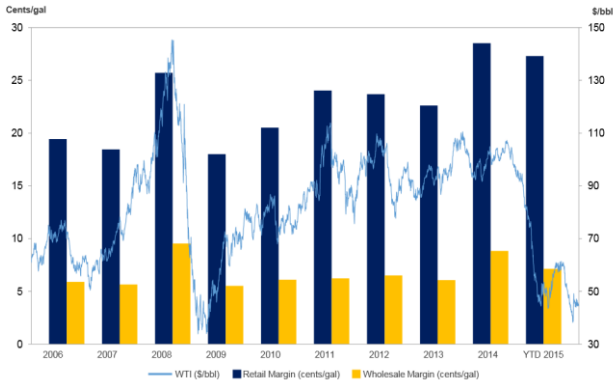
Industry Outlook

As you can see from the preceding graph that dates back to the start of 2013, Sunoco's stock price started around $25/share and reached $55 prior to the market's downturn. Since the market's downturn, the company's stock price has reverted to around $35/share. What will continue to impact SUN more drastically than the market as a whole is the price of crude oil. As you can see from the following 1-year graph of crude oil prices, the cost per barrel has begun to increase again.

The takeaway here is that Sunoco has managed to sustain notable revenue growth during a time of extremely volatile commodity pricing. As the price of crude oil continues to increase (or at least remain fluctuating at current levels), Sunoco's revenue will increase further. The Economy Forecast Agency (EFA) is an agency that specializes on long-range financial market forecasts for corporate clients. This agency's historical forecasts for the price of crude oil have been very accurate. The agency provides monthly expectations in the price of crude oil which include highs, lows and averages. For 2016 into 2017, the monthly averages amount to $48/barrel.

Exponential Revenue Growth

During a time of extreme volatility in the price of crude oil, SUN was still able to have a strong quarter performance. Both adjusted EBITDA and cash flow attributable to partners had significant increases compared to last year's respective quarter.
SUN's total volume of gallons sold increased 39% from last year to 408 million gallons. The gross profit on these gallons was $0.082/gallon, a notable increase from $0.049/gallon last year.



As you can see from the chart above the company's margins were only slightly impacted when the price of crude oil dropped from $100 to $40/barrel.

This chart ultimately reflects the company's wholesale and retail margins resilience through commodity cycles.

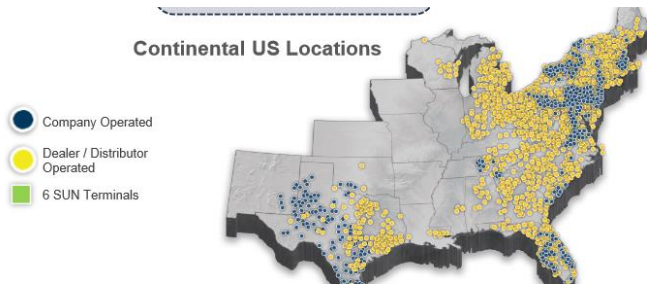
Coupled with the gross margin increase, the company's retail segment had a strong performance as well. Same store sales volume increased by 1.3%.
It is clear that this surprise has carried over to analyst estimates as well. The chart below reflects the revenue and EBITDA surprises for the past five quarters.

Past Earning Surprises		
Quarter ending	Revenue	EBITDA
12/31/2014	257.38%	149.90%
3/31/2015	165.95%	5.69%
6/30/2015	8.48%	175.08%
9/30/2015	-14.09%	37.39%
12/31/2015	-34.85%	-18.26%
Mean	76.57%	69.96%
Standard error	57.4%	39.0%

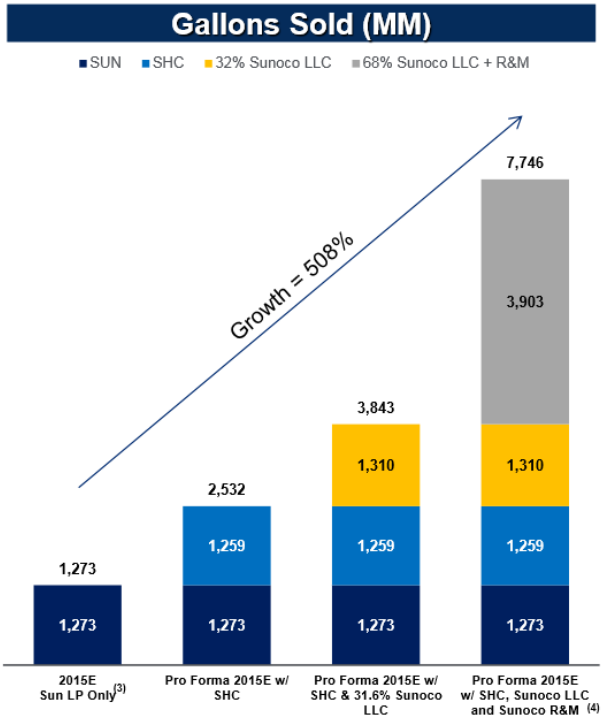
An appealing feature to investors is when the street continues to underestimate a company's performance while the stock price has yet to react. Sunoco beat its revenue three out of the last five quarters by an average of more than 130%. The company beat its EBITDA expectations four out of the last five quarters from Q4 of 2014 – Q4 2015 by 149%, 6%, 175%, and 38% respectively. The consistent positive EBITDA surprises proves the company's ability to efficiently manage operating costs while continuing to grow exponentially.

Strategic Acquisitions/Company Dropdown Transactions

To reiterate, the same store sales increase of 1.3% was largely influenced by the recently acquired Mid-Atlantic Convenience Stores (MACS). During the same period, MACS experienced an increase of 7.1% in merchandise sales. This successful acquisition continues to extend the company's geographic reach which can be seen in the chart below.



Recently, Sunoco has been engaging in multiple drop down transactions. The purpose of this strategy is to acquire additional investors without these investors being directly involved in their main business. Previously acquired assets are being sold to themselves ion order to spread the risk of a new venture among several entities. The following chart shows the impact of this company's vertical integration which can be considered organic growth as these were originally Sunoco entities.



Based on these figures, the number of gallons sold will grow by 508% in 2015. The following table shows how this company's strategy has impacted its total reported margins.

Revenue, Adj	2,904.2	2,093.5	2,683.8	3,820.4	4,321.4	4,492.6	10,317.5	16,935.3	16,935.3
Growth %, YoY	47.7	-27.9	28.2	42.4	13.1	4.0	129.7	64.1	64.1
Gross Profit, Adj	38.0	32.3	36.1	36.9	44.5	62.3	371.0	1,458.2	1,458.2
Margin %	1.3	1.5	1.3	1.0	1.0	1.4	3.6	8.6	8.6
EBITDA, Adj	–	18.4	19.6	23.3	30.8	49.9	118.4	521.3	521.3
Margin %	–	0.9	0.7	0.6	0.7	1.1	1.1	3.1	3.1
Net Income, Adj	12.2	8.5	9.2	10.6	9.2	37.0	56.7	89.8	102.5
Margin %	0.4	0.4	0.3	0.3	0.2	0.8	0.5	0.5	0.6

Most notably, the gross margin has increased from 1.4% in 2013 to 8.6% in 2015. The EBITDA margin increased by approximately 300 basis points.

ROIC/WACC ~ Value Creation

An important figure to look at when analyzing a company is its return on invested capital (ROIC). But more importantly, the ROIC/WACC ratio. This figure demonstrates that a company is yielding a higher return rate on its capital expenditures than it pays to run the

business. When this ratio is greater than 1 (after adjustments for goodwill and such forth) value is being created for the shareholders. As you can see from the table below, Sunoco has certainly proven value creation. The 5-year average is approximately 9.

ROIC	10.1%	10.1%	6.5%	17.7%	307.8%	6.3%
WACC	10.1%	10.1%	3.1%	4.9%	6.8%	8.7%
ROIC/WACC	1.00	1.00	2.11	3.65	45.47	0.72
					5-Year Avg.	8.99

Valuation

The valuation of Sunoco LP is based on a valuation computed by a pro forma using a DCF method with a main focus on return on invested capital.
Attached to this report is an overview containing the assumptions, inputs, and significant market data that have been used in the valuation.
When valuing Sunoco LP, a moderate approach has been applied. Due to the nature of the business, a 10 year period to convergence has been used. The pro forma has used the average of analysts' estimates for revenue growth in the upcoming years. Since Sunoco operates solely in the United States, a tax rate of 40% has been applied along with a discount rate (risk premium) of 6.00 %.
The financial metrics of the firm were made to converge closely with the industry averages that have been provided by Capital IQ which include total operating costs as a percentage of revenue, revenue, beta, and the D/E level. In 2015, Sunoco's adjusted operating costs/revenue was 96.9%. The average operating costs/revenue for the industry is 64.8% and its historical average is 96%.
Inputting the aforementioned assumptions and inputs, the pro forma calculated an intrinsic value of $42.05 compared to its market price of $36.60 with a one-year target of $43.95.

Conclusion

In conclusion I am recommending a BUY on Sunoco. Given the industry outlook which will be the primary determinant of this company's stock price along with its strong performance during volatile oil pricing. It is clear that this company can sustain long-term growth and yield a potential 30% return for investors.

SIENAcollege

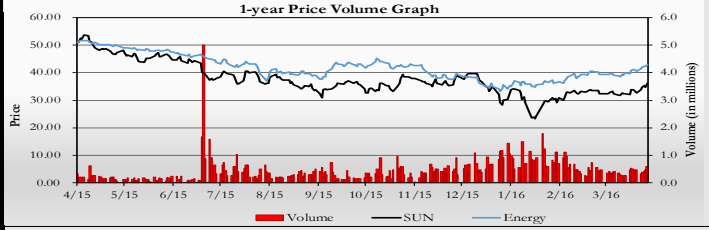
Siena Market Line
1st week of May 2016

Sunoco LP (SUN)

CENTER FOR GLOBAL FINANCIAL STUDIES

BULLISH

Analysis by P.C. Principal	Current Price:	$36.61	Intrinsic Value	$42.05	Target 1 year Return: 29.98%
4/29/2016	Divident Yield:	9.9%	Target Price	$43.95	Probability of Price Increase: 82%



Description

Sunoco LP engages in the wholesale distribution and retail sale of motor fuels primarily in Texas, New Mexico, Oklahoma, Louisiana, Kansas, Maryland, Virginia, Tennessee, Georgia, and Hawaii.

General Information

Sector	Energy
Industry	Oil, Gas and Consumable Fuels
Last Guidance	November 3, 2015
Next earnings date	May 5, 2016
Estimated Country Risk Premium	6.00%
Effective Tax rate	40%
Effective Operating Tax rate	26%

Market Data

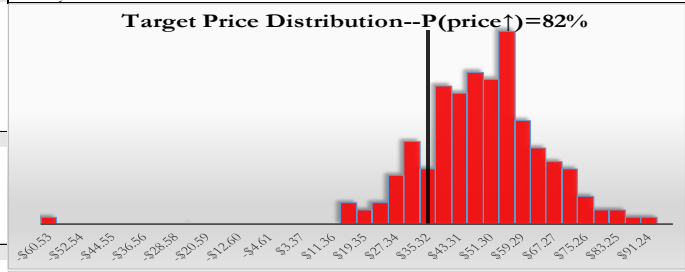
Market Capitalization	$4,012.96
Daily volume (mil)	0.38
Shares outstanding (mil)	111.75
Diluted shares outstanding (mil)	98.38
% shares held by institutions	78%
% shares held by investments Managers	47%
% shares held by hedge funds	2%
% shares held by insiders	0.03%
Short interest	5.26%
Days to cover short interest	9.57
52 week high	$54.82
52-week low	$22.86
Levered Beta	1.18
Volatility	0.00%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
12/31/2014	257.38%	149.90%
3/31/2015	165.95%	5.69%
6/30/2015	8.48%	175.08%
9/30/2015	-14.09%	37.39%
12/31/2015	-34.85%	-18.26%
Mean	76.57%	69.96%
Standard error	57.4%	39.0%

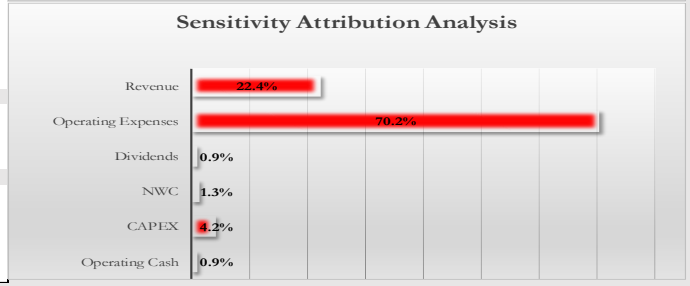
Peers

Sunoco Logistics Partners L.P.
Global Partners LP
Murphy USA Inc.
CrossAmerica Partners LP
Plains All American Pipeline, L.P.
NGL Energy Partners LP
CST Brands, Inc.
Kinder Morgan, Inc.

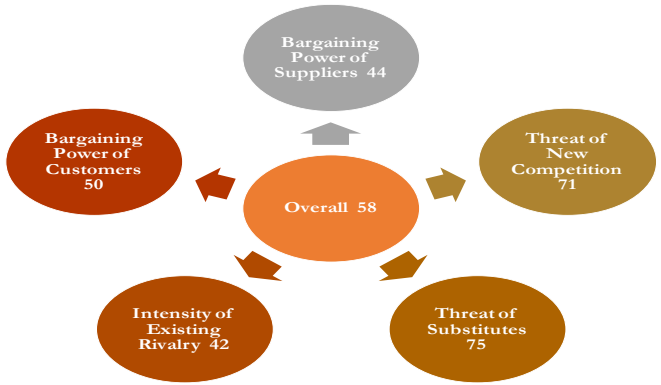


Management	Position	Total compensations growth	Total return to shareholders
Owens, Robert	Chief Executive Officer of S	124.46% per annum over 1y	-14.42% per annum over 1y
Archer, Cynthia	Chief Marketing Officer of S	N/M	N/M
Curia, Christopher	Executive Vice President of	N/M	N/M
Heinemann, S.	Executive Vice President of	N/M	N/M
Williams, R.	Executive Vice President of	N/M	N/M
Grischow, Scott	Director of Investor Relatio	N/M	N/M

Profitability	SUN (LTM)	SUN (5 years historical average)	Industry (LTM)
ROIC	6.3%	70.45%	-0.10%
NOPAT Margin	2%	1.82%	-5.4%
Revenue/Invested Capital	3.25	38.66	0.02
ROE	7.1%	78.99%	-1.56%
Adjusted net margin	2%	1.79%	-11.6%
Revenue/Adjusted Book Value	4.37	44.21	0.13
Invested Funds	**SUN (LTM)**	**SUN (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	1.1%	1.8%	7%
Estimated Operating Cash/Total Capital	1.1%	1.2%	N/A
Non-cash working Capital/Total Capital	5.1%	6.6%	0%
Invested Capital/Total Capital	100.4%	98.1%	89%
Capital Structure	**SUN (LTM)**	**SUN (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.69	0.32	0.55
Cost of Existing Debt	8.14%	3.48%	4.29%
Estimated Cost of new Borrowing	3.77%	2.10%	4.29%
CGFS Risk Rating	BB	A	CC
Unlevered Beta (LTM)	0.85	0.41	1.15
WACC	8.70%	7.00%	10.44%



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



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	64.1%	1.9%	0.72
12/31/2016	10.0%	2.0%	0.81
12/31/2017	8.0%	2.2%	0.81
12/31/2018	7.0%	2.5%	0.90
12/31/2019	6.0%	0.7%	0.24
12/31/2020	5.0%	0.8%	0.26
12/31/2021	4.0%	1.4%	0.47
12/31/2022	3.0%	2.1%	0.68
12/31/2023	3.0%	2.8%	0.87
12/31/2024	2.5%	3.4%	1.06
12/31/2025	2.0%	4.1%	1.23
Continuing Period	2.1%	4.7%	1.39

Period	Invested Capital	Net Claims	Price per share
Base Year	$116.50	$2,057.92	$44.90
12/31/2016	$125.96	$3,017.74	$46.84
12/31/2017	$139.74	$3,557.88	$48.68
12/31/2018	$260.98	$4,009.96	$50.80
12/31/2019	$5,216.10	$4,848.92	$53.21
12/31/2020	$5,584.26	$5,622.20	$56.29
12/31/2021	$6,573.06	$6,215.49	$60.12
12/31/2022	$7,104.91	$6,608.78	$64.72
12/31/2023	$7,603.09	$6,821.03	$70.08
12/31/2024	$8,060.37	$6,838.29	$76.18
12/31/2025	$8,432.83	$6,753.30	$83.00
Continuing Period			

SIENAcollege

Siena Market Line
1st week of May 2016

Twitter Inc.

NYSE:TWTR

Analyst: Arthur Jeannerot
Sector: Information Technology

BUY

Price Target: $21

Key Statistics as of April 27, 2016

Market Price:	$14.62
Industry:	Internet Software and Services
Market Cap:	$10.32B
52-Week Range:	$13.91-$41.09
Beta:	1.14

Thesis Points:

- Twitter is a unique product in the social media space, which ensures it will be around for a long time.
- The Twitter service has reached maturity, causing investors to worry about the company's future ability to generate profits and forcing it to reinvent itself.
- With shares near an all-time low, Twitter could be a prime acquisition target.

Company Description:

Twitter is a leading social network with over 300 million monthly active users. Twitter was founded by Jack Dorsey in 2006, and went public in November 2013. Since it started as an SMS-based group messaging service, Twitter has become one of the leading social networks alongside Facebook (FB), Instagram (owned by Facebook) and LinkedIn (LNKD). The company also diversified its business with the acquisition of video apps Periscope and Vine, and is starting to make its foray into live video.

Thesis

Twitter is a unique product in the social media space, which fulfills a critical purpose: live information. Since it was founded ten years ago, the platform has become essential for people looking for the latest news. Thanks to its constantly updating live feed, Twitter has often proven its superiority over mainstream media for initial reporting of important news. After a very successful IPO, which sent the share price soaring from $26 to a high of $70 in less than two months, Twitter shares took a sharp downturn and hit an all-time low of $13.91 in February 2016. This was mainly due to a shift in the company's business model, which is no longer attracting new users. After replacing many key executive as well as its board, the company is now on path to reinvent itself, especially by focusing on live video. With its current market capitalization of $11 billion, Twitter is dramatically undervalued compared to its peers and is a very attractive takeover target in the tech media sector. With Yahoo! (YHOO) putting its core business up for sale, Twitter could be next.

Porter's 5 Forces

The bargaining power of customers (in Twitter's case, marketers) is relatively high, as there is a variety of competing social networking platforms to advertise on. If most of Twitter's customers were to switch their ads to Facebook (FB) or Google (GOOG), it would cause a dramatic fall in the company's revenues.

The bargaining power of suppliers (in this case, users) is also high, since they are the core driver of Twitter's revenues. If the majority of Twitter users leave, the ads will stop generating clicks and the company's revenues will be severely impacted.

The threat of new entrants is also high, as there is perpetual innovation going in the social media space. As we have seen in the past with examples such as MySpace, it is hard to dominate the social media field for an extended period of time.

The intensity of existing rivalry is also fairly high, as there is already a handful of different social media platforms. Luckily for Twitter, the way it works differentiates it greatly from really "social" networks such as Facebook, Instagram, Snapchat and Tumblr, so it is not unrealistic to imagine Twitter could keep its spot as the go-to source for news.

Barriers to entry are relatively low, as the only requirements needed to start a social network are a computer and programming skills. The difficulty in social network resides in gaining enough traction to be able to sell advertising space to marketers.

Business Model

Twitter's business model is fairly simple: the company sells advertising space to marketers through what it calls "Promoted Products. Promoted products consists of accounts, tweets and trends that clients can pay to have promoted to Twitter's audience. The company can then provide marketers with all sorts of metrics on the effectiveness and reach of their marketing campaign. Naturally, this is a very profitable business, with very high gross margins (67% in 2015). The key to success in this business is to stay relevant and maintain audience, or marketers will sell their ads to a competing platform. This is why the company invests heavily in research and development and pursues strategic acquisitions like it did in the past with Vine and more recently Periscope.

Twitter

Since it was launched ten years ago, Twitter has become an essential component of the social media sphere. Because of the way Twitter works (chronological newsfeed, hashtags), it has naturally become a reference for the latest information. Despite having grown at a very rapid pace, the service now seems to have reached maturity, with the numbers of monthly active users stagnating around 300 million. One of the issues with Twitter is that a large part of its user base is actually composed of non-registered users. Even though those users cannot be included in the company's statistics, they can have an impact on the company's revenue if they engage with promotional content, which would generate ad revenue. Twitter recently made several changes to the core layout of Twitter, most notably the implementation of "Moments" and "While You Were Away" (WYWA). Moments is a collection of media (tweets, vines, periscope, etc.) relevant to a particular news story and WYWA is a personalized summary of the important activity of a user's feed since their last login.

Periscope

Twitter acquired Periscope in January 2015, before the app was even launched. The exact amount paid for the acquisition was not disclosed, but most estimates fall within the $75-$100 million range. Periscope is a live video-streaming platform, which enables anyone with an iOS or Android smartphone to stream content live from their smartphone (or GoPro for iPhone users). The app was released on Apple's App Store in March 2015, and on Google's Play Store in May 2015. Since then, it has gained considerable traction, reaching ten million users in just four months, and winning Apple's app of the year award for the 2015. Periscope was a very strategic acquisition for Twitter, which is focusing on live video to grow its business. It is still too early to assess the revenue-generating potential of Periscope, but judging from the interest in live video demonstrated by technology companies, it could become as popular as Snapchat. Furthermore, the integration of Periscope with Twitter will create new ways for marketers to promote their products, since a Periscope stream can be displayed wherever a Tweet can. This should allow Twitter to diversify its ad offerings, which could be a source of future growth. Furthermore, content marketers can also promote their Periscope channel on Twitter the same way they promote their own Twitter channel, which is a potential additional source of revenue for the company.

Vine

Vine as a video-sharing app available on iOS, Android and Windows Phone. The concept behind Vine is short, looping video clips of 6 seconds or less that users can share with each other. Twitter acquired the company in October 2013, before the app was available to the public. Vine was launched in January 2013 on iOS and in June on Android, and quickly became the most downloaded app on the App Store. As of 2015, Vine had over 200 million monthly active users, who played about 1.5 billion Vines every day. Twitter does not currently generate revenue directly on Vine, or at least not through the placements of commercials before videos. However, marketers who use Twitter's promoted products can promote their own Vine channel via Twitter, which would still generate revenue but would not be attributed directly to Vine.

Financials & Valuation

Twitter is currently not profitable, as the company invests heavily in R&D and SG&A, but the company still looks attractive on several metrics. First, like all the young Internet companies, Twitter has been growing revenues at a staggering pace. Between 2011 and 2015, the company's revenues have increased more than twenty-fold, from $106 million to over $2.2 billion. In my valuation, I forecast revenues to exceed $10 billion by the end of the forecast period in 2026. The company's return on invested capital (ROIC), which stood at 19.3% in 2015 or about 2 times the WACC, is expected to taper off to reach 10.8% in the continuing period, or just 1.1 times the WACC. In order to value the company, I used a discounted cash flow model with a focus on return on invested capital. Most of the assumptions were based on industry metrics, implying that as the company matures, it should resemble the industry as a whole. This returned an intrinsic value of $16.46, which implies that shares of Twitter are currently undervalued by about 12%. The 1-year price target came out at $20.5, which represents a potential return of 40.2%.

Conclusion

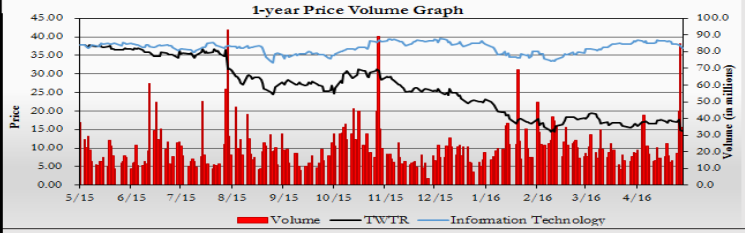
Twitter is currently undervalued and represents an attractive investment opportunity. Even though the company's core product has reached maturity, the company is still innovating, most notably in live video where it is focusing its efforts. Since the start of their downward trend in January 2014, Twitter shares have lost almost 80% of their value. Without making a case that they were fairly valued at $69, I believe it is reasonable to say that the current stock price of Twitter does not accurately represent the company's future prospects. The company is also extremely discounted compared to its peers, and this valuation gap is bound to narrow in the future as Twitter's new businesses pick up growth. Furthermore, at such a discounted valuation, the company could be an attractive acquisition target for a large Internet company such as Facebook or Alphabet.

SIENAcollege

Siena Market Line
1st week of May 2016

Twitter, Inc. (TWTR) — CENTER FOR GLOBAL FINANCIAL STUDIES — BULLISH

Analysis by Arthur Jeannerot	Current Price:	$14.62	Intrinsic Value	$16.46	Target 1 year Return: 40.22%
5/1/2016	Divident Yield:	0.0%	Target Price	$20.50	Probability of Price Increase: 99.6%



Description

Twitter, Inc. operates as a global platform for public self-expression and conversation in real time.

General Information

Sector	Information Technology
Industry	Internet Software and Services
Last Guidance	November 3, 2015
Next earnings date	July 26, 2016
Estimated Country Risk Premium	9.39%
Effective Tax rate	31%
Effective Operating Tax rate	31%

Market Data

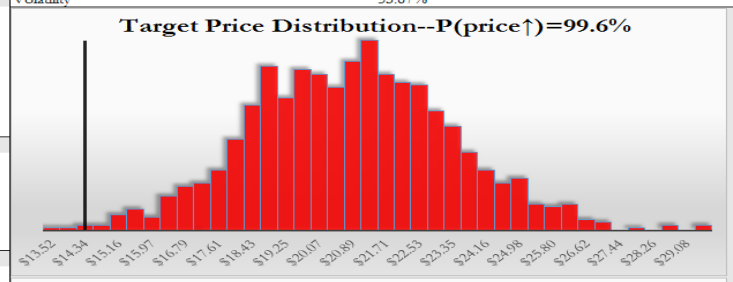
Market Capitalization	$10,158.66
Daily volume (mil)	26.88
Shares outstanding (mil)	694.85
Diluted shares outstanding (mil)	675.20
% shares held by institutions	47%
% shares held by investments Managers	35%
% shares held by hedge funds	1%
% shares held by insiders	16.67%
Short interest	7.94%
Days to cover short interest	2.28
52 week high	$38.96
52-week low	$13.91
Levered Beta	1.14
Volatility	53.67%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
3/31/2015	-14.13%	-166.97%
6/30/2015	-1.18%	-146.45%
9/30/2015	0.57%	-118.91%
12/31/2015	-2.21%	-109.10%
3/31/2016	-3.98%	-82.90%
Mean	-4.19%	-124.86%
Standard error	2.6%	14.6%

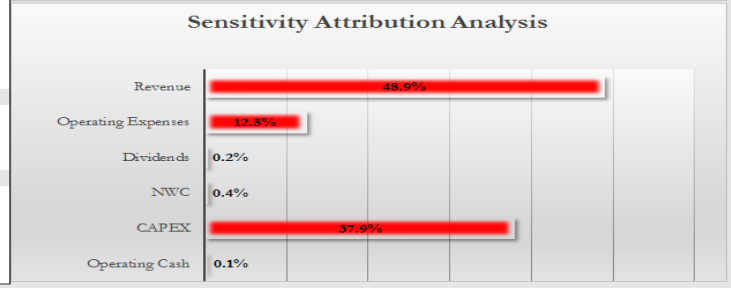
Peers

LinkedIn Corporation
Facebook, Inc.
Yahoo! Inc.
Alphabet Inc.
Match Group, Inc.
Pandora Media, Inc.
Rackspace Hosting, Inc.

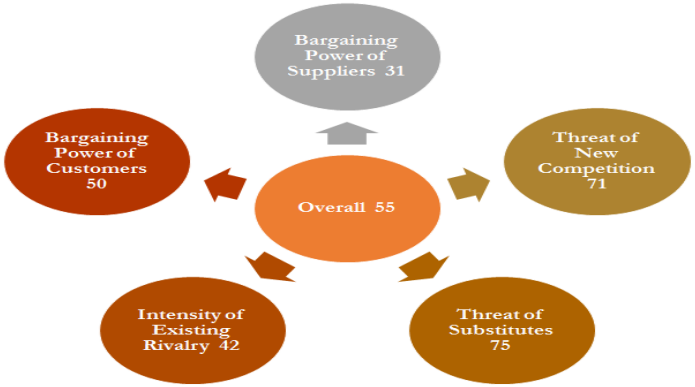


Management	Position	Total compensations growth	Total return to shareholders
Kordestani, Omid	Executive Chairman	N/M	0% per annum over 0y
Dorsey, Jack	Co-Founder, Chief Executive	N/M	0% per annum over 0y
Noto, Anthony	Chief Financial Officer	-99.45% per annum over 1y	-35.49% per annum over 1y
Bain, Adam	Chief Operating Officer	N/M	0% per annum over 0y
Kaiden, Robert	Chief Accounting Officer	N/M	N/M
Messinger, Adam	Chief Technology Officer and	N/M	N/M

Profitability	TWTR (LTM)	TWTR (5 years historical average)	Industry (LTM)
ROIC	11.7%	32.33%	15.35%
NOPAT Margin	38%	46.80%	19.7%
Revenue/Invested Capital	0.31	0.69	0.78
ROE	8.7%	69.85%	16.60%
Adjusted net margin	35%	45.22%	18.4%
Revenue/Adjusted Book Value	0.25	1.54	0.90
Invested Funds	**TWTR (LTM)**	**TWTR (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	27.2%	35.1%	71%
Estimated Operating Cash/Total Capital	0.9%	0.9%	N/A
Non-cash working Capital/Total Capital	3.6%	4.2%	-13%
Invested Capital/Total Capital	73.8%	68.2%	45%
Capital Structure	**TWTR (LTM)**	**TWTR (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.21	0.06	0.09
Cost of Existing Debt	5.96%	5.39%	2.92%
Estimated Cost of new Borrowing	4.48%	4.01%	2.92%
CGFS Risk Rating	CCC	B	BBB
Unlevered Beta (LTM)	1.05	1.00	1.08
WACC	9.30%	12.73%	13.88%



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



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	49.6%	38.5%	1.26
3/31/2017	16.0%	53.5%	1.70
3/31/2018	10.5%	48.5%	1.42
3/31/2019	9.1%	44.1%	1.22
3/31/2020	8.4%	40.0%	1.07
3/31/2021	7.7%	36.9%	0.97
3/31/2022	7.0%	36.4%	0.95
3/31/2023	6.3%	34.2%	0.90
3/31/2024	24.3%	40.5%	1.27
3/31/2025	50.5%	49.9%	2.15
3/31/2026	23.1%	51.4%	2.24
Continuing Period	2.1%	33.4%	0.79

Period	Invested Capital	Net Claims	Price per share
Base Year	$430.07	-$888.50	$16.12
3/31/2017	$912.67	-$2,330.44	$20.27
3/31/2018	$2,647.75	-$3,741.10	$24.39
3/31/2019	$4,889.13	-$5,236.25	$28.50
3/31/2020	$7,785.39	-$6,717.26	$32.54
3/31/2021	$9,699.39	-$8,193.58	$36.46
3/31/2022	$11,637.99	-$9,841.30	$40.36
3/31/2023	$13,474.06	-$11,406.75	$43.92
3/31/2024	$15,080.48	-$12,968.96	$48.05
3/31/2025	$16,512.54	-$14,737.49	$54.10
3/31/2026	$17,747.90	-$17,789.64	$61.15
Continuing Period			

SIENAcollege

Siena Market Line
1st week of May 2016

Medtronic plc

NYSE: MDT

Analyst: Senan Lonergan
Sector: Healthcare

BUY

Price Target: $92

Key Statistics as of 11/29/2015

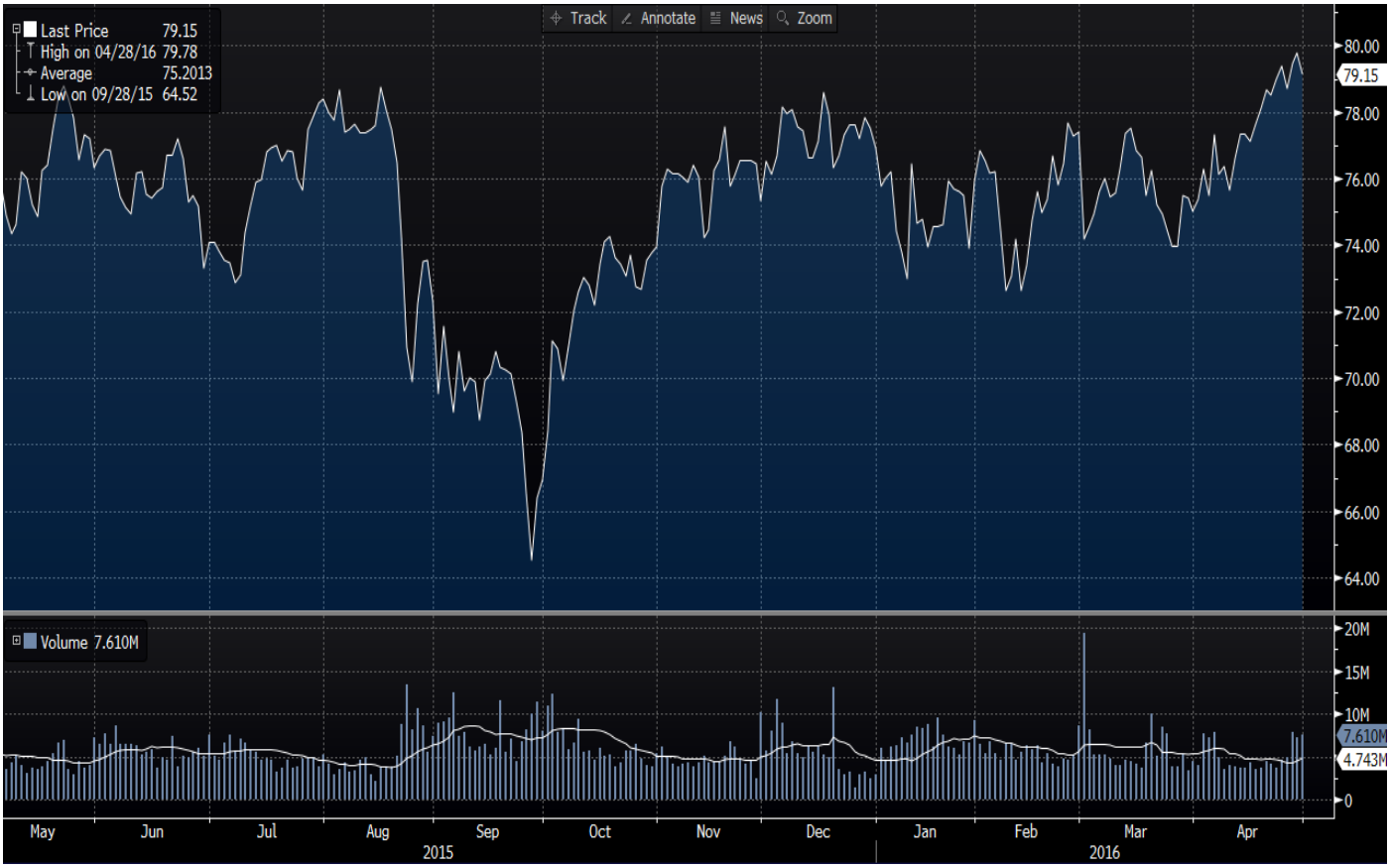
Market Price:	$79.15
Industry:	Medical Devices and Equipment
Market Cap:	$110.89B
52-Week Range:	$55.54-80.74
Beta:	0.80

Thesis Points:

- Leading provider of medical devices/equipment
- Diversified business portfolio
- Continued revenue growth with low volatility
- Organic growth coupled with acquisitions

Company Description:

Medtronic, Inc. is the world's leading medical technology company, controlling more than half of the $8 billion global heart-pacing market, which includes pacemakers and defibrillators. The company's products and services also include implantable neurological pain, tremor, spasticity, and incontinence management systems; heart valves; catheters and stents for angioplasty; implantable drug administration systems; hydrocephalic shunts; autotransfusion equipment; disposable devices for handling and monitoring blood during surgery; and instruments and devices used in surgical procedures of the head and spine and by ear, nose, and throat physicians. Medtronic employs 85,000 individuals and is headquartered in Dublin, Ireland.

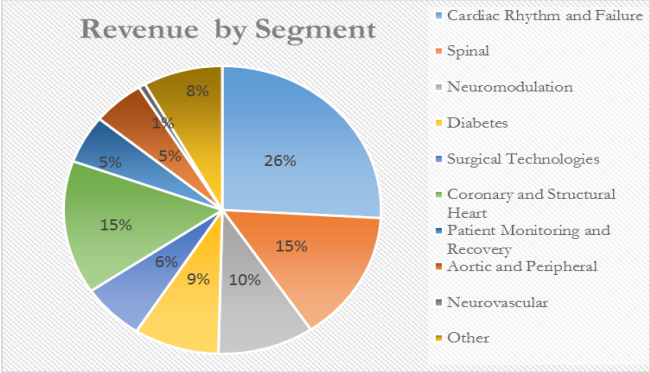


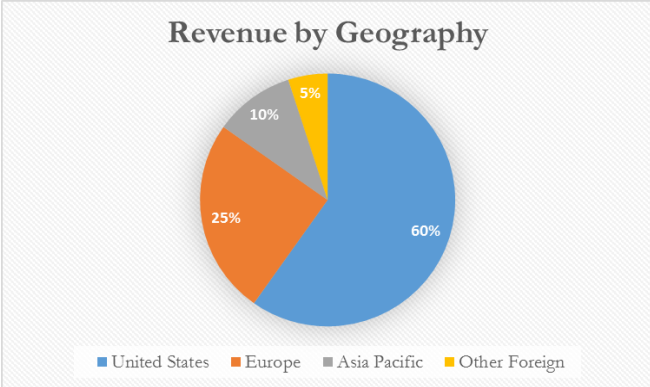
Thesis

Currently priced at $79.15, MDT has the potential to reach $92 a share in 2016, providing shareholders a 12-15% return on investment (including the 1.9% annual dividend). Medtronic's diversified business portfolio allows the upside potential of this stock to exceed the downside risk. Not only are they currently holding the largest market share in the medical devices industry, they are continuing to grow revenue through innovation and increased global exposure. The integration of Covidien, acquired in June 2014, is finally complete and the addition to Medtronic has provided considerable synergies and benefits.

Business Diversity

Medtronic operates through a variety of segments that diversifies the company and keeps revenue volatility at a minimum. The largest segment is cardiac rhythm and heart failure products, which accounts for 25.9% of total revenue. Products in this segment include defibrillation systems, pacing systems, and atrial fibrillation. The coronary and structural heart segments takes up 15% of revenue, while the spinal segment accounts for 14.7%. Neuromodulation accounts for 9.8%, and the remaining 34.6% of revenue is a result of various other products. The pie chart further elaborates on the diversity of this company. This cross-market diversity enables the company to withstand demand fluctuations in specific segments. While growth has slowed in several of the company's key markets (i.e. implantable cardioverter defibrillators and spinal procedures), Medtronic remains focused on its fundamental strategy of innovation. As a result of this diverse mix of products, Medtronic is often first to the market with new products. In addition to product diversity, Medtronic's products have reached more than 140 countries. Approximately 60% of sales are in the U.S, 25% are in Europe, 10% Asia, and 5% other. The overall business diversity of MDT allows the stock to be far less cyclical than many of its competitors. In the event of an economic crisis or bear market, MDT will prove to be a stable stock that is continuing to grow.





Market Share

The medical devices industry will continue to grow at an annualized rate slightly higher than GDP, and the competition is high. IBIS World statistics expect an annualized growth rate of 3.5% over the next five years. The industry is relatively saturated and because the barriers to entry are high, Medtronic's competition is made up of large, well-established corporations. However, Medtronic's revenue accounts for 34.3% of the nearly 45B dollar industry, which makes them the leading provider of medical devices/equipment. The next largest market share holders are General Electric, St. Jude Medical, and Johnson and Johnson, who hold 18.6%, 6.4%

and 5.4% respectively. By expanding its product line with R&D expenditure, and by tapping into emerging markets, Medtronic management expects their market share to increase as they obtain new customers around the world.

Acquisition

While Medtronic does continue to grow organically, the 60% revenue gain in 2015 is largely attributed to the 42.9 billion dollar acquisition of Covidien. This strategic acquisition has added value to the company in several ways which management estimates will total 850M in savings annually. These savings are a result of cost synergies, as well tax aversions. Medtronic is now headquartered in Dublin, Ireland where they pay significantly lower taxes.

Financials: Research and Development

Medtronic has continued to grow revenue on a year over year basis. Revenue has grown each year since 2012, including a 19.1% growth in 2015FY, and a remarkable 63% LTM. Their free cash flow of 4,856M, and an optimal capital structure of 33.9% debt allows Medtronic to invest in innovation. Research and Development is critical for this industry, and Medtronic continues to develop and patten products because of their devotion to this department. Funds allocated to R&D has increased the last three years, and the last 12 months totals 2,177M. The primary driver of this stock is revenue, but because there is always the possibility of a paradigm shift in the industry, the companies that focus on Research and Development are better off. Medtronic is dedicated to attracting the most impressive engineers, and management are comfortable with slightly higher SG&A, and R&D expenses in order to be the most innovative company.

Conclusion

In conclusion, investors in MDT can expect a one year return in the range of 12-15%. Medtronic's diverse portfolio of products, as well as its global reach to over 140 countries has allowed the company to continue growing revenue, while demonstrating little volatility. In the event of a bear market, Medtronic will prove to be a stable stock when compared to its biggest competitors. Furthermore, management acknowledges the possibility of future acquisitions or mergers, which provides investors with more upside potential. Medtronic will continue to be the leader in the medical devices/equipment industry, and management's dedication to R&D insures shareholders that any paradigm shift in the industry will be first recognized by Medtronic engineers.

SIENAcollege

Siena Market Line
1st week of May 2016

Medtronic plc (mdt)

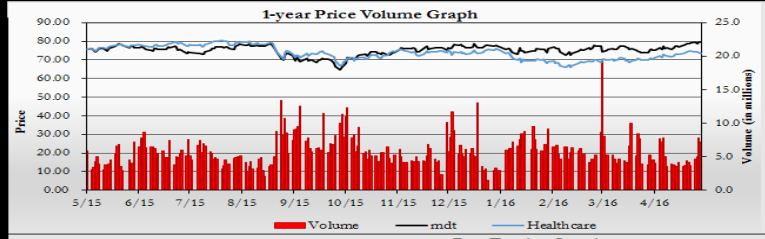
CENTER FOR GLOBAL FINANCIAL STUDIES

BULLISH

Analysis by Senan Lonergan
5/1/2016

Current Price:	$79.15	Intrinsic Value	$90.38
Divident Yield:	2.0%	Target Price	$96.40

Target 1 year Return: 23.79%
Probability of Price Increase: 98.5%



Description

Medtronic plc manufactures and sells device-based medical therapies worldwide.

General Information

Sector	Healthcare
Industry	Healthcare Equipment and Supplies
Last Guidance	November 3, 2015
Next earnings date	May 31, 2016
Estimated Country Risk Premium	2.40%
Effective Tax rate	6%
Effective Operating Tax rate	16%

Market Data

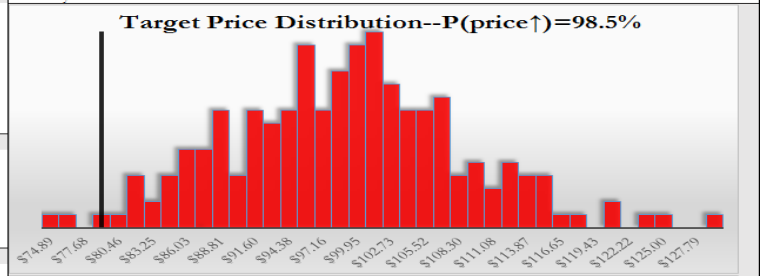
Market Capitalization	$110,892.57
Daily volume (mil)	7.61
Shares outstanding (mil)	1401.04
Diluted shares outstanding (mil)	1432.03
% shares held by institutions	78%
% shares held by investments Managers	79%
% shares held by hedge funds	1%
% shares held by insiders	0.10%
Short interest	0.88%
Days to cover short interest	2.23
52 week high	$80.74
52-week low	$55.54
Levered Beta	1.05
Volatility	18.23%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
1/23/2015	-36.80%	-39.19%
4/24/2015	-1.82%	-20.89%
7/31/2015	0.25%	-20.67%
10/30/2015	-0.93%	-22.32%
1/29/2016	-1.73%	-4.62%
Mean	-8.21%	-21.54%
Standard error	7.2%	5.5%

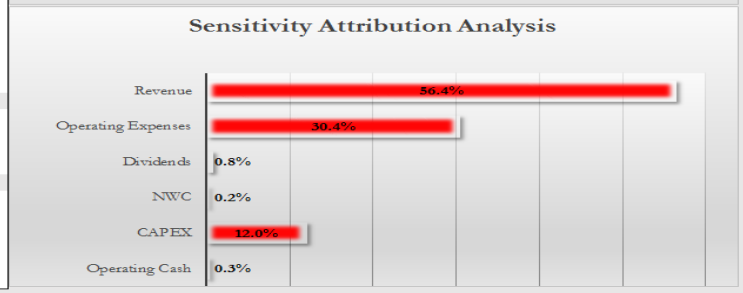
Peers

Boston Scientific Corporation
St. Jude Medical Inc.
Edwards Lifesciences Corp.
Abbott Laboratories
CR Bard Inc.
Stryker Corporation
Heartware International Inc.
Zimmer Biomet Holdings, Inc.

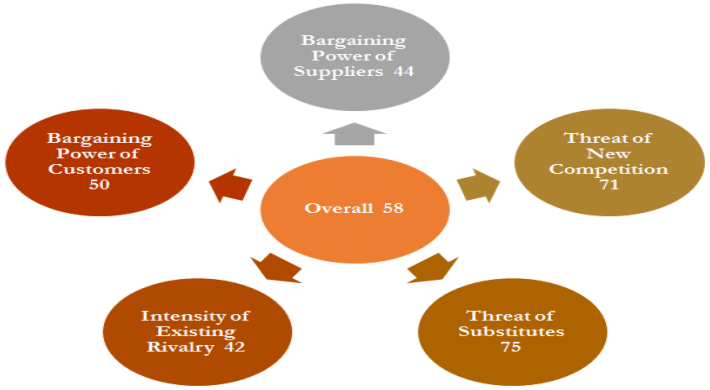


Management	Position	Total compensations growth	Total return to shareholders
Ishrak, Omar	Chairman and Chief Executive	16.39% per annum over 3y	18.3% per annum over 3y
Ellis, Gary	Chief Financial Officer and	36.1% per annum over 5y	-0.03% per annum over 5y
Coyle, Michael	Executive Vice President and	40.92% per annum over 4y	2.31% per annum over 4y
Hanson, Bryan	Executive Vice President and	43.53% per annum over 3y	18.3% per annum over 3y
Kuntz, Richard	Chief Scientific, Clinical &	N/M	N/M
Warren, Jeff	Vice President of Investor R	N/M	N/M

Profitability	mdt (LTM)	mdt (5 years historical average)	Industry (LTM)
ROIC	7.9%	33.69%	12.82%
NOPAT Margin	24%	44.42%	21.6%
Revenue/Invested Capital	0.33	0.76	0.59
ROE	7.5%	28.37%	14.79%
Adjusted net margin	20%	41.94%	18.5%
Revenue/Adjusted Book Value	0.38	0.68	0.80
Invested Funds	**mdt (LTM)**	**mdt (5 years historical average)**	**Industry (LTM)**
Total Cash/Total Capital	16.6%	22.8%	21%
Estimated Operating Cash/Total Capital	2.6%	2.7%	N/A
Non-cash working Capital/Total Capital	4.1%	6.4%	9%
Invested Capital/Total Capital	86.8%	79.8%	74%
Capital Structure	**mdt (LTM)**	**mdt (5 years historical average)**	**Industry (LTM)**
Total Debt/Common Equity (LTM)	0.35	0.25	0.21
Cost of Existing Debt	4.12%	3.80%	3.72%
Estimated Cost of new Borrowing	4.48%	3.82%	3.72%
CGFS Risk Rating	CCC	BB	B
Unlevered Beta (LTM)	0.80	0.80	0.74
WACC	5.96%	5.88%	5.90%



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



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	63.3%	23.9%	1.32
1/29/2017	10.6%	30.5%	1.85
1/29/2018	3.3%	29.3%	1.62
1/29/2019	5.3%	30.9%	1.75
1/29/2020	3.8%	31.7%	1.79
1/29/2021	3.5%	29.8%	1.70
1/29/2022	3.3%	28.1%	1.63
1/29/2023	3.1%	26.5%	1.56
1/29/2024	2.8%	24.9%	1.48
1/29/2025	2.6%	23.3%	1.41
1/29/2026	2.4%	21.7%	1.33
Continuing Period	2.1%	20.1%	1.27

Period	Invested Capital	Net Claims	Price per share
Base Year	$20,822.84	$24,980.02	$90.49
1/29/2017	$22,426.17	$27,975.84	$97.11
1/29/2018	$23,897.58	$26,018.03	$101.00
1/29/2019	$26,577.82	$24,914.01	$104.66
1/29/2020	$86,677.78	$20,791.34	$109.05
1/29/2021	$90,449.85	$18,492.18	$112.11
1/29/2022	$103,653.80	$16,535.39	$114.90
1/29/2023	$107,306.71	$14,925.39	$117.44
1/29/2024	$112,416.21	$13,693.17	$119.74
1/29/2025	$116,054.63	$12,856.90	$121.82
1/29/2026	$119,260.32	$12,437.79	$123.67
Continuing Period			