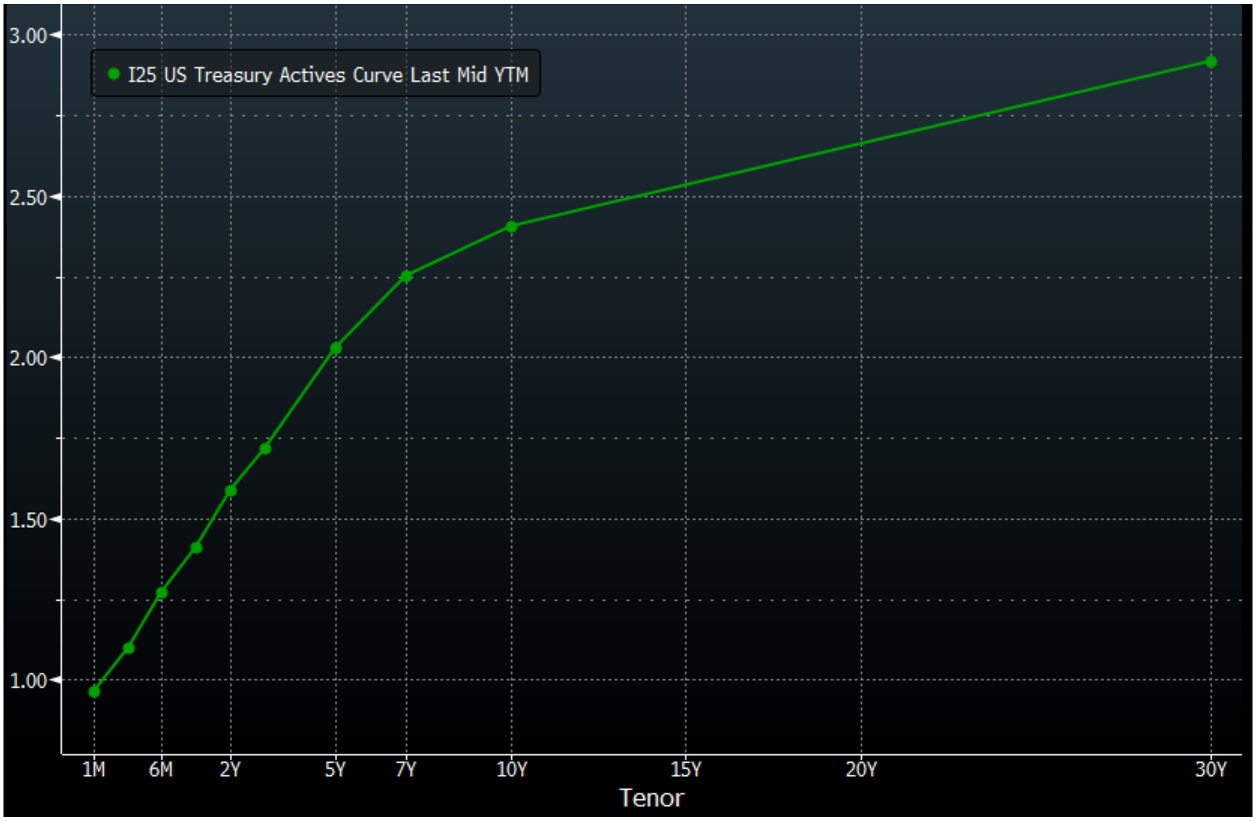
Bond Report

Rates rose during this trading week. The cause for the increase in rates came from two main causes, both political in nature. The first cause for the increase in rates came from speculation on who will take chairmen of the FED in February. Janet Yellen has been written off along with multiple other candidates for the seat. Trump has made comments this week about how very close he is to making a decision on who will replace Yellen. The consensus at the moment is that John Taylor from Stanford will be replacing Yellen. This, of course, has not been finalized and may change. The next political event that has been pushing rates up is the hope of tax reform finally being accomplished. With the tax reform looming business are beginning to get active in their wishes to get it past. Wall street journal reporting that businesses are even encouraging employees to become active in encouraging politicians through lobbying. Bonds ended this week at: 2-Year Treasury yield – 1.6%, 10-Year Treasury note – 2.426%, 30-Year Treasury bond Yield – 2.92%



What's next and key events

In the week to come we should receive more information on the two political conditions that affected rates so much this week. Although there is no set time frame, Trump will most likely give a more definitive name on who will be replacing Yellen at the FED. Also, congress may feel added pressure from lobbyist to make a more defined time line on tax reform in this coming week. Two major pieces of economic data will be coming out at the end of this week. On Thursday jobless claims will be released which will give some indication on employment. On Friday more indicators on employment will be released when the employment situation is released. This information may give indication to how wages will be doing in the future and through this inflation can be extrapolated. With inflation the FED may be more likely to engage in large federal funds rate hikes which could lead to large impacts in rates.

October, 28, 2017

Verint Systems Inc.: VRNT

Ryan Rosmarin

Sector: Information Technology
Industry: Application Software & Cyber Security
Current Price: $42.85
Target Price: $52.75

Company Description: Verint Systems Inc. is a global leader in actionable intelligence solutions and cyber security for over 10,000 organizations and governments in more than 180 countries. With the growth of big data across all industries, Verint Systems provides organizations with crucial insights and allows decision makers to anticipate, respond, and efficiently take action with its Customer Engagement and Cyber Intelligence solutions. By combining enterprise-class software with advanced analytics, Verint offers a large variety of customizable services to its customers protected by more than 800 patents worldwide.

BUY

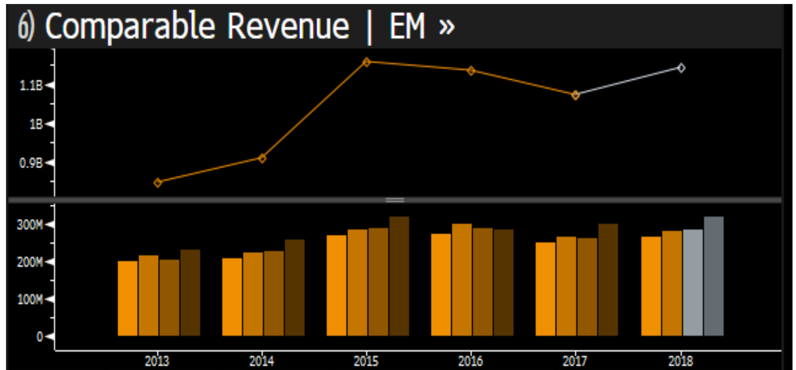
Current Price:	$42.85
Target Price:	$52.75
Market Cap:	2.73B
52 Week Range:	$33.40-$44.70
Average Volume:	423,555
D/E Ratio:	0.74
EBITDA Margin:	12.39%
12M Total Return:	18.61%
ROE:	-2.84%
Cost of Equity:	9.2%

Catalysts:

- **Short-Term** (within the year): Organic growth opportunity within Cyber Intelligence segment
- **Mid-Term** (1-2 years): Heightened geopolitical risk environment along with forecasted recovery in the cyber security industry
- **Long-Term** (3+years): Continual growth of actionable intelligence use among business & increasing cyber threats worldwide

Thesis:

Verint Systems Inc. is a worldwide leading force in the expanding actionable intelligence market and will continue to drive organic growth within its Customer Engagement and Cyber Intelligence segments. With over 14,000 professionals working in Research & Development, Verint consistently develops its artificial intelligence platform, allowing organizations to drive efficiencies and cut costs over time. In a risky geopolitical environment, with cyber security threats at an all-time high, Verint can expect revenue growth from a large increase in demand in its cyber intelligence segment. With its Customer Engagement segment, Verint has opportunity for organic growth as industries increasingly shift more towards automating operational activities. Verint's ability to attract new customers through its innovation and flexibility will create internal value and drive the company's stock price.

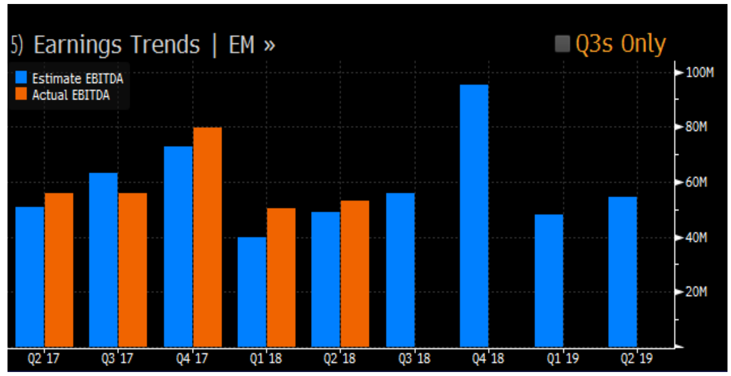


(USD)	2013	2014	2015	2016	2017	2018
FY	848.1M	910.0M	1.2B	1.1B	1.1B	1.1B
Q1	200.2M	205.4M	269.3M	270.4M	249.0M	265.7M
Q2	215.1M	222.8M	284.7M	297.1M	264.2M	278.2M
Q3	202.6M	224.8M	288.5M	285.3M	260.0M	282.5M
Q4	230.1M	257.1M	315.6M	281.8M	299.5M	317.5M

Business Overview:

Verint Systems Inc. offers its customers an advanced actionable intelligence platform through a four component foundation of data capturing, processing, analysis, and visualization across its Customer Engagement and Cyber Intelligence segments. Verint's platform allows companies to capture and manage a wide range of structured/unstructured operational, transactional, network, and web data to be used in big data applications. Verint Systems then facilitates the cleansing, fusing, and preparation of the data for analysis where it is classified through a wide range of engines. The analytical process includes correlations, anomaly detection, identity extraction, behavioral analysis, and predictive analytics. This allows for the identification of crucial insights for management during the visualization process and helps them make informed and effective decisions more efficiently. Unlike most of its competitors, Verint provides its network of organizations with deployment flexibility on premise, in the private/public cloud, or in a hybrid fashion. Enterprises are able to integrate Verint solutions on a modular basis as they decide to add pieces of the Verint portfolio to their business over time. Verint's strategic product flexibility allows for repeat business and the attraction of new customers through its reputation of innovation and domain expertise. The Customer engagement segment offers customer-centric organizations the ability optimize customer interactions, increase loyalty, and maximize revenue opportunities while reducing costs and mitigating risks. The Verint solution allows companies to lever real-time shared intelligence across the enterprise, increasing efficiency and quality as operations become more automated. In the cyber intelligence segment, Verint is a leading provider of security and data mining software to intelligence agencies, national security and law enforcement agencies, and correctional facilities. To enhance its services, Verint also collaborates with various communications networks to intercept potential data threats through calls, emails, texts, social media, etc. Verint earns 51% of its revenues in the Americas, 30% in the EMEA region, and 16% in the APAC region.

First Half Earnings Performance:



Verint Systems has beaten expectations in the first half this year, earning 48% of their full year revenue outlook, with a forecasted higher demand in the second half due to seasonality. Q1 non-GAAP revenue increased 7% year-over-year to $266mn, earning $177mn in Customer Engagement and $91mn in Cyber Intelligence. On a constant currency basis, Customer Engagement revenue increased 3% and Cyber Intelligence grew 19% year-over-year. Increases in Cyber Intelligence drove a 5% year-over-year improvement in non-GAAP operating margins, as there has been an increased in demand for cyber data mining services. In Q1, Verint delivered $10mn-plus projects to its customers as well as striking a multimillion-dollar deal with the Latin American government to protect the country against large-scale cyber-attacks. In Q2, Verint delivered $278mn in total revenue, increasing 4.5% for Q1 and 5.3% year-over-year. Customer Engagement revenue totaled $184mn increasing 5% from Q1 and at a steady pace of 3% year-over-year. Growth in the Customer Engagement segment was largely due to several $5mn-plus deals with financial, insurance, telecommunications, and health care services. Cyber Intelligence revenue increased 4% from Q1 to $95mn, a 12% increase from last year. Verint Systems continues to drive company growth with the increasing demand and improvements in its Cyber Intelligence segment. With the further evolution of security threats worldwide, Verint increased research & development expenditure in the first half and is likely to continue its expansion for the remainder of the year. Verint's latest addition to its Cyber Intelligence platform in Q2 was the release of its new web and social intelligence suites that enhance real time, open source data collections with advance machining and data mining software. The system transforms large volumes of web and social media content into insights, allowing for the identification of suspicious behavioral patterns and the creation of predictive intelligence. Geographically, Q2 led to revenue growth in all regions totaling $144mn, $85mn, and $49mn in the America's, EMEA, and APAC regions respectively. Q2 non-GAAP gross margins were approximately 65% with an operating margin of $45.6mn, 16.4%. Adjusted EBITDA margins came in at 19.1% of non-GAAP revenue, totaling $53.2mn. In Q2, Verint earned a net gain of $3.2mn from foreign exchange and benefited from a $1.3mn tax reversal of an accrual that was no longer necessary. At the end of the first half, Verint held $441mn in cash and short-term investments with $100mn in cash from operations, 45% increase year-over-year. Net debt totaled $385mn, after Verint acted on an attractive credit market to refinance their term loan, extending its maturity to seven years. Verint Systems expects revenues of $285mn in Q3 with mid-single digit growth in Customer Engagement and high single digit growth in Cyber Intelligence

Growth Strategy:

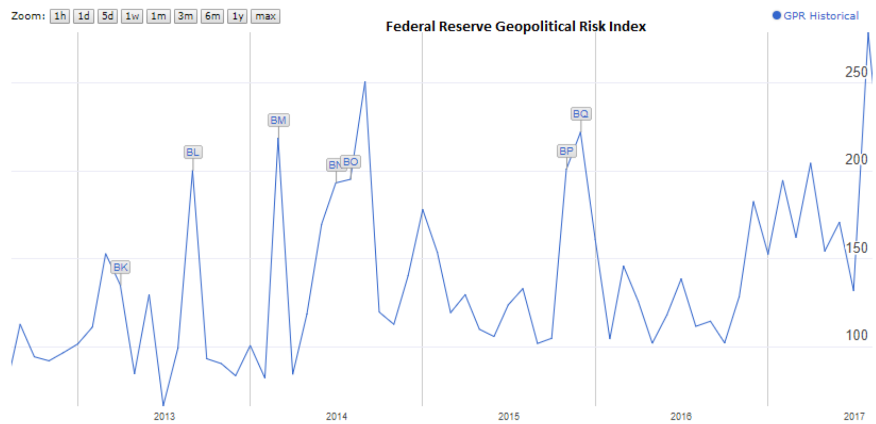
Verint Systems continues to grow through its reputation for innovation and domain expertise, making them a strategic vendor for organizations looking to advance their customer engagement and cyber intelligence. Verint's broad portfolio of software and supporting services continues to enhance operational efficiency, reduce cost, and drive revenues for its customers. Growth in the Customer Engagement segment will be driven by Verint's business approach of flexibility, providing them with a competitive advantage among its competitors. Verint's flexible business model permits organizations to evolve their customer engagement platform at different paces, allowing them the adaptation to priorities and trends unique to their company. In addition, Verint has cloud-enabled their customer engagement optimization portfolio allowing organizations to deploy Verint solutions in the way that best meets their objectives, whether it is on premise, in a private/public cloud, or in a hybrid fashion. Cloud generated revenue has currently grown 25% year-over-year and continues to gain scale in Verint's solutions, offering higher profit margins than the traditional on premise application process. Driven by upsell opportunities around analytics and CRM tools, Customer Engagement is expected to grow around 10% over the next two years.

After double-digit growth in Q1 and Q2, Verint Systems continues to growth its Cyber Intelligence segment, the primary driver of Verint's stock. Making up 35% of sales, Cyber Intelligence captures, processes, and alnalyzes big data volumes across communications networks, the internet, and dark web. The reprioritization of Cyber Intelligence with a renewed budget and heightened geopolitical concern will continue to drive organic revenue growth of at least 10% within the segment. The recent 7% depreciation of the US dollar against a trade-weighted basket of currencies will also contribute to revenue growth, as international sales is a large portion of Verint's revenue. Prior appreciation of the USD created significant headwinds to the purchasing power of Verint's customers. With the generation of most Cyber Intelligence revenue from Governments, Verint plans to leverage their experience to offer more cyber security and data mining to infrastructure providers and enterprises that fear security breaches. With an expected 15% CAGR in the cyber intelligence market, Verint remains in good position to expand existing customer platform and win multimillion-dollar deals among new ones. In the last year, Verint has signed over $380mn in large cyber security contracts.

Industry Analysis:

The overall forecast for the Information Technology sector on the Russell 2000 index continues to look promising as it has outperformed the RTY Index by 6.23% YTD and has beaten it by 45.09% over the last five years. The Russell 2000 IT segment has returned 18.75% YTD as R&D continues to pour into technological innovation, driving growth for the industry as a whole. High levels of product elasticity and substitutes spur competition within the index putting upward pressure on the profit margins of companies who can successfully adapt. More specific to Verint's operations, the cyber intelligence industry has grown at a CAGR of 20% in 2017 and is forecasted to have a CAGR of 15% over the next two years. As cyber threats and data breaches continue to become more frequent and complex, demand will heavily increase for Verint solutions. Additionally, growth in the cyber intelligence industry has historically been 80% correlated to oil prices and emerging market GDP. Emerging market GDP yoy has increased to 5.2% and is forecasted to stabilize at 5.5%, while WTI crude prices are up around 20% YTD, signaling bullish sentiment in the cyber intelligence industry. Between 2017-2021, global cyber security products and service expenditure is projected to exceed $1 trillion cumulatively. This is a potential growth environment for Verint Systems who will continue to be a leading provider in the industry. Another driver of the industry is the economic optimism under the Trump Administration. Markets continue to act bullish despite geopolitical concerns and a projected increasing rate environment. Trump's pro-growth strategy, tax-cuts, and deregulation should have a positive influence on Verint solutions, enabling them easier access to new markets and business expansion.

Geopolitical Concern:



With sharp increases in the frequency and complexity of cyber-attacks, the demand for cyber intelligence security among world governments continues to grow at an all-time high. This increase in demand is further driven with the high tensions of the current geopolitical environment, which has reached its highest level on the Fed's GPR Index in the last three years. Historically, there has been three war domains described by NATO: Air, Land, and Sea. In 2016, NATO added Cyber as a fourth dimension of attack between nations in times of international conflict. Increases in geopolitical risk climate lead to complex nation state attacks and heavy expenditure in global government spending on cybersecurity to hedge the risk of hackers breaking into confidential systems and information databases. In today's environment, the Fed's GPR Index has increased to 160 in Q217 compared to 104 at the end of Q416. The heightened risk of attacks from North Korea's nuclear missile program consistently drives volatility in this index as US President Donald Trump continues to combat the threats of Kim Jong Un. The North Korean missile crisis increases tensions among the US and China as well due to China's close relations with Pyongyang. This adds additional threat to two major world economies who are already in distress with current trade relations. Conflict between US and China could potentially bring Russia into the scene as they hold a strategic alliance with China to grow the eastern economy. Growth in demand for cyber intelligence is also driven by increases in acts of terror around the world by ISIS and other radical states. Since the emergence of ISIS in 2011, there has been over 70,000 terrorist attacks worldwide, many of them being against western civilizations and culture. This increase in violence furthers the demand for cyber intelligence among world governments, allowing them to discover acts of terror before they occur. Verint's cyber intelligence technology can track individual persons and groups who pose a threat to national security by scanning for key indicators through their conversations, social media presence, and web browsing. This increase in demand represents significant growth potential for Verint Systems as their stock price is 85% correlated to its growth in its Cyber Intelligence segment. As a leading provider of cyber intelligence in the IT sector, Verint will create value through the organic growth of its CI segment.

Competitors:

Verint's margins are closer to the median compared to its competitors, leaving significant room for growth as the company becomes more profitable. Although margins are currently low due to the high expenses of operation, Verint continues to improve through sales growth and market expansion. With EBITDA and Operating margins of 16.05% and 5.75% respectively, Verint performs above the median of its competitors, as low margins are common within the industry. Verint's margins are forecasted to increase as the cyber intelligence industry recovers from a slowdown in EBIT over the past two years due in part to reverse operating leverage in the segment when sales were under pressure. After making some adjustments to cost structure in 2017, Verint maintained a high base level of investment in belief that the spending slowdown would only be temporary. Over the next two years, EBIT margins are expected to return to a range of 15-20%, with Verint growing around 25% on a longer-term basis. Margins will increase in Customer Engagement as well as Verint shifts from on premise to cloud based solution integration.

	Name	Sales Growth (%)	EBITDA Growth (%)	EBITDA Margin	Operating Income Margin	Net Income Growth (%)
	Median	5.32%	9.00%	9.58%	5.75%	9.94%
100)	VERINT SYSTEMS INC	1.72%	-8.69%	16.05%	5.75%	-65.37%
101)	MICROSOFT CORP	5.43%	12.52%	34.92%	25.16%	12.46%
102)	INTL BUSINESS MACHINE...	-2.29%	-9.54%	20.74%	14.98%	-6.60%
103)	ORACLE CORP	3.02%	3.87%	41.91%	35.09%	7.41%
104)	NICE LTD	24.13%	9.00%	21.34%	11.11%	-33.93%
105)	PEGASYSTEMS INC	9.40%	-20.27%	9.58%	6.26%	12.64%
106)	SEACHANGE INTERNATIO...	-19.07%	62.97%	-6.36%	-13.36%	38.29%
107)	EGAIN CORP	-16.11%	49.18%	-0.64%	-6.13%	-6.93%
108)	REALNETWORKS INC	6.30%	50.97%	-13.66%	-17.29%	39.85%

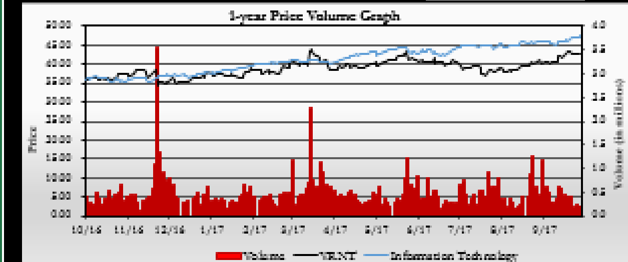
Conclusion:

Verint Systems Inc. stock price will appreciate 23% over the next 3-6 months as they continue to grow Cyber Intelligence in a favorable environment for information technology. Increased demand in CI due to heighted geopolitical concerns and terror threats will drive revenue and organic growth for Verint, as they are a leading provider in the industry. Verint will grow sales and attract new customers in CE, as firms continue to become more reliant on technology and look to operate with big data applications and cloud software. Verint Systems continues to invest heavily into research & development, leading to a wider range of solutions and increased reputation for innovation and domain expertise. In the current market environment, Verint Systems has strong potential for earnings growth, higher margins, and value creation.

SIENA college | BJORKLUND FUND

Verint Systems Inc. (VRNT) — CENTER FOR GLOBAL FINANCIAL STUDIES — BULLISH

Analysis by RYAN ROSMARIN	Current Price:	$42.85	Intrinsic Value	$45.99	Target 1 year Return: 23.11%
10/18/2017	Divident Yield:	0.0%	Target Price	$52.75	Probability of Price Increase:



Description

Verint Systems Inc. provides actionable intelligence solutions and value-added services worldwide.

General Information

Sector	Information Technology
Industry	Software
Last Guidance	November 3, 2015
Next earnings date	December 2, 2017
Estimated Country Risk Premium	6.00%
Effective Tax rate	23%
Effective Operating Tax rate	23%

Market Data

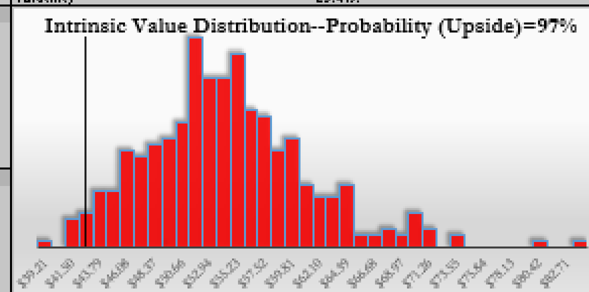
Market Capitalization	$2,731.03
Daily volume (mil)	0.19
Shares outstanding (mil)	63.73
Diluted shares outstanding (mil)	62.78
% shares held by institutions	84%
% shares held by investments Managers	80%
% shares held by hedge funds	12%
% shares held by insiders	1.13%
Short interest	1.63%
Days to cover short interest	2.35
52 week high	$44.70
52-week low	$33.40
Volatility	25.41%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
7/31/2016	-1.76%	-54.10%
10/31/2016	-7.65%	-64.03%
1/31/2017	-2.05%	-49.50%
4/30/2017	0.38%	-69.75%
7/31/2017	1.59%	-59.84%
Mean	-1.90%	-59.44%
Standard error	1.6%	3.6%

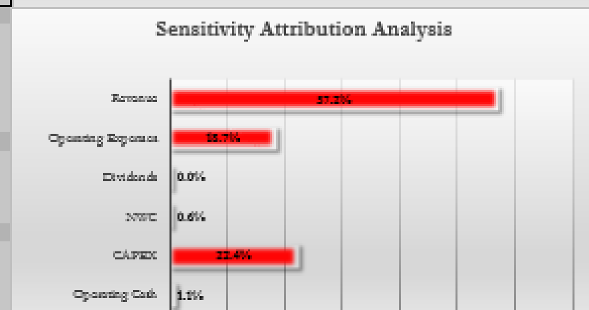
Peers

- PTC Inc.
- Pegasystems, Inc.
- Nuance Communications, Inc.
- Synopsys, Inc.
- Zendesk, Inc.
- Salesforce.com, inc.
- RealNetworks, Inc.
- SeaChange International, Inc.

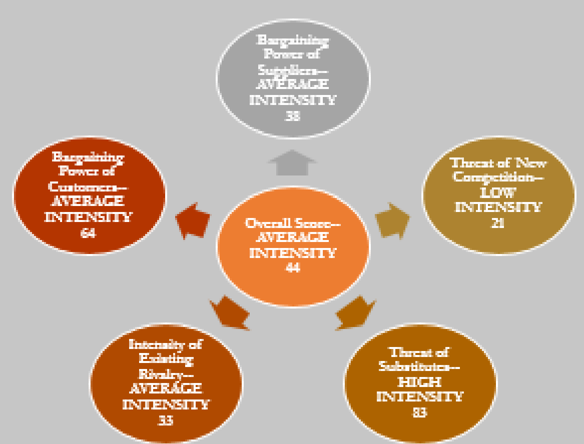


Management	Position	Total compensation growth	Total return to shareholders
Bodner, Dan	Chairman, CEO & President	4.15% per annum over 6y	4.08% per annum over 6y
Robinson, Douglas	Chief Financial Officer	-0.68% per annum over 6y	4.08% per annum over 6y
Fante, Peter	Chief Administrative Officer	0.15% per annum over 6y	4.08% per annum over 6y
Mariah, Elan	President of Customer Engage	0.59% per annum over 6y	4.08% per annum over 6y
Raden, Alan	Senior Vice President of Cor	N/M	N/M
Sharon, Elad	President of Communications	N/M	N/M

Profitability	VRNT (LTM)	VRNT (5 years historical a	Peers' Median (LTM)
Return on Capital (GAAP)	3.8%	11.82%	-3.67%
Operating Margin	5%	10.44%	3.45%
Revenue/Capital (GAAP)	0.75	1.13	-1.06
ROE (GAAP)		7.7%	26.1%
Net margin		4.3%	15.6%
Revenue/Book Value (GAAP)	#VALUE!	1.77	1.68
Invested Funds	**VRNT (LTM)**	**VRNT (5 years historical a**	**Peers' Median (LTM)**
Cash/Capital	20.5%	19.5%	61.2%
NWC/Capital	-4.3%	-7.5%	-35.8%
Operating Assets/Capital	12.9%	16.0%	14.7%
Goodwill/Capital	70.9%	70.5%	59.9%
Capital Structure	**VRNT (LTM)**	**VRNT (5 years historical a**	**Peers' Median (LTM)**
Total Debt/Market Capitalization	0.42	0.46	0.53
Cost of Existing Debt	4.6%	5.1%	4.8%
CGFS Rating (F-score, Z-score, and default Probab	CC	B	B
WACC	7.7%	9.1%	10.0%



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



Valuation

Period	Revenue Growth Forecast	NOPAT Margin Forecast	Revenue to Capital Forecast
Base Year	2%	12.1%	0.40
7/31/2018	6%	0.6%	0.40
7/31/2019	5%	3.5%	0.40
7/31/2020	5%	4.5%	0.40
7/31/2021	5%	5.2%	0.39
7/31/2022	4%	5.7%	0.39
7/31/2023	4%	22.2%	0.38
7/31/2024	4%	22.0%	0.35
7/31/2025	4%	21.8%	0.33
7/31/2026	3%	21.6%	0.31
7/31/2027	3%	21.3%	0.29
Continuing Period	3%	21.1%	0.28

Period	Return on Capital Forecast	WACC Forecast	Price per share Forecast
Base Year	4.9%	7.7%	$45.50
7/31/2018	0.2%	7.7%	$52.11
7/31/2019	1.4%	8.1%	$58.82
7/31/2020	1.8%	8.2%	$65.78
7/31/2021	2.0%	8.3%	$72.91
7/31/2022	2.2%	8.4%	$80.21
7/31/2023	8.4%	8.9%	$87.90
7/31/2024	7.8%	9.1%	$95.80
7/31/2025	7.2%	9.2%	$103.91
7/31/2026	6.7%	9.3%	$112.25
7/31/2027	6.2%	9.5%	$120.84
Continuing Period	5.9%	9.6%	

October 28, 2017

Company Name: OSTK

TJ Curtin

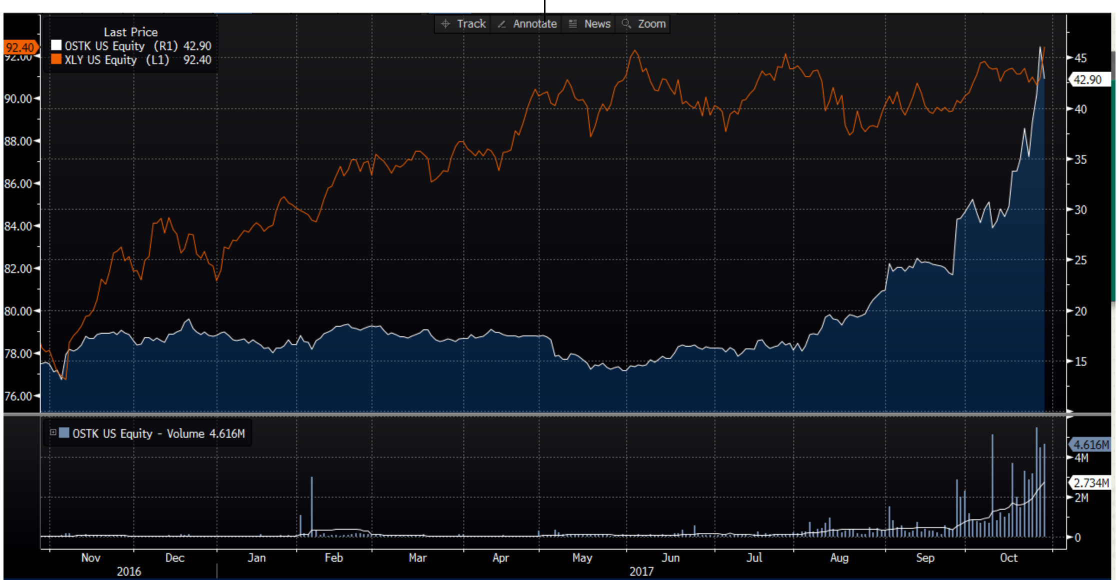
Sector: **Consumer Discretionary**
Industry: **Internet and Direct Marketing Retail**
Current Price: **$41.53**
Target Price: **$103.08**

BUY

Current Price:	$41.53
Target Price:	$103.08
Market Cap:	$1.15B
EBITDA:	$16.1M
R&D % of Rev:	6.14%
Gross Margin:	19.5%

No customer represents more than 1% of sales

Company Description: Overstock.com, Inc. is an online retailer of a large variety of products and recently has declared itself an incubator of blockchain technology. The company sells items such as food products, clothing, and furniture and has constantly been expanding its product lineup to include new products and services such as used cars and insurance.

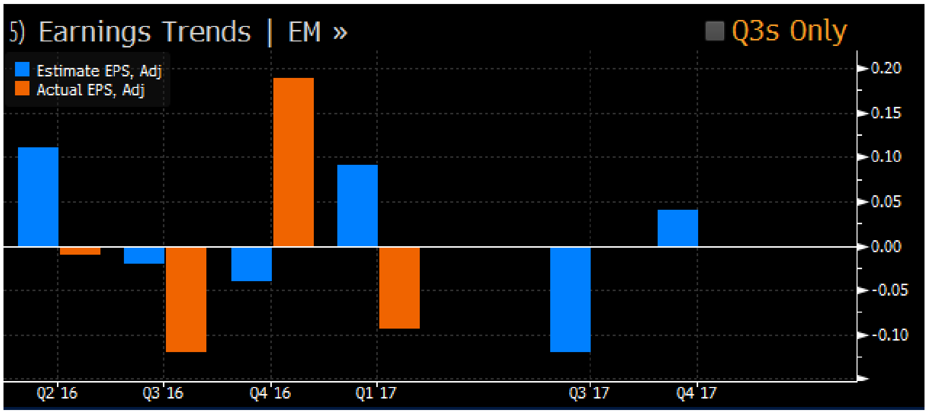


Thesis: Overstock.com Inc. is an online retailer of various goods and services through direct channels and channels utilizing the relationships of partners. In late 2014, the company began to make its way into the blockchain and cryptocurrency space, through which it has become a leader in developing and utilizing new technologies, to enhance its business strategy. This early move into the space, coupled with innovation and associated efficiencies as well as increased demand for blockchain utilization and the likely appreciation of crypto value will allow the company to become an industry leader in a developing industry and will translate to an increase in shareholder value.

Catalysts:

- **Short Term(within the year):**
  - Gains from newly added Cars segment
  - Cryptocurrency ICO (mid Nov.)
- **Mid Term(1-2 years):**
  - Will become an industry leader in blockchain implementation
  - Will become an industry leader as a cryptocurrency exchange
- **Long Term(3+):**
  - Benefits associated with the capitalization of short and mid-term catalysts (consulting potential, currency appreciation, efficiency increases)

Earnings Performance:



As can be noted by the graph above, where the blue bars represent analyst estimates for earnings per share over the past year whilst the orange lines represent actual earnings per share, predictions as well as performance are all over the place. This is due in part to the seasonality of Overstock's revenue, in part to the large degree of uncertainty that surrounds the cryptocurrency and blockchain markets of which Overstock has been the first major online retail corporation to begin investing major resources into, and in part because only recently have analysts begun to follow and report on this stock. Estimates appear to be more conservative for the next year, in terms of volatility, likely to reduce the forecast error by analysts and because of the inclusion of last year's data.

	Measure	Q3/17 Est	4Wk Chg	YoY Gr	Growth vs Comps
11)	EPS, Adj+	-0.120	0.00%	0.0%	Weaker
12)	EPS, GAAP	-0.120	0.00%	0.0%	Weaker
13)	Revenue	453.000M	0.00%	2.6%	Weaker
14)	Net Income, Adj+	-2.120M	10.55%	31.6%	Stronger
15)	Operating Profit	-4.270M	0.00%	--	--
16)	EBITDA	5.210M	0.00%	56.1%	Stronger

Earnings per share as well as revenue growth have been consistently weaker than competition (competitors include the likes of Amazon, Target and Wayfair) although net income growth, which has grown by a massive 31.6% over the past year as well as EBITDA growth, which also boasts a large gain of 56.1% come in stronger than competition. This data exemplifies the lack of compatibility with other firms in the industry due to Overstock's transition from an e-commerce retailer to a blockchain and cryptocurrency focused organization.

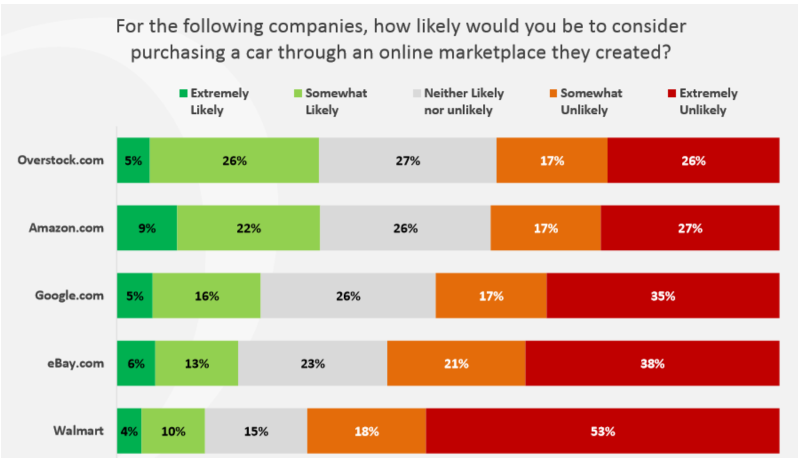
Business Strategy:

Overstock.com, Inc. owns and operates three websites that it utilizes to sell its variety of products either direct to consumer or to businesses. These products include, but are not limited to the areas of home and garden, furniture, home décor, jewelry, watches, clothing and accessories, electronics and computers and other products. Recently, the organization has opened a new cars website for the posting and sale of used cars as the predicted supply of used vehicles is expected to rise to an all-time high over the next 3 years. The internet retail industry is described as intensely competitive and that key success factors include things such as price, product quality and assortment, shopping convenience, website organization and load speed, order processing and fulfillment, delivery time, customer service, website compatibility with mobile platforms, brand recognition and brand reputation. The company admits that it is not the leader of many of these areas in comparison to competitors; I believe because their primary focus is shifting elsewhere.

As competition became tougher, Overstock executives began to look toward the horizon for growth opportunities. In 2014, OSTK became interested in the growing blockchain and cryptocurrency trend and began to invest resources and efforts into pioneering this trend relative to their industry. In order to spearhead this movement, they acquired a majority interest in what can be described as either a financial technology (fintech) company or a blockchain and cryptocurrency company named Medici, which they have coined T0 (pronounced T-Zero). They were the first of all their competition to begin accepting Bitcoin as a form of payment in January of 2014 and by September of the same year, they began accepting the currency internationally. As a reference point, since January 2014, the value of the Bitcoin has increased over 670% from about $740 per coin to roughly $5,700. In January of 2016, OSTK acquired majority interests in two registered broker-dealers that were affiliated with T0. Also in 2016, the company acquired nearly an 11% equity interest in Bitt, Inc., a startup based in Barbados that facilitates a variety of digital currency transfers and business payments in the Caribbean.

Overstock owns its own headquarters in Midvale, Utah which offers approximately 232,000 square feet of office space. They lease approximately 12,000 additional square feet for their Medici initiatives (those related to blockchain and cryptocurrency) and approximately 1.2 million square feet are leased throughout the U.S. for warehousing activities and with another 9,700 square feet leased separately for various data centers. The company does not report any off-balance sheet activities at all and no customer represents more than 1% of their business.

Addition of Cars:

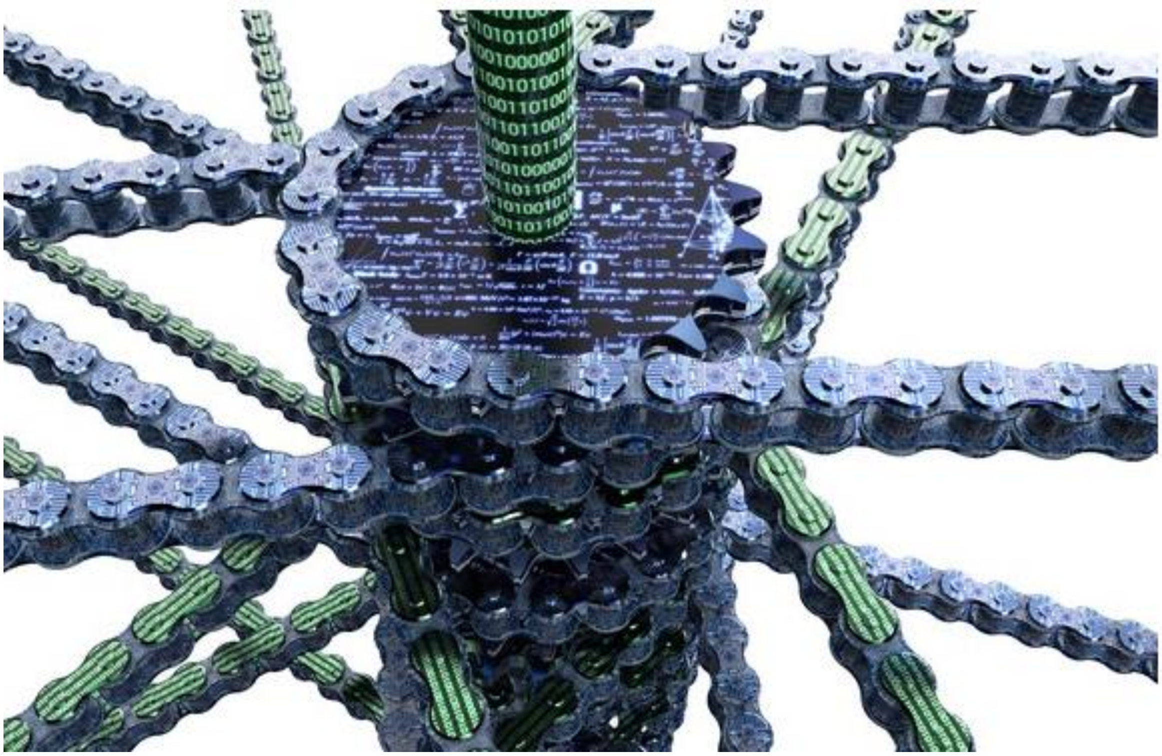


The graph to the left shows the results of a survey where customers were asked about their likelihood of purchasing a car through various online retailers. The data shows that customers were likely to consider purchasing a car through Overstock in comparison to its strongest competitors. The fact that over 30% of interviewees were more likely than not willing to consider purchasing a car through Overstock's online marketplace, coupled with the notion that there are currently more than 4 million cars available, provides a glimpse at the potential revenue share that Overstock is aiming gain a portion of. This is especially important whilst online marketplaces for car sales are inefficient, not updated regularly, inaccurate and often full of software bugs. Overstock offers the lowest cost for warrantees, entirely online financing options for all customers, parts and maintenance service that can be delivered to or performed at the customers home and the organization is currently working on including off lease vehicles and virtual reality tours of cars in anticipation of future trends. These actions allow for the company to gain revenue around the entire ownership experience (purchase, insurance, warrantee, maintenance and repair and even potentially the sale). As this segment gains success, brand loyalty will strengthen and benefit other segments of the business as well.

Acquisitions:

The first acquisition that Overstock made in an effort to become a leader in blockchain and cryptocurrency technologies was of the fintech company initially coined Medici. The Blockchain is the technology that allows cryptocurrencies to exist, although it has various other useful business applications. Blockchain technology is essentially a digital, decentralized (no trusted third party) ledger that eliminates the need for a bank to exist between transactions. Since the networks are open-source, it is nearly impossible to alter logged data and so the potential for more secure peer-to-peer and business-to-business operations points strongly to this technology. The purpose of the Medici acquisition was to give Overstock a competitive advantage in the e-commerce sector by becoming the first to begin accepting cryptocurrencies as a form of payment. Initially, Bitcoin was the only currency accepted although other currencies such as Ethereum have been added to the list over time. Not only will this drive customers toward the organization over competitors, but the price appreciation of the currency as well as the increased operating efficiencies that come along with the proper utilization of blockchain technology will help the company to strengthen its position in its industry.

In January of 2016, two registered broker-dealers approved by FINRA and nearly all of the related employees were acquired by OSTK in an effort to further exacerbate the company's position in the cryptocurrency markets. In 2016, OSTK also acquired nearly an 11% equity interest in Bitt, Inc., a startup based in Barbados that facilitates a variety of digital currency transfers and business payments in the Caribbean. Recently, OSTK issued class A preferred shares through a blockchain medium making it the first publicly traded company to utilize the new technology to issue shares. This recent push toward the exchange-side of blockchain technology indicates that the company may very well be shifting its focus from the realm of e-commerce to the cryptocurrency-exchange side of things. As an entity with a significant amount of experience in this industry (nearly 4 years whilst competitors have yet to enter) and the signs that the industry is shifting from a great potential idea to a widely accepted idea as governments and institutional investors have begun to take financial interest in the potentially "disruptive" technology, OSTK has positioned themselves well thanks to their acquisitions over the past years. Getty Images was kind enough to provide the image below which is a digital representation of blockchain technology; the gear at the center represents the ledger, where information is recorded and stored and the chains represent users on the network who corroborate this information by recording and storing it separately. Users and the ledger store their own as well as others information in an encrypted form so that only relevant data is viewable. The more users that utilize the network equates to a higher strength and security of the blockchain, and underlying cryptocurrency(ies) themselves.



Initial Coin Offering:

An ICO (Initial Coin Offering) is much like the IPO of a stock, however it is for the initial sale of a new digital currency rather than the initial sale of a new public corporation. Overstock is seeking to raise $500 million through its private ICO between November 15th and December 31st of 2017, which if successful, will be the largest ICO in history compared to the previously set record of $262 million. Success in these offerings largely depends on the amount of people aware of the transaction, the public's trust and faith in the entity raising the funds and in the ability of the organization to manage the offering and supply of the currency adequately; an issue that Overstock is largely the most qualified to take on. If successful, OSTK will raise more capital than the market cap of itself in August of this year and rising demand for this currency will allow Overstock to earn additional income on the price appreciation of its own coin. These events will also likely be associated with an increase in the company's stock price.

Cryptocurrency Appreciation:

The Bitcoin is the most widely recognized cryptocurrency today as it was the first that was released and boasts the highest price and market cap; currently there are more than 800 other cryptocurrencies on the market with different intents and purposes. The chart on the previous page, sourced from Coindesk.com, shows Bitcoin prices in USD from January of 2014 through October 27, 2017. The value at the beginning of the period is under $1,000 and ends near the $6,000 mark. These historical values show the degree of uncertainty that was present in the cryptocurrency market from 2014 through the beginning of 2017 and exemplify the confidence that investors have gained over the past year as major events have begun to unfold relative to the industry. One of these is the introduction of federal regulation of cryptocurrencies; a concern that many had prior to this was the banning of utilizing and trading these currencies by the federal government. Various analysts have attempted to convey a target price for the Bitcoin, with estimates ranging between $8,000 and $20,000 over the next 12 months.

OSTK has been accepting Bitcoin since early 2014 and has announced the acceptance of other cryptocurrencies on a rolling basis since then. Currently, the organization also accepts Ethereum, Bitcoin Cash (a fork of the original Bitcoin), Litecoin, Dash and Monero. Each of these currencies is regarded as highly stable in comparison to the alternatives that exist and they have all boasted sizable gains since their introduction into the blockchain. The Ethereum price chart above, from coinbase.com, shows the uncertainty that existed with the coin from its inception up until the end of October 2017. As this organization increases its cryptocurrency exchange potential in a cost-effective manner and takes on more well-researched cryptocurrencies onto its accepted medium of exchange list as well as pushes toward its own coin offering, the appreciation of cryptocurrencies alone is set to generate substantial gains for the company moving forward.

Shift of Focus from Retail to Blockchain and Cryptocurrency Technologies:

As OSTK shifts from having a focus on e-commerce to a focus on blockchain and cryptocurrency technology, gains are to be expected so long as implementation and adaptation are successful. The company is sure to fluctuate in value as it makes this transition, however the thousand percent gains that have come along with OSTK's accepted cryptocurrencies, associated with the transition to the currencies starting to become widely accepted methods of exchange (from previously being condemned as "only for money-launderers and criminals") it is likely to see operating efficiencies, greater consumer and investor interest, currency appreciation and the ability to better capitalize on opportunity given the advantageous market position. The company has shed some light onto the confidence that they have in themselves when the board authorized a stock repurchase program in May of 2015. In January of 2017, the organization repurchased approximately 604,000 shares of common stock for $10 million. They have the option to purchase up to $15 million of common stock through the end of 2017 and may opt for additional share repurchases in the future. This signals that the company has faith in its own activities and is aiming to increase its earnings per share; a sign that investors would like to see amidst times of uncertainty about the current and future value of this company.

Conclusion:

OSTK is a profitable e-commerce retailer, however its future gains will largely come from strategy and performance in the blockchain and cryptocurrency departments. Although investors may be weary of investing in these technologies, their performance over the past 4 years provides evidence to their legitimacy, demand and profitability and an investment in OSTK is great way to gain exposure to the industry without investing directly in the volatile technological instruments themselves. Overstock is, by far, the most invested in terms of dollars and years in this technology with respect to its competition and an industry leader in an emerging market is largely able to capitalize on future opportunity that others are not able to. With the notion that this company will be leading the cryptocurrency trend in the coming year, I see its potential to be a great growth stock and 1 year investment that should be re-evaluated at least quarterly due to the implied volatility of any company related to the cryptocurrency industry.

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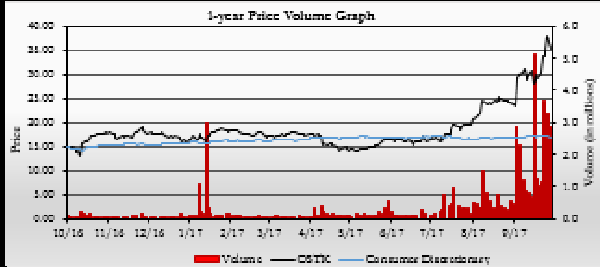
Overstock.com, Inc. (OSTK) — **BULLISH**

Analysis by TJ Curtin	Current Price:	$41.35	Intrinsic Value	$103.08	Target 1 year Return: 190.26%
10/27/2017	Divident Yield:	0.0%	Target Price	$120.02	Probability of Price Increase: 100



Description

Overstock.com, Inc. operates as an online retailer in the United States.

General Information

Sector	Consumer Discretionary
Industry	Internet and Direct Marketing Retail
Last Guidance	November 3, 2015
Next earnings date	November 3, 2017
Estimated Country Risk Premium	5.69%
Effective Tax rate	24%
Effective Operating Tax rate	24%

Market Data

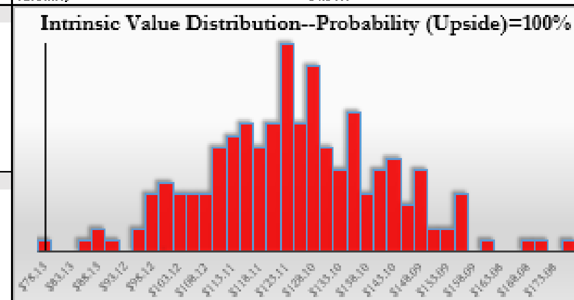
Market Capitalization	$1,033.76
Daily volume (mil)	5.45
Shares outstanding (mil)	25.00
Diluted shares outstanding (mil)	25.20
% shares held by institutions	71%
% shares held by investments Managers	33%
% shares held by hedge funds	9%
% shares held by insiders	12.86%
Short interest	9.92%
Days to cover short interest	2.94
52 week high	$43.15
52-week low	$13.05
Volatility	51.50%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
6/30/2016	4.22%	-121.75%
9/30/2016	4.51%	-140.60%
12/31/2016	0.51%	-9.70%
3/31/2017	-3.21%	-71.55%
6/30/2017	N/A	N/A
Mean	1.51%	-85.90%
Standard error	1.8%	29.3%

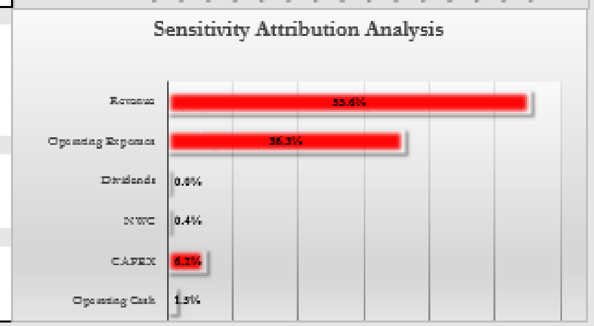
Peers

Wayfair Inc.
Pier 1 Imports, Inc.
RH
Groupon, Inc.
Haverty Furniture Companies, Inc.
Barnes & Noble, Inc.
Ethan Allen Interiors Inc.
Williams-Sonoma, Inc.

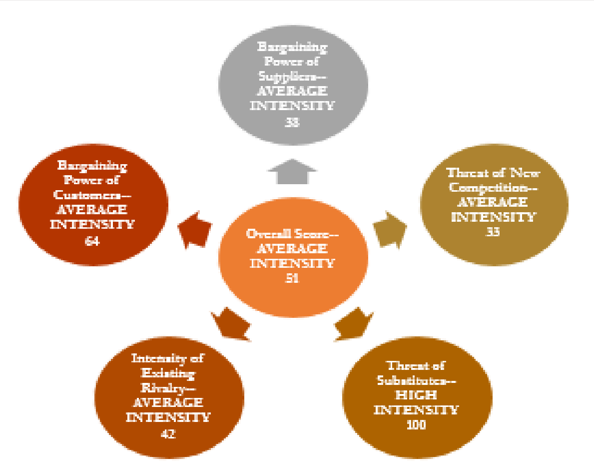


Management	Position	Total compensations growth	Total return to shareholders
Byrne, Patrick	Founder, CEO & Director	-23.72% per annum over 5y	16.41% per annum over 5y
Nourzaleh, Saum	President & Director	28.48% per annum over 1y	42.51% per annum over 1y
Hughes, Robert	Principal Financial & Accoun	9.94% per annum over 3y	-12.53% per annum over 3y
Wilkins, Alec	Chief Architect and Senior V	N/M	0% per annum over 0y
Lee, Carter	Senior Vice President of Tec	N/M	N/M
Nickle, E.	Vice President of Legal and	N/M	N/M

Profitability	OSTK (LTM)	OSTK (5 years historical averag	Peers' Median (LTM)
Return on Capital (GAAP)	9.8%	2.31%	4.44%
Operating Margin	1%	0.30%	3.14%
Revenue/Capital (GAAP)	6.55	7.67	1.42
ROE (GAAP)		9.8%	20.7%
Net margin		2.5%	3.5%
Revenue/Book Value (GAAP)	#VALUE!	3.95	5.92
Invested Funds	**OSTK (LTM)**	**OSTK (5 years historical averag**	**Peers' Median (LTM)**
Cash/Capital	30.4%	32.7%	71.7%
NWC/Capital	-32.6%	-28.4%	-64.1%
Operating Assets/Capital	99.4%	94.7%	80.9%
Goodwill/Capital	2.8%	0.7%	11.6%
Capital Structure	**OSTK (LTM)**	**OSTK (5 years historical averag**	**Peers' Median (LTM)**
Total Debt/Market Capitalization	0.21	0.11	0.70
Cost of Existing Debt	4.6%	4.5%	5.9%
CGFS Rating (F-score, Z-score, and default Probabilit;	BBB	CCC	BBB
WACC	8.9%	9.9%	10.3%



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



Valuation

Period	Revenue Growth Forecast	NOPAT Margin Forecast	Revenue to Capital Forecast
Base Year	8%	1.1%	3.51
6/30/2018	4%	1.9%	3.49
6/30/2019	4%	2.0%	3.36
6/30/2020	4%	2.4%	3.41
6/30/2021	4%	2.9%	3.47
6/30/2022	4%	3.2%	3.50
6/30/2023	4%	3.5%	2.36
6/30/2024	4%	3.9%	2.33
6/30/2025	4%	4.1%	2.29
6/30/2026	4%	4.2%	2.25
6/30/2027	2%	4.2%	2.17
Continuing Period	2%	16.8%	2.12

Period	Return on Invested Capital Forecast	WACC Forecast	Price per share Forecast
Base Year	4.0%	8.9%	$106.65
6/30/2018	6.5%	8.4%	$128.50
6/30/2019	6.9%	8.2%	$131.95
6/30/2020	8.3%	8.4%	$144.32
6/30/2021	10.0%	8.7%	$158.33
6/30/2022	11.2%	8.7%	$173.44
6/30/2023	8.3%	8.5%	$191.13
6/30/2024	9.1%	8.6%	$210.06
6/30/2025	9.5%	8.6%	$230.13
6/30/2026	9.6%	8.9%	$251.84
6/30/2027	9.2%	8.7%	$274.38
Continuing Period	35.6%	8.7%	

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March, 21, 2017

MKS Instruments, Inc (MKSI)

Tommaso Centemero

Sector: Industrial Goods
Industry: Diversified Machinery
Current Price: $105.90
Target Price: $116.57

MKS Instruments, Inc. is a global provider of instruments, subsystems and process control solutions that measures, controls, powers, delivers, monitors and analyzes critical parameters of advanced manufacturing processes. The company operates through two segments, including the Vacuum & Analysis segment and the Light & Motion segment. The Vacuum & Analysis segment provides a range of instruments, components, subsystems and software, which are derived from its core competencies in pressure measurement and control, flow measurement and control, gas and vapor delivery, gas composition analysis, residual gas analysis, leak detection, control and information technology, ozone generation and delivery, radio frequency (RF) and direct current (DC) power, reactive gas generation and vacuum technology. The Light & Motion segment provides a range of instruments, components and subsystems, which are derived from its core competencies in lasers, photonics and optics.

BUY

Current Price:	$105.90
Target Price:	$116.57
Market Cap:	5.7B
Rev Growth LTM:	70.3%
EBITDA Margin:	20.8%
ROIC:	17.06%
WACC:	11.7%
52 Week Range:	48.05-106.70
Volume:	578,538

Thesis: Throughout the past few years, MKS Instruments has established itself as a powerhouse within its industry, becoming the worldwide leader on technology solutions in all the markets it operates. Looking forward, the margins of improvement for the company are significant. The

Catalysts:

- Short Term(within the year): Announcement of next earnings.
- Mid Term(1-2 years): Cost Reduction through achievement of cost synergies with Newport Corp and decrease in interest

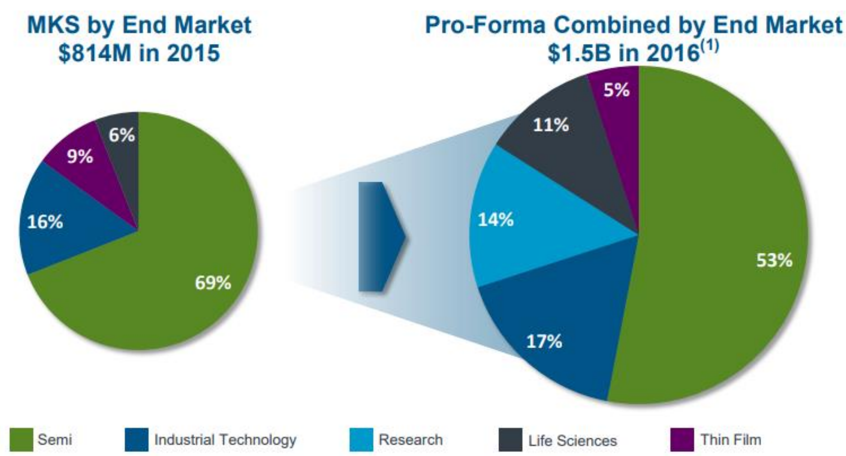
company enjoys a diversified product portfolio, giving it a chance of growing from different areas. In particular, the semiconductor and the laser and power solutions are very promising. In addition, MKS' commitment to decrease its costs and achieve greater operational efficiencies have brought several benefits on the last couple of quarters and the trend is that it may continue to do so as the company works towards achieving additional cost synergies with Newport Corp, a company acquired about a year ago. Lastly, the announcement of Q4 earnings is another key element to keep in mind. MKS beat the last 8 estimates and investors have historically responded positively to such surprises. MKS is off to another outstanding quarter where revenues are estimated to grow at least 5% sequentially, which would be the achievement of another quarterly record.

costs.

- Long Term(3+): Revenue Growth from all segments added to a substantial growth of the Asian Market

mks Technology for Productivity

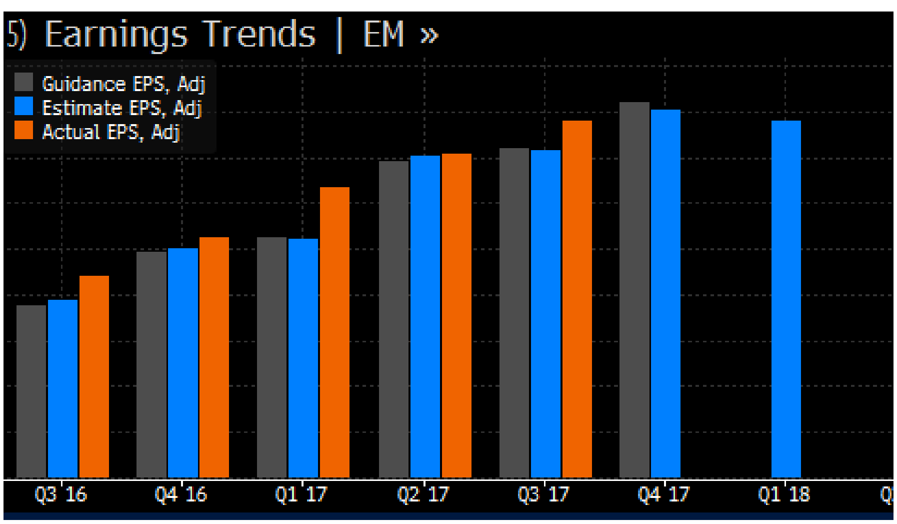
Business Overview:



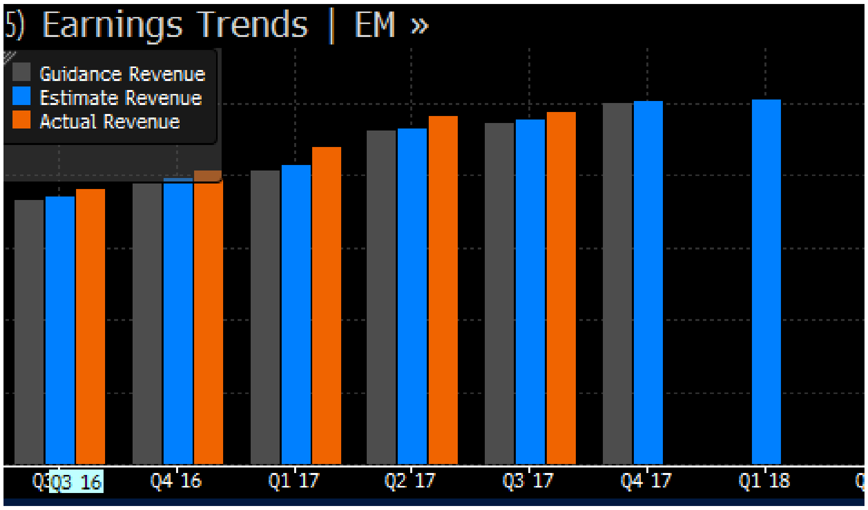
MKS Instruments was founded in 1961 as a Massachusetts corporation, providing instruments, subsystems and process control solutions that measure, control, power, deliver, monitor and analyze critical parameters of advanced manufacturing processes to improve process performance and productivity. Nowadays, the company is a worldwide leader in all markets it operates. MKS Instruments operates mainly within the semiconductor manufacturing application, offering products for etching, cleaning, lithography, metrology and inspection of semiconductor processing steps. In addition, the company also provide specialized instruments and software to monitor and analyze process performance. Apart from the semiconductor market, MKS' products are also used in the manufacture of electronic thin films, life and health sciences, process and industrial technologies and research and defense. Revenue derived from the semiconductor segment have always been the bulk of the company's sales, amounting to about 70%. However, with the acquisition of Newport Corp in 2016, the company was able to diversify its product offerings and semiconductors now amount to only 53% of its revenue. Following, industrial technology makes up for 17% of the revenue, research and defense equals to 14%, life sciences corresponds to 11%, and finally the remaining 5% is derived from electronic thin film. MKS products are divided into two segments, vacuum and analysis and light and motion. The vacuum and analysis segment includes analytical and control solutions; materials delivery solutions; power, plasma and reactive gas generation solutions; and pressure and vacuum measurements while the light and motion is composed by lasers, optics and photonics solutions.

MKS owns manufacturing facilities in the United States, China, Mexico, Korea, Germany, Austria, France, Romania, UK, Israel and Italy. As of 2016, 52.5% of the company's revenue was generated in the United States, with the remainder split between Asia and Europe. MKS has experienced an outstanding growth in its Asian market, especially in China, Korea and Japan, where semiconductor development has been constantly increasing. The company also devotes a lot of its capital to research and developments. MKS' technology solutions are very customized and constant innovation is required in order to stay at the top of the market. In 2016, the company had 680 research and development employees and spent over $110M in product innovation, about 7% of its revenue.

Q3 Earnings: MKS Instruments beat expectations once again, setting a record quarterly revenue of $486M, a 28% increase in the last twelve months and a 1% increase from last quarter. Non-GAAP net earnings also experienced a significant increase, achieving a historical quarterly record of $85.9M. An important factor to this growth was the performance of the semiconductor portfolio, specifically power, plasma and pressure solutions, which saw its revenue increase 38% from a year ago, also achieving a quarterly record. Another sector that boosted its revenue throughout the quarter is Light & Motion, setting an all-time quarterly record of $178M for the division as well, an increase of 18% in the last twelve months. Through heavy focus on operational efficiency, this segment has not only seen a substantial growth in its revenue but also in in its profitability, as its operating margin is now up to 21.5% compared to the 10-11% computed a year ago. Several other areas within the company had shown success in this quarter, justifying the effectiveness of the company's product diversification. The power solutions' product group has undertaken an exponential growth, increasing its revenue by 90% from a year ago. MKS' new line of control solutions in conformity with EtherCAT, a recently developed communication protocol for semiconductors, has been granted with many design awards and has sparked interest on several OEM's, especially in China. In addition, through strategic technical localization, MKS has increased its presence in Asia, particularly South Korea and China, by making significant investments in local infrastructure, and local service, repair and application teams. As a consequence, South Korea' revenue is expected to set a new annual revenue at the end of the year. In 2017, Korea more than doubled its revenue in comparison to last year and it increased by the significant rate of 250% since 2012. On another note, the company's commitment to greater operational efficiencies has led to another step forward towards the achievement of



$40M of cost synergies with Newport Corp, a goal established soon after the acquisition of the company in 2016. To this day, MKS has accomplished $38M of cost synergies, only $2M short of its initial goal, which should be fully achieved within the next two quarters. Closing the outcome of another outstanding quarter, MKS Instruments was included in the list of 100 fastest growing companies in 2017 by Fortune Magazine.



Q4 Forecast:

The outlook for Q4 is optimistic, as MKS counts on another quarter with continued growth in revenues and earnings. The integration with Newport, company acquired in 2016, is proceeding ahead of plans and additional cost synergies should be achieved by the end of this quarter. Top management believes that synergies with Newport will eventually reach an annual value of $40M (currently at $38M), which would increase the operating profit by about 1-2%. The company believes on the strength of the semiconductor market, which has been on a rise and has recently brought significant gains to the company. In addition, MKS is well positioned to leverage its broad product portfolio and therefore expects to drive significant growth in the general industrial, life sciences and research markets. With the acquisition of Newport, MKS expanded significantly its customers' portfolio, strengthened its position in the semiconductor market, and placed itself as a leader in adjacent markets such as laser, photonics, vibration isolation and so forth. Due to the complementary nature of both companies, several cross selling opportunities will arise, as MKS have now a chance to commercialize their products to current Newport customers. In addition, the company seek on capitalizing on the growing Asian market, as China, Korea and Japan has significantly increased its revenue share and have been investing heavily in research and development tied to the semiconductor market, specially involving mobile devices production.

Revenue Growth:

Coming off from an outstanding quarter, MKS margins of growth are high as the company has been solidifying its name as world leader in technology solutions. The company plans to achieve $2B in revenue at some point in 2018, a 17% growth from current revenue. Revenue estimates have been beaten in the last 8 out of 8 quarters, with the company confident that another surprise is on its way. In order to achieve this MKSI counts on further growth through cross-selling opportunities, given that many buyers related to

Newport can be served with MKSI products as well. Still in regards to buyers, two of the buyers that consist of roughly 23% of MKSI's revenues, those being LAM Research and Applied Materials, have been increasing their revenue at a fast pace, indicating that their business with MKSI is prone to increase as well. Lam Research had an increase in revenue of 36.1% in its 2017 fiscal year, while Applied Materials has a current LTM revenue growth of 40.1%. In addition, the Asian market has brought outstanding results to the company, specifically South Korea and China, and its forecasted future is promising. MKSI invested significantly in technical localization in both countries willing to expand its customer service reach and therefore solidify its reliability among the market. MKSI was able to improve its relationship with key Chinese OEM's within the last few months which, associated with the research & development taken place around semiconductor equipment, has been driving a significant growth. The Asian market in general grew 140% from 2015 to 2016 and the company expects exponential growth to be maintained throughout this year as South Koreas is set to beat its annual record of revenue. By the end of the year, revenue generated in Korea is expected to double from last year, and complete an increase of 250% since 2012. With a growing trend in mobile devices manufacturing, MKS expects to benefit from it as an eight figure order was just achieved in China in this quarter. In addition, growing opportunities in laser and power solutions are also promising. MSK expanded its range of products through the acquisition of Newport, who enjoyed a wide customer base, and the laser market provides the company with an outstanding opportunity to increase its sales as industries rely more and more on this products for their manufacturing processes. All markets in which MKS operates have expressed positive CAGRs in the past years and MKS's growth has outpaced all of them substantially. Therefore, looking forward to next quarter, MSK is confident that its increased market share in the laser and power solutions along with the constant growth generated through the last quarters in the semiconductor segment will lead the company to another outstanding quarter, estimating a growth of approximately 7% sequentially and 20% from a year ago.

Cost Reduction:

An aspect that MKS Instruments have been prioritizing in the past year is the achievement of cost synergies after the acquisition of Newport Corp, with the intent of improving its operating margin. MKS' target is to achieve $40M of cost synergies and it has been on track to accomplish its goal. By the end of Q2, cost synergies were up to $36M, increasing to $38M in Q3. Looking forward, the company is forecasted to accomplish in full its cost synergies target within the next two quarters, representing a competitive advantage in its operations in regards to its competitors. Additionally, the company has been working on a financial strategy to delever its balance sheet and therefore reduce interest costs. In the third quarter, MKS completed its third successful repricing of their term loan, by completing two voluntary principal repayments totaling $125 million. Since the loan origination in April 2016, as a result of voluntary repayments and reduction in interest rate spread, the company reduced its interest expenses by about $23 million, equivalent to 60%. Looking forward, the company is projecting an additional 25 basis point reduction in its interest rate spread in the fourth quarter, which would result in a $0.07 per share addition to its non-GAAP net earnings. Still in regards to costs, MKS has devoted a lot of attention to improve operational efficiencies and therefore decrease costs of production over the last four years. In fact, costs of goods sold went from being 56.7% of revenue in 2014 to 53.8% in 2017, a substantial reduction. Consequently, operating income increased throughout those years, reaching 20.5% also in 2017.

In Millions of USD except Per Share	FY 2014	FY 2015	FY 2016	Last 12M
12 Months Ending	12/31/2014	12/31/2015	12/31/2016	09/30/2017
Revenue	780.9	813.5	1,295.3	1,809.3
+ Sales & Services Revenue	100.0%	100.0%	100.0%	100.0%
- Cost of Revenue	56.7%	55.4%	55.2%	53.8%
+ Cost of Goods & Services	56.7%	55.4%	55.2%	53.8%
Gross Profit	43.3%	44.6%	44.8%	46.2%
+ Other Operating Income	0.0%	0.0%	0.0%	0.0%
- Operating Expenses	25.6%	25.1%	29.1%	25.7%
+ Selling, General & Admin	16.9%	15.9%	17.7%	15.8%
+ Research & Development	8.1%	8.4%	8.5%	7.3%
+ Depreciation & Amortization	–	0.8%	–	
+ Other Operating Expense	0.6%	0.0%	2.9%	2.6%
Operating Income (Loss)	17.7%	19.5%	15.7%	20.5%

Industry Outlook:

MKS operates in a variety of different markets, hedging the company against potential section fluctuation. All markets in which the company has been operating are forecasted to grow in the near future, therefore building up positive expectations within the company. The semiconductor business, backbone of MKS' operations, has been growing at a CAGR of 7%, with electronic thin film following the same trend. Following, the life & health sciences factor has grown at a CAGR of 5%, with process & industrial technologies and research & defense right after, computing a positive but under 5% CAGR. MKS has been outpacing the market in all categories, implying that little growth in the market can generate substantial gains to the company. For instance, semiconductor within the company grew about 8x the growth of the market, while L&M also outpaced the market by about 4.5 times.

In regards to competitors, the markets in which MKS operates are highly competitive. MKS is the worldwide leader in technology solutions on every market it operates. Substantial competition is encountered in all of its product lines, although there is no single competitor competing with MKS across all product lines. Examples of competitors include Brooks Automation on the semiconductor business, Hitachi Ltd. and Horiba Ltd. for mass flow controllers, Nor-Cal Products, Inc and VAT, Inc for vacuum components, Advanced Energy Industries, Inc. for power delivery and reactive gas generators and so forth. MKS has demonstrated a second to none growth in the past few years and its metrics are far away from being threatened by any competitor.

Name (BICS Best Fit)	Mkt Cap	Rev - 1 Yr Gr:Y	EBITDA 1Yr Growth:Y	OPM:Y	ROIC:Y	ROE:Y	WACC	Debt/Equity:Y
Median	1.27B	16.60%	24.00%	6.24%	8.61%	5.72%	11.35%	31.35%
100) MKS INSTRUMENTS INC	5.75B	59.23%	24.89%	15.75%	10.33%	11.44%	11.71%	49.30%
101) VEECO INSTRUMENTS INC	866.73M	-30.31%	--	-13.15%	-6.98%	-7.06%	11.14%	0.20%
102) ULTRA CLEAN HOLDINGS ...	866.52M	19.96%	103.38%	4.31%	4.83%	5.72%	11.65%	31.35%
103) NANOMETRICS INC	713.87M	18.02%	166.16%	12.84%	12.07%	11.66%	10.53%	0.00%
104) LAM RESEARCH CORP	33.49B	36.15%	61.80%	25.28%	17.36%	26.49%	10.35%	42.00%
105) KLA-TENCOR CORP	17.08B	16.60%	29.85%	37.18%	27.13%	92.71%	7.76%	220.93%
106) FORMFACTOR INC	1.27B	35.96%	-54.82%	-5.51%	-5.50%	-7.01%	13.49%	34.45%
107) ELECTRO SCIENTIFIC IND...	563.66M	-12.67%	-662.90%	-11.42%	-11.21%	-11.60%	9.65%	9.63%
108) BROOKS AUTOMATION INC	2.29B	1.38%	-23.22%	3.75%	-10.42%	-9.69%	14.21%	0.00%

Ownership:

MKSI has 54.3M of shares outstanding, for a total market cap of 5.8B. Stocks are mainly owned by Investment Advisors, totaling 87.58%. Following that are hedge funds, who own 4.87% of the stocks. The remainder is split among pension funds, insurance companies, individuals and so forth. The majority of the stocks are owned in the United States, 92.2% to be exact, with the rest split between Canada, UK, Norway, Germany, Switzerland, Netherlands and France. Insiders own 1.47% of the shares outstanding. Blackrock owns MKSI's highest amount of stock, followed by Vanguard Group and then Dimensional Fund Advisors. Positions have been steady throughout the whole quarter, highlighting the investors believe on MKS Instruments' long term success.

Top Ownership Type (%)

54) Ownership Type	10/22/17	Curr	Change
41) Investment Advisor	87.58	87.56	-0.02
42) Hedge Fund Manager	4.87	4.85	-0.02
43) Pension Fund	2.44	2.51	+0.07
44) Insurance Company	1.65	1.64	-0.01
45) Individual	1.36	1.36	0.00
46) Sovereign Wealth Fund	1.00	1.00	0.00
47) Bank	0.53	0.52	-0.01
48) Government	0.28	0.28	0.00
49) Brokerage	0.17	0.17	0.00

1. BLACKROCK		6,159,789	6,159,789	6,159,789	6,159,789
2. VANGUARD GROUP		4,486,129	4,709,492	4,872,899	4,872,899
3. DIMENSIONAL FUND ADVIS...	DIMENSIONAL FUND A...	4,226,764	3,732,244	3,461,053	3,461,053
4. WELLINGTON MANAGEMENT ...		5,340,998	5,267,657	4,064,706	2,763,436
5. HARTFORD FINANCIAL SER...		1,637,746	1,891,259	1,947,249	1,968,467
6. ROYCE AND ASSOCIATES LLC	ROYCE & ASSOCIATES...	2,328,613	1,876,981	1,786,381	1,786,381
7. SILVERCREST ASSET MANA...	SILVERCREST ASSET ...	1,953,879	1,995,005	1,476,781	1,476,781
8. FRANKLIN RESOURCES		1,719,745	1,677,015	1,397,458	1,397,458
9. NEUBERGER BERMAN GROU...	NEUBERGER BERMAN ...	1,411,361	1,409,800	1,392,278	1,392,278
10. STATE STREET CORP		1,248,433	1,287,019	1,350,159	1,350,159

Management:

MKS Instrument's management is experienced within their field of work and has achieved impressive results at MKS. All of their top executives have been part of the company for at least 8 years, highlighting the continuation of a well defined strategy along the way and the successful chemistry among them. Gerald Colella, CEO and President, has worked for the company for over 30 years. John T.C. Lee, Senior Vice President and COO, has been in the company for 8 years and have 25 years of experience within the industry. Prior to MKS, Lee worked for several competitors and also for Applied Materials, who is now one of the company's largest clients. Lastly, Seth H. Bagshaw, Senior Vice President, CFO and Treasurer. Bagshaw has worked at MKS for 10 years and has over 20 years of experience in the industry. All three of them hold stocks within the company, which can be seen as an incentive for them to achieve greater results. Although they seem to be sort of overpaid, the successful strategy they have put together along the years associated with their willingness to take the company to the next level has brought outstanding results to the company, therefore justifying such compensation.

Name	Title		Total Compensation
1) Gerald Colella	President/CEO		6,577,014 (USD)
2) Seth Bagshaw	Sr VP/CFO/IR/Treasurer		2,274,435 (USD)
3) John Lee	Senior VP/COO		1,944,663 (USD)
4) Dennis Werth	Senior VP:Business Unit..		1,773,829 (USD)
5) Brian Quirk	Senior VP:Operations		1,315,002 (USD)

Conclusion:

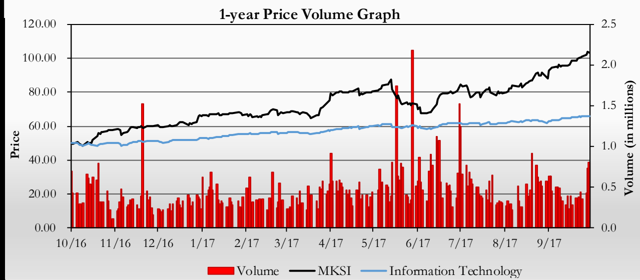
Historical data itself can definitely portray the power of this company, which has grown exponentially in the past few years. Looking ahead, the future is even more promising as the company prepares to explore new opportunities within the semiconductor, laser and power; and light and motion areas. In addition, the booming Asian market and its focus on the semiconductor industry can only benefit MKS, who has consistently invested on technical localization to improve its customer service in that region. Cost reduction will also be a factor within the company's growth, as the efforts to achieve cost synergies with newly acquired Newport Corp have increased the company's operational efficiency and therefore aid in the increase in operating profit margin. All of this can be added to the next announcement of earnings, scheduled for February 1st 2018. The company has been outstanding on the last numerous earnings, beating estimates every time. Q4 is very promising as the company is expected to once again set revenue quarterly records and take a further step towards the company's goal of $2B of revenue. Investors have always reacted positively to earning calls and MKS will capitalize on it once again.

MKS Instruments, Inc. (MKSI)

CENTER FOR GLOBAL FINANCIAL STUDIES

NEUTRAL

Analysis by Tommaso	Current Price:	$105.90	Intrinsic Value	$103.99	Target 1 year Return: 9.28%
10/27/2017	Divident Yield:	0.9%	Target Price	$114.76	Probability of Price Increase: 88.5%



Description

MKS Instruments, Inc. provides instruments, subsystems, and process control solutions that measure, control, power, deliver, monitor, and analyze critical parameters of manufacturing processes worldwide.

General Information

Sector	Information Technology
Industry	Semiconductors and Semiconductor Equipment
Last Guidance	November 3, 2015
Next earnings date	January 25, 2018
Estimated Country Risk Premium	6.40%
Effective Tax rate	26%
Effective Operating Tax rate	25%

Market Data

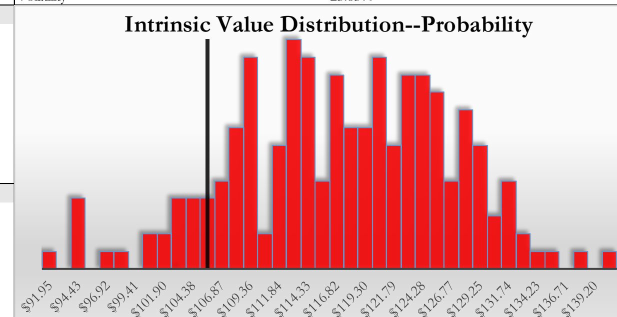
Market Capitalization	$5,747.78
Daily volume (mil)	0.58
Shares outstanding (mil)	54.28
Diluted shares outstanding (mil)	54.89
% shares held by institutions	100%
% shares held by investments Managers	80%
% shares held by hedge funds	5%
% shares held by insiders	1.43%
Short interest	2.82%
Days to cover short interest	3.17
52 week high	$106.70
52-week low	$48.05
Volatility	23.63%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
9/30/2016	0.62%	0.42%
12/31/2016	1.29%	-9.55%
3/31/2017	2.86%	16.09%
6/30/2017	2.04%	-6.88%
9/30/2017	1.30%	-1.61%
Mean	1.62%	-0.31%
Standard error	0.4%	4.5%

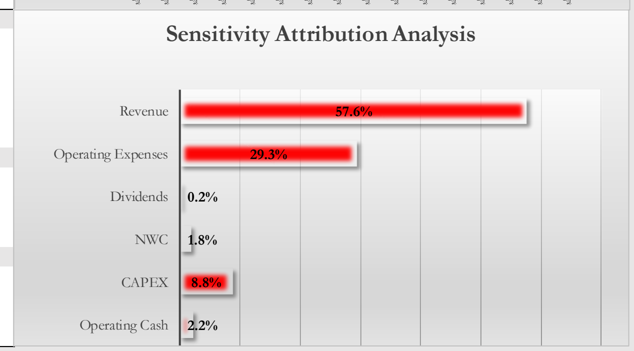
Peers

- Teradyne, Inc.
- Entegris, Inc.
- KLA-Tencor Corporation
- Lam Research Corporation
- Applied Materials, Inc.
- Advanced Energy Industries, Inc.
- FormFactor, Inc.
- Nanometrics Incorporated

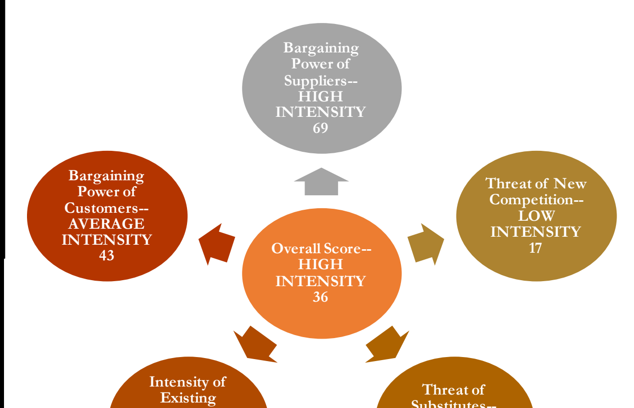


Management	Position	Total compensations growth	Total return to shareholders
Colella, Gerald	Chief Executive Officer, Pre	18.62% per annum over 5y	0.61% per annum over 5y
Bagshaw, Seth	CFO, Senior VP & Treasurer	20.7% per annum over 5y	0.61% per annum over 5y
Lee, John	Chief Operating Officer and	15.44% per annum over 5y	0.61% per annum over 5y
Quirk, Brian	Senior Vice President of Glo	17.2% per annum over 2y	29.33% per annum over 2y
Werth, Dennis	Senior VP & GM of Light & Mo	N/M	0% per annum over 0y
Chute, Richard	Secretary and Director	-0.13% per annum over 5y	0.61% per annum over 5y

Profitability	MKSI (LTM)	MKSI (5 years historical average)	Peers' Median (LTM)
Return on Capital (GAAP)	19.2%	24.56%	54.85%
Operating Margin	15%	13.69%	16.08%
Revenue/Capital (GAAP)	1.26	1.79	3.41
ROE (GAAP)	24.7%	9.0%	29.0%
Net margin	17.0%	8.1%	18.7%
Revenue/Book Value (GAAP)	1.46	1.12	1.56
Invested Funds	**MKSI (LTM)**	**MKSI (5 years historical average)**	**Peers' Median (LTM)**
Cash/Capital	27.5%	56.9%	51.6%
NWC/Capital	19.6%	17.8%	13.2%
Operating Assets/Capital	22.7%	9.4%	21.7%
Goodwill/Capital	30.2%	16.0%	13.5%
Capital Structure	**MKSI (LTM)**	**MKSI (5 years historical average)**	**Peers' Median (LTM)**
Total Debt/Market Capitalization	0.23	0.00	0.21
Cost of Existing Debt	6.1%	4.0%	4.2%
CGFS Rating (F-score, Z-score, and default Probability)	BB	BB	A
WACC	8.1%	10.4%	10.1%



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



Valuation

Period	Revenue Growth Forecast	NOPAT Margin Forecast	Revenue to Capital Forecast
Base Year	70%	20.9%	0.79
9/30/2018	46%	16.8%	1.08
9/30/2019	7%	16.6%	0.94
9/30/2020	5%	16.1%	0.84
9/30/2021	5%	15.7%	0.77
9/30/2022	4%	15.4%	0.72
9/30/2023	4%	17.8%	0.68
9/30/2024	4%	19.0%	0.63
9/30/2025	3%	18.9%	0.58
9/30/2026	3%	18.8%	0.54
9/30/2027	2%	18.7%	0.51
Continuing Period	2%	18.6%	0.48

Period	Return on Capital Forecast	WACC Forecast	Price per share Forecast
Base Year	16.5%	8.1%	$105.05
9/30/2018	18.1%	8.2%	$115.75
9/30/2019	15.6%	8.4%	$126.65
9/30/2020	13.6%	8.6%	$137.85
9/30/2021	12.1%	8.8%	$149.74
9/30/2022	11.1%	8.8%	$160.68
9/30/2023	12.0%	9.5%	$172.45

October, 27, 2017

Comfort Systems USA Inc.: FIX

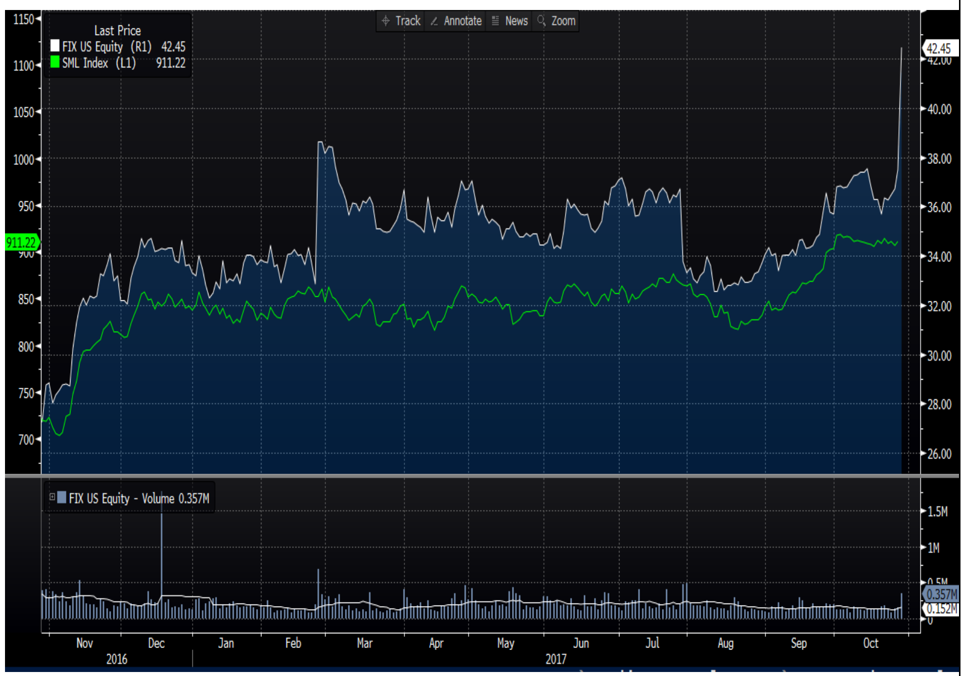
Daniel McAvoy

Sector: Industrials
Industry: Capital Goods
Current Price: $42.45
Target Price: $46.77

Comfort Systems USA, Inc.'s headquarters is in Houston, TX. They are a leading provider of mechanical services including HVAC (heating, ventilation, and air conditioning). Comfort Systems USA's commercial and industrial markets include office buildings, retail centers, apartment complexes, hotels, manufacturing plants, and government offices.

BUY

Current Price:	$42.45
Target Price:	$46.77
Market Cap:	1.4B
ROIC:	15.33%
WACC:	10.23%
Gross Margin:	20.99%



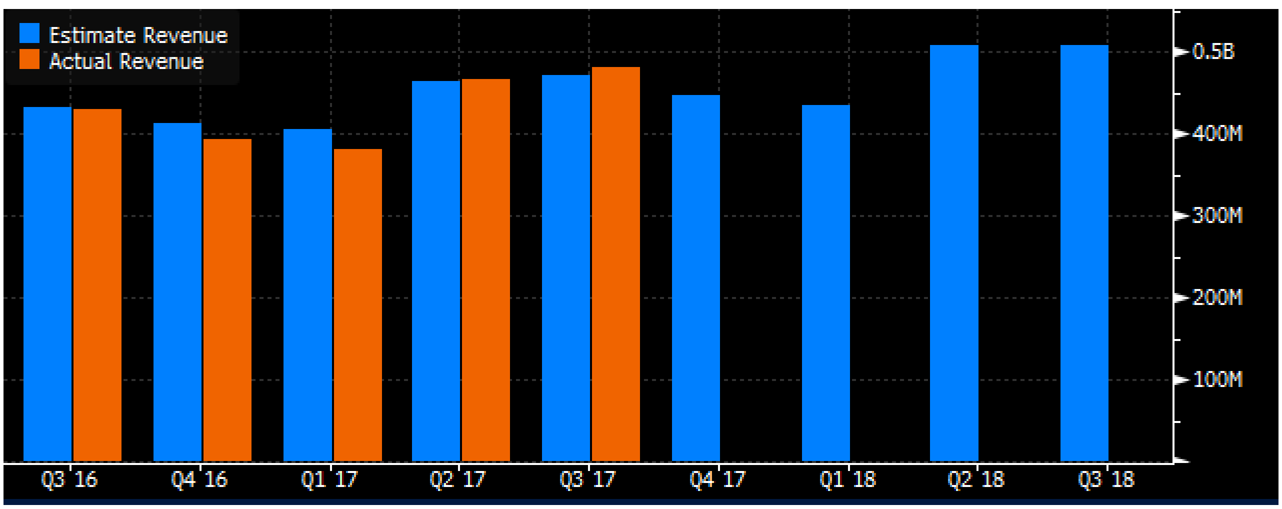
Thesis: Comfort Systems USA, Inc. is in an industry that will always be around and has secured its spot as one of the top leaders. FIX recently released their third quarter 2017 results, and have proved to their investors that they are growing in revenue and cash flow performance. CEO Brian Lane says in Q3 results, "We are pleased to report third quarter results marked by strong earnings and cash flow performance. Margins continued to benefit from solid field execution, and we are reporting the highest third quarter cash flow in our history." With the south having major disasters in the recent months, Comfort Systems USA will have plenty of business because every building you see needs the work done that Comfort Systems USA provides.

Catalysts:

- **Short Term(within the year):** Win contracts for new buildings or buildings that need repairing due to destruction from the Hurricanes that hit this summer.
- **Mid Term(1-2 years):** Continue to have a strong backlog and think about expanding into the last few states that they are not already in.
- **Long Term(3+):** Complete their recent acquisition with BCH Holdings

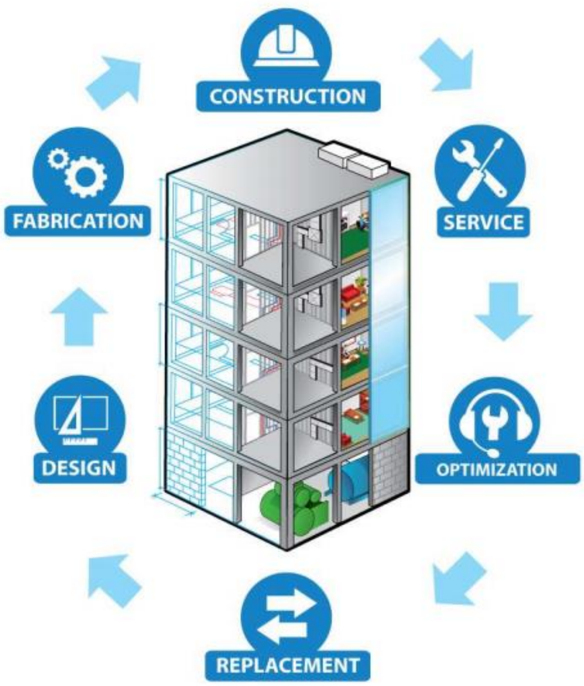
Earnings Performance:

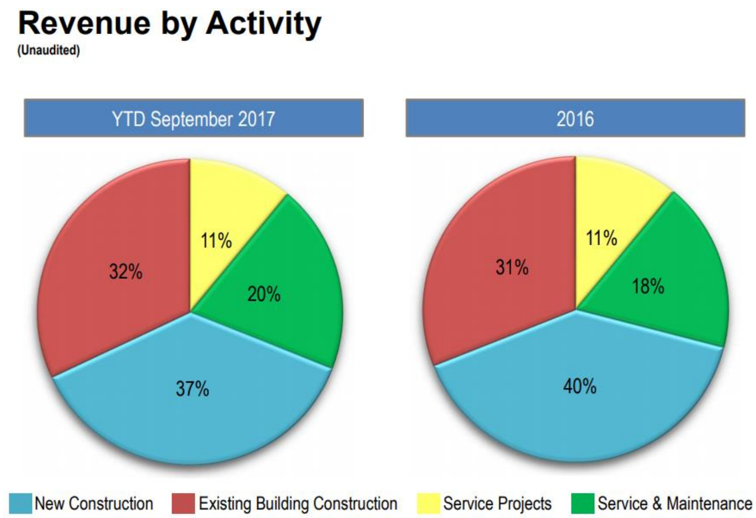
Comfort Systems USA was pleased to come out with positive results in their recent third quarter earnings report. CEO Brian Lane was happy to say this morning that net income of $22.3 million or $0.59 per diluted share, for the third quarter of 2017, grew from $20.5 million or $0.54 per diluted share, for the third quarter of 2016. The Company reported revenue of $480.9 million in the quarter three, as compared to $428.8 million in 2016. The Company also reported free cash flow of $39.5 million in the current quarter, as compared to $7.3 million in 2016. Backlog as of September 30, 2017 was $901.2 million as compared to $937.8 million as of June 30, 2017 and $719.3 million as of September 30, 2016. Lane said that he thinks their backlog is very strong and that they will be able to use it effectively in the future. For nine months ending at September 30, 2017, the company reported net income of $47.7 million or $1.27 per diluted share compared to $48.0 million or $1.27 per diluted share, in 2016. The Company also reported revenue of $1.33 billion, as compared to $1.24 billion in 2016. Free cash flow for the nine months ended September 30, 2017 was $49.6 million, as compared to $33.3 million in 2016.



Company Description:

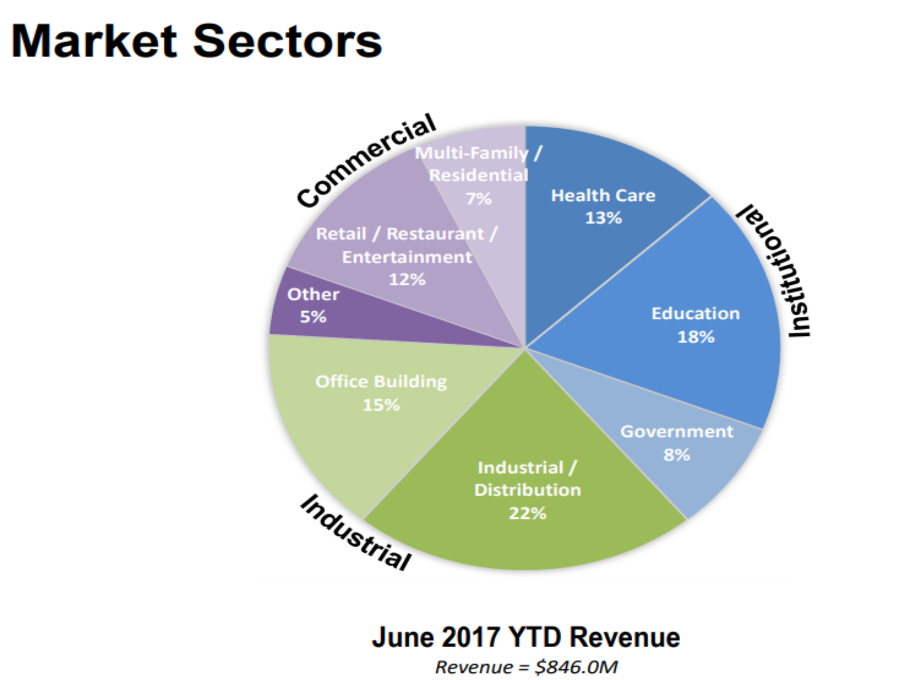
Comfort Systems USA provides mechanical contracting services, which is broken down to what they call HVAC. HVAC is heating, ventilation, and air conditioning. FIX also offers plumbing, piping and controls, off site construction, electrical, monitoring and fire protection. FIX does not only do installing projects. They can also offer maintaining, repairing, and replacement of their products and systems. FIX is all through the United States besides a few states in the norther mid-west states. FIX's revenue is broken down into four different sections, which are new construction, existing building construction, service projects, and service and maintenance. New construction makes up 37% of the revenue made. Existing building construction makes up 32%. Service projects only bring in 11%. Lastly, service and maintenance is at 20% of the revenue made by FIX. Comfort Systems USA also breaks down the lifecycle of their business when dealing with buildings in their slides. This involves a 10-20 year replacement cycle, recurring service, and increase in technical and energy efficiency.





Market Sector:

Comfort Systems USA sector is considered Industrials, but this can be broken down even further. When dealing with projects they break down their business into three different sectors. The three sectors are industrial, commercial, and institutional. These three sectors get broken down even further. In the industrial sector, they will do projects with office building and industrial distribution. The commercial sector involves multi-family/residential, retail/restaurant/entertainment, and other. The institutional sector can be broken down into Health Care, Government, and Education. For the revenue YTD of June 2017, which was $846 million, industrial makes up 35%of the revenue. The sector commercial makes up 24%, and the institutional sector is 39%. FIX does a great job on keeping all three sectors diverse so if one is not performing well they can fall back on the other two.



Debt:

Comfort Systems USA's total debt now is $81.96 million. FIX does not usually take on a lot of debt. $30 thousand of it is capital leases and the rest are acquisitions. The most recent acquisition happened on April 1, 2017. On that date, FIX acquired all of the issued and outstanding stock of BCH Holdings, Inc. and its subsidiaries for $100 million, comprised of $85.7 million in cash at closing and $14.3 million in a note payable to the former owners. This is not the first time that FIX has acquired another company. They just recently completed two acquisitions. The first one being Environmental Air Systems, LLC on January 1, 2016 for $46.6 million. The second one was ShoffnerKalthoff family of companies (collectively, "Shoffner") for $19.8 million, of which $14.8 million was allocated to goodwill and identifiable intangible assets. Acquisitions are not something new to this company and have been proving to their investors that they know how to handle them, which also makes investors less worried about their debt because almost all of it is through acquisitions.

Competitors:

When it comes to competitors Comfort Systems will always have to deal with small family owned businesses for the minor tasks that they complete. Heating and air conditioning projects for family homes, restaurants, and small offices can be completed by these family owned businesses. This may also be why FIX has been acquiring the family owned businesses that are at the top. When it comes to major projects, FIX has all the advantages. When comparing to competitors on Bloomberg it shows that, a major company like FIX does not exist in the United States and are all located over in Asia. This makes it that FIX should almost get every major building project in the United States. FIX even beats every medium when talking about market cap, EBITDA, profit margins, gross margins, and operating margin. This goes to show that FIX is one of the leaders in this business.

	Name (BICS Best Fit)	Ticker	Mkt Cap	EBITDA to Net Sales:Q	PM LF	GM:Q	OPM LF↑
	Median		830.19M	4.48%	3.90%	12.88%	4.21%
100)	COMFORT SYSTEMS USA INC	FIX US	1.58B	9.31%	4.63%	20.97%	7.14%
101)	LUENMEI QUANTUM CO LT...	600167 CH	3.28B	--	11.83%	-8.02%	-26.75%
102)	TAIKISHA LTD	1979 JP	1.05B	1.98%	0.61%	11.68%	1.16%
103)	DAI-DAN CO LTD	1980 JP	575.05M	2.91%	2.15%	12.55%	2.50%
104)	RCR TOMLINSON LTD	RCR AU	533.05M	--	2.07%	--	2.66%
105)	HIBIYA ENGINEERING LTD	1982 JP	676.41M	3.88%	33.60%	16.57%	3.41%
106)	TAKASAGO THERMAL ENG...	1969 JP	1.45B	4.48%	2.60%	12.68%	4.21%
107)	ELECTRA LTD	ELTR IT	830.19M	6.05%	3.26%	8.60%	4.84%
108)	YURTEC CORP	1934 JP	729.01M	3.21%	3.90%	13.64%	5.52%
109)	BRAVIDA HOLDING AB	BRAV SS	1.38B	6.08%	4.30%	15.03%	5.87%

(Accounting Adjustments: Adjusted for Abnormal Items When Applicable) 10) Analyze List

Conclusion:

Comfort Systems USA, Inc. is at the top in its field of work and has secured a great place there by bringing in great numbers almost every quarter and doing the best work compared to competitors. They just recently announced the best earnings report in their history and they do not plan to slow down. They are showing great growth in revenue. They have complete control over the debt, so there is no issue there. Lastly, they have a great business model. Everything they do evolves over time, which will continue to give them business. I believe this company is a very strong and stable company that will continue to grow in all of its sectors of business and be a good long-term buy.

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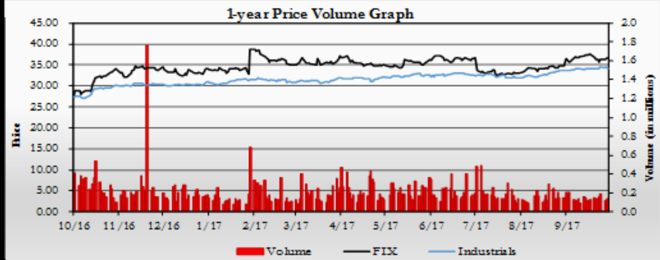
CENTER FOR GLOBAL FINANCIAL STUDIES

Comfort Systems USA, Inc. (FIX)

NEUTRAL

Analysis by Daniel McAvoy	Current Price:	$42.45	Intrinsic Value	$41.33	Target 1 year Return: 10.83%
10/27/2017	Divident Yield:	0.6%	Target Price	$46.77	Probability of Price Increase: 85%



Description

Comfort Systems USA, Inc. provides mechanical installation, renovation, maintenance, repair, and replacement services for the mechanical services industry in the United States.

General Information

Sector	Industrials
Industry	Construction and Engineering
Last Guidance	November 3, 2015
Next earnings date	February 23, 2018
Estimated Country Risk Premium	5.69%
Effective Tax rate	24%
Effective Operating Tax rate	24%

Market Data

Market Capitalization	$1,575.69
Daily volume (mil)	0.36
Shares outstanding (mil)	37.12
Diluted shares outstanding (mil)	37.68
% shares held by institutions	71%
% shares held by investments Managers	86%
% shares held by hedge funds	5%
% shares held by insiders	2.15%
Short interest	1.08%
Days to cover short interest	2.41
52 week high	$42.58
52-week low	$27.15
Volatility	27.90%

Past Earning Surprises

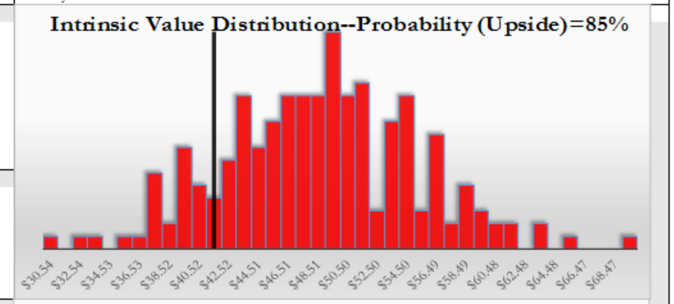
Quarter ending	Revenue	EBITDA
9/30/2016	-0.29%	-0.01%
12/31/2016	-5.00%	-10.66%
3/31/2017	-6.03%	-17.04%
6/30/2017	0.80%	4.45%
9/30/2017	1.30%	1.57%
Mean	-1.84%	-4.34%
Standard error	1.5%	4.1%

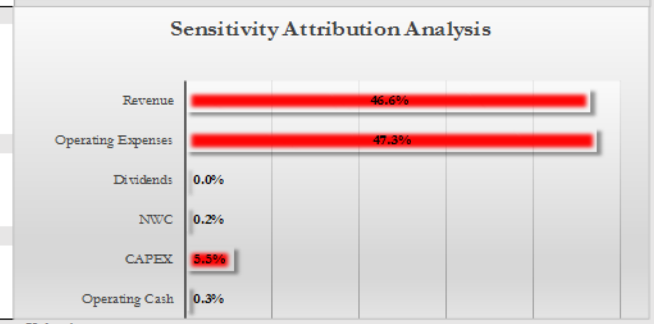
Peers

MYR Group Inc.
Primoris Services Corporation
IES Holdings, Inc.
EMCOR Group, Inc.
Aegion Corporation
Granite Construction Incorporated
MasTec, Inc.
KBR, Inc.

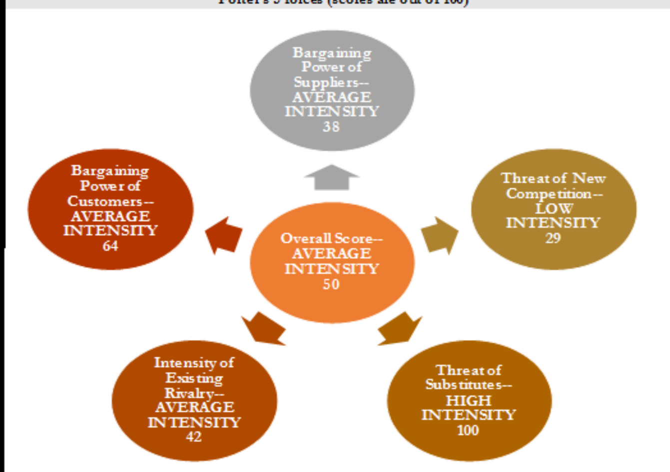
Management	Position	Total compensations growth	Total return to shareholders
Lane, Brian	Chief Executive Officer, Pre	17.83% per annum over 5y	5.78% per annum over 5y
George, William	Chief Financial Officer and	11.02% per annum over 5y	5.78% per annum over 5y
Shaeff, Julie	Chief Accounting Officer and	9.29% per annum over 5y	5.78% per annum over 5y
McKenna, Trent	Senior Vice President, Gener	17.22% per annum over 5y	5.78% per annum over 5y
Giardinelli, Alfred	Co-Founder, Director and Pre	N/M	N/M
Diltz, Charles	Senior Vice President of Nat	N/M	N/M

Profitability	FIX (LTM)	FIX (5 years historical average)	Peers' Median (LTM)
Return on Capital (GAAP)	16.6%	12.18%	6.74%
Operating Margin	4%	2.56%	2.34%
Revenue/Capital (GAAP)	4.30	4.75	2.88
ROE (GAAP)	20.8%	15.1%	18.4%
Net margin	4.2%	2.9%	3.8%
Revenue/Book Value (GAAP)	4.98	5.16	4.88
Invested Funds	**FIX (LTM)**	**FIX (5 years historical average)**	**Peers' Median (LTM)**
Cash/Capital	9.8%	12.3%	17.8%
NWC/Capital	10.8%	14.7%	11.3%
Operating Assets/Capital	42.9%	40.2%	41.6%
Goodwill/Capital	36.6%	32.4%	29.2%
Capital Structure	**FIX (LTM)**	**FIX (5 years historical average)**	**Peers' Median (LTM)**
Total Debt/Market Capitalization	0.29	0.19	0.41
Cost of Existing Debt	5.2%	16.6%	4.4%
CGFS Rating (F-score, Z-score, and default Probability)	AA	BB	BBB
WACC	10.7%	22.1%	9.1%





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



Valuation

Period	Revenue Growth Forecast	NOPAT Margin Forecast	Revenue to Capital Forecast
Base Year	6%	6.2%	3.76
9/30/2018	8%	4.7%	2.96
9/30/2019	6%	5.2%	2.79
9/30/2020	3%	6.0%	2.91
9/30/2021	1%	6.5%	2.95
9/30/2022	1%	7.0%	2.99
9/30/2023	1%	7.2%	3.01
9/30/2024	1%	9.2%	3.02
9/30/2025	2%	9.5%	2.84
9/30/2026	2%	9.8%	2.68
9/30/2027	2%	10.1%	2.53
Continuing Period	2%	10.4%	2.41

Period	Return on Invested Capital Forecast	WACC Forecast	Price per share Forecast
Base Year	23.5%	10.7%	$42.25
9/30/2018	13.8%	8.8%	$47.68
9/30/2019	14.6%	8.9%	$52.58
9/30/2020	17.6%	9.0%	$57.97
9/30/2021	19.3%	9.0%	$63.77
9/30/2022	20.8%	9.1%	$69.88
9/30/2023	21.8%	9.0%	$76.14
9/30/2024	27.9%	9.1%	$82.65
9/30/2025	27.0%	9.2%	$89.40
9/30/2026	26.2%	9.3%	$96.41
9/30/2027	25.5%	9.3%	$103.71
Continuing Period	25.0%	9.4%	

October 25th, 2017

Shake Shack: SHAK

JT Jennings

Sector: Services
Industry: Specialty Eateries
Current Price: $35.52
Target Price: $40.04

Shake Shack is an American casual dining restaurant chain based in New York City. Shake Shack was originally a hot dog stand in Madison Square Park that has now grown into a global corporation with a cult like following. Shake Shack offers burgers, hot dogs, crispy chicken, fries, shakes and beer and wine. Shake Shack's IPO was in 2015, and the company has been expanding ever since. Their focus is in urban areas across America, and they have recently expanded into global markets.

BUY

Current Price:	$35.52
Target Price:	$40.04
Market Cap:	$1.31B
WACC:	9.7%
ROIC:	21.7%
EBITDA:	$52.73M

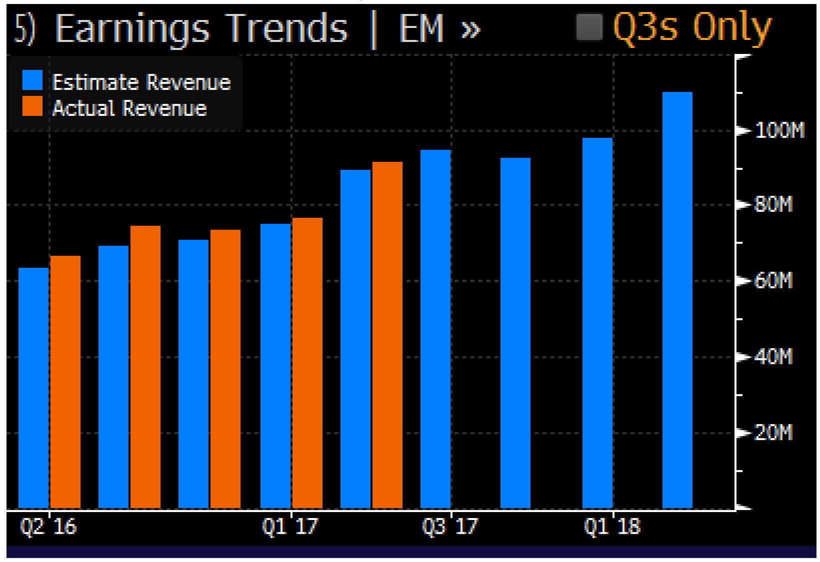
Thesis: Shake Shack Inc. is taking the casual dining industry by storm. Their Shack burger is considered the best in the industry, which has granted them a following that produces lines that wrap around the corner. Shake Shack is continuing their steady and healthy expansion strategy both domestically and internationally. Since the company has went public in 2015, they have consistently generated positive revenues while effectively limiting their costs.

Catalysts:

- **Short Term(within the year):** Strong Q2 sales growth 37% due to the opening of 24 new Shacks
- **Mid Term(1-2 years):** Breakfast option implementation in 2018
- **Long Term(3+):** Announced opening of two new Shacks in mainland China with partner Maxim's Caterers

Earnings Performance:

Shake Shack shows a lot of promise to investors due to their ability to continue sales and revenue growth while the company expands. They have been able to limit the amount of debt due to their strategy to finance their expansion with their sales revenue. In quarter two of 2017, strong growth continued. Shake Shack's Q2 delivered a beat in the top line and bottom line, proving their ability to decrease expenses and increase their revenue. Sales were up 37.4% for the second quarter versus Q2 for 2016, which was mainly a result of higher sales volume, due primarily to the opening of 24 new domestic company-operated Shacks. Total revenues came in at $91.3 million and beat consensus estimates by $1.8 million. As shown in the chart to the right, Shake Shack has beaten the estimates for revenue over the past 5 quarters, and CEO Randy Garutti says that they are expecting to the same in following quarter. Their earnings report will come out within the week, on Nov. 1st. If Garutti is correct with his statement then there should be a spike in stock price, because Shake Shak has legitimized their ability to create revenue. Another positive for Shake Shak was that they increased operating profit by 27.6% to $25.3 million compared to $19.9 million from Q2 of 2016. Healthy and constructive growth is Shake Shacks overall goal, and rightfully so considering it is a very young company. Even though they are a young company, they have shown the ability to keep costs down and produce steady revenue growth meaning that they are more than capable of expanding and capturing a greater share of the casual dining market.

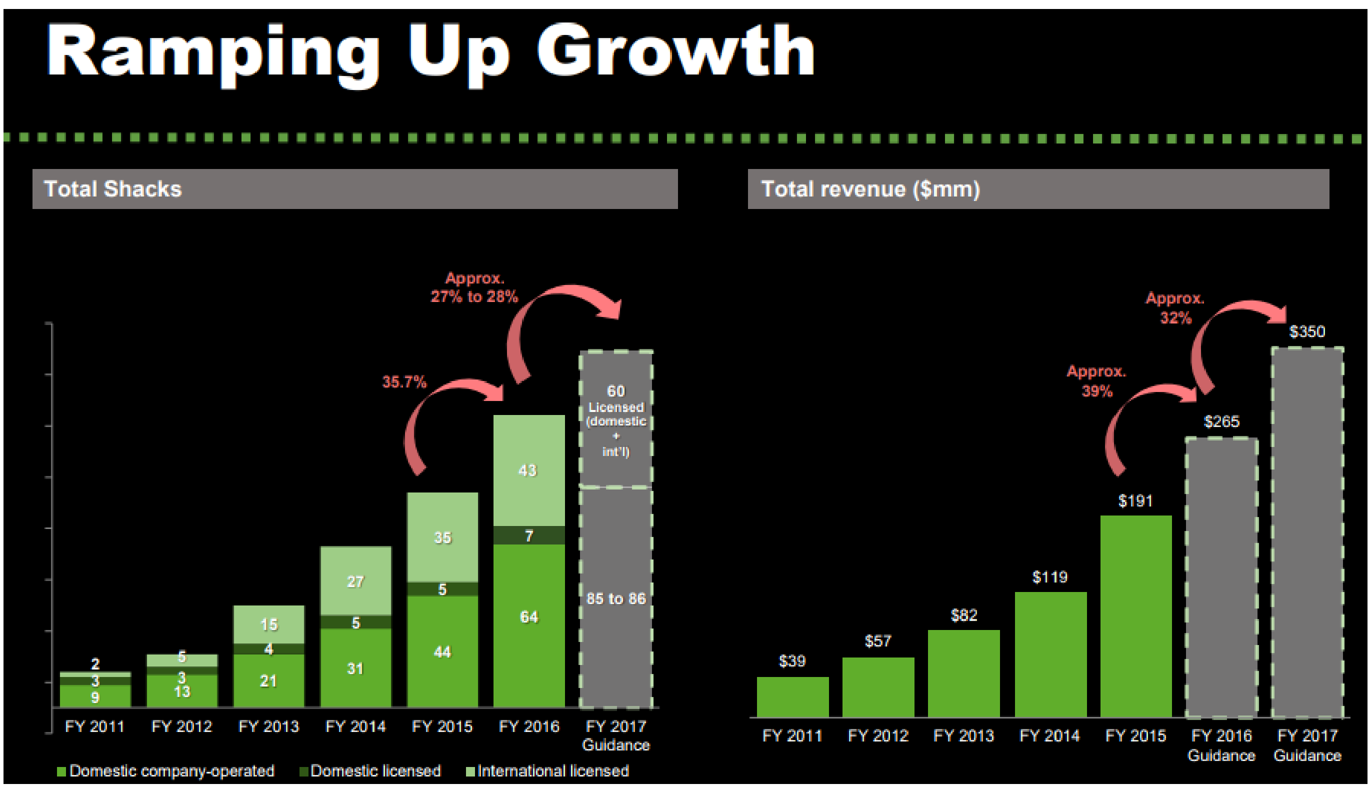


In Millions of USD except Per Share	FY 2014	FY 2015	FY 2016	Current/LTM	FY 2017 Est	FY 2018 Est
12 Months Ending	12/31/2014	12/30/2015	12/28/2016	06/28/2017	12/31/2017	12/31/2018
Gross Margin	28.14	31.61	30.70	29.66		
Gross Profit	33.3	60.2	82.4	93.7	101.6	123.3
EBITDA	9.0	17.0	42.3	49.5	53.8	66.8
Revenue	118.5	190.6	268.5	315.9	355.1	443.5
Cost of Goods & Services Sold	85.2	130.3	186.1	222.2		
SG&A as Percentage Total Sales	15.34	19.85	11.38	10.87		
Operating Margin	2.65	3.54	10.36	9.98	9.02	8.79
EBITDA Margin	7.55	8.91	15.76	15.68		
Short and Long Term Debt	32.3	0.3	10.2	6.2		

The chart above adds to the point of Shaks successful growth in the first few years of being a publicly traded company. Their gross margin is consistent and there is healthy growth in revenue, profits, and EBITDA margin. It is very promising to see that Shake Shack is able to expand while limiting their debt to only $6.2 million, especially as a young company, it shows that they have an effective growth strategy that should continue their success into the future for a long time.

Business Description:

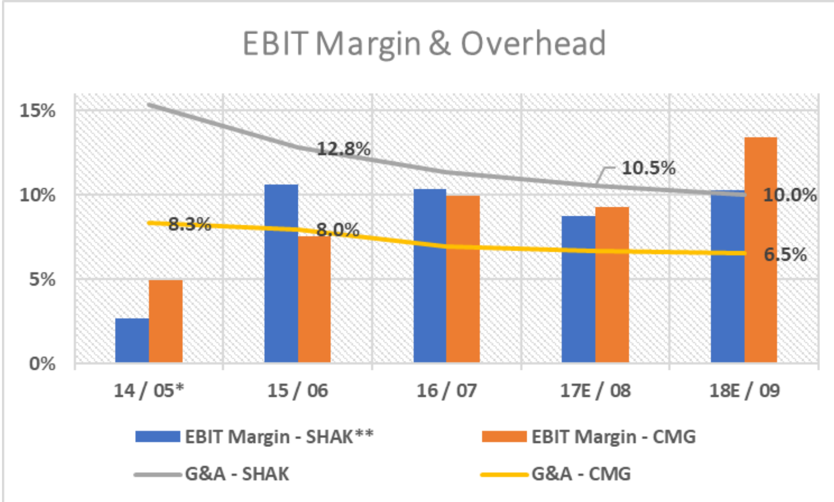
Shake Shack operates both domestically and internationally providing consumers with high quality and fast service in a casual dining setting. They have 134 Shacks in operation of which 75 are domestically operated. Their management team's goal is to continue to grow at a fast but steady rate to ensure they do not become too exposed. This quarter alone they opened four domestic company-operated shacks in Long Island, Lexington, Chicago and Orlando. They were also able to open two licensed shacks in Minute Maid Park home to the Houston Astros and LAX Airport Terminal 3. However, Shake Shacks proudest expansion was the opening of two licensed Shacks in South Korea. This brought the total number of Shacks opened in 2017 to a notable 24 Shacks. The key to their success is the exceptional flavor of their food. The ability to go from a hot dog stand in Madison Square Park to be able to IPO in just over ten years is a testament to the quality of their food. The Shack Burger is quickly becoming one of the most talked about products in the fast casual industry. It is said to not only rival, but also actually be preferred over In N Outs world famous cheeseburger. However, Shake Shack only uses the highest quality ingredients. Their burgers consist of 100% all-natural Angus beef, no hormones and no antibiotics. Their chicken is raised cage-free and does not contain antibiotics or hormones as well. Shake Shack is conscious to the growing vegetarian consumer base and has implemented their signature 'Shroom Burger. Their menu is more diverse and offers far more products than competitors like Five Guys and In N Out. Additionally, they sell wine and beer to consumers that look to complement their meal with a nice relaxing beverage. Shake Shack has a signature beer created by Brooklyn Brewery named ShackMeister Ale, as well as their own wine Shack Red and Shack White supplied by Frog's Leap. Below is graph from 2016 showing their expectations for the growth strategy and the revenues that will be generated from their expansion.



Competitors:

The casual dining industry has seen large growth over the past several years but has slowly declined in the past in 2 years. However, in 2017 analysts expect the industry to rise around 10% to $52 billion compared to $47 billion the year before. Fast casual dining industry has lead the restaurant sector in growth, and analysts predict that there should be an increase of 1% in consumer traffic in 2018. The key to capitalizing on the rise in consumer traffic is differentiating themselves from competition. Shake Shacks undeniable success in its short history can be attributed to the quality of food and their strive to differentiate themselves form other burger destinations. Although Shake Shack is only 13 years old, they have already rivaled burger companies such as Five Guys and In N Out. Both are staples in the fast food burger industry, both have a cult-like following, and both have seen rapid expansion in their history. However, neither of them offer nearly the amount of items that Shake Shack does, neither of them use the highest quality ingredients, and neither of them have a mission to give back to the community. Shake Shack's mission to provide the highest quality food is a direct factor to their growth and success. They pride themselves on sourcing incredible ingredients from like-minded ranchers, farmers, bakers and food purveyors. A direct quote from their website says, "Our burgers are made with 100% all-natural Angus beef—vegetarian fed, humanely raised and source verified. The Chick'n Shack™ is 100% all-natural cage-free chicken. Our flat-top dogs? 100% all-natural Vienna beef. Our fries are crinkle cut Yukon potatoes, with zero artificial ingredients. And our vanilla and chocolate frozen custard recipes use only real sugar, no corn syrup and milk from dairy farmers who pledge not to use artificial growth hormones." The quality of ingredients directly reflects in the taste. The Shack Burger was just named the "Top Chain Burger" according to *The Daily Meal*. In addition to their superior burger, they have a wide range of products that just is not comparable to any other casual dining burger restaurant. They did not forget about vegetarians either their 'ShroomBurger ensures that all types of customers can find something they enjoy. Another differentiating aspect at Shake Shack is their mission to stay green. They approach this mission by recycling anything appropriate, using only farms and ranches that have minimal impact on the environment, and being a member of 1% for the planet foundation.

It is clear that Shake Shack has the ability to differentiate themselves, and they do it with the utmost effectiveness, which directly correlates to their profits. Their entrance into the market mirrors the early stages of Chipotle's growth. Their CAGR is north of 30% similar to Chipotle even though Chipotle had far more store locations. They are at the top tier concerning average unit volumes currently above $4.5 million, which is almost double what Chipotle was in their early stages. Shake Shack's restaurant level profit is forecasted to be 26% at the end of 2017, which is far greater than early Chipotle at 24% based on 2009 numbers. Currently Shake Shack's unit-level margins are very good, however as the company matures they will likely plateau to a more realistic percentage. There is promise for them to sharply reduce their corporate costs by leveraging its growing unit base. Based on the graph below as Shake Shack expands its system-wide units their general and administrative costs will mellow out and their EBIT margin will stabilize relatively similar to what happen with Chipotle in 2009.



Catalysts:

Catalysts will play a large role in the success for the future of Shake Shack. The short-term catalyst has been mentioned in the Earnings Performance section above, however Shack's ability to improve sales growth 37% from year to year is impressive. What is even more impressive is that they were able to do that even though they are expanding unit systems both domestically and internationally. On top of that, they did not acquire any debt from this expansion because they were able to finance them through generated revenue. If they are able to continue to expand with the same results, Shake Shack will see an incredible amount of profitability.

The breakfast menu option is something that will allow Shake Shack to compensate for the loss of consumer traffic. They offer the menu in only a select few stores, and it has seen promising results. The launch of the breakfast option will be implemented in 2018. The menu will consist of three types of breakfast sandwiches, coffee and an apple turnover pastry. Restaurants in urban areas and cities that offer breakfast options statistically have a much higher average unit volume, which would greatly benefit Shake Shack. That is not surprising considering the amount of people who are commuting to work that are looking for a quick stop and go meal or coffee. In the casual dining industry, the amount of consumer traffic is everything. Anything that can increase the number of costumers is something worth considering, and adding the breakfast option is a perfect way to gain repeat customers and improve their differentiation amongst competition.

The third and most promising catalyst for the long-term success of Shake Shack is the announcement that they will be opening two Shacks in mainland China. They have plans to open their first Chinese restaurant in Hong Kong next year. What may be the best part of their expansion is that they have partnered with Maxim's Caterers Limited. This should give shareholders and Shake Shack's management team a sense of security. Maxim's Caterers is Hong Kong's largest food and beverage corporation and restaurant chain. They know the Chinese market as well as anyone and should provide Shake Shack with a great return on their investment. The ability to enter the Chinese market will undoubtedly increase sales considering their five

Shacks in Japan and their five Shacks in South Korea are among the top international licensed Shacks in regard to sales revenue.

Conclusion:

Shake Shack has exploded into the casual dining industry, and quickly became a major player. Since its inception into the publicly traded market in 2015, Shake Shack has generated positive revenues and increased its expansion every year. They have shown the ability to effectively infiltrate and succeed in the international markets, which many casual dining restaurants are not capable of doing. They have been effected by the decrease in consumer traffic, as has the entire casual dining industry. Nevertheless, they have made significant strides in combatting these shortcomings. In the casual dining market in order to succeed, it is necessary to differentiate yourself from your competitors, and Shake Shack is at the top of their game when it comes to doing just that. Their product speaks for itself, in its short history Shack Burger has now become arguably the best burger in the chain restaurant industry. Combine their differentiation, their product and the fact that they are maintaining steady healthy growth, and Shake Shack is destined to become the premier restaurant in the casual dining industry.

Current Price: $35.52

Target Price: $40.04

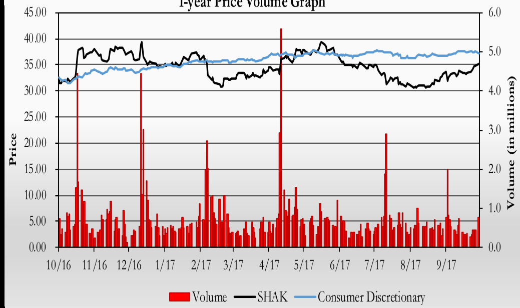
Target 1 year Return: 12.74%

CENTER FOR GLOBAL FINANCIAL STUDIES

Shake Shack Inc. (SHAK) — **NEUTRAL**

Analysis by JT Jennings	Current Price: $35.52	Intrinsic Value $34.15	Target 1 year Return: 12.74%
10/27/2017	Divident Yield: 0.0%	Target Price $40.04	Probability of Price Increase: 91.5%

1-year Price Volume Graph



Description

Shake Shack Inc. owns, operates, and licenses Shake Shack restaurants (Shacks) in the United States and internationally.

General Information

Sector	Consumer Discretionary
Industry	Hotels, Restaurants and Leisure
Last Guidance	November 3, 2015
Next earnings date	November 1, 2017
Estimated Country Risk Premium	5.77%
Effective Tax rate	24%
Effective Operating Tax rate	24%

Market Data

Market Capitalization	$922.85
Daily volume (mil)	0.85
Shares outstanding (mil)	25.98
Diluted shares outstanding (mil)	25.55
% shares held by institutions	N/M
% shares held by investments Managers	78%
% shares held by hedge funds	20%
% shares held by insiders	10.87%
Short interest	37.19%
Days to cover short interest	15.60
52 week high	$39.70
52-week low	$30.12
Volatility	0.00%

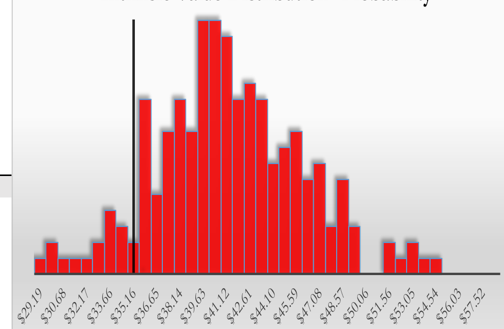
Past Earning Surprises

Quarter ending	Revenue	EBITDA
6/29/2016	4.89%	-3.62%
9/28/2016	8.38%	2.71%
12/28/2016	4.14%	-8.02%
3/29/2017	3.02%	-6.02%
6/28/2017	2.14%	5.20%
Mean	4.51%	-1.95%
Standard error	1.1%	2.5%

Peers

Zoe's Kitchen, Inc.
Bojangles', Inc.
Chipotle Mexican Grill, Inc.
The Habit Restaurants, Inc.
Noodles & Company
McDonald's Corporation
The Wendy's Company
Potbelly Corporation

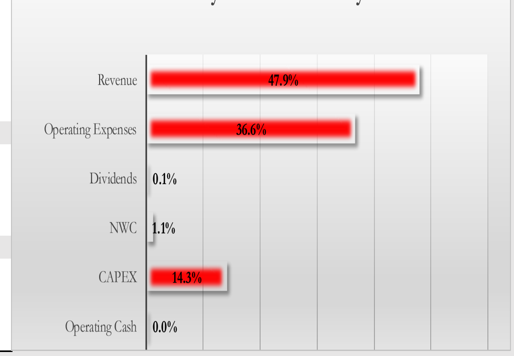
Intrinsic Value Distribution--Probability



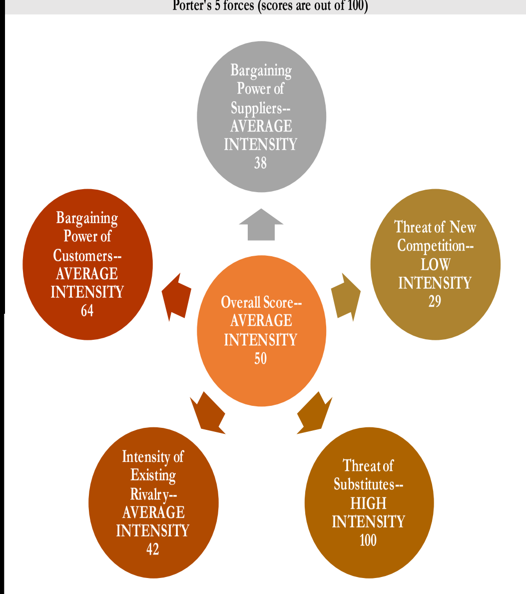
Management	Position	Total compensations growth	Total return to shareholders
Meyer, Daniel	Founder & Chairman	17.92% per annum over 1y	-7.83% per annum over 1y
Garutti, Randall	CEO & Director	47.16% per annum over 3y	N/M
Rubenzer, Peggy	Senior Vice President of Peo	-100% per annum over 2y	N/M
Comonte, Tara	Chief Financial Officer	N/M	N/M
Koff, Zachary	Chief Operating Officer	N/M	N/M
Palmese, Ronald	Senior VP, General Counsel &	N/M	0% per annum over 0y

Profitability	SHAK (LTM)	SHAK (5 years historical average)	Peers' Median (LTM)
Return on Capital (GAAP)	13.6%	13.45%	5.56%
Operating Margin	9%	6.75%	4.61%
Revenue/Capital (GAAP)	1.59	1.99	1.21
ROE (GAAP)	7.6%	3.9%	35.7%
Net margin	4.1%	4.3%	5.8%
Revenue/Book Value (GAAP)	1.85	0.90	6.11
Invested Funds	**SHAK (LTM)**	**SHAK (5 years historical average)**	**Peers' Median (LTM)**
Cash/Capital	16.8%	48.6%	7.7%
NWC/Capital	-8.4%	4.2%	-3.0%
Operating Assets/Capital	91.6%	48.7%	87.2%
Goodwill/Capital	0.0%	0.0%	8.1%
Capital Structure	**SHAK (LTM)**	**SHAK (5 years historical average)**	**Peers' Median (LTM)**
Total Debt/Market Capitalization	0.30	0.21	0.70
Cost of Existing Debt	4.0%	8.2%	4.8%
CGFS Rating (F-score, Z-score, and default Probability)	BB	BBB	BBB
WACC	9.4%	18.7%	9.6%

Sensitivity Attribution Analysis



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



Valuation

Period	Revenue Growth Forecast	NOPAT Margin Forecast	Revenue to Capital Forecast
Base Year	40%	14.0%	1.55
6/28/2018	28%	14.5%	1.33
6/28/2019	22%	15.0%	1.41
6/28/2020	14%	15.7%	1.35
6/28/2021	11%	16.6%	1.31
6/28/2022	6%	18.4%	1.26
6/28/2023	5%	17.9%	1.25
6/28/2024	5%	17.5%	1.24
6/28/2025	4%	17.1%	1.24
6/28/2026	3%	16.6%	1.24
6/28/2027	3%	16.4%	1.23
Continuing Period	2%	16.0%	1.23

Period	Return on Invested Capital Forecast	WACC Forecast	Price per share Forecast
Base Year	21.8%	9.7%	$33.04
6/28/2018	19.4%	9.0%	$37.26
6/28/2019	21.2%	9.5%	$42.25
6/28/2020	21.2%	8.9%	$48.47
6/28/2021	21.8%	9.1%	$53.97
6/28/2022	23.2%	9.6%	$57.62
6/28/2023	22.3%	9.6%	$63.08
6/28/2024	21.8%	9.7%	$68.56
6/28/2025	21.2%	9.7%	$75.32
6/28/2026	20.6%	9.8%	$84.39
6/28/2027	20.3%	9.8%	$90.83
Continuing Period	19.7%	9.8%	

SIENA college BJORKLUND FUND

October,26, 2017

Hexcel Corporation : HXL

Ryan Fuchs

Sector: Industrials
Industry: Aerospace and Defense
Current Price: $62.09
Target Price: $73.02

Company Description:

Hexcel Corporation develops, manufacturers, and markets lightweight, high performance structural materials, honeycomb, adhesives, engineered core and composite structures, for use in Commercial Aerospace, Space & Defense and Industrial markets. Hexcel's products are used in a wide variety of end applications, such as commercial and military aircraft, space launch vehicles and satellites, wind turbine blades, automotive, recreational products and other industrial applications.

BUY

Current Price:	$62.09
Target Price:	$73.02
Market Cap:	5.57B
Beta:	0.9
EV/EBITDA:	13.62
Net Debt/EBITDA:	1.61
EBITDA Margin:	22.62%
ROIC:	13.35%
Volume:	583,880

Catalysts:

- Short Term(within the year): Large demand for composite products driving revenues back to a growing state
- Mid Term(1-2 years): Leading efficiency in producing composite products through new facilities and synergies derived from recent acquisitions
- Long Term(3+): Increased orders driven by enlarged demand for aircraft deliveries from major customers such as Boeing and Airbus

Thesis: Hexcel Corporation is a global leader in composite materials. The cost reduction composite material brings to aircrafts provides stability for Hexcel as there is little threat of substitute to their leading product. Their long standing relationship with major industry players such as Boeing and Airbus will allow Hexcel to succeed adjacently with them in a booming industry. Future earnings will be driven by the intense capital expenditure period that the company just exited. The operational excellence and customer base Hexcel has portrayed will allow the company to continue serving as a best-in-class composite supplier.

Sum of The Parts Valuation:

HXL

			EV/EBITDA					
			Multiple			EV		
Segment	Method	Value	Low	High		Low	High	
Aircraft & Parts	LTM EBITDA	454.30	12.95	13.48	*	5883.19	6123.96	*Spirit Aerospace Holdings Inc.
Engineered	LTM EBITDA	57.20	10.13	10.53	*	579.44	602.32	*Belden Inc.

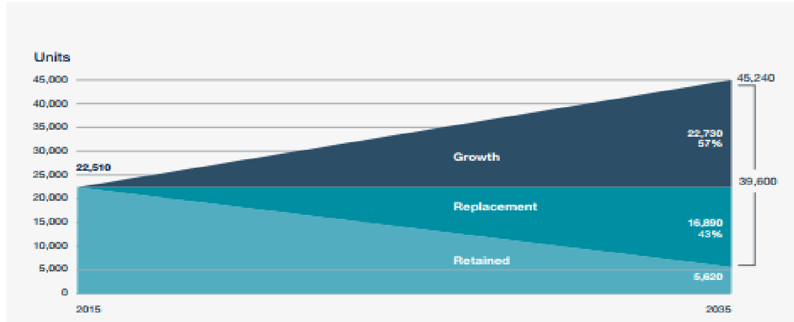
Total Firm Value	6462.62	6726.28
Less: Net Debt	(714.70)	(714.70)
Plus: Options Proceeds from In-the-Money Options	89.80	89.80
Total Equity Value	5837.72	6101.38
Fully Diluted Shares OS	89.80	89.80
Equity Value	65.01	67.94
Current Price	62.09	62.09
Premium/Discount to mkt	**4.49%**	**8.62%**

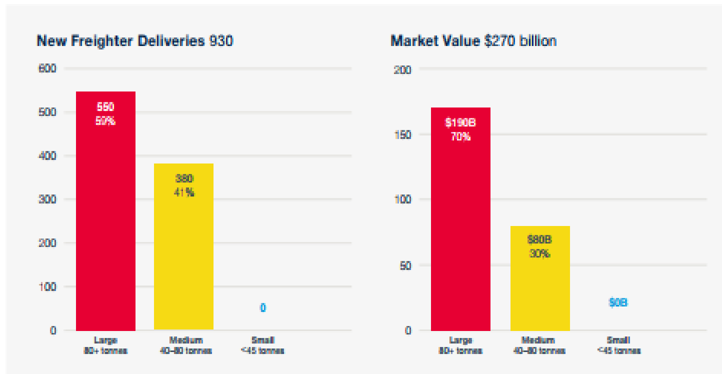
Earnings Performance:

For the 3rd quarter of 2017, Hexcel's net sales were $491.5 million, 1.8% lower than the $500.5 million reported for the third quarter of 2016. On a per segment basis, commercial aerospace sales of $352.6 million decreased 2.2% for the quarter as compared to the 3rd Quarter of 2016. The sales decline in wide body aircrafts such as the A380, B777, and B747 slightly more than offset the growth of the A350 and newer narrow body aircrafts. Sales to "Other Commercial Aerospace" which include regional and business aircraft customers, were down about 6% for the third quarter of 2017 as compared to 2016. Space & Defense sales of $82.7 million increased 1.5% for the quarter as compared to the 3rd quarter of 2017. The increase was driven by U.S. military rotorcraft and the Joint Strike Fighter program. Rotorcraft sales comprise just over half of Space & Defense sales with strong military performance offset by weaker commercial rotorcraft sales. Total industrial sales of $56.2 million for the third quarter of 2017 were 3.8% lower than the 3rd quarter of 2017. This decrease was driven by wind energy sales declining more than 25% for the 3rd quarter compared to the 2016 quarter. However, the company expects wind energy sales in 2018 to exceed 2016 levels, as various legacy blades with lower composite content transition to longer, higher efficiency blades with higher composite content. Despite the decrease in sales the stock's price jumped from $58.48 to $61.60 on October 19th, the date of 2017's 3rd quarter earnings call. The price actually reached its 52 week high of $63.93 just days after the call, before taking a slight dip to its current price $62.09.

Industry Outlook:

Older, less efficient airplanes replaced with more efficient, newer generation airplanes

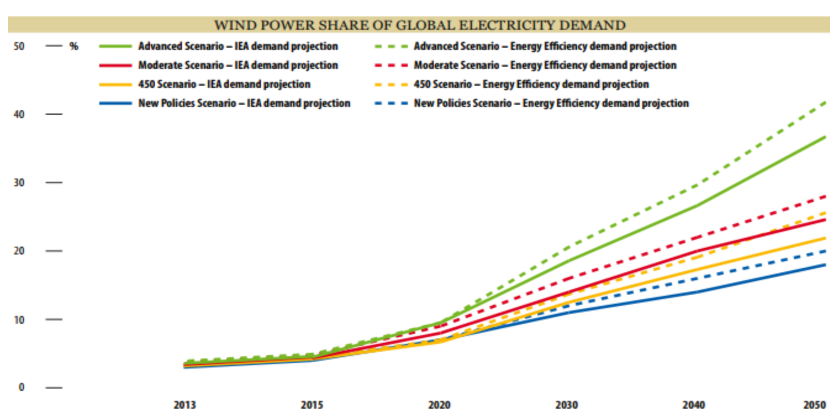




The long standing boom and bust cycles of the jet industry are finally smoothing. The global aerospace and defense industry is broken down into two sub sectors: commercial aerospace and space and defense. Both of these subsectors are experiencing rapid growth to form a booming industry. Airbus anticipates that air traffic will grow by 4.5% annually and therefore increase in value to nearly $5.2 trillion, up from its 2015 estimate of US$4.9 trillion. Total commercial aircraft demand by 2035 will number 33,070 units. With 32,425 of them for passenger service and 645 of them being freighters. Over the next 20 years, passenger aircraft deliveries will consist of 23,530 single-aisle, 8,060 twin-aisle, and 1,480 in the "jumbo" class. Airbus says passenger traffic continues to outperform the world's gross domestic product (GDP) in terms of growth, in 2015 by 5.8%, and that both will go up, powered by emerging economies, which will grow on average by 4-6% per year in the 2016-2035 timeframe. The world's "middle class" will double in the next 20 years, increasing from 2.79 billion to 4.83 billion. This leads Airbus to predict international tourist arrivals will reach 1.6 billion people by 2020, a 47% increase. Boeing predicts that growth the air traffic market will be valued at US$5.9 trillion representing 39,600 commercial aircrafts required to meet demand in the coming 20 years. Single-aisle airplanes will hold the largest share of these 39,600 new deliveries, with airlines needing more than 28,100 units. 9,100 new wide body airplanes, almost 800 more than predicted a year ago, will be delivered. This will allow airlines to serve new markets more efficiently than in the past. This bodes well for Hexcel, as the decrease in the commercial aerospace segment's sales were a result of certain legacy wide body aircrafts.

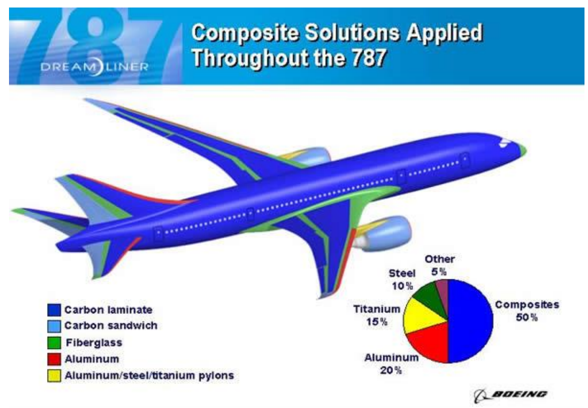
Wind Energy Outlook:

In 2017's 3rd quarter, the Industrial segment's sales were 3.8% lower than the prior year quarter. During that quarter, wind energy sales were down more than 25% compared to the prior year quarter. Wind Energy experienced a challenging year and were down just over 30% for the first nine months of 2017 as compared to last year. However, the Company expects wind energy sales in 2018 to exceed 2016 levels, as various legacy blades with lower composite content transition to longer, higher

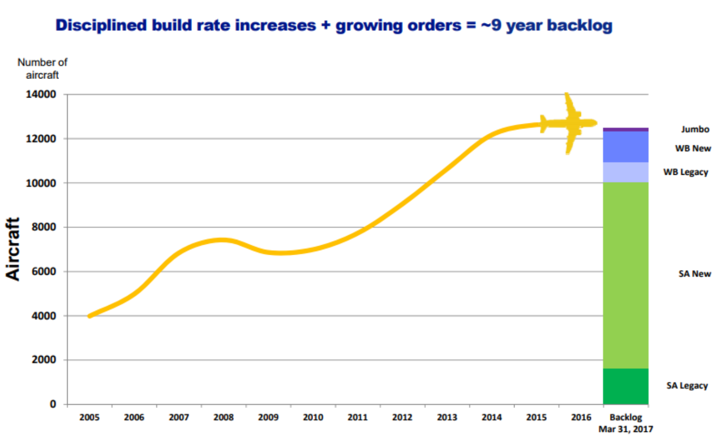


efficiency blades with higher composite content. Wind Energy is the largest submarket in Hexcel's industrial segment. The submarket comprises over 50% of the total revenues. The expected growth for the coming years in this submarket should drive this segment's revenues past 2016 numbers.

Composite in Airliners:



When it comes to airliners, weight is money. The heavier a plane is, the more fuel it takes to drive it through the air. The more fuel it takes, the more it costs. This drive to improve aerodynamic performance of the new aircraft and increase fuel efficiency is leading designers to move away from using aluminum in airframes. This has opened doors for carbon fiber composites. Hexcel has the greatest number of aerospace qualified products of any composite materials manufacturers worldwide. Top of the line planes such as Boeing's 787 Dreamliner and Airbus's A350 rely on lightweight carbon fiber composites. The key to a composite material such as carbon fiber is that it is extremely strong for its weight. To get an idea of how strong this material actually is, Airbus UK head of research, Colin Sirett said "we could get a sledgehammer and take it to this panel and the sledgehammer would actually bounce off." Sirett calculates that every kilogram cut saves roughly $1 million in costs over the lifetime of an aircraft. The use of such composites can reduce the weight of an aircraft by up to 20%. More than 50% of the Boeing 787 and the Airbus A350 XWB airframes are carbon fiber composite. Hexcel has capitalized by serving as a supply chain leader. This has awarded them contracts with industry leaders such as Boeing and Airbus. Around 80% of Hexcel's revenues come from Boeing and Airbus. However, they have recently extending their contracts with these companies, as they will be supplying carbon fiber prepreg for the Airbus A350XWB through 2030. They have used their long relationship with these customers to create nine years of backlog worth ten billion in sales to Hexcel (backlog graph shown to the left).



Capital Allocation:

Hexcel has created value by successfully balancing aggressive reinvestment into the firm along with maintaining creditability. The large amount of cash from operations the company generates allows them to fund most of their capital expenditures without leveraging. The company has generated $423M in cash from operations over the last twelve months. Cash from operations has risen $150M since 2013 when Nick Stanage became CEO. This has increased both free cash flow and free cash flow to the firm over the last 5 years.

HXL	2013	2014	2015	2016	LTM
CFO	272.90	318.00	301.00	401.40	423.00
CAPEX	(194.90)	(260.10)	(305.30)	(327.90)	(317.40)
FCF	**78.00**	**57.90**	**(4.30)**	**73.50**	**105.60**

HXL	2013	2014	2015	2016	LTM
NOPAT	192.88	218.57	246.31	264.31	272.76
D&A	59.30	71.20	76.70	93.60	100.90
Change in W/C	0.80	(23.70)	(12.10)	14.80	11.30
CAPEX	(194.90)	(260.10)	(305.30)	(327.90)	(317.40)
FCFF	**58.08**	**5.97**	**5.61**	**44.81**	**67.56**

With plenty of room for growth, Hexcel's increase in free cash flow will narrow the free cash flow margin gap between it and its competitors (margin shown in Best-In-Class Margins section). This increased free cash flow has allowed the firm to be aggressive in their capital expenditures, R&D spending, and acquisitions. Hexcel's CAPEX margin is well above the industry average. However, the company states that it is past peak CAPEX spending, which will result in a continued increase in free cash flow. Hexcel's R&D expense has been increasing at roughly 10% per year, rising $10 million since 2012. The R&D is virtually all invested in future programs both from a material capability and new material form or manufacturing process. The focus of these programs is the advancements around new composite forms that cure faster, faster to lay down, and that make a stronger value proposition going forward. With the threat of aluminum lithium presented from the partnership between Airbus and Bombardier, Hexcel will continue its enhanced R&D spending to further develop best-in-class composite. With that being said, composite holds little threat of substitute to aluminum lithium because it is still 25-20% less dense, lighter, and stronger. On May 24, 2016, Hexcel opened a new $10 million innovation center in Duxford, UK. This building houses the company's chemistry and development functions and is fully equipped with state-of-the-art formulation and analytical laboratories, mixer rooms, and microscopy and SEM laboratories. At the opening ceremony, CTO Paul Mackenzie said "the building is already resonating with activity." Hexcel also built two new plants. One core facility was built in Casablanca, Morocco for $20 million. This facility will convert HexWeb honeycomb materials into engineered core parts that are used for structural reinforcement and light weighting in aerospace applications, including aircraft structures, engine nacelles and helicopter blades. The other factory was a $250 million investment in precursor and carbonization lines that will occupy a 15-hectare/37-acre site in Roussillon, France. At this plant, carbon fibers will be supplied to customers worldwide, including Airbus for A350 XWB and Safran for the CFM LEAP engine.

Overview | Comp Sheets | Markets | EPS Preview | Ownership | Credit | Custom

Add Column | 93) Fields | 19) Save | 20) Discard

Name (BICS Best Fit)	Mkt Cap (USD)	Last Px	ROIC LF	CAPEX/Sales LF	CAPEX T12M	R&D/Net Sales:Q	T12M R&D	EBITDA to Net Sales:Q
Median	9.43B	91.94	11.32%	1.97%	-119.00M	2.40%	45.95M	14.65%
100) HEXCEL CORP	5.57B	62.04	13.35%	10.60%	-317.40M	2.40%	48.60M	23.58%
101) TRANSDIGM GROUP INC	14.17B	273.00	11.54%	1.90%	-69.65M	--	--	46.78%
102) HEICO CORP	7.06B	91.94	11.32%	1.76%	-28.20M	2.92%	45.95M	23.64%
103) NORTHROP GRUMMAN CORP	51.87B	297.99	20.70%	3.32%	-962.00M	--	--	14.65%
104) AAR CORP	1.34B	38.67	5.14%	1.87%	-32.40M	0.00%	0.00	7.08%
105) SPIRIT AEROSYSTEMS HO...	9.43B	79.67	11.37%	2.60%	-237.40M	0.37%	25.00M	-1.63%
106) ROCKWELL COLLINS INC	21.94B	135.05	8.17%	3.58%	-225.00M	14.28%	975.00M	19.96%
107) HARRIS CORP	16.18B	135.86	9.10%	2.59%	-119.00M	--	--	22.50%
108) BOEING CO/THE	154.42B	259.27	49.03%	1.64%	-1.90B	3.16%	3.14B	13.21%
109) ASTRONICS CORP	992.38M	34.63	9.27%	1.97%	-12.61M	0.00%	0.00	11.94%

(Accounting Adjustments: Adjusted for Abnormal Items When Applicable) 10) Analyze List

Hexcel's strategic acquisition of Structil will further develop their carbon fiber composite material. On October 2nd, Hexcel acquired French company Structil, a French producer of high-performance composites to the aerospace, defense and industrials market. This acquisition combines Structil's advanced composites product portfolio of prepregs, adhesives, and pultrusions with Hexcel's. The deal will further enhance the company's product offerings to their customers in aerospace and industrial, providing an expanded choice of advance composite solutions. This French company is a prime target because Hexcel invests regularly in France, where 21% of its revenues come from. Also, Hexcel just opened a $250 million new plant in France where carbon fibers will be supplied to customers worldwide. This acquisition was funded by debt. However, Hexcel has consistently used leverage while still maintaining viable credit. The company holds an S&P rating of BBB. With the increase of total debt, Hexcel still manages to keep its debt metrics right around the industry average. The company has increased its short-term liquidity by raising cash $85 million from 2016's year end to LTM. This has directly increased the company's quick ratio from 1.0x to 1.4x during that time.

Overview | Comp Sheets | Markets | EPS Preview | Ownership | Credit | Custom

	Name (BICS Best Fit)	Mkt Cap (USD)	Last Px	ROE	IC/WACC Ratio	WACC	ROIC LF	Net Debt to EBITDA	Net Debt LF	Net D/E LF	Debt/Equity LF
	Median	9.47B	91.15	21.78%	1.10	9.35%	11.32%	1.61	736.00M	57.19	77.95%
100)	HEXCEL CORP	5.49B	61.16	18.03%	1.27	9.50%	13.35%	1.61	714.70M	50.09	58.44%
101)	NORTHROP GRUMMAN CORP	51.76B	297.34	36.72%	1.89	6.90%	20.70%	1.14	4.35B	66.98	95.90%
102)	TRANSDIGM GROUP INC	14.35B	276.42	--	1.10	6.16%	11.54%	6.46	10.12B	--	--
103)	BOEING CO/THE	152.69B	256.38	428.83%	1.76	9.49%	49.03%	0.06	736.00M	64.28	940.44%
104)	HARRIS CORP	16.25B	136.41	23.66%	1.08	8.02%	9.10%	2.51	3.55B	121.11	137.64%
105)	ROCKWELL COLLINS INC	21.94B	135.02	19.89%	0.92	7.58%	9.87%	4.12	6.45B	106.64	118.26%
106)	HEICO CORP	6.97B	91.15	16.38%	1.12	9.51%	11.32%	1.08	385.27M	29.11	32.85%
107)	SPIRIT AEROSYSTEMS HO...	9.47B	80.01	31.23%	1.63	7.67%	11.37%	0.54	390.30M	21.54	60.01%
108)	AAR CORP	1.33B	38.49	5.71%	0.42	10.96%	5.14%	1.31	175.90M	19.02	20.66%
109)	ASTRONICS CORP	1.02B	35.66	12.38%	0.85	11.37%	9.27%	1.79	154.70M	44.49	46.87%

(Accounting Adjustments: Adjusted for Abnormal Items When Applicable) 10) Analyze List

Best-in-Class Margins:

Hexcel's operational excellence has expanded their best-in-class margins. Hexcel's operational excellence has brought an operating margin of 18.1%, opposed to the industry average 10.72%. This best-in-class margin was driven by Microsoft Dynamics AX supply chain management. This program allows the company to forecast inventory, avoid stock outs, and place orders to suppliers. The program reduces operating costs by easily identifying and correcting potential inventory shortages. Hexcel has also efficiently expanded margins by decreasing their headcount. Hexcel's total headcount is lower than last year-end and one year ago, including the more than 120 people they've hired to startup their two new facilities. The company's operational efficiency is demonstrated by a positive change in working capital in 2016 and the LTM.

Overview | Comp Sheets | Markets | EPS Preview | Ownership | Credit | Custom

Add Column | 93) Fields | 19) Save | 20) Discard

	Name (BICS Best Fit)	Mkt Cap (USD)	Last Px	EBITDA to Net Sales:Y	OPM:Y	PM:Y	3Yr Avg Op Mgn	FCF Margin
	Median	9.48B	91.29	15.63%	13.03%	8.98%	14.38%	7.63%
100)	HEXCEL CORP	5.50B	61.21	22.62%	17.97%	12.13%	17.55%	3.67%
101)	TRIUMPH GROUP INC	1.53B	30.80	6.62%	11.63%	8.62%	12.10%	6.50%
102)	TRANSDIGM GROUP INC	14.41B	277.50	43.81%	41.79%	19.46%	40.92%	19.71%
103)	SPIRIT AEROSYSTEMS HO...	9.48B	80.13	13.75%	12.95%	8.53%	12.69%	6.81%
104)	ROCKWELL COLLINS INC	21.98B	135.30	25.21%	19.44%	11.81%	19.38%	15.01%
105)	NORTHROP GRUMMAN CORP	51.82B	297.66	14.89%	13.03%	8.98%	13.14%	7.72%
106)	HEICO CORP	6.98B	91.29	23.66%	19.51%	11.49%	18.63%	15.86%
107)	HARRIS CORP	16.26B	136.53	23.46%	23.82%	14.48%	19.83%	7.63%
108)	BOEING CO/THE	152.74B	256.46	8.19%	10.10%	7.73%	9.44%	8.34%
109)	ASTRONICS CORP	1.03B	35.81	15.63%	11.55%	7.65%	14.38%	5.66%

(Accounting Adjustments: Adjusted for Abnormal Items When Applicable) 10) Analyze List

Below are the margins per segment:

Operating Margin					
Segment	2012	2013	2014	2015	2016
Aircraft & Parts					
Revenues	1287.7	1354.9	1487.6	1529.1	1677.6
Operating Income	257.3	276.3	308.8	336.2	368.3
Operating Margin	19.98%	20.39%	20.76%	21.99%	21.95%
Engineered					
Revenues	349.3	393.1	436.4	411	394.4
Operating Income	50.6	58.9	67	55.8	50
Operating Margin	14.49%	14.98%	15.35%	13.58%	12.68%

Vs. Competitors:

Competitors			
Aircraft & Parts	HEI	SPR	BA
Operating Margin (LTM)	20.29%	7.88%	11.40%

Competitors			
Engineered	BDC	LFUS	HUBB
Operating Margin (LTM)	12.58%	18.75%	14.57%

Ownership:

99.73% of Hexcel's shares are owned by institutional investors. 86% of those shares are owned by investment advisors and 3.42% are owned by Hedge Funds. Within those intitutions, Blackrock's latest change was +233,521 shares, to hold they're position as the second largest owner. This change is promising for Hexcel as the hedge fund is most likely looking long. A positive change in institutional position is also a promising sign for Hexcel. Below shows the insider transactions throughout the year for the company. 14,000 more shares have been bought by management than sold. CEO Nick Stanage picked up the largest number of shares during that time period.

51) Institutional	10/22/17	Curr	Change
11) % of Shares Held	110.19	110.30	+0.11
12) % of Float Held	111.12	111.23	+0.11
13) # of Institutions	509	512	+0.59%
14) # of Buyers	165	167	+1.21%
15) # of Sellers	155	158	+1.94%
16) # of New Buyers	58	60	+3.45%
17) # of Selloffs	35	33	-5.71%
18) % Chg in Inst Positions	-17.37	-17.25	+0.12

	Trade Date↑	No. Part	Participants	Net Sell (Shares)	Net Buy (Shares)	Close Price	Volume
12)	10/23/2017	1	HENDRICKS KIMBERLY A	-1,300		62.9000	1.076MLN
13)	05/09/2017	2	BRUBAKER LYNN, FOSTER ...		10	50.2100	622,586
14)	05/05/2017	2	FOSTER W KIM, BRUBAKER...		4,779	50.6000	523,288
15)	03/02/2017	2	PENSKY WAYNE C, MERLOT...	-13,023		54.9400	489,323
16)	02/17/2017	1	MERLOT THIERRY	-7,696		53.4200	397,074
17)	01/27/2017	6	PENSKY WAYNE C, MERLOT...		4,686	50.4700	1.113MLN
18)	01/26/2017	5	PENSKY WAYNE C, HENNEM...		2,241	50.8500	1.255MLN
19)	01/24/2017	7	STANAGE NICK L, PENSKY...		27,719	50.9900	454,835
20)	12/05/2016	1	CANARIO MICHAEL	-2,000		53.4400	1.543MLN
21)	11/22/2016	1	HENNEMUTH ROBERT G			50.0400	576,505
22)	11/09/2016	1	HENNEMUTH ROBERT G			47.7300	977,412
23)	11/02/2016	1	SWORDS TIMOTHY			44.7700	1.01MLN

Conclusion:

The operational excellence and customer base Hexcel has portrayed will allow the company to continue serving as a best-in-class composite supplier. Through leading margins, Hexcel's operations have generated excess cash allowing them to lever at desired time and cost. The company has capitalized on this opportunity by completing strategic acquisitions in core markets. The expected growth of both their segments' industries provide no reason to believe that the company will not exceed prior year quarter sales again. With all signs looking up, we must capitalize on this opportunity to buy this best-in-class company in a booming industry.

SIENA college

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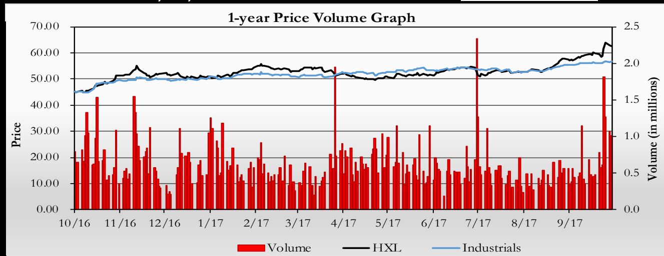
CENTER FOR GLOBAL FINANCIAL STUDIES

NEUTRAL

Analysis by RYAN	Current Price: $62.09	Intrinsic Value $66.37	Target 1 year Return: 18.36%
10/27/2017	Divident Yield: 0.8%	Target Price $73.02	Probability of Price Increase: 94%



Description

Hexcel Corporation, together with its subsidiaries, develops, manufactures, and markets structural materials for use in commercial aerospace, space and defense, and industrial markets.

General Information

Sector	Industrials
Industry	Aerospace and Defense
Last Guidance	November 3, 2015
Next earnings date	January 21, 2018
Estimated Country Risk Premium	6.31%
Effective Tax rate	22%
Effective Operating Tax rate	24%

Market Data

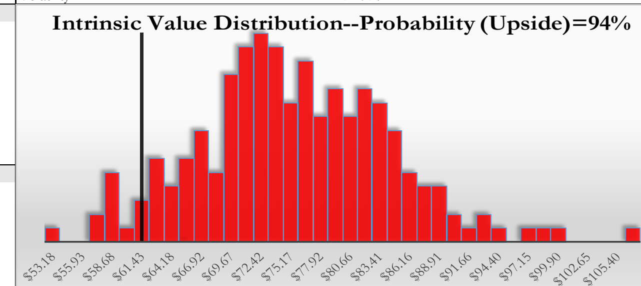
Market Capitalization	$5,569.18
Daily volume (mil)	0.29
Shares outstanding (mil)	89.83
Diluted shares outstanding (mil)	92.33
% shares held by institutions	84%
% shares held by investments Managers	84%
% shares held by hedge funds	6%
% shares held by insiders	0.83%
Short interest	2.81%
Days to cover short interest	4.60
52 week high	$63.93
52-week low	$44.61
Volatility	21.92%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
9/30/2016	-0.84%	-3.51%
12/31/2016	-5.06%	-4.84%
3/31/2017	-10.10%	-18.45%
6/30/2017	-9.20%	-8.47%
9/30/2017	-5.26%	-5.95%
Mean	-6.09%	-8.24%
Standard error	1.7%	2.7%

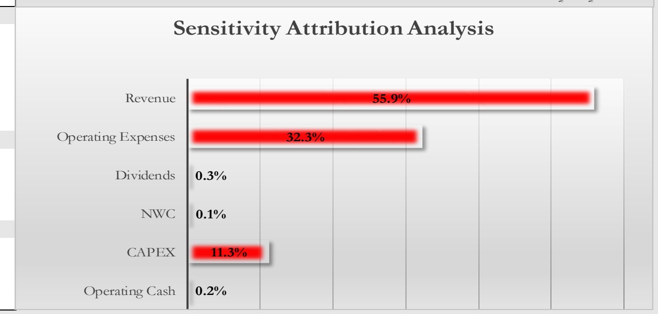
Peers

TransDigm Group Incorporated
Esterline Technologies Corporation
Moog Inc.
Triumph Group, Inc.
HEICO Corporation
AAR Corp.
Rockwell Collins, Inc.
KLX Inc.

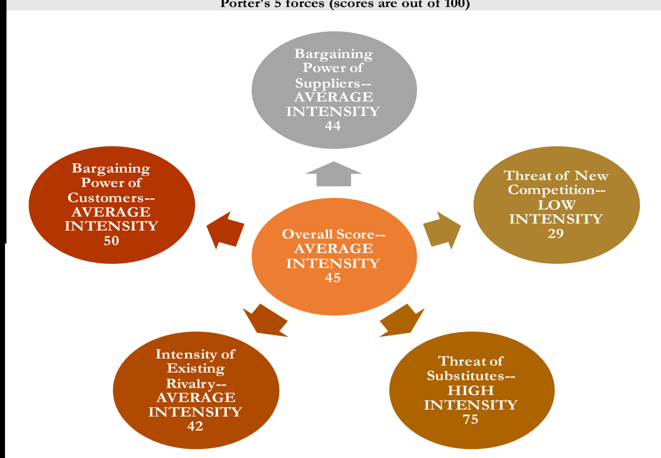


Management	Position	Total compensations growth	Total return to shareholders
Stanage, Nick	President, Chief Executive O	20.69% per annum over 5y	4.86% per annum over 5y
Hennemuth, Robert	Executive Vice President of	3.2% per annum over 5y	4.86% per annum over 5y
Merlot, Thierry	President of Aerospace, Euro	N/M	0% per annum over 0y
Winterlich, Patrick	Executive VP & CFO	N/M	N/M
Hendricks, Kimberly	Senior VP, Corporate Control	N/M	N/M
Mackenzie, Paul	Senior VP & CTO	N/M	N/M

Profitability	HXL (LTM)	HXL (5 years historical average)	Peers' Median (LTM)
Return on Capital (GAAP)	14.2%	17.36%	20.04%
Operating Margin	14%	12.85%	12.03%
Revenue/Capital (GAAP)	1.02	1.35	1.67
ROE (GAAP)	20.5%	20.5%	13.5%
Net margin	13.1%	11.3%	7.6%
Revenue/Book Value (GAAP)	1.56	1.81	1.78
Invested Funds	**HXL (LTM)**	**HXL (5 years historical average)**	**Peers' Median (LTM)**
Cash/Capital	5.3%	3.7%	13.8%
NWC/Capital	14.8%	20.8%	22.7%
Operating Assets/Capital	79.9%	74.7%	19.0%
Goodwill/Capital	0.0%	0.0%	44.5%
Capital Structure	**HXL (LTM)**	**HXL (5 years historical average)**	**Peers' Median (LTM)**
Total Debt/Market Capitalization	0.37	0.25	0.52
Cost of Existing Debt	4.0%	4.0%	4.7%
CGFS Rating (F-score, Z-score, and default Probability)	A	BBB	A
WACC	7.8%	9.6%	9.1%



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



Valuation

Period	Revenue Growth Forecast	NOPAT Margin Forecast	Revenue to Capital Forecast
Base Year	-2%	15.2%	0.82
9/30/2018	4%	15.3%	0.74
9/30/2019	6%	16.0%	0.69
9/30/2020	9%	17.1%	0.67
9/30/2021	8%	17.1%	0.65
9/30/2022	8%	17.1%	0.62
9/30/2023	7%	17.1%	0.60
9/30/2024	6%	17.1%	0.58
9/30/2025	6%	17.2%	0.55
9/30/2026	5%	17.1%	0.53
9/30/2027	4%	17.1%	0.50
Continuing Period	4%	17.1%	0.48

Period	Return on Capital Forecast	WACC Forecast	Price per share Forecast
Base Year	12.4%	7.8%	$67.60
9/30/2018	11.4%	7.6%	$74.15
9/30/2019	11.1%	7.6%	$80.59
9/30/2020	11.5%	7.6%	$87.34
9/30/2021	11.1%	7.6%	$94.45
9/30/2022	10.7%	7.6%	$101.94
9/30/2023	10.3%	7.6%	$110.67
9/30/2024	9.9%	7.6%	$118.93
9/30/2025	9.5%	7.6%	$127.59
9/30/2026	9.0%	7.6%	$136.64
9/30/2027	8.6%	7.6%	$146.07
Continuing Period	8.2%	7.6%	

Below, insert a screenshot of your “OUTPUT” page from the Pro-Forma. Or, if you built your own model, insert screenshot of it here.

SIENAcollege

BJORKLUND FUND

October 24th, 2017

Dycom Industries, Inc.: DY

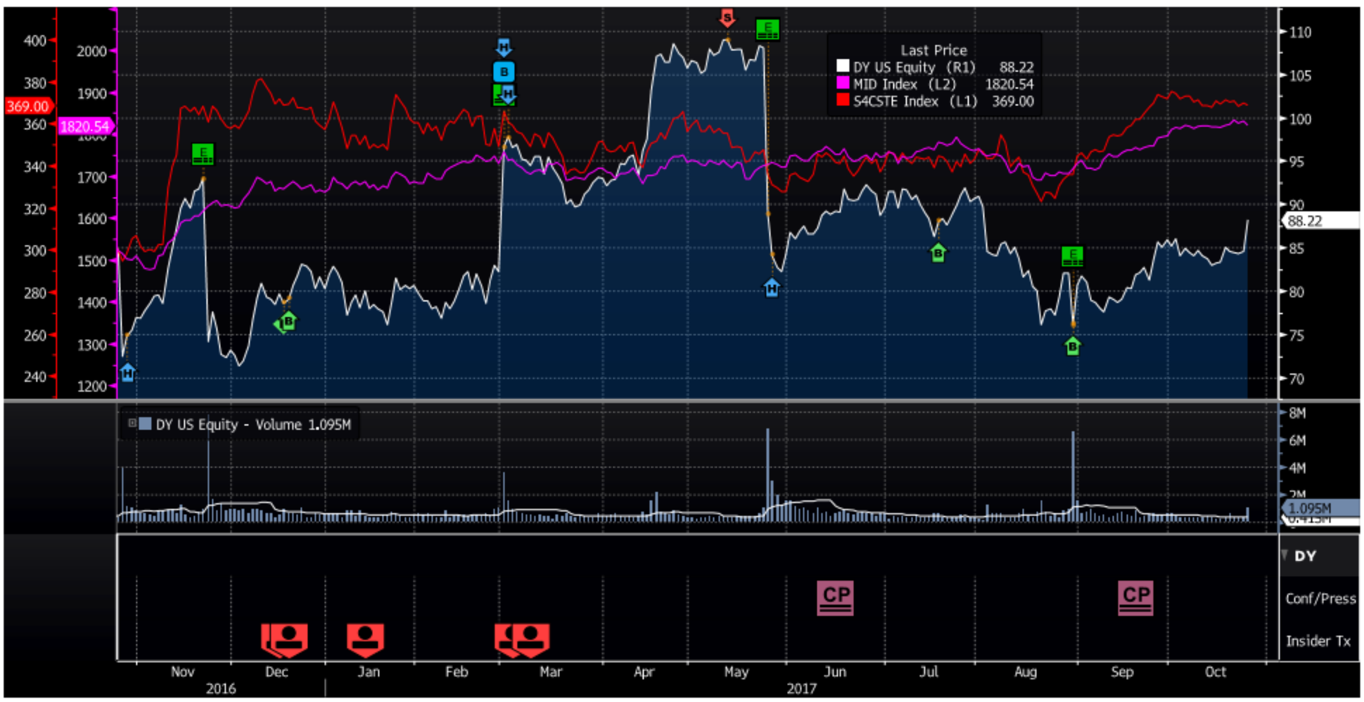
Paul Martinez

Sector: Industrial Goods
Industry:Engineering & Construction
Current Price: $84.45
Target Price: $111.23

BUY

Current Price:	$88.45
Target Price:	$111.23
Market Cap:	2.64B
Average Volume:	1.05M
ROIC:	13.06%
WACC:	9.6%

Company Description: Dycom Industries is a leading provider of specialty contracting services throughout the United States and Canada. Subsidiary companies provide program management, engineering, construction, maintenance, and installation services for telecommunication providers, underground utilities, construction, and electric and gas utilities.



Thesis:

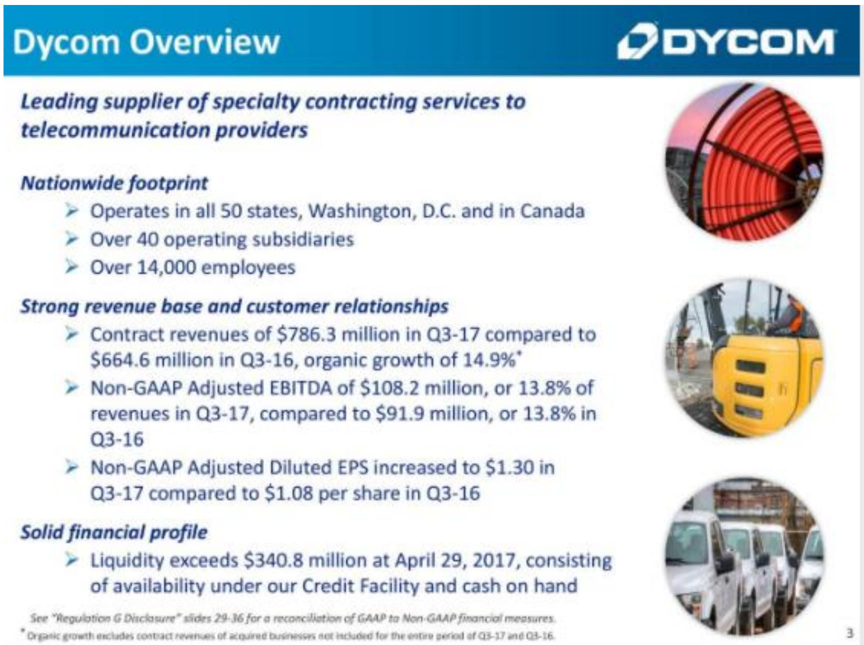
Dycom Industries, Inc. is a leading provider of specialty contracting services throughout the United States and Canada. Dycom is in an optimal market position and are currently operating in a niche market that creates opportunities constantly. Dycom is currently experiencing strong organic growth and has established a successful capital allocation strategy. Going forward Dycom can expect synergies both internally and externally that will increase margins and allow Dycom to gain more market share and blow past their competitors.

Catalysts:

- **Short Term (within the year):** Increasing number of backlog orders. Master Service Agreement's (MSAs) anchor revenues and allow for balancing out of seasonality dips in revenue.
- **Mid Term (1-2 years):** President Donald Trump's corporate tax cut proposal. Currently Dycom has an effective tax rate of 38%, which is heavily pulling down margins. In the future, tax cuts will increase margins.
- **Long Term (3+):** As technology increases, demand for quicker, more efficient internet will increase. Dycom will continue to receive revenues from their major customers, such as AT&T, Verizon, and Comcast.

Business Description:

Dycom Industries, Inc. provides specialty-contracting services in the United States and Canada. Dycom offers various services to their customers, such as, engineering, construction, maintenance, and installation services.



These services include comprising and splicing of fiber, copper, and coaxial cables to telecommunication providers. Dycom operates in all 50 states and has small portion of business operations in Canada as well. Currently, Dycom has a very strong presence in the eastern half of the United States. This presence stems from the origination and headquarters being located in Palm Beach, Florida. Dycom provides the full package in terms of servicing for their customers. Dycom provides planning, management, engineering, design, construction, and maintenance. Dycom prides themselves on the customer relationships that they currently have and the relationships that they work to obtain. Currently, Dycom's top five customers composed close to 77% of total revenues in fiscal year 2017. These relationships allow for sustained growth and stabilized revenue flow that can be represented through their increase in backlog orders. Dycom is currently operating well in a niche market and can expect to see exponential increases in revenues and margins going forward.

Company Performance:

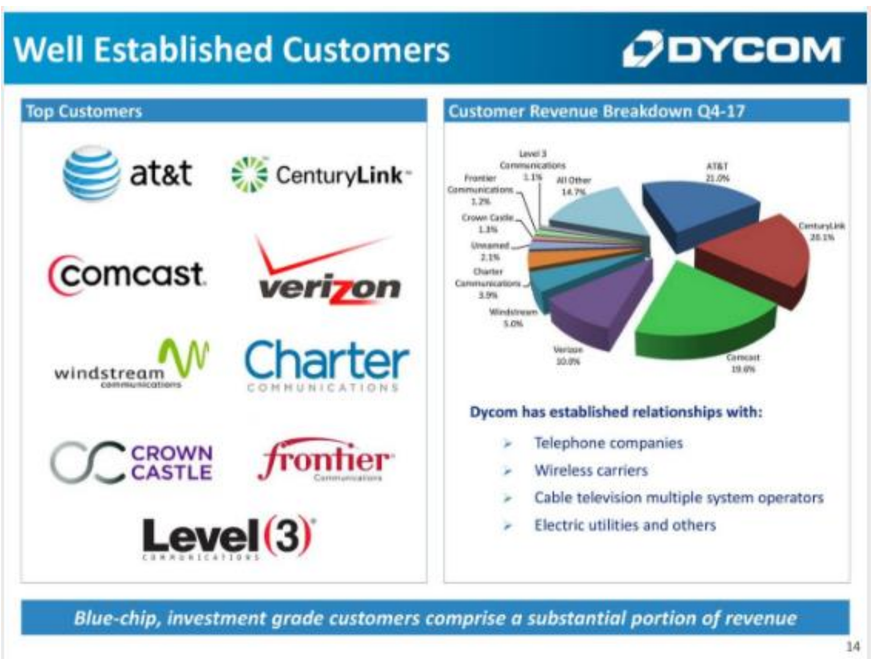
Dycom Industries, Inc. similar to many other companies in this industry encounter seasonality impacts. Dycom experiences a slight slow-down during holiday periods or long periods of vacation and other cyclical periods. This is because a large sum of their revenues are composed based on performance of other companies and the level of business that is being done by their major customers. With this being said, Dycom balances these seasonality and cyclical trends by maintaining a healthy amount of backlog contracts. These

Name (BICS Best Fit)	EBITDA Growth (%)	EBITDA Margin	Operating Income Margin	Net Income Growth (%)	Net Profit Margin	Return on Invested Capital	Return on Assets	Return on
Median	9.60%	9.03%	6.38%	32.28%	3.51%	7.07%	4.13%	10.00%
100) DYCOM INDUSTRIES INC	12.17%	13.63%	8.80%	10.99%	4.81%	11.19%	8.15%	24.01%
101) AMERICAN TOWER CORP	18.28%	58.31%	32.98%	55.23%	19.64%	6.98%	3.96%	23.03%
102) CROWN CASTLE INTL CORP	7.02%	53.21%	25.40%	4.65%	11.84%	4.34%	1.85%	5.00%
103) SBA COMMUNICATIONS C...	5.27%	66.34%	28.38%	236.05%	5.26%	4.85%	1.20%	--
104) MASTEC INC	25.59%	10.47%	7.57%	200.42%	3.96%	10.99%	6.81%	21.58%
105) PRIMORIS SERVICES CORP	15.90%	6.95%	4.10%	32.28%	2.19%	7.67%	4.40%	10.00%
106) FLUOR CORP	-10.43%	4.98%	3.79%	-17.30%	2.06%	9.01%	4.31%	12.58%
107) MYR GROUP INC/DELAWA...	-32.12%	5.21%	2.18%	-19.98%	1.15%	4.99%	2.84%	5.76%
108) KBR INC	-57.23%	3.46%	2.27%	--	-0.29%	1.28%	-0.37%	-1.31%

backlog contracts are multi-year contracts that can supply a more constant stream of revenue. As reported in their last earnings call, backlog revenues were up approximately 600 million from fiscal year Q3 to Q4. Wireless backlog was quoted to be at an all-time high. This increase shows positive stability and long-term growth in the coming years. Dycom is also experiencing organic growth of approximately 5% and has been able to decrease SGA expenses by three basis points, bringing expenses down to approximately 7.6%. Dycom Industries, Inc. as depicted above is beating the median average in every category and is leading in some as well. Currently, Dycom has larger margins than their main competitor does, Mastec Inc. Dycom can expect to see these margins widen further with corporate tax cuts. Operating expenses are expected to decrease as acquisitions are integrated and synergies develop. Dycom is performing very well with double digit growth YoY, with sales growth of 14.76%, EBITDA growth of 12.17%, and Net Income growth of 11%. Dycom is in an optimal market position to expand their market share going forward.

Growth Strategy:

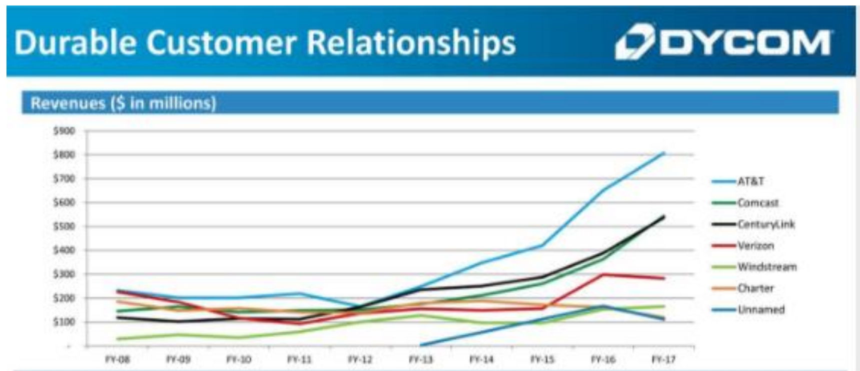
As mentioned, Dycom Industries, Inc. is in a position where they are expecting major growth in their company. Being that Dycom Industries, Inc. provides products and services for telecommunication providers, as these major providers grow, Dycom will grow. As reported in Dycom's last earnings call,

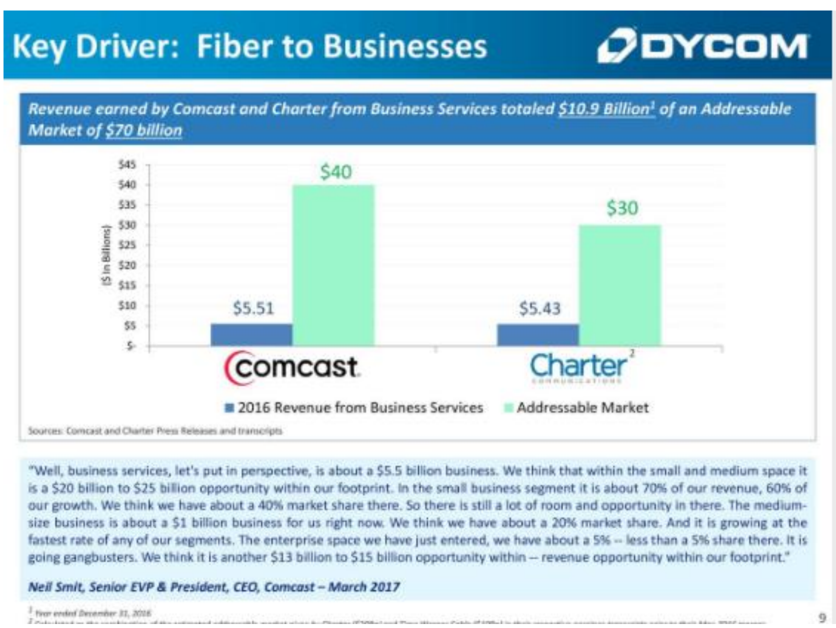


"telecommunications has a large market for growth, less than 20% of total United States homes have fiber wiring". Dycom looks to take advantage of this opportunity. As mentioned in Dycom's annual report, "Telecommunications providers will continue to expand their network capabilities to meet the demand of their consumers, driving demand for our services as these providers outsource a significant portion of their engineering, construction, maintenance, and installation requirements". As humans, we are constantly demanding faster, more efficient technologies and are willing to pay more and more for them. As these providers grow, and continue to compete with each other, Dycom will continue to reap the benefits. With this being said, Dycom deliberately targets high quality, long-term industry partners. These partners generate the vast majority of the industry's opportunities as a whole. Contracts and partnerships with these companies like AT&T, Verizon, and Comcast allow for growth on both sides of the deal. Furthermore, Dycom selectively acquires businesses to expand their presence and footprint across the United States. This also allows for the establishing and enhancing of customer relationships. Due to this scale and presence across the United States, Dycom has obtained the ability to leverage themselves and expand margins through these previously mentioned strategies.

Customer Relationships:

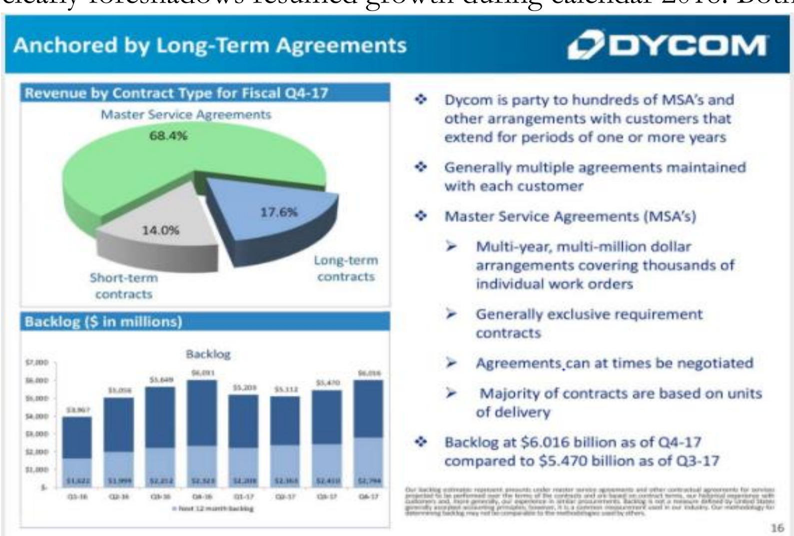
Dycom Industries, Inc. has established their business to the point where they have achieved long-term contracts and partnerships with some of the largest companies in the telecommunications industry. Dycom prides themselves on these relationships and continuously looks to improve and gain more long-term contracts with these large companies. Dycom's top five customers made up approximately 76.1% of total revenues during fiscal year 2017. As you can see in the chart to the right, these revenues are increasing pretty steadily over the years and the renewing of deals with these companies is a strong sign for Dycom. The top five customers in terms of revenue are the following, AT&T, Comcast, CenturyLink, Verizon, and Charter Communications (Time Warner Cable). As mentioned, these strong relationships with major clients is evident and very important to the company. Dycom recently renewed licenses with AT&T and Comcast, these two companies made up 40% of Dycom's total revenue last fiscal year. Major customers recently have announced their commitment to fiber wiring. Both AT&T and CenturyLink CFO's have recently been quoted mentioning this and increasing broadband speeds that would ultimately be done through Dycom servicing. With this being said, data transmissions are constantly increasing as technology and internet protocol are increasing. There is a large opportunity in many businesses, for example, the goal for all is to move from 4G to 5G. 5G speeds require more cell sites, which therefore requires more ground wiring. Furthermore, Dycom as well as major customers believe that there is a large market opportunity in some of the smaller businesses. Dycom plans to take advantage of these smaller businesses, such as Comcast and Charter.



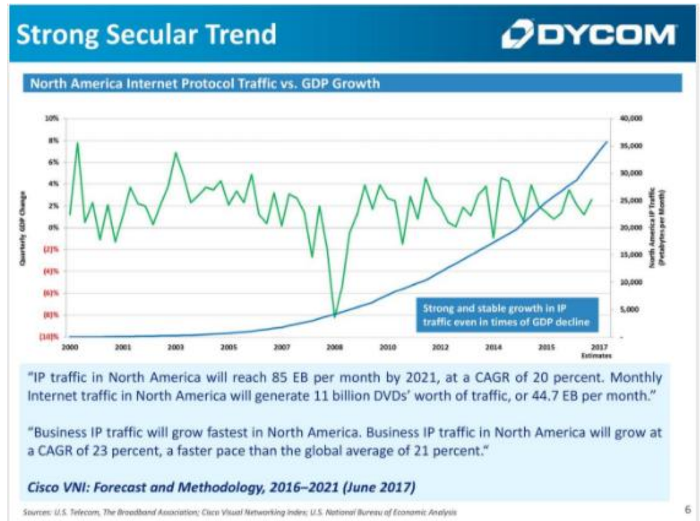


Backlog Contract Revenues:

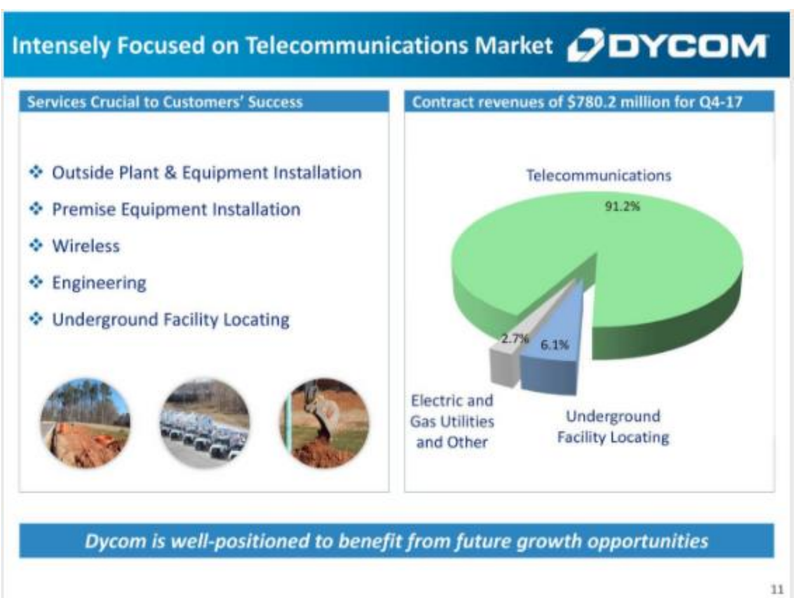
Dycom Industries, Inc. has many customer partnerships in which they enter into a Master Service Agreement, also known as an MSA. A Master Service Agreement is an agreement in which both parties guarantee future contracts or future transactions. These MSA's are normally multi-year, multi-million dollar deals that are being contracted. Historically, multi-year master service agreements have been awarded primarily through a competitive bidding process. Certain occasions warrant the extension of these agreements through negotiations. Normally these contracts are long-term in duration, longer than a year. Sometimes they may be short-term in duration and have a completion period of around 3-4 months. Recently, Dycom has experienced strong growth in their backlog numbers and long-term future contracts. Organic contract revenues grew from 727.6 million in fiscal Q3-16 to 760.9 million in fiscal Q3-17. With this being said, total backlog increased from 5.4 billion in Fiscal Q3 to 6.02 billion in Fiscal Q4. During their last earnings call, CEO, Steven Nielsen stated, "We're particularly pleased with the increase in our next 12 months backlog as it clearly foreshadows resumed growth during calendar 2018. Both backlog calculations reflect strong performance as we booked new work and renewed existing work". These backlog measurements are not defined by GAAP, however, is a very common measurement in this industry. With this being said, the increase in backlog revenues and contracts anchors revenues, and gives a forecasted guidance and stability for the future. As reported in their annual report, Dycom expects to have completed 50% of total backlog revenues, approximately 3 billion in revenues within the next 6 months.



Industry Outlook/Macro Factors:



Looking forward Dycom Industries, Inc. has a strong market position with many revolving factors that can only provide an even larger upside in the future. As mentioned, Dycom currently has an effective tax rate of approximately 38%. Recently progress has been made towards President Donald Trump's tax cut and we can expect to see a large widening of margins in the near future if Dycom's effective tax rate was to decrease. Furthermore, 92% of Dycom's revenues come from the telecommunication industry. With this being said, telecommunications companies are increasing network bandwidth, by improving wireline networks. Deloitte recently reported, "The growth in smartphone usage signals continuing opportunity for all telecom sub-sectors, including wireless and wireline/broadband carriers, network equipment/infrastructure companies, and device manufacturers". Companies are also seeing an increase in technology and internet protocol. As companies begin to transition from 4G to 5G, growth opportunities will be arising. To fuel this revolution, companies must increase the amount of cell sites and cell coverage which all requires fiber wiring. There is a strong secular trend moving forward, internet protocol has improved in times of low or negative GDP growth, with a CAGR of approximately 20% over the last 15 years. All of these factors will lead to increasing revenues, widening margins, and expansion. Dycom understands their market position and is ready to take advantage of it moving into calendar year 2018 and looking ahead for calendar year 2019.



Ownership Summary:

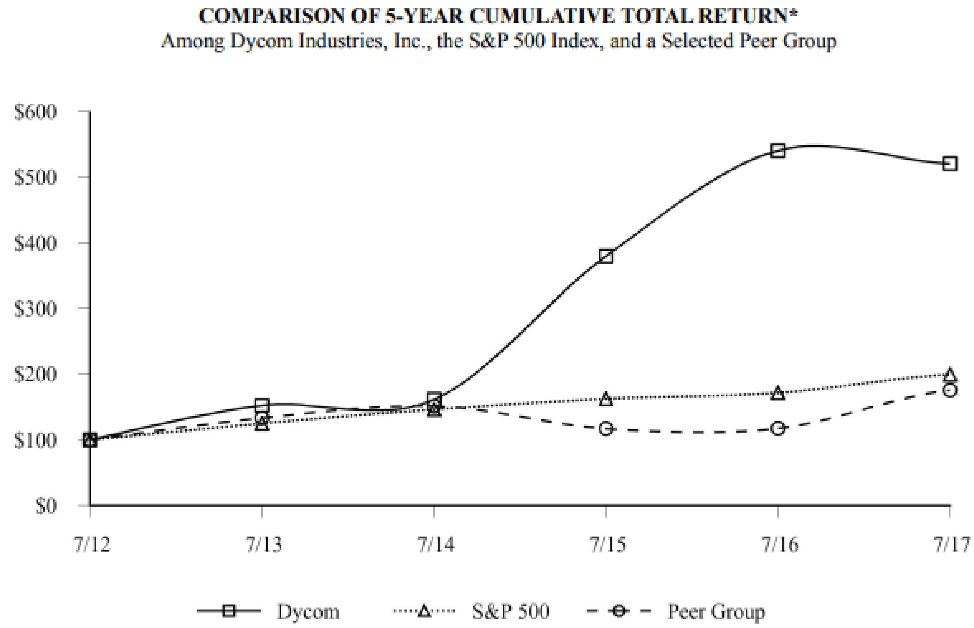
Primarily Investment Advisors currently hold Dycom Industries, Inc. at approximately 72%, out of this 72% major holdings come from Vanguard at 8% and Blackrock at 6% of shares outstanding. Following this, hedge fund managers hold close to 20% of Dycom shares outstanding, with significant amounts of share purchases by Point72 Asset Management and Stelliam Investment Management. Furthermore, on Tuesday of this week, CEO, Steven Nielsen, bought/acquired almost 11,000 shares of Dycom Industries, Inc. By exercising his grant now, this proves that he believes that there is value going to be created in the future. This also shows that he is and will continue to be vested in the company and continue to do his job of driving the stock price up for shareholders. In addition to this confidence from C-Suite Executives, Dycom has been actively buying back shares outstanding. Throughout 2017, Dycom repurchased approximately 3.2 million shares outstanding. Dycom has also authorized 112.1 million dollars for share repurchases through August 2018. All of the following are signs of confidence in the company from the inside out.

Ownership Type	10/22/17	Curr↓	Change
11) Investment Advisor	72.21	72.18	-0.03
12) Hedge Fund Manager	19.13	19.11	-0.02
13) Individual	3.42	3.47	+0.05
14) Bank	1.59	1.59	0.00
15) Pension Fund	1.22	1.25	+0.03
16) Insurance Company	1.12	1.08	-0.04
17) Brokerage	0.56	0.56	0.00
18) Sovereign Wealth Fund	0.41	0.41	0.00
19) Government	0.14	0.14	0.00
20) Holding Company	0.10	0.09	-0.01
21) Endowment	0.06	0.06	0.00

9) Max shares bought in single transaction	NIELSEN STEVEN E	10/24/2017	10,619

Conclusion:

Dycom Industries, Inc. has experienced some fluctuations in stock prices due to seasonality falls and some small revenue misses. With this being said, Dycom is at the perfect position to grow in the future. Currently, Dycom is beating their peer groups in returns, margins, and other aspects as well. With Dycom's strong organic growth, increasing MSA's, and strong long-term relationships, they will see success throughout 2018 and 2019. Dycom is perfectly positioned to benefit from many macro events that are coming in the near future and I do not believe that the market is pricing in the caliber of these benefits. Dycom Industries, Inc. is a long-term buy.

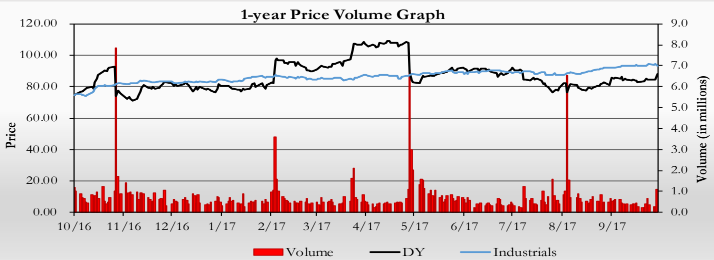


Peer Group composed of the following companies: MasTec, Inc., Quanta Services, Inc., MYR Group, Inc., and Willbros Group, Inc.

SIENAcollege — BJORKLUND FUND

Dycom Industries, Inc. (DY) — CENTER FOR GLOBAL FINANCIAL STUDIES — BULLISH

Analysis by Paul Martinez	Current Price:	$89.59	Intrinsic Value	$96.88	Target 1 year Return: 24.16%
10/27/2017	Divident Yield:	0.0%	Target Price	$111.23	Probability of Price Increase: 98.2%



Description

Dycom Industries, Inc. provides specialty contracting services in the United States and Canada.

General Information

Sector	Industrials
Industry	Construction and Engineering
Last Guidance	November 3, 2015
Next earnings date	November 22, 2017
Estimated Country Risk Premium	8.24%
Effective Tax rate	26%
Effective Operating Tax rate	26%

Market Data

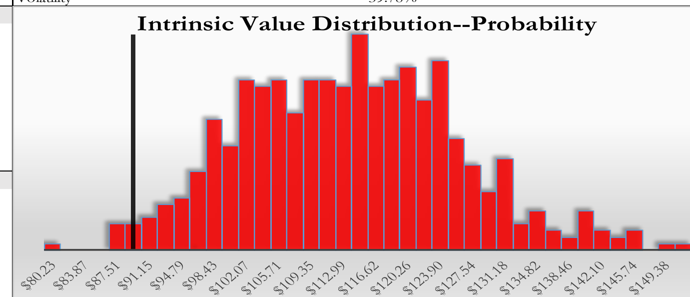
Market Capitalization	$2,775.53
Daily volume (mil)	0.23
Shares outstanding (mil)	31.11
Diluted shares outstanding (mil)	31.98
% shares held by institutions	116%
% shares held by investments Managers	87%
% shares held by hedge funds	20%
% shares held by insiders	4.43%
Short interest	16.67%
Days to cover short interest	7.85
52 week high	$110.64
52-week low	$70.33
Volatility	39.78%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
7/30/2016	2.61%	0.92%
10/29/2016	0.02%	-4.00%
1/28/2017	6.16%	2.86%
4/29/2017	6.90%	-0.92%
7/29/2017	-2.35%	-5.78%
Mean	2.67%	-1.38%
Standard error	1.8%	1.6%

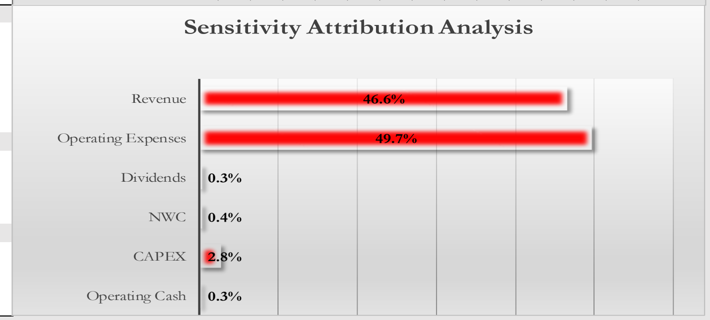
Peers

- MasTec, Inc.
- Primoris Services Corporation
- KBR, Inc.
- Granite Construction Incorporated
- EMCOR Group, Inc.
- AECOM
- Jacobs Engineering Group Inc.
- Quanta Services, Inc.

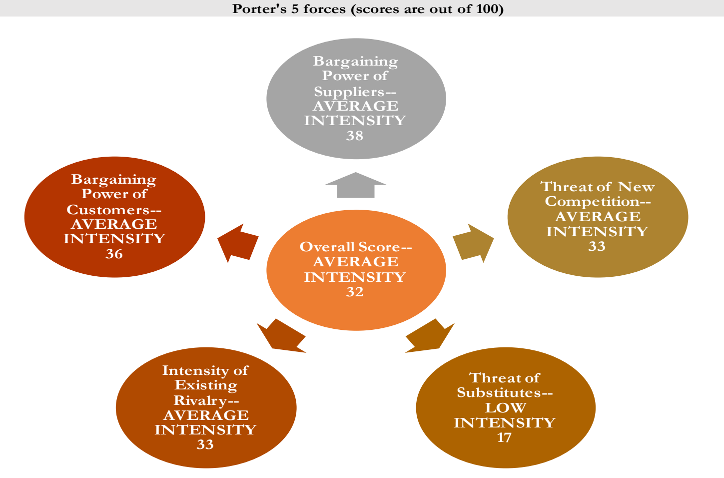


Management	Position	Total compensations growth	Total return to shareholders
Nielsen, Steven	Chairman, President & CEO	5.23% per annum over 6y	2.33% per annum over 6y
DeFerrari, H.	Senior VP, CFO & Treasurer	10.87% per annum over 6y	2.33% per annum over 6y
Estes, Timothy	Executive VP & COO	5.04% per annum over 6y	2.33% per annum over 6y
Vilsoet, Richard	VP, General Counsel & Corpor	6.42% per annum over 6y	2.33% per annum over 6y
Dickens, Kimberly	VP & Chief Human Resources O	6.08% per annum over 2y	18.88% per annum over 2y
Roach, Rebecca	VP & Chief Accounting Office	N/M	N/M

Profitability	DY (LTM)	DY (5 years historical average)	Peers' Median (LTM)
Return on Capital (GAAP)	11.8%	8.30%	6.34%
Operating Margin	6%	3.50%	3.04%
Revenue/Capital (GAAP)	2.13	2.37	2.08
ROE (GAAP)	32.5%	16.3%	11.6%
Net margin	5.9%	3.4%	3.3%
Revenue/Book Value (GAAP)	5.51	4.74	3.55
Invested Funds	**DY (LTM)**	**DY (5 years historical average)**	**Peers' Median (LTM)**
Cash/Capital	2.3%	4.0%	15.0%
NWC/Capital	36.0%	45.9%	11.6%
Operating Assets/Capital	42.1%	24.0%	37.1%
Goodwill/Capital	19.5%	26.1%	36.2%
Capital Structure	**DY (LTM)**	**DY (5 years historical average)**	**Peers' Median (LTM)**
Total Debt/Market Capitalization	0.60	0.55	0.42
Cost of Existing Debt	5.1%	7.2%	3.9%
CGFS Rating (F-score, Z-score, and default Probability)	AA	BBB	BBB
WACC	11.2%	10.9%	8.3%



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



Valuation

Period	Revenue Growth Forecast	NOPAT Margin Forecast	Revenue to Capital Forecast
Base Year	15%	9.0%	2.15
7/29/2018	5%	5.7%	1.99
7/29/2019	11%	6.5%	1.94
7/29/2020	5%	6.6%	1.82
7/29/2021	5%	6.7%	1.70
7/29/2022	4%	9.2%	1.59
7/29/2023	4%	9.2%	1.45
7/29/2024	3%	9.3%	1.33
7/29/2025	3%	9.4%	1.22
7/29/2026	3%	9.4%	1.13
7/29/2027	2%	9.5%	1.05
Continuing Period	2%	9.6%	0.98

Period	Return on Capital Forecast	WACC Forecast	Price per share Forecast
Base Year	19.4%	11.2%	$94.46
7/29/2018	11.5%	10.8%	$108.49
7/29/2019	12.7%	10.8%	$121.69
7/29/2020	11.9%	10.9%	$135.46
7/29/2021	11.4%	10.9%	$149.63
7/29/2022	14.6%	11.0%	$164.16
7/29/2023	13.4%	11.1%	$179.00
7/29/2024	12.3%	11.1%	$194.03
7/29/2025	11.4%	11.2%	$209.27
7/29/2026	10.7%	11.2%	$224.67
7/29/2027	10.0%	11.3%	$240.17
Continuing Period	9.4%	11.4%	