Macroeconomic Overview

This past week, all major U.S. indices declined on a weekly basis due to unsatisfactory economic data that suggests a slowdown in economic growth of the U.S. economy. In addition, lower expected earnings growth in advance of the upcoming quarterly earnings season had a negative impact on the market. In effect, the Dow Jones Industrial Average and the NASDAQ Composite decreased on a weekly basis by 2.29% and 2.69% respectively, while the S&P 500 declined by 2.23% during the last week. Small cap stocks measured by the Russell 2000 index yielded negative returns of 2.05% throughout the week. The VIX week-to-date change of 15.75% indicates that volatility levels increased during the week, leading to a year-to-date change of 21.51%. The yield of the 10-year U.S. T-note increased by 2 basis points to 1.95%. In addition, the price of oil increased throughout the week by 4.94% to a price of \$48.87/bbl.

This week's decline of benchmark stock prices was primarily driven by negative economic reports, indicating

U.S. Stocks									
Index	% Change Week- to-Date	% Change Year- to-Date							
DJIA	-2.29%	-0.62%							
S&P 500	-2.23%	0.10%							
NASDAQ Composite	-2.69%	3.28%							
Russell 2000	-2.05%	2.96%							
VIX	15.75%	-21.51%							

a slowdown in the recovery of the U.S. economy. Third estimates of real GDP growth for the final quarter of 2014 remained unchanged at 2.2%, 0.2% lower than market expectations of 2.4% and 0.4% lower than an initial reading of 2.6%. The Commerce Department also reported a decline in corporate profits with

their largest quarterly decline in four years. Annually, corporate profits declined 0.8% and were the first decrease in corporate profits since the 2008 financial crisis. Another indicator of the slowdown in U.S. economic growth is the decline in the U.S. durable goods market in February. Manufacturers experienced a decline in new orders of 1.4%. Core capital goods orders, an indicator of expected future business investment also declined by 1.4%. In the transportation sector, commercial aircraft manufacturers saw a significant decline in new orders by 8.9%.

In February, the Consumer Price Index started to rise again after declining in the previous three months. After excluding relatively volatile energy and food prices, the consumer price index rose by 0.2%. While the price of oil is still very low, only starting to recover slowly and the dollar remains strong compared to other major currencies, corporate earnings are expected to be affected by these conditions for several quarters. Lastly, the housing market continues to improve and surprised the market with an increase of 7.8% in sales of newly built homes, a third consecutive monthly increase.

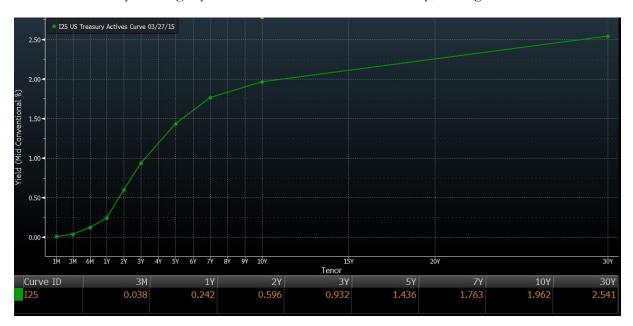
Internationally, the Eurozone starts to show signs of improvement, primarily led by growth of the German economy that recorded its fastest increase in private sector activity since 2011. The primary drivers of growth in the Eurozone are currently low oil prices combined with the weak euro as well as greater confidence in the Eurozone's stability after the launch of the European Central Bank's stimulus program. In February, the consumer price index of the Eurozone was 0.3% lower compared to a year earlier. Expected economic growth led to an increase of the workforce. Businesses started to hire new workers at the fastest rate the economy has seen since 2011.

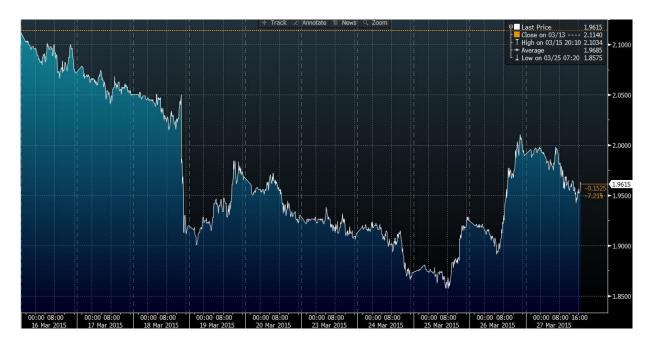
Next week, investors will be looking forward to see data from different economic reports that will have an impact on the global markets. On Tuesday 31st major economies will report on economic data. Germany will report on the country's unemployment change. The United Kingdom will report on the economy's Gross

Domestic Product (GDP) YoY and QoQ (Q4). The Eurozone will report on the economy's Consumer Price Index (CPI) YoY (Mar). Canada will release data about the country's Gross Domestic Product (MoM) (Jan). The Bank of Japan will report on the country's performance of the large manufacturing sector and China will release data about the manufacturing PMI (Mar). On Wednesday 1st, Germany and the United Kingdom will report on their country's manufacturing PMI (Mar). On Thursday 2nd, the United Kingdom will report on the country's construction PMI (Mar).

Bond Report

U.S. bonds yields slightly rose this past week subsequent to a slight decrease in bond prices. Bond yields have gradually been on the decline since the beginning of the month, with the yields on benchmark 10 year notes as high at 2.24% on March 6th after the nonfarm payrolls report for February indicated strong jobs growth. The same yields slumped below 2% on March 18th to 1.93% and have remained relatively flat up to the start of this past week. On Monday March 23th, the market opened with the yield of benchmark 10 year notes at 1.92%, incurring a slight decrease to 1.88% on Tuesday. Bond yields continued to decrease on Tuesday as investors piled in to the bond market as a result of last weeks Fed meetings with Janet Yellen, in which it was made very probable that the Federal Reserve would take its time in gradually raising interest rates. This is the lowest the yield has been in more than six weeks, that being since the February 5th, 2015 when the 10 year yield closed at 1.83%. This past Thursday, March 26th, U.S. government bonds sold off for the second straight session causing a fairly drastic increase in yields. The selloff sent the yield on 10 year benchmark notes back above 2%, settling in at 2.1% at the close on Thursday. The selloff comes as a result of an upbeat labor market report released on Thursday, the 26th as well as a weak 7 yearnotes auction. The labor market report released on Thursday was the initial U.S. jobless claims which showed a decrease of 9,000 to a seasonally adjusted 282,000 for the week ending on March 21. In addition, the bond market's price decline intensified as the market took out a \$90 billion package of seven, five and two-year Note auctions this past week, which saw very unfavorable demand volume. There was \$29 billion worth of 7-year notes up for auction which saw its lowest overall demand since May of 2009. Five year notes worth \$35 billion also saw its lowest demand since 2009. Bond yields slightly corrected back below 2% on Friday, closing at 1.95%.





What's Next & Key Earnings

On Monday, 30th, the U.S. Pending Home Sales (MoM) report will be released. The National Association of Realtors (NAR) Pending Home Sales Report measures the change in the number of homes under contract to be sold but still awaiting the closing transaction, excluding new construction.

On Tuesday, March 31st, the U.S. CB Consumer Confidence report will be released. Conference Board (CB) Consumer Confidence measures the level of consumer confidence in economic activity. It is a leading indicator as it can predict consumer spending, which plays a major role in overall economic activity. Higher readings point to higher consumer optimism.

On Wednesday, April 1st, the ADP National Employment Report will be released. The ADP National Employment Report is a measure of the monthly change in non-farm, private employment, based on the payroll data of approximately 400,000 U.S. business clients. The release, two days ahead of government data, is a good predictor of the government's non-farm payroll report. The change in this indicator can be very volatile.

On Friday, April 3rd, Nonfarm Payrolls report will be released. Nonfarm Payrolls measures the change in the number of people employed during the previous month, excluding the farming industry. Job creation is the foremost indicator of consumer spending, which accounts for the majority of economic activity.

On Friday, April 3rd, the U.S. unemployment rate will be released. The Unemployment Rate measures the percentage of the total work force that is unemployed and actively seeking employment during the previous month.

The market will be closed on Friday due to Good Friday.

Symbol	Company	EPS	Forecast	Prev.	lmp.	Period End			
Wednesday, April 1, 2015									
MON	Monsanto		2.93	0.47	<u>a</u> , <u>a</u> , <u>a</u> ,	02/2015			
		Thursday, A	pril 2, 2015						
■ KMX	CarMax		0.6	0.60	<u>a</u> , <u>a</u> , <u>a</u> ,	02/2015			
■ MU	Micron		0.75	0.97	A A A	02/2015			

Pamela Juergens

Healthcare



ANI Pharmaceuticals, Inc.

NASDSAQ:ANIP

BUY

Price Target: \$82.09

Key Statistics as of 2/12/2014

Market Price: \$61.94

Industry: Biotechnology
Market Cap: \$705.37 M
52-Week Range: \$19.90-71.78

Beta: 3.6

Thesis Points:

- Diversified revenue and earnings base
- Focus on revenue growth, active with product acquisitions

Analyst:

Sector:

- Deep pipeline, addressing large, diversified markets
- Relatively low risk compared to name brand biotechs

Company Description:

ANI Pharmaceuticals, Inc. is an integrated specialty pharmaceutical company that develops, manufactures and markets branded and generic prescription pharmaceuticals. They manufacture a wide range of drugs including solid dose products, as well as liquids, topicals, narcotics and potent products. Their targeted areas of development include pain management (narcotics), anti-cancer (oncolytics), and women's health (hormones and steroids). Their products include Esterified Estrogen with Methyltestosterone (EEMT) tablets for use in treating vasomotor symptoms of menopause, Fluvocamine Maleate to treat obsessions and compulsions in patients with obsessive-compulsive disorder, Hydrocortisone Enema and Cortenema for the treatment of ulcerative colitis, and Metoclopramide and Reglan for treating gastroesophageal reflux. ANI Pharmanceuticals markets and sells their products through wholesalers, retail market chains, distributors, mail order pharmacies, and hospitals.





ANI Pharmaceuticals has a largely diversified portfolio with a total combine current market, as well as a pipeline of 48 products that they manufacture and products they acquire, with an addressable market of approximately \$2.8 billion. The company is very active with product acquisitions, and it is likely to continue in the future, further diversifying their pipeline. Their revenue has been growing rapidly, and it is expected to continue to grow as they launch, as well as acquire more products. They expect to launch between five and six products in FY 2015, driving their topline growth. Since they develop generic drugs, they are relatively low risk compared to name brand drug makers.

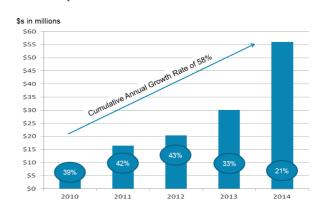
Current Product Portfolio

ANI currently maintains a diversified product portfolio, where they have a leading market share for all of the different drugs that they offer. In ANI's current product portfolio their most important product is generic Esterified Estrogen with Methyltestosterone (EEMT). EEMT is indicated for the treatment of moderate to severe vasomotor symptoms associated with menopause in patients not improved by estrogen alone. For the year ended December 31, 2014, EEMT comprised of 44% of ANI's sales, an increase from the 33% in FY 2013. This is partially because a large competitor stopped producing EEMT, which led to a large increase in market share and allowed them to significantly increase the price that they charge. They have a 44% market share with EEMT. Company management believes that ANI is on track to become the only supplier of EEMT, once the competition exhausts the supply of material, sometime during Q3 2014. If they were to become the sole supplier, this could translate to an increase in annual revenue of approximately \$43 million, based on their current 44% market share. Another generic product is Fluvoxamine, which is indicated for the treatment of obsessions and compulsions in patients with obsessive compulsive disorder. It is generally used when the obsessions and compulsions interfere with the patient's ability to function socially and occupationally. It currently has a leading position in the market and a 55% market share. Another generic product they offer is hydrocortisone enema. HC Enema is used to treat mild or moderate ulcerative colitis. ANI also has a leading position in the market with HC Enema, and enjoys a

90% market share. Their next generic drug is Metoclopramide Solution, used as a short term (4 to 12 weeks) therapy for adults with symptomatic, documented gastroesophogeal reflux who fail to respond to conventional therapy. They have a number 2 position in the market and have a 29% market share. Another generic in their product portfolio is Opium tincture. It is an opiate used for treating diarrhea, which works by decreasing intestinal muscle contractions. ANI made two product acquisitions in July and August 2014 to add to their product portfolio. ANI acquired Lithobid in July 2014. It is used to treat the manic episodes of manic depression. Lithobid generated \$3.3 million of sales in six months. They acquired Vanocin in August and it is used to treat several skin problems such as acne, acne rosacea, and seborrheic dermatitis. Vanocin generated \$4.4 million of sales in 2014, representing five months of

Focus on Immediate Revenue Growth

In June 2013 ANI and BioSante Pharmaceuticals merged, and the combined company became known as ANI Pharmaceuticals. Prior to the merger ANI had 11 products in development, which addressed markets with total sales of approximately \$775 million. Since the merger ANI's pipeline has expanded to 49 products in development, addressing markets with total sales of \$2.7 billion. Additionally, in 2014 ANI acquire Lithobid and Vanocin. ANI actively looks to acquire products to expand their portfolio. In December 2014, ANI closed an offering of 3% Convertible Senior Notes due 2019. Prior to this they were completely debt free. After the offering, they are sitting on approximately \$165.5 million in cash. ANI's CEO has stated that they have the capacity to accommodate their existing pipeline and more for the next ten years and their facilities are fully owned, therefore the bulk of their funds will be used for accretive product acquisition. Their future acquisitions will target immediate revenue growth for the company. They have a CAGR for the last 5 years of 58%, with the trend likely to continue in the future.





Pipeline

After their merger ANI is sitting on an impressive pipeline of 49 products, 5 of which they plan to release in FY 2015. Two of the products that they plan to launch this year that are already approved, are Teva Pharmaceuticals testosterones (Bio-t-gel). ANI will receive a 5% royalty from all TEVA testosterone sales in the US, and they still retain global rights outside of the US to Bio-t-gel. Another promising pipeline asset is the GVAX portfolio. In 2013, BioSante sold their GVAX Cancer Immunotherapy portfolio to Audro Biotech for \$1 million and future royalty, milestone and sub-license payments. The GVAX portfolio contains immunotherapy vaccines for pancreatic cancer, Melanoma, Leukemia, Prostate, Breast, Multiple Myeloma and colon cancer, three of which have orphan drug designation. Since Audro bought the GVAX portfolio they have signed several deals with Johnson and Johnson worth up to \$1.182 billion in up-front and milestone payments, as well as future royalties. This portfolio has large potential for approvals because of the orphan drug designations, as well as future sales. The merger with BioSante gave ANI a stake in a number of products in development, and since development costs are solely the responsibility of other companies ANI will incur no expenses related to the development and only stands to generate revenues in the future.

Products	ANI	Partnered	Total
At FDA	6	3	9
Development	5	3	8
Acquired Products	29	:	<u>29</u>
Totals	40	6	46

Relatively Low Risk

Since their merger with BioSante, ANI has created a company in which some of the typical risks of a biotech stock are minimized. Since they create generic drugs, they submit ANDAs for approval instead of NDAs. An ANDA (Abbreviated New Drug Application) is submitted to the FDA's Center for Drug Evaluation and Research, Office of Generic Drugs, and provides for the review and ultimate approval of a generic drug product. Generic drug approvals are abbreviated because they are generally not required to include preclinical and clinical

data to establish safety and effectiveness. Instead, generic drug applicants must scientifically demonstrate that their product is bioequivalent. There is a greater level of certainty in obtaining an ANDA approval, both in the cost, because there are no surprise requirements imposed by the FDA, and in receiving approval then there is with an NDA. ANI's focus on generics and mature branded products is a conservative approach to using their cash. However, they target the higher margin products in those two groups, which has allowed them to continue to grow, and provide a good return on investment.

Conclusion

ANI is positioned to continue to grow as they have up to this point, both organically and inorganically. They are actively acquiring products where they will incur no more costs, and only stand to benefit when the drugs go to market. They also have a diversified portfolio of generic and non-generic drugs on the market where they have significant market share.



		CENTER FO	OR GLOBAL	FINANCIAL ST	TUDIES			
ANI Pharmaceuticals, Inc.	ANIP	Analyst Pamela Juergens	Current Price \$61.94	Intrinsic Value \$73.71	Target Value \$82.09	Divident Yield	Target Return	BULLISH
General	<u>Info</u>	Peers	Market Cap.	Ψ13.11	¥ 0=10 P	agement	32.3170	
Sector	Healthcare			Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY201
Industry	Pharm accuticals			Przybyl, Arthur	Chief Executive Officer, Presiden	ş -	\$ 4,992,811.00	\$ -
Last Guidanœ	Feb-19-2015			Arnold, Charlotte	Chief Financial Officer, Vice Presi	ş -	\$ 2,037,441.00	\$ -
Next earnings date	NM			Marken, James	Vice President of Operations	ş -	\$ 1,454,632.00	\$ -
Market 1	<u>Data</u>			Schrepfer, Robert	Vice President of New Business 1	ş -	\$ 1,309,377.00	\$ -
Enterprise value	\$647.03			Sullivan, David	Vice President of Quality Operati	\$ -	ş - :	\$ -
Market Capitalization	\$705.37							
Daily volume	0.31			Historical Performance				
Shares outstanding	11.39				ANIP	Peers	Industry	All U.S. firms
Diluted shares outstanding	11.05			Growth	77.2%		15.2%	6.0%
% shares held by institutions	47.86%	Current Capital	Ctanatana	Retention Ratio	0.0%		103.4%	61.6%
•		<u> </u>			0.0%			
% shares held by insiders	3.12%	Total debt/market cap	17.11%	ROIC			15.0%	11.8%
Short interest	13.93%	Cost of Borrowing	0.00%	EBITA Margin	0.0%		19.0%	13.7%
Days to cover short interest	4.68	Interest Coverage	2542.06%	Revenues/Invested capital	76.8%		91.9%	202.3%
52 week high	\$71.78	Altman Z	3.00	Excess Cash/Revenue			44.9%	18.5%
52-week low	\$19.90	Debt Rating	AAA	Unlevered Beta			0.92	0.95
5y Beta	0.00	Levered Beta	1.54	TEV/REV	8.4x		4.0x	2.4x
6-month volatility	59.80%	WACC (based on market value weights)	10.03%	TEV/EBITDA	24.6x		12.4x	11.3x
	Past Ear	ning Surprises		TEV/EBITA	25.8x		15.3x	15.4x
	Revenue	EBITDA	Norm. EPS	TEV/UFCF			29.6x	26.8x
Last Quarter	17.0%	29.5%	19.6%		Non GAA	P Adjustments		
Last Quarter-1	19.2%	34.4%	43.5%	Operating Leases Capitalization	100%	Straightline	10 yea	urs
Last Quarter -2	-16.4%	-87.2%		R&D Exp. Capitalization	100%	Straightline	10 yea	urs
Last Quarter -3	-4.6%	18.1%	-2.9%	Expl./Drilling Exp. Capitalization	0%	N/A	N/A	1
Last Quarter -4	14.7%	22.8%	40.0%	SG&A Capitalization	0%	N/A	N/A	1
		Proforma Assumptions Period	Rev. Growth	Adj. Op. Cost/Rev	Revenue	Forecasted Profi NOPLAT	tability Invested capital	UFCF
0 3 61/61	0.097							
Operating. Cash/Cash	0.0%	LTM	86%	47%	\$55.97	\$24.30	\$87.70	\$24.30
Unlevered Beta	1.40	LTM+1Y	65%	49%	\$92.35	\$33.53	\$105.90	\$15.33
Rev/Invested Capital	100.0%	LTM+2Y	50%	51%	\$138.53	\$45.06	\$126.23	\$24.73
Continuing Period Revenue Growth	3.0%	LTM+3Y	45%	51%	\$200.86	\$62.22	\$152.52	\$35.93
Long Term ROIC	11.1%	LTM+4Y	19%	52%	\$239.03	\$72.18	\$169.49	\$55.21
Invested Capital Growth	Equals to Maintenance	LTM+5Y	13%	52%	\$270.53	\$80.60	\$183.74	\$66.35
Justified TEV/REV	2.0x	LTM+6Y	11%	52%	\$301.52	\$89.17	\$198.06	\$74.84
Justified TEV/EBITDA	20.0x	LTM+7Y	10%	52%	\$332.27	\$97.88	\$211.51	\$84.44
Justified TEV/EBITA	15.0x	LTM+8Y	4%	52%	\$345.81	\$101.63	\$218.16	\$94.98
Justified TEV/UFCF	29.0x	LTM+9Y	4%	53%	\$358.34	\$103.18	\$224.19	\$97.15
	ROIC	WACC	<u>Valuati</u> EVA	on Enterprise Value	Total Debt	Other claims	Equity	Adjusted Price
LTM	27.7%	10.0%	\$15.51	\$827.68	\$110.69	-\$111.53	\$828.52	\$74.67
LTM+1Y	38.2%	10.2%	\$29.68	\$904.38	\$110.69	-\$111.33	\$919.99	\$82.84
LTM+2Y	42.6%	10.3%	\$40.68	\$973.76	\$110.69	-\$120.50	\$1,007.67	\$90.50
LTM+3Y	49.3%	10.4%	\$59.24	\$1,042.53	\$110.69	-\$173.10	\$1,104.94	\$98.90
LTM+4Y	47.3%	10.4%	\$62.32	\$1,085.19	\$110.69	-\$173.10	\$1,195.53	\$107.03
	47.6%	10.7%	\$62.32 \$67.77	\$1,065.19	\$110.69 \$110.69	-\$221.04 -\$280.29	\$1,195.55 \$1,294.56	\$107.03 \$116.16
I TM+5V	47.070	10.7%			•			
LTM+5Y	40 50/		\$74.77	\$1,162.02	\$110.69 \$110.69	-\$348.15 -\$425.71	\$1,399.48 \$1,508.32	\$125.12 \$134.66
LTM+6Y	48.5%		201 40					\$134.66
LTM+6Y LTM+7Y	49.4%	10.9%	\$81.49	\$1,193.29				
LTM+6Y LTM+7Y LTM+8Y	49.4% 48.1%	10.9% 11.0%	\$80.83	\$1,212.32	\$110.69	-\$514.92	\$1,616.55	\$144.27
LTM+6Y LTM+7Y	49.4%	10.9% 11.0% 11.1%	\$80.83 \$81.14			-\$514.92 -\$607.31	\$1,616.55 \$1,729.70	\$144.27 \$151.89
LTM+6Y LTM+7Y LTM+8Y	49.4% 48.1%	10.9% 11.0%	\$80.83 \$81.14	\$1,212.32	\$110.69	-\$514.92 -\$607.31	\$1,616.55	\$144.27 \$151.89
LTM+6Y LTM+7Y LTM+8Y LTM+9Y	49.4% 48.1% 47.3%	10.9% 11.0% 11.1% Monte Carlo Simulation A Stdev	\$80.83 \$81.14 ssumptions Min	\$1,212.32 \$1,233.08 Max	\$110.69 \$110.69 Distribution	-\$514.92 -\$607.31 <u>Mont</u>	\$1,616.55 \$1,729.70 e Carlo Simulation Resu Intrinsic Value	\$144.27 \$151.89 ults 1y-Target
LTM+6Y LTM+7Y LTM+8Y LTM+9Y Revenue Variation On. Costs Variation	49.4% 48.1% 47.3% Base 0	10.9% 11.0% 11.1% Monte Carlo Simulation A Stdev 10%	\$80.83 \$81.14 ssumptions Min N/A	\$1,212.32 \$1,233.08 Max N/A	\$110.69 \$110.69 Distribution Normal	-\$514.92 -\$607.31 <u>Mont</u> Mean est.	\$1,616.55 \$1,729.70 e Carlo Simulation Resu Intrinsic Value \$74.67	\$144.27 \$151.89 ************************************
LTM+6Y LTM+7Y LTM+8Y LTM+9Y Revenue Variation On. Costs Variation	49.4% 48.1% 47.3% Base 0	10.9% 11.0% 11.1% Monte Carlo Simulation A Stdev 10% 10%	\$80.83 \$81.14 ssumptions Min N/A N/A	\$1,212.32 \$1,233.08 Max N/A N/A	\$110.69 \$110.69 Distribution Normal	-\$514.92 -\$607.31 <u>Mont</u> Mean est. σ(e)	\$1,616.55 \$1,729.70 e Carlo Simulation Resu Intrinsic Value \$74.67 \$0.32	\$144.27 \$151.89 ************************************
LTM+6Y LTM+7Y LTM+8Y LTM+9Y Revenue Variation Op. Costs Variation Market Risk Premium	49.4% 48.1% 47.3% Base 0 0 6%	10.9% 11.0% 11.1% Monte Carlo Simulation A Stele 10% 10% N/A	\$80.83 \$81.14 ssumptions Min N/A N/A 5%	\$1,212.32 \$1,233.08 Max N/A N/A 7%	\$110.69 \$110.69 Distribution Normal Normal Triangular	-\$514.92 -\$607.31 <u>Mont</u> Mean est. σ(e) 3 σ(s) adjusted price	\$1,616.55 \$1,729.70 e Carlo Simulation Resu Intrinsic Value \$74.67 \$0.32 \$73.71	\$144.27 \$151.89 ************************************
LTM+6Y LTM+7Y LTM+8Y LTM+9Y Revenue Variation On. Costs Variation	49.4% 48.1% 47.3% Base 0	10.9% 11.0% 11.1% Monte Carlo Simulation A Stdev 10% 10%	\$80.83 \$81.14 ssumptions Min N/A N/A	\$1,212.32 \$1,233.08 Max N/A N/A	\$110.69 \$110.69 Distribution Normal	-\$514.92 -\$607.31 <u>Mont</u> Mean est. σ(e)	\$1,616.55 \$1,729.70 e Carlo Simulation Resu Intrinsic Value \$74.67 \$0.32	\$144.27 \$151.89 ************************************

Issam Kaisse Basic Materials



Calgon Carbon Corporation

NYSE:CCC

BUY

Price Target: \$23.20

Key Statistics as of 3/25/2015

Market Price: \$20.71

Industry: Commodity Chemicals

Market Cap: \$1.11B 52-Week Range: \$18.56-23.13

Beta: 1.07

Thesis Points:

Market opportunity in the activated carbon segment

Analyst:

Sector:

- Regulatory compliance for drinking water
- Stable future cash flow with long term contracts
- Growth opportunity in ballast water treatment

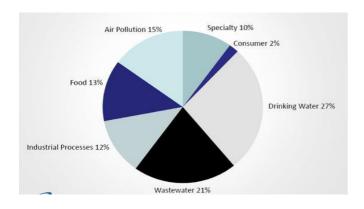
Company Description:

Calgon Carbon Corporation was founded in 1942 and is headquartered in Pittsburg, Pennsylvania. It provides services and solutions for purifying water and air, food, beverage, and industrial process streams primarily in the United States, Europe, and Japan. The company operates in three segments: Activated Carbon and Service, Equipment, and Consumer. The Activated Carbon and Service segment manufactures and markets granular and powdered activated carbon for use in applications to remove organic compounds from liquids, gases, water, and air. The Equipment segment offers adsorption systems that are used to control volatile organic compound emissions, off gases from air strippers, and landfill gas production; and liquid phase equipment systems for use in potable water treatment, process purification, wastewater treatment, groundwater remediation, and de-chlorination applications. This segment also provides UV oxidation equipment for taste and odor removal in municipal drinking water and for water reuse; Ionic Separator used for the purification, separation, and recovery of products in the food, pharmaceutical, mining, chemical, and biotechnology industries. The Consumer segment offers carbon cloth that is activated carbon in cloth form for medical, military, and specialty markets. The company sells its products and services through a direct sales force and sales offices, as well as through a network of agents and distributors to potable water, industrial process, environmental water, and food.





Calgon Carbon Corporation (CCC) is the world's largest producer of granular activated carbon. The firm solves customer purification and separation problems with a variety of technologies. CCC has a diverse product portfolio complemented by ultraviolet light and ION exchange. The company is a BUY because Calgon Carbon will benefit from the advance of the market for pure water and population growth. Compared to its peers, CCC represents good value in its industry and is well positioned to take advantage of the "ballast water treatment" opportunity. The company is poised for growth as it expects boom in demand for its products and is well placed to gain from its aggressive costreduction actions, capacity expansion and contract wins. As you can see on the graph below, the company is present in diverse range of markets and its largest contributions are in drinking water and wastewater treatment.



Market Opportunity

Calgon Carbon Corporation manufactures activated carbon used in the purification, separation and concentration of liquids. The report "Global Activated Carbon Market Forecast and Opportunities" projects activated carbon to grow at a CAGR of 10.8% in the next three years. Since the firm has a significant market share in this segment, CCC could benefit from an increase in demand for activated carbon from 2.7 billion pounds in 2012 to 4.5 billion pounds in 2017.





Thus, the company generates approximately 88% of the revenue from the activated carbon segment. Since the firm is already a leading manufacturer of activated carbon, CCC will be able to grow over 10% for the next few years. The report also outlines that the two major markets for activated carbon are Asia-Pacific and North America with more than 75% of the global sales in 2013. Calgon Carbon continues to develop its activated carbon segment because this product is an effective solution for air and water pollution control. Developed and developing countries are asking for this product because they want to comply with the regulations from the World Health Organization. The activated carbon is mostly used in controlling mercury emissions, as well as the treatment of drinking water and purification of air. The global market for activated carbon is expected to growth in the upcoming years because industries such as mining, food & beverages, pharmaceuticals and petrochemical are using it more frequently. Currently, the company holds a patent that it enables the use for activated carbon to remove mercury.

Regulatory compliance

Recently, the US environmental Protection Agency has issued a rule regarding the Disinfection By-Products (DBPs)². This agency of the US federal government has limited the use of disinfectants in order to decrease the risk of water contamination from the reaction of chlorine with organic material. According to the rule, the US should comply by the end of 2015. Thus, this compliance will increase the demand for granular activated carbon (GAC) as the company supplies high quality GAC that removes organic material. As you can see on the chart below, this is the process that CCC uses to deliver clean drinking water for society.

² http://water.epa.gov/lawsregs/rulesregs/sdwa/stage2/regulations.cfm





Every year demand is growing in developing countries such as China and India. Hence, those countries are encountering water crisis in rural as well as urban areas and this is an opportunity for the company to expand its business in those regions. Thus, Calgon Carbon will benefit from this increase in demand and the mounting environmental pollution. In fact, governments are trying to save the planet from deteriorating quality of water, so they are enacting policies to limit pollution levels. The rising environmental awareness is triggering the demand for solutions that will reduce the negative effects of environmental pollution.

Stable Future Cash Flows

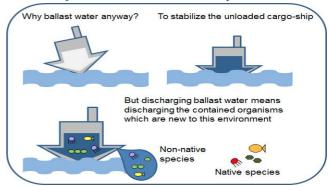
Calgon Carbon Corporation has been able to secure its future growth. As a matter of fact, the firm has signed long-term contracts with several clients. Those long-term contracts will make cash flow stability stronger for Calgon Carbon. According to the company's presentation, the table below shows that almost all contracts length is 10 years.

Location	Contract Length	Projected Annual Reactivation Amount (millions of pounds)
City of Phoenix	10 Years	6-11
City of Scottsdale	10 Years	6
City of Glendale	10 Years	1-2
Thames Water (UK)	10 Years*	11
		Source: Company Presentation

As discussed earlier there is an increasing demand for granular activated carbon and potable reactivation, CCC will most likely benefit from a flow in long-term contracts. Thus, the company can achieve a strong growth momentum as long as it continues establishing contract length of more than 10 years. Recently, the firm has been able to sign a contract with the municipality of Seoul City in South Korea in order to supply 7 million pounds of granular activated carbon. South Korea selected Calgon Carbon because the country believes that the firm has an advanced manufacturing process that meets the requirements in the drinking water treatment industry³.

Growth Opportunity in Ballast water treatment

Calgon Carbon pays close attention to the subject of ballast water and the negative impact on the marine environment. Cruise ships, large tankers, and bulk cargo carriers use water as ballast to increase stability and improve fuel efficiency. As you can see on the image below, the process of ballast tanks is explained.



Ships will often fill and empty their ballast tanks relative to their cargo weight. When those ships empty their tank in different regions, they introduce non-native species that could harm marine line. Hence, the Marine Environment Protection Committee and the US Coast Guard decided to issue ballast water management regulations that will require ships to treat their ballast water before draining it. The new regulations are expected to go into force within next year and there is a market opportunity for CCC out there. According to Bloomberg, ballast water treatment "market may reach as much as \$3.14 billion by 2023, up from about \$466.6 million this year"4. Calgon Carbon will benefit from this new market because ships in US waters will be required to equip themselves with ballast water treatment systems. In fact, the firm acquired Hyde Marine in 2010 as it saw a market potential in the long term. The solutions that Hyde Marin offers are less costly than the competition and can service most ship types. Thus, this acquisition will enable CCC to be a world leader in ballast water treatment systems and evolve into one of the most exciting long-term market opportunities.

³ http://www.pghtech.org/news-publications/techburgher/calgon-carbon-awarded-second-major-contract-in-2014-for-drinking-water-treatment-in-south-korea.aspx#.VQ9hRZOG_dJ

http://www.bloomberg.com/news/articles/2013-12-05/ballast-water-treatment-market-seen-exceeding-3-billion



Financials & forecasts

Calgon Carbon Corporation continues achieving significant improvement from the periods of 2013. At first glance, the company seems to be undervalued and more attractive than its peers. CCC is trading at a 2016 PE of approximately 17, which makes it attractive because the company's PEG ratio is at 2.86. Thus, the stock is undervalued and there is a positive momentum in the long term. Currently, the company is trading near the 52 week low so it is a good opportunity to consider CCC as an investment perspective. Calgon Carbon generated an operating cash flow of \$84.3 million for 2014 and a positive free cash flow that increased by 74% from 2012 to 2014. Also, the firm has a debt that does not exceed \$30 million without any debt servicing pressure. The company announced on February 19th, 2015 that it will start paying a dividend of 5 cent per share. Thus, Calgon Carbon is confident that it will have enough cash in the future to keep sustaining the dividend payment. Overall, the pro-forma has a conservative approach with an upside potential of almost 13% and a price target of \$23.20.

Conclusion

Calgon Carbon has an interesting growth opportunity. As a matter of fact, the company is actively improving itself in the activated carbon segment and preparing its products to comply with the international regulations. CCC can be considered a long-term investment because it is well positioned to take advantage of the standards about air and water pollution. The management team of the company looks forward to succeed in the future that is why they realize strategic acquisitions that could benefit the company. The ballast water market is a growing opportunity and Calgon Carbon seems to be well prepared to outperform its peers. The global water crisis is one of the biggest challenges and this represent a high growth opportunity in emerging markets for the firm. The stock has the potential to achieve high returns in the next 5 years and for these reasons Calgon Carbon Corporation is definitely a BUY.



		CENTER FO	R GLOBAL	FINANCIAL S'I	IUDIES			
Calgon Carbon Corporation	ccc	Analyst DI SAM	Current Price \$20.71	Intrinsic Value \$20.72	Target Value \$23,20	Divident Yield	Target Return	NEUTRAL
Genera	l Info	Peers	Market Cap.	Ψ20172		agement	12.7070	
Sector	Materials	Pall Corporation	\$10,634.64	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014
Industry	Chemicals	Xylem Inc.	\$6,311.42	Dearth, Randall	Chairman, Chief Executive Office	\$ 769,613.00	\$ 1,747,986.00	\$ 1,842,383.00
Last Guidance	Feb-19-2015	CLARCOR Inc.	\$3,243.35	Schott, Stevan	Chief Financial Officer, Principal.	\$ 462,504.00	\$ 694,248.00	\$ 723,420.00
Next earnings date	NM	Donaldson Company, Inc.	\$5,061.76	O'Brien, Robert	Chief Operating Officer and Exe	\$ 826,991.00	\$ 933,262.00	\$ 955,223.00
Market	Data	Beijing Sanju Environmental Protection &	\$18,837.18	Rose, Richard	Senior Vice President, General Co	\$ 440,646.00	\$ 620,952.00	\$ 565,217.00
Enterprise value	\$1,112.71	MeadWestvaco Corporation	\$8,335.21	Coccagno, James	Senior Vice President of Asia, Gl	\$ 42,400.00	\$ 299,752.00	\$ 374,049.00
Market Capitalization	\$933.35	Canexus Corporation	\$297.65	Colletti, Nicholas	Vice President	\$ -	\$ -	\$ -
Daily volume	0.86	Nippon Carbide Industries Co., Inc.	\$19,651.54	Historical Performance				
Shares outstanding	52.85	Fujian Yuanli Active Carbon Co., Ltd	\$1,755.76		ccc	Peers	Industry	All U.S. firms
Diluted shares outstanding	53.94	Fangda Jinhua Chemical Technology Co.,l	\$3,753.60	Growth	5.3%	2.4%	7.1%	6.0%
% shares held by institutions	77.02%	Current Capital St	ructure	Retention Ratio	79.2%	28.7%	48.4%	61.6%
% shares held by insiders	1.32%	Total debt/market cap	6.41%	ROIC		11.4%	22.7%	11.8%
Short interest	1.84%	Cost of Borrowing	1.63%	EBITA Margin	11.7%	11.3%	11.8%	13.7%
Days to cover short interest	3.66	Interest Coverage	28271.10%	Revenues/Invested capital	105.0%	109.1%	191.3%	202.3%
52 week high	\$23.13	Altman Z	5.62	Excess Cash/Revenue	6.0%	12.3%	12.8%	18.5%
52-week low	\$18.56	Debt Rating	AA	Unlevered Beta	0.73	0.79	1.21	0.95
5y Beta	1.04	Levered Beta	1.18	TEV/REV	1.8x	1.7x	1.1x	2.4x
6-month volatility	26.06%	WACC (based on market value weights)	8.51%	TEV/EBITDA	11.4x	11.6x	9.3x	11.3x
•	Past Ear	ning Surprises		TEV/EBITA	15.6x	16.9x	12.7x	15.4x
	Revenue	EBITDA	Norm. EPS	TEV/UFCF	25.4x	45.7x	34.0x	26.8x
Last Quarter	0.4%	1.8%	0.0%		Non GAA	P Adjustments		
Last Quarter-1	-2.8%	-6.1%	-4.2%	Operating Leases Capitalization	100%	Straightline	10 ye	ars
Last Quarter -2	-1.3%	-2.3%	0.0%	R&D Exp. Capitalization	100%	Straightline	10 ye	ars
Last Quarter -3	-0.6%	0.4%	0.0%	Expl./Drilling Exp. Capitalization	n 0%	N/A	N/A	A
Last Quarter -4	-3.6%	-0.1%	5.3%	SG&A Capitalization	0%	N/A	N/.	A
		Proforma Assumptions Period	Rev. Growth	Adj. Op. Cost/Rev	Revenue	Forecasted Profit NOPLAT	tability Invested capital	UFCF
0	0.0%	LTM	1%	80%	\$555.10	\$47.94	\$552.99	\$47.94
Operating. Cash/Cash Unlevered Beta	1.10	LTM+1Y	1% 5%	76%	\$582.86	\$60.00	\$627.29	-\$14.29
Rev/Invested Capital	150.0%	LTM+2Y	10%	77%	\$641.14	\$61.23	\$696.86	-\$14.29 -\$8.34
		LTM+3Y		1176	\$041.14	•	\$090.00	-\$19.18
_				770/	\$710.00	\$66.0E	\$792.20	
Continuing Period Revenue Growth	7.0%		12%	77%	\$718.08 \$825.70	\$66.25 \$75.77	\$782.29 \$884.37	•
Continuing Period Revenue Growth Long Term ROIC	7.0% 14.0%	LTM+4Y	15%	77%	\$825.79	\$75.77	\$884.37	-\$26.30
Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth	7.0% 14.0% Follows Forward Rev. Growth	LTM+4Y LTM+5Y	15% 18%	77% 78%	\$825.79 \$974.44	\$75.77 \$90.76	\$884.37 \$1,000.88	-\$26.30 -\$25.75
Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV	7.0% 14.0% Follows Forward Rev. Growth 1.6x	LTM+4Y LTM+5Y LTM+6Y	15% 18% 17%	77% 78% 78%	\$825.79 \$974.44 \$1,140.09	\$75.77 \$90.76 \$107.29	\$884.37 \$1,000.88 \$1,147.12	-\$26.30 -\$25.75 -\$38.96
Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA	7.0% 14.0% Follows Forward Rev. Growth 1.6x 10.0x	LTM+4Y LTM+5Y LTM+6Y LTM+7Y	15% 18% 17% 16%	77% 78% 78% 78% 78%	\$825.79 \$974.44 \$1,140.09 \$1,322.50	\$75.77 \$90.76 \$107.29 \$126.83	\$884.37 \$1,000.88 \$1,147.12 \$1,269.84	-\$26.30 -\$25.75 -\$38.96 \$4.11
Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA	7.0% 14.0% Follows Forward Rev. Growth 1.6x 10.0x 14.0x	LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y	15% 18% 17% 16% 12%	77% 78% 78% 78% 78%	\$825.79 \$974.44 \$1,140.09 \$1,322.50 \$1,481.21	\$75.77 \$90.76 \$107.29 \$126.83 \$143.38	\$884.37 \$1,000.88 \$1,147.12 \$1,269.84 \$1,382.43	-\$26.30 -\$25.75 -\$38.96 \$4.11 \$30.79
Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA	7.0% 14.0% Follows Forward Rev. Growth 1.6x 10.0x 14.0x 30.0x	LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y	15% 18% 17% 16% 12% 10%	77% 78% 78% 78% 78% 78% 78%	\$825.79 \$974.44 \$1,140.09 \$1,322.50 \$1,481.21 \$1,629.33	\$75.77 \$90.76 \$107.29 \$126.83 \$143.38 \$158.66	\$884.37 \$1,000.88 \$1,147.12 \$1,269.84 \$1,382.43 \$1,487.66	-\$26.30 -\$25.75 -\$38.96 \$4.11 \$30.79 \$53.42
Continuing Period Revenue Growth Long Term ROIC Inngsted Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA Justified TEV/UFCF	7.0% 14.0% Follows Forward Rev. Growth 1.6x 10.0x 14.0x 30.0x	LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y	15% 18% 17% 16% 12% 10% Valuation	77% 78% 78% 78% 78% 78% 200 Enterprise Value	\$825.79 \$974.44 \$1,140.09 \$1,322.50 \$1,481.21 \$1,629.33 Total Debt	\$75.77 \$90.76 \$107.29 \$126.83 \$143.38 \$158.66	\$884.37 \$1,000.88 \$1,147.12 \$1,269.84 \$1,382.43 \$1,487.66 Equity	-\$26.30 -\$25.75 -\$38.96 \$4.11 \$30.79 \$53.42 Adjusted Price
Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA Justified TEV/UFCF	7.0% 14.0% Follows Forward Rev. Growth 1.6x 10.0x 14.0x 30.0x ROIC 8.7%	LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 8.5%	15% 18% 17% 16% 16% 12% 10% EVA \$0.89	77% 78% 78% 78% 78% 78% 78% 78% Enterprise Value \$1,230.80	\$825.79 \$974.44 \$1,140.09 \$1,322.50 \$1,481.21 \$1,629.33 Total Debt \$71.28	\$75.77 \$90.76 \$107.29 \$126.83 \$143.38 \$158.66 Other claims \$40.85	\$884.37 \$1,000.88 \$1,147.12 \$1,269.84 \$1,382.43 \$1,487.66 Equity \$1,118.66	-\$26.30 -\$25.75 -\$38.96 \$4.11 \$30.79 \$53.42 Adjusted Price \$21.68
Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA Justified TEV/UFCF LTM LTM+IY	7.0% 14.0% Follows Forward Rev. Growth 1.6x 10.0x 14.0x 30.0x ROIC 8.7% 10.8%	LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+7Y LTM+9Y WACC 8.5% 8.6%	15% 18% 17% 16% 16% 12% 10% EVA \$0.89 \$14.29	77% 78% 78% 78% 78% 78% 78% 78% 78% Enterprise Value \$1,230.80 \$1,363.83	\$825.79 \$974.44 \$1,140.09 \$1,322.50 \$1,481.21 \$1,629.33 Total Debt \$71.28	\$75.77 \$90.76 \$107.29 \$126.83 \$143.38 \$158.66 Other claims \$40.85 \$55.73	\$884.37 \$1,000.88 \$1,147.12 \$1,269.84 \$1,382.43 \$1,487.66 Equity \$1,118.66 \$1,236.82	-\$26.30 -\$25.75 -\$38.96 \$4.11 \$30.79 \$53.42 <u>Adjusted Price</u> \$21.68 \$23.95
Continuing Period Revenue Growth Long Term ROIC Inng Term ROIC Inguited Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA Justified TEV/UFCF LTM LTM+1Y LTM+2Y	7.0% 14.0% Follows Forward Rev. Growth 1.6x 10.0x 14.0x 30.0x ROIC 8.7% 10.8% 9.8%	LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 8.5% 8.6% 8.7%	15% 18% 17% 16% 12% 10% EVA \$0.89 \$14.29 \$7.70	77% 78% 78% 78% 78% 78% 78% 78% 78% **Second of the control of th	\$825.79 \$974.44 \$1,140.09 \$1,322.50 \$1,481.21 \$1,629.33 Total Debt \$71.28 \$71.28 \$71.28	\$75.77 \$90.76 \$107.29 \$126.83 \$143.38 \$158.66 Other claims \$40.85 \$55.73 \$63.51	\$884.37 \$1,000.88 \$1,147.12 \$1,269.84 \$1,382.43 \$1,487.66 Equity \$1,118.66 \$1,236.82 \$1,347.50	-\$26.30 -\$25.75 -\$38.96 \$4.11 \$30.79 \$53.42 <u>Adjusted Price</u> \$21.68 \$23.95 \$26.05
Continuing Period Revenue Growth Long Term ROIC Inng Term ROIC Inguited Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA Justified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y	7.0% 14.0% Follows Forward Rev. Growth 1.6x 10.0x 14.0x 30.0x ROIC 8.7% 10.8% 9.8% 9.5%	LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 8.5% 8.6% 8.7% 8.8%	15% 18% 17% 16% 16% 12% 10% EVA \$0.89 \$14.29 \$7.70 \$5.88	77% 78% 78% 78% 78% 78% 78% 78% 78% Enterprise Value \$1,230.80 \$1,363.83 \$1,482.30 \$1,629.58	\$825.79 \$974.44 \$1,140.09 \$1,322.50 \$1,481.21 \$1,629.33 Total Debt \$71.28 \$71.28 \$71.28 \$71.28	\$75.77 \$90.76 \$107.29 \$126.83 \$143.38 \$158.66 Other claims \$40.85 \$55.73 \$63.51 \$81.52	\$884.37 \$1,000.88 \$1,147.12 \$1,269.84 \$1,382.43 \$1,487.66 Equity \$1,118.66 \$1,236.82 \$1,347.50 \$1,476.78	-\$26.30 -\$25.75 -\$38.96 \$4.11 \$30.79 \$53.42 Adjusted Price \$21.68 \$23.95 \$26.05 \$28.58
Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA Justified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y	7.0% 14.0% Follows Forward Rev. Growth 1.6x 10.0x 14.0x 30.0x ROIC 8.7% 10.8% 9.8% 9.5% 9.7%	LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+9Y WACC 8.5% 8.6% 8.7% 8.8% 8.8%	15% 18% 17% 16% 16% 12% 10% EVA \$0.89 \$14.29 \$7.70 \$5.88 \$7.32	77% 78% 78% 78% 78% 78% 78% 78% Enterprise Value \$1,230.80 \$1,363.83 \$1,482.30 \$1,629.58 \$1,802.15	\$825.79 \$974.44 \$1,140.09 \$1,322.50 \$1,481.21 \$1,629.33 Total Debt \$71.28 \$71.28 \$71.28 \$71.28 \$71.28	\$75.77 \$90.76 \$107.29 \$126.83 \$143.38 \$158.66 Other claims \$40.85 \$55.73 \$63.51 \$81.52 \$106.44	\$884.37 \$1,000.88 \$1,147.12 \$1,269.84 \$1,382.43 \$1,487.66 Equity \$1,118.66 \$1,236.82 \$1,347.50 \$1,476.78 \$1,624.43	-\$26.30 -\$25.75 -\$38.96 \$4.11 \$30.79 \$53.42 Adjusted Price \$21.68 \$23.95 \$26.05 \$28.58 \$31.46
Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITDA Justified TEV/EBITA Justified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+2Y LTM+3Y LTM+4Y LTM+4Y LTM+5Y	7.0% 14.0% Follows Forward Rev. Growth 1.6x 10.0x 14.0x 30.0x ROIC 8.7% 10.8% 9.8% 9.5% 9.7% 10.3%	LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 8.5% 8.6% 8.7% 8.8% 8.9% 8.9%	15% 18% 17% 16% 12% 10% EVA \$0.89 \$14.29 \$7.70 \$5.88 \$7.32 \$13.22	77% 78% 78% 78% 78% 78% 78% 78% 78% Enterprise Value \$1,230.80 \$1,363.83 \$1,482.30 \$1,629.58 \$1,802.15 \$1,995.06	\$825.79 \$974.44 \$1,140.09 \$1,322.50 \$1,481.21 \$1,629.33 Total Debt \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28	\$75.77 \$90.76 \$107.29 \$126.83 \$143.38 \$158.66 Other claims \$40.85 \$55.73 \$63.51 \$81.52 \$106.44 \$130.95	\$884.37 \$1,000.88 \$1,147.12 \$1,269.84 \$1,382.43 \$1,487.66 Equity \$1,118.66 \$1,236.82 \$1,347.50 \$1,476.78 \$1,624.43 \$1,792.83	-\$26.30 -\$25.75 -\$38.96 \$4.11 \$30.79 \$53.42 Adjusted Price \$21.68 \$23.95 \$26.05 \$28.58 \$31.46 \$34.82
Continuing Period Revenue Growth Long Term ROIC Inng Term ROIC Inguited Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA Justified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+5Y LTM+6Y	7.0% 14.0% Follows Forward Rev. Growth 1.6x 10.0x 14.0x 30.0x ROIC 8.7% 10.8% 9.8% 9.5% 9.7% 10.3% 10.3% 10.7%	LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 8.5% 8.6% 8.7% 8.8% 8.8% 8.9% 8.9%	15% 18% 17% 16% 16% 12% 10% EVA \$0.89 \$14.29 \$7.70 \$5.88 \$7.32 \$13.22 \$19.12	77% 78% 78% 78% 78% 78% 78% 78% 78% 81,230.80 \$1,363.83 \$1,482.30 \$1,629.58 \$1,802.15 \$1,995.06 \$2,219.81	\$825.79 \$974.44 \$1,140.09 \$1,322.50 \$1,481.21 \$1,629.33 Total Debt \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28	\$75.77 \$90.76 \$107.29 \$126.83 \$143.38 \$158.66 Other claims \$40.85 \$55.73 \$63.51 \$81.52 \$106.44 \$130.95 \$168.16	\$884.37 \$1,000.88 \$1,147.12 \$1,269.84 \$1,382.43 \$1,487.66 Equity \$1,118.66 \$1,236.82 \$1,347.50 \$1,476.78 \$1,624.43 \$1,792.83 \$1,980.37	-\$26.30 -\$25.75 -\$38.96 \$4.11 \$30.79 \$53.42 Adjusted Price \$21.68 \$23.95 \$26.05 \$28.58 \$31.46 \$34.82 \$38.35
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Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITDA Justified TEV/EBITA Justified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+7Y LTM+8Y LTM+8Y LTM+8Y LTM+8Y LTM+8Y LTM+9Y Revenue Variation	7.0% 14.0% Follows Forward Rev. Growth 1.6x 10.0x 14.0x 30.0x ROIC 8.7% 10.8% 9.8% 9.5% 9.7% 10.3% 10.7% 11.1% 11.3% 11.5% Base	LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 8.5% 8.6% 8.7% 8.8% 8.9% 8.9% 9.1% 9.2% 9.3% 9.4% Monte Carlo Simulation Ass Stdev 10%	15% 18% 18% 17% 16% 16% 12% 10% EVA \$0.89 \$14.29 \$7.70 \$5.88 \$7.32 \$13.22 \$13.22 \$24.09 \$27.99 \$31.51 umptions Min N/A	77% 78% 78% 78% 78% 78% 78% 78% 78% Enterprise Value \$1,230.80 \$1,363.83 \$1,482.30 \$1,629.58 \$1,802.15 \$1,995.06 \$2,219.81 \$2,420.94 \$2,613.56 \$2,800.89 Max N/A	\$825.79 \$974.44 \$1,140.09 \$1,322.50 \$1,481.21 \$1,629.33 Total Debt \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28	\$75.77 \$90.76 \$107.29 \$126.83 \$143.38 \$158.66 Other claims \$40.85 \$55.73 \$63.51 \$81.52 \$106.44 \$130.95 \$168.16 \$162.49 \$130.06 \$74.74	\$884.37 \$1,000.88 \$1,147.12 \$1,269.84 \$1,382.43 \$1,487.66 Equity \$1,118.66 \$1,236.82 \$1,347.50 \$1,476.78 \$1,624.43 \$1,792.83 \$1,980.37 \$2,187.17 \$2,412.22 \$2,654.87 E Carlo Simulation Res Intrinsic Value \$21.68	-\$26.30 -\$25.75 -\$38.96 \$4.11 \$30.79 \$53.42 Adjusted Price \$21.68 \$23.95 \$26.05 \$28.58 \$31.46 \$34.82 \$38.35 \$42.34 \$46.67 \$50.23 ults 1y-Target \$23.95
Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA Justified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+6Y LTM+7Y LTM+8Y LTM+8Y LTM+9Y	7.0% 14.0% Follows Forward Rev. Growth 1.6x 10.0x 14.0x 30.0x ROIC 8.7% 10.8% 9.8% 9.5% 9.7% 10.3% 10.7% 11.1% 11.3% 11.5% Base 0	LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 8.5% 8.6% 8.7% 8.8% 8.9% 8.9% 9.1% 9.2% 9.3% 9.4% Monte Carlo Simulation Ass Stdev	15% 18% 17% 16% 16% 12% 10% EVA \$0.89 \$14.29 \$7.70 \$5.88 \$7.32 \$13.22 \$19.12 \$24.09 \$27.99 \$31.51 umptions Min	77% 78% 78% 78% 78% 78% 78% 78% 78% 78%	\$825.79 \$974.44 \$1,140.09 \$1,322.50 \$1,481.21 \$1,629.33 Total Debt \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28 \$71.28	\$75.77 \$90.76 \$107.29 \$126.83 \$143.38 \$158.66 Other claims \$40.85 \$55.73 \$63.51 \$81.52 \$106.44 \$130.95 \$168.16 \$162.49 \$130.06 \$74.74 Mean est. σ(ε)	\$884.37 \$1,000.88 \$1,147.12 \$1,269.84 \$1,382.43 \$1,487.66 Equity \$1,118.66 \$1,236.82 \$1,347.50 \$1,476.78 \$1,624.43 \$1,792.33 \$1,980.37 \$2,187.17 \$2,412.22 \$2,654.87 e Carlo Simulation Res Intrinsic Value	-\$26.30 -\$25.75 -\$38.96 \$4.11 \$30.79 \$53.42 Adjusted Price \$21.68 \$23.95 \$26.05 \$28.58 \$31.46 \$34.82 \$38.35 \$42.34 \$46.67 \$50.23 ults
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Nicholas Luca



Cypress Semiconductor Corp.

Nasdaq:CY Sector: Technology

BUY

Price Target: \$16.65

Key Statistics as of 03/28/2015

Market Price: \$14.36

Industry: Semiconductor-Broad Line

Market Cap: \$2.37B 52-Week Range: \$8.04-16.25

Beta: 1.0

Thesis Points:

 Ability to separate themselves from the negatively viewed semiconductor industry

Analyst:

- Rapid innovation creates entrance into new segments
- New revenue streams and reduction of costs through recent merger

Company Description:

Cypress Semiconductor Corporation provides mixed-signal programmable solutions, specialized semiconductor memories, and integrated semiconductor solutions worldwide. The company's Memory Products division designs and manufactures static random access memory (SRAM) products and nonvolatile RAMs used to store and retrieve data in networking, wireless infrastructure and handsets, computation, consumer, automotive, industrial, and other electronic systems; and general-purpose programmable clocks. Its Data Communications division focuses on universal serial bus (USB) controllers, Bluetooth low energy and wireless USB solutions, and module based solutions for trackpads and other user interface applications used in PC and peripheral, industrial automation imaging, security camera, and consumer devices, such as mobile handsets and set-top boxes. The company's Programmable Solutions division designs and develops programmable product offerings, including Programmable System-on-Chip (PSoC) devices used in various industrial applications, mass storage, household appliances, laptop computers, and toys; CapSense devices are used in applications that employ buttons or sliders, such as handsets and various other consumer, industrial, and automotive applications; TrueTouch touch-sensing/touch screen products used in mobile phones, tablets, e-readers, wearables, GPS, automobiles, digital cameras, and other mobile systems; and automotive products. Its Emerging Technology division provides wafer level chip scale packaging solutions and foundry services, as well as other development stage activities. The company sells its semiconductor products through distributors, manufacturing representative firms, and its sales force to original equipment manufacturers and manufacturers. It has a strategic foundry partnership with HuaHong Grace Semiconductor Manufacturing Corporation and United Microelectronics Corporation.





As of March 28th, 2015, Cypress Semiconductor Corp. (CY) is a BUY due to the market undervaluing the company because of the struggling industry of semiconductors they compete in. The rapid decline in semiconductor stocks is reflective of the long-term decline in personal computers, or PCs; because of this correlation, the market is scared to invest with CY. However, Cypress's ability to separate themselves from the industry is quite attractive, as most of their products have little connection to the PC segment. Homes and cars are becoming more involved with the revolution of the Internet of things, incorporating technology within at a fast rate. Their touch screen leadership is ahead of it's time, and is gaining popularity amongst consumers. 2015 shall be a favorable year for CY as they expect upwards of 45% YoY growth.

Separation from Rest of Industry

The semiconductor industry struggled in 2014, with many of companies down double digit percentages. As stated before, this is heavily due to the decline in personal computers. PC's are a dying product, as consumers switch over to tablets, and other substitutes. Because of this decrease in demand of PC's and the products that tie with them, semiconductors have struggled.

The issue however is the misconception of CY that the market holds. Cypress no longer holds as close of relationship with PC's and PC related products as the market believes it does. They have been planning for this decline and adapted by investing heavily in Internet of Things or IoT, of which can simply put as incorporating internet into devices, like televisions, automobile radio docks, and other such appliances that didn't used to have internet capability. They are creating products that will help develop internet in such places. Soon enough everything will be related through a network. The evidence lies within the progression of systematic networks like linking a mobile phone to the radio of an automobile, or the connection of tablets-PCs-televisionsphones, of which are all capable of being integrated together. All of their peers are much more related to PCs and relate to the negative view of semiconductors at this moment, but Cypress should not be valued on the same basis, as they are continuing to separate themselves.

It is a good time to buy as estimates by analysts rose over the past month for the current fiscal year by about 28.0%. But that is not yet reflected in its price, as the stock gained only 2.9% over the same time frame. The company posted a positive earnings surprise of 28.57% in the reported fourth quarter. The stock has only risen about roughly 2.4% since the release of Q4 earnings. The stock has also delivered an average earnings surprise of nearly 83.19% over the trailing four quarter.

Innovating Products

Cypress has been conducting a lot of research into products separate of PCs over the past few years. During fiscal 2014, 2013, and 2012, research and development expenses totaled \$164.5 million, \$190.9 million, and \$189.9 million, respectively. This heavy R&D has now led to products that are significantly ahead the competition and gaining notice from consumers positively in new markets

TrueTouch Touchscreen

TrueTouch offers single-chip touchscreen solutions for products such as smartphones and superphones, tablets, e-readers, wearables, portable media players, cameras, automotive infotainment systems and other products. The TrueTouch family includes devices that perform traditional touchscreen functions including interpreting multitouch operation, single touches, and gestures such as tap, double-tap, pan, pinch, scroll and rotate. Recently, Cypress expanded the TrueTouch portfolio by adding solutions with advanced features such as water resistance, passive stylus support and hover functionality to its Gen5 and Gen4X families



Touchscreen devices face tough environments. With form factors becoming thinner, chargers and displays



becoming noisier, and consumers using their devices in harsher conditions, providing high touch performance demands a tougher touchscreen controller. TrueTouch touchscreen controllers leverage the industry's through being able to meet these consumer needs, as well as adding other innovated features that separate their screen from large competitors like the IPhone 6. Cypress Corp.'s unmatched IP portfolio is backed by more than 100 capacitive touch-sensing patents

TrueTouch's Increased Demand in China

As a result of the efficiency of their TrueTouch Touchscreen, Cypress has landed design wins at a number of Chinese smartphone manufacturers. The company's latest design has been bought and used by Huawei, the largest telecommunications equipment maker in the world, in 5 of their new smartphones. Along with Huawei, ZTE, a leading global provider of telecommunications equipment, will also use Cypress Corp.'s Gen5 TrueTouch screen in its new Nubia superphone. These two companies should help Cypress benefit from a booming smartphone market in China. At the end of last year, smartphone penetration in China was only 40%. By 2017, this rate is expected to go up to 49%. This means that half the population in China will still need a smartphone beyond 2017. Since Huawei and ZTE are two key players in the Chinese smartphone market, Cypress is creating relationships with the right companies to profit from this booming market.

Wearable MCUs

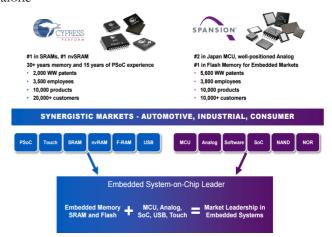
Cypress' entry into the wearables market with its TrueTouch controllers is a major achievement. The use of its TrueTouch controllers in Qualcomm and Sony's smartwatches are likely to boost the company's' revenues. The strength in wearable devices and continued innovation in the space should lead to higher demand for Cypress' controllers over the next few years.



Merging with Spansion

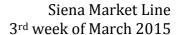
Earlier this year, Cypress announced that it entered into a definitive agreement to merge with Spansion, Inc., a leading designer, manufacturer and developer of embedded systems semiconductors, in an all-stock, tax-free transaction. The post-merger company is expected to generate approximately \$2 billion in revenue annually and realize more than \$135 million in cost synergies on an annualized basis within three years, and create a leading global provider of microcontrollers and specialized memories needed in today's embedded systems.

Cypress Semiconductor's merger with Spansion is transformative, as the combined company should be able to leverage a combined sales force and R&D workforce that is smaller than if each company operated standalone



The most important aspect of merging with Spansion is the increase in dominance in the automotive market, of which Spansion has a \$450 million automotive business in microcontrollers(MCUs), flash memories and analog – many in missioncritical sockets. This has added significantly to their investment in automotive business, which stood at \$40 million prior to the merging with Spansion.







Cypress Semiconductor Corp. recently announced the expansion of its TraveoTM microcontroller (MCU) family with a new series that provides automotive manufacturers with a cost-effective platform to deliver 2-D and 3-D graphics and advanced functionality for dashboards, head-up displays and HVAC systems in compact vehicles. This new series of the Traveo family is the first automotive product launched as part of Cypress and is another step forward in bringing the luxury car experience to the mass market. By offering a cost-effective yet high-performance and scalable platform, customers can affordably deliver 2-D and 3-D graphics and other advanced functionality in compact vehicles



		CENTER FO	OR GLOBAL	FINANCIAL ST	TUDIES			
Cypress Semiconductor	CY	Analyst Nicholas Luca	Current Price \$14.36	Intrinsic Value \$14.79	Target Value \$16.65	Divident Yield 3%	Target Return	NEUTRAL
Genera	l Info	Peers	Market Cap.	Ų I I I I		gement	2710070	
Sector	Information Technology	Altera Corp.	\$13,356.64	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014
Industry	conductors and Semiconductor Equip	Broadcom Corp.	\$25,703.09	Rodgers, T.	Co-Founder, Chief Executive Of \$	3,425,411.00	\$ 2,996,266.00	\$ 2,131,243.00
Last Guidance	Oct-16-2014	Silicon Laboratories Inc.	\$2,146.15	Trent, Thad	Chief Financial Officer, Principal . \$	- :	ş - :	\$ 657,432.00
Next earnings date	4/16/2015	Maxim Integrated Products, Inc.	\$9,799.03	Keswick, Paul	Executive Vice President of Mark \$	1,732,006.00	\$ 2,147,002.00	\$ 1,167,734.00
Market	Data	Xilinx Inc.	\$11,064.01	Nazarian, Dana	Executive Vice President of Mem \$	1,456,076.00	\$ 1,978,777.00	\$ 1,062,518.00
Enterprise value	\$4,721.49	Atmel Corporation	\$3,459.04	Oliveira, J.	Chief Technical Officer and Exec \$			\$ -
Market Capitalization	\$4,602.94	Cavium, Inc.	\$3,957.49	McCarthy, Joseph	Director of Corporate Communi \$	-	\$ -	\$ -
Daily volume	6.77	Cirrus Logic Inc.	\$2,088.41	Historical Performance				
Shares outstanding	320.54	Microchip Technology Inc.	\$9,912.30		CY	Peers	Industry	All U.S. firms
Diluted shares outstanding	169.12	Linear Technology Corporation	\$11,165.58	Growth	-3.5%	8.6%	6.5%	6.0%
% shares held by institutions	44.28%	Current Capital	Structure	Retention Ratio	127.4%	50.2%	44.1%	61.6%
% shares held by insiders	4.26%	Total debt/market cap	5.15%	ROIC		14.8%	14.1%	11.8%
Short interest	17.51%	Cost of Borrowing	2.35%	EBITA Margin	1.0%	33.7%	13.5%	13.7%
Days to cover short interest	8.36	Interest Coverage	100.00%	Revenues/Invested capital	54.9%	76.7%	99.0%	202.3%
52 week high	\$16.25	Altman Z	2.32	Excess Cash/Revenue	31.1%	64.1%	54.7%	18.5%
52-week low	\$8.04	Debt Rating	AAA	Unlevered Beta	1.78	1.15	1.26	0.95
5y Beta	1.57	Levered Beta	1.46	TEV/REV	2.6x	3.7x	2.8x	2.4x
6-month volatility	40.37%	WACC (based on market value weights)	10.25%	TEV/EBITDA	25.5x	14.5x	14.0x	11.3x
	Past Earn	uing Surprises		TEV/EBITA	100.8x	16.5x	19.1x	15.4x
	Revenue	EBITDA	Norm. EPS	TEV/UFCF	39.2x	90.0x	26.8x	26.8x
Last Quarter	0.8%	-5.5%	-7.1%		Non GAAF	Adjustments		
Last Quarter-1	-0.1%	4.6%	6.7%	Operating Leases Capitalization	100%	Straightline	10 yea	ars
Last Quarter -2	-0.1%	21.0%	33.3%	R&D Exp. Capitalization	100%	Straightline	10 yea	ars
Last Quarter -3	0.0%	-10.4%	0.0%	Expl./Drilling Exp. Capitalization	0%	N/A	N/A	
Last Quarter -4	0.7%	2.7%	12.5%	SG&A Capitalization	0%	N/A	N/A	A
		Proforma Assumptions Period	Rev. Growth	Adj. Op. Cost/Rev	Revenue	Forecasted Profit NOPLAT	tability Invested capital	UFCF
Operating, Cash/Cash	0.0%		Rev. Growth	Adj. Op. Cost/Rev	Revenue \$725.50			
Operating, Cash/Cash Unlevered Beta	0.0% 1.40	Period				NOPLAT	Invested capital	
		Period LTM	0%	72%	\$725.50	NOPLAT -\$41.51	Invested capital \$1,410.92	-\$41.51
Unlevered Beta	1.40	Period LTM LTM+1Y	0% 8%	72% 70%	\$725.50 \$784.67	**NOPLAT -\$41.51 -\$2.42	\$1,410.92 \$1,393.03	-\$41.51 \$15.43
Unlevered Beta Rev/Invested Capital	1.40 51.4%	Period LTM LTM+1Y LTM+2Y	0% 8% 8%	72% 70% 54%	\$725.50 \$784.67 \$846.26	-\$41.51 -\$2.42 \$66.60	\$1,410.92 \$1,393.03 \$1,391.54	-\$41.51 \$15.43 \$68.09
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth	1.40 51.4% 9.9%	Period LTM LTM+1Y LTM+2Y LTM+3Y	0% 8% 8% 9%	72% 70% 54% 49%	\$725.50 \$784.67 \$846.26 \$919.11	-\$41.51 -\$2.42 \$66.60 \$137.78	\$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66	-\$41.51 \$15.43 \$68.09 \$110.66
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC	1.40 51.4% 9.9% 15.0%	Period LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y	0% 8% 8% 9% 9%	72% 70% 54% 49% 47%	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42	**NOPLAT** -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60	\$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth	1.40 51.4% 9.9% 15.0% Equals to Maintenanœ	Period LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y	0% 8% 8% 9% 9% 9%	7.2% 70% 54% 49% 47% 46%	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56	**NOPLAT** -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81	\$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV	1.40 51.4% 9.9% 15.0% Equals to Maintenance 3.7x	Period LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+5Y	0% 8% 8% 9% 9% 9% 10%	72% 70% 54% 49% 47% 46% 45%	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52	\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32	\$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA	1.40 51.4% 9.9% 15.0% Equals to Maintenanœ 3.7x 14.5x	Period LTM LTM+1Y LTM+2Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y	0% 8% 8% 9% 9% 9% 10% 10% 10%	7.2% 70% 54% 49% 47% 46% 45% 44% 44%	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA	1.40 51.4% 9.9% 15.0% Equals to Maintenanæ 3.7x 14.5x 100.8x	Period LTM LTM+1Y LTM+2Y LTM+2Y LTM+4Y LTM+6Y LTM+6Y LTM+7Y LTM+7Y LTM+8Y	0% 8% 8% 9% 9% 9% 10% 10%	7.2% 70% 54% 49% 47% 46% 45% 44% 44%	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA	1.40 51.4% 9.9% 15.0% Equals to Maintenance 3.7x 14.5x 100.8x 39.2x	Period LTM LTM+1Y LTM+2Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y	0% 8% 8% 9% 9% 9% 10% 10% 10%	72% 70% 54% 49% 45% 46% 45% 44% 43%	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58 \$394.30	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67 \$1,969.03	\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA Justified TEV/UFCF	1.40 51.4% 9.9% 15.0% Equals to Maintenance 3.7x 14.5x 100.8x 39.2x	Period LTM LTM+1Y LTM+2Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+8Y LTM+9Y WACC	0% 8% 8% 9% 9% 9% 10% 10% 10% 10%	72% 70% 54% 49% 47% 46% 45% 44% 44% 44% 53%	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08 Total Debt	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58 \$394.30 Other claims	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67 \$1,969.03 Equity	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93 Adjusted Price
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/UFCF LTM	1.40 51.4% 9.9% 15.0% Equals to Maintenanæ 3.7x 14.5x 100.8x 39.2x ROIC	Period LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 10.2%	0% 8% 8% 8% 9% 9% 9% 10% 10% 10% EVA -\$185.99	72% 70% 54% 49% 47% 46% 45% 44% 44% 43% Enterprise Value \$5,177.10	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08 Total Debt \$243.25	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58 \$394.30 Other claims -\$21.20	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67 \$1,969.03 Equity \$4,955.06	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93 Adjusted Price \$15.75
Unlevered Beta Rey/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA Justified TEV/UFCF LTM LTM+1Y	1.40 51.4% 9.9% 15.0% Equals to Maintenance 3.7x 14.5x 100.8x 39.2x ROIC -2.9% -0.2%	Period LTM LTM+1Y LTM+2Y LTM+2Y LTM+5Y LTM+5Y LTM+5Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 10.2% 10.3%	0% 8% 8% 8% 9% 9% 9% 10% 10% 10% EVA \$\$185.99 -\$146.55	72% 70% 54% 49% 47% 46% 45% 44% 43% Enterprise Value \$5,177.10 \$5,715.59	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08 Total Debt \$243.25 \$279.17	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58 \$394.30 Other claims -\$21.20 \$96.72	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67 \$1,969.03 Equity \$4,955.06 \$5,339.70	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93 Adjusted Price \$15.75 \$17.40
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y	1.40 51.4% 9.9% 15.0% Equals to Maintenance 3.7x 14.5x 100.8x 39.2x ROIC -2.9% -0.2% 4.8%	Period LTM LTM+1Y LTM+2Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 10.2% 10.3% 10.5%	0% 8% 8% 8% 9% 9% 9% 10% 10% 10% EVA -\$185.99 -\$78.95	72% 70% 54% 49% 47% 46% 45% 44% 44% 53% Enterprise Value \$5,177.10 \$5,715.59 \$6,298.36	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08 Total Debt \$243.25 \$279.17	\$\\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67 \$1,969.03 Equity \$4,955.06 \$5,339.70 \$6,247.48	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93 Adjusted Price \$15.75 \$17.40 \$20.12
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y	1.40 51.4% 9.9% 15.0% Equals to Maintenance 3.7x 14.5x 100.8x 39.2x ROIC -2.9% -0.2% 4.8% 9.9%	Period LTM LTM+1Y LTM+2Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 10.2% 10.3% 10.5% 10.6%	0% 8% 8% 9% 9% 9% 10% 10% 10% EVA -\$185.99 -\$146.55 -\$78.95 -\$9.42	72% 70% 54% 49% 47% 46% 45% 44% 44% 55,77.10 \$5,715.59 \$6,298.36 \$6,887.99	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08 Total Debt \$243.25 \$279.17 \$279.17	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58 \$394.30 Other claims -\$21.20 \$96.72 -\$228.30 -\$470.67	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67 \$1,969.03 Equity \$4,955.06 \$5,339.70 \$6,247.48 \$7,079.49	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93 Adjusted Price \$15.75 \$17.40 \$20.12 \$22.69
Unlevered Beta Rey/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA lustified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+5Y LTM+6Y	1.40 51.4% 9.9% 15.0% Equals to Maintenance 3.7x 14.5x 100.8x 39.2x ROIC -2.9% -0.2% 4.8% 9.9% 13.4% 16.0% 17.9%	Period LTM LTM+1Y LTM+2Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 10.2% 10.3% 10.5% 10.6% 10.7% 10.8% 10.9%	0% 8% 8% 8% 9% 9% 9% 10% 10% 10% EVA -\$185.99 -\$146.55 -\$78.95 -\$9.42 \$40.46	72% 70% 54% 49% 47% 46% 45% 44% 44% 43% Enterprise Value \$5,775.59 \$6,298.36 \$6,887.99 \$7,497.85 \$8,141.89 \$8,847.89	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08 Total Debt \$243.25 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58 \$394.30 Other claims -\$21.20 \$96.72 -\$228.30 -\$470.67 -\$652.58 -\$932.37 -\$1,206.04	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67 \$1,969.03 Equity \$4,955.06 \$5,339.70 \$6,247.48 \$7,079.49 \$7,871.26 \$8,795.09 \$9,774.76	-\$41.51 \$15.43 \$68.09 \$110.66 \$114.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93 Adjusted Price \$15.75 \$17.40 \$20.12 \$22.69 \$25.26 \$28.26 \$31.31
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA Lustified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+5Y LTM+6Y LTM+6Y LTM+6Y LTM+7Y	1.40 51.4% 9.9% 15.0% Equals to Maintenance 3.7x 14.5x 100.8x 39.2x ROIC -2.9% -0.2% 4.8% 9.9% 13.4% 16.0% 17.9% 19.2%	Period LTM LTM+1Y LTM+2Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 10.2% 10.3% 10.5% 10.6% 10.7% 10.8% 10.9% 11.0%	0% 8% 8% 9% 9% 9% 10% 10% 10% 10% EVA -\$185.99 -\$146.55 -\$78.95 -\$9.42 \$40.46 \$80.40 \$114.52 \$141.91	72% 70% 54% 49% 47% 46% 45% 44% 44% 64% 55,177.10 \$5,715.59 \$6,298.36 \$6,887.99 \$7,497.85 \$8,141.89 \$8,847.89 \$9,606.50	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08 Total Debt \$243.25 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58 \$394.30 Other claims -\$21.20 \$96.72 -\$228.30 -\$470.67 -\$652.58 -\$932.37 -\$1,206.04 -\$1,528.56	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67 \$1,969.03 Equity \$4,955.06 \$5,339.70 \$6,247.48 \$7,079.49 \$7,871.26 \$8,795.09 \$9,774.76 \$10,855.90	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93 Adjusted Price \$15.75 \$17.40 \$20.12 \$22.69 \$25.26 \$28.26 \$31.31 \$34.77
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITTA Justified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+6Y LTM+6Y LTM+7Y LTM+8Y	1.40 51.4% 9.9% 15.0% Equals to Maintenance 3.7x 14.5x 100.8x 39.2x ROIC -2.9% -0.2% 4.8% 9.9% 13.4% 16.0% 17.9% 19.2% 20.4%	Period LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 10.2% 10.5% 10.5% 10.6% 10.7% 10.8% 10.9% 11.0% 11.1%	0% 8% 8% 8% 9% 9% 9% 10% 10% 10% EVA -\$185.99 -\$146.55 -\$78.95 -\$9.42 \$40.46 \$80.40 \$114.52 \$141.91 \$171.30	72% 70% 54% 49% 47% 46% 45% 44% 44% 43% Enterprise Value \$5,177.10 \$5,715.59 \$6,298.36 \$6,887.99 \$7,497.85 \$8,141.89 \$8,847.89 \$9,606.50 \$10,426.69	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08 Total Debt \$243.25 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58 \$394.30 Other claims -\$21.20 \$96.72 -\$228.30 -\$470.67 -\$652.58 -\$932.37 -\$1,206.04 -\$1,528.56 -\$1,910.22	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67 \$1,969.03 Equity \$4,955.06 \$5,339.70 \$6,247.48 \$7,079.49 \$7,871.26 \$8,795.09 \$9,774.76 \$10,855.50 \$12,057.74	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93 Adjusted Price \$15.75 \$17.40 \$20.12 \$22.69 \$25.26 \$28.26 \$31.31 \$34.77 \$38.60
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA Lustified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+5Y LTM+6Y LTM+6Y LTM+6Y LTM+7Y	1.40 51.4% 9.9% 15.0% Equals to Maintenance 3.7x 14.5x 100.8x 39.2x ROIC -2.9% -0.2% 4.8% 9.9% 13.4% 16.0% 17.9% 19.2%	Period LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 10.2% 10.3% 10.5% 10.6% 10.7% 10.8% 10.9% 11.1% 11.1% 11.2%	0% 8% 8% 8% 9% 9% 9% 10% 10% 10% EVA -\$185.99 -\$146.55 -\$78.95 -\$9.42 \$40.46 \$80.40 \$114.52 \$141.91 \$171.30 \$201.23	72% 70% 54% 49% 47% 46% 45% 44% 44% 64% 55,177.10 \$5,715.59 \$6,298.36 \$6,887.99 \$7,497.85 \$8,141.89 \$8,847.89 \$9,606.50	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08 Total Debt \$243.25 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58 \$394.30 Other claims -\$21.20 \$96.72 -\$228.30 -\$470.67 -\$652.58 -\$932.37 -\$1,206.04 -\$1,528.56 -\$1,910.22 -\$2,333.91	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67 \$1,969.03 Equity \$4,955.06 \$5,339.70 \$6,247.48 \$7,079.49 \$7,871.26 \$8,795.09 \$9,774.76 \$10,855.90 \$12,057.74 \$13,366.44	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93 Adjusted Price \$15.75 \$17.40 \$20.12 \$22.69 \$25.26 \$28.26 \$31.31 \$34.77 \$38.60 \$41.70
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITTA Justified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+3Y LTM+4Y LTM+5Y LTM+5Y LTM+6Y LTM+6Y LTM+7Y LTM+8Y	1.40 51.4% 9.9% 15.0% Equals to Maintenance 3.7x 14.5x 100.8x 39.2x ROIC -2.9% -0.2% 4.8% 9.9% 13.4% 16.0% 17.9% 19.2% 20.4%	Period LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 10.2% 10.5% 10.5% 10.6% 10.7% 10.8% 10.9% 11.0% 11.1%	0% 8% 8% 8% 9% 9% 9% 10% 10% 10% EVA -\$185.99 -\$146.55 -\$78.95 -\$9.42 \$40.46 \$80.40 \$114.52 \$141.91 \$171.30 \$201.23	72% 70% 54% 49% 47% 46% 45% 44% 44% 43% Enterprise Value \$5,177.10 \$5,715.59 \$6,298.36 \$6,887.99 \$7,497.85 \$8,141.89 \$8,847.89 \$9,606.50 \$10,426.69	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08 Total Debt \$243.25 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58 \$394.30 Other claims -\$21.20 \$96.72 -\$228.30 -\$470.67 -\$652.58 -\$932.37 -\$1,206.04 -\$1,528.56 -\$1,910.22 -\$2,333.91	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67 \$1,969.03 Equity \$4,955.06 \$5,339.70 \$6,247.48 \$7,079.49 \$7,871.26 \$8,795.09 \$9,774.76 \$10,855.50 \$12,057.74	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93 Adjusted Price \$15.75 \$17.40 \$20.12 \$22.69 \$25.26 \$31.31 \$34.77 \$38.60 \$41.70
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITTA Justified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+3Y LTM+4Y LTM+5Y LTM+5Y LTM+6Y LTM+6Y LTM+7Y LTM+8Y	1.40 51.4% 9.9% 15.0% Equals to Maintenance 3.7x 14.5x 100.8x 39.2x ROIC -2.9% -0.2% 4.8% 9.9% 13.4% 16.0% 17.9% 19.2% 20.4% 21.4%	Period LTM LTM+1Y LTM+2Y LTM+2Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 10.2% 10.3% 10.5% 10.6% 10.7% 10.8% 10.9% 11.0% 11.1% 11.2% Monte Carlo Simulation A	0% 8% 8% 8% 9% 9% 9% 10% 10% 10% 10% EVA -\$185.99 -\$146.55 -\$78.95 -\$9.42 \$40.46 \$80.40 \$114.52 \$141.91 \$171.30 \$201.23	72% 70% 54% 49% 47% 46% 45% 44% 44% 43% Enterprise Value \$5,177.10 \$5,715.59 \$6,298.36 \$6,887.99 \$7,497.85 \$8,141.89 \$8,847.89 \$9,606.50 \$10,426.69 \$11,311.70	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08 Total Debt \$243.25 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58 \$394.30 Other claims -\$21.20 \$96.72 -\$228.30 -\$470.67 -\$652.58 -\$932.37 -\$1,206.04 -\$1,528.56 -\$1,910.22 -\$2,333.91	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67 \$1,969.03 Equity \$4,955.06 \$5,339.70 \$6,247.48 \$7,079.49 \$7,871.26 \$8,795.09 \$12,057.74 \$13,855.90 \$12,057.74 \$13,356.44 \$2 Carlo Simulation Resi	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93 Adjusted Price \$15.75 \$17.40 \$20.12 \$22.69 \$25.26 \$28.26 \$31.31 \$34.77 \$38.60 \$41.70
Unlevered Beta Rev/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITA Justified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+5Y LTM+6Y LTM+6Y LTM+8Y LTM+8Y LTM+8Y LTM+8Y	1.40 51.4% 9.9% 15.0% Equals to Maintenance 3.7x 14.5x 100.8x 39.2x ROIC -2.9% -0.2% 4.8% 9.9% 13.4% 16.0% 17.9% 19.2% 20.4% 21.4% Base	Period LTM LTM+1Y LTM+2Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 10.2% 10.3% 10.5% 10.6% 10.7% 10.8% 10.7% 10.8% 10.9% 11.0% 11.1% Monte Carlo Simulation A Stdev	0% 8% 8% 8% 9% 9% 9% 10% 10% 10% 10% EVA -\$185.99 -\$146.55 -\$78.95 -\$9.42 \$40.46 \$80.40 \$114.52 \$141.91 \$171.30 \$201.23 Ssumptions Min	72% 70% 54% 49% 47% 46% 45% 444% 44% 44% 55,177.10 \$5,715.59 \$6,298.36 \$6,887.99 \$7,497.85 \$8,141.89 \$8,847.89 \$9,606.50 \$10,426.69 \$11,311.70 Max	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08 Total Debt \$243.25 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17 \$279.17	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58 \$394.30 Other claims -\$21.20 \$96.72 -\$228.30 -\$470.67 -\$652.58 -\$932.37 -\$1,206.04 -\$1,528.56 -\$1,910.22 -\$2,333.91	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67 \$1,969.03 Equity \$4,955.06 \$5,339.70 \$6,247.48 \$7,079.49 \$7,871.26 \$8,795.09 \$12,057.74 \$13,366.44 \$2 Carlo Simulation Resultations	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93 Adjusted Price \$15.75 \$17.40 \$20.12 \$22.69 \$25.26 \$28.26 \$31.31 \$34.77 \$38.60 ults 1y-Target
Unlevered Beta Rey/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITTA Justified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+7Y LTM+8Y LTM+8Y LTM+9Y Revenue Variation	1.40 51.4% 9.9% 15.0% Equals to Maintenance 3.7x 14.5x 100.8x 39.2x ROIC -2.9% -0.2% 4.8% 9.9% 13.4% 16.0% 17.9% 19.2% 20.4% 21.4% Base 0	Period LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y WACC 10.2% 10.5% 10.5% 10.6% 10.7% 10.8% 10.8% 10.9% 11.1% 11.2% Monte Carlo Simulation A Stdev 10%	0% 8% 8% 8% 9% 9% 9% 10% 10% 10% EVA -\$185.99 -\$146.55 -\$78.95 -\$9.42 \$40.46 \$80.40 \$114.52 \$141.91 \$171.30 \$201.23 ssumptions Min N/A	72% 70% 54% 49% 47% 46% 45% 44% 44% 43% Enterprise Value \$5,177.10 \$5,715.59 \$6,298.36 \$6,887.99 \$7,497.85 \$8,141.89 \$8,847.89 \$9,606.50 \$10,426.69 \$11,311.70 Max N/A	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08 Total Debt \$243.25 \$279.17	NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58 \$394.30 Other claims -\$21.20 \$96.72 -\$228.30 -\$470.67 -\$652.58 -\$932.37 -\$1,206.04 -\$1,528.56 -\$1,910.22 -\$2,333.91 Monte	Invested capital	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93 Adjusted Price \$15.75 \$17.40 \$20.12 \$22.69 \$25.26 \$28.26 \$31.31 \$34.77 \$38.60 \$41.70 ***Units************************************
Unlevered Beta Rey/Invested Capital Continuing Period Revenue Growth Long Term ROIC Invested Capital Growth Justified TEV/REV Justified TEV/EBITDA Justified TEV/EBITTA Justified TEV/UFCF LTM LTM+1Y LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+8Y LTM+8Y LTM+9Y Revenue Variation Op. Costs Variation	1.40 51.4% 9.9% 15.0% Equals to Maintenanœ 3.7x 14.5x 100.8x 39.2x ROIC -2.9% -0.2% 4.8% 9.9% 13.4% 16.0% 17.9% 19.2% 20.4% 21.4% Base 0	Period	0% 8% 8% 8% 9% 9% 9% 10% 10% 10% EVA -\$185.99 -\$146.55 -\$78.95 -\$9.42 \$40.46 \$80.40 \$114.52 \$141.91 \$171.30 \$201.23 ssumptions Min N/A N/A	72% 70% 54% 49% 47% 46% 45% 44% 44% 43% Enterprise Value \$5,177.10 \$5,715.59 \$6,298.36 \$6,887.99 \$7,497.85 \$8,141.89 \$8,847.89 \$9,606.50 \$11,311.70 Max N/A N/A	\$725.50 \$784.67 \$846.26 \$919.11 \$1,003.42 \$1,098.56 \$1,204.52 \$1,321.83 \$1,451.32 \$1,594.08 Total Debt \$243.25 \$279.17	**NOPLAT -\$41.51 -\$2.42 \$66.60 \$137.78 \$190.60 \$234.81 \$274.32 \$313.13 \$352.58 \$394.30 **Other claims** -\$21.20 \$96.72 -\$228.30 -\$470.67 -\$652.58 -\$932.37 -\$1,206.04 -\$1,528.56 -\$1,910.22 -\$2,333.91 **Monte Mean est. \$\sigma(e)\$	Invested capital \$1,410.92 \$1,393.03 \$1,391.54 \$1,418.66 \$1,465.14 \$1,531.64 \$1,630.35 \$1,727.71 \$1,840.67 \$1,969.03 Equity \$4,955.06 \$5,339.70 \$6,247.48 \$7,079.49 \$7,871.26 \$8,795.09 \$9,774.76 \$10,855.90 \$12,057.74 \$13,366.44 \$2 Carlo Simulation Rest Intrinsic Value \$15.75 \$0.32	-\$41.51 \$15.43 \$68.09 \$110.66 \$144.12 \$168.32 \$175.61 \$215.77 \$239.62 \$265.93 Adjusted Price \$15.75 \$17.40 \$20.12 \$22.69 \$25.26 \$28.26 \$31.31 \$34.77 \$38.60 \$41.70 ults 1y-Target \$17.40 \$0.25

Analyst: Laura Pladys



Globus Medical, Inc.

NYSE:GMED Sector: Healthcare

BUY
Price Target: \$32.00

Key Statistics as of 3/25/2015

Market Price: \$23.74

Industry: Medical Devices

Market Cap: \$2.25 B

52-Week Range: \$17.45 – 27.00

Beta: 0.05

Thesis Points:

- Growth through 3 acquisitions in the last fiscal year
- Significant domestic and international expansion forecasted
- CREO: GMED's future most advanced pedicle screw system in the world
- Surgeons' training and commissions

Company Description:

Globus Medical, Inc., a medical device company, focuses on the design, development, and commercialization of musculoskeletal implants that promote healing in patients with spine disorders. It offers products that address an array of spinal pathologies, anatomies, and surgical approaches. The company provides fusion products that are used in cervical, thoracolumbar, sacral, and interbody/corpectomy fusion procedures to treat degenerative, deformity, tumor, and trauma conditions. It also offers disruptive technology products that provide material improvements to fusion procedures, such as minimally invasive surgical techniques, as well as new treatment alternatives, which include motion preservation technologies, such as dynamic stabilization, total disc replacement and interspinous process spacer products, and advanced biomaterials technologies; and interventional pain management solutions comprising treatments for vertebral compression fractures. The company has received pre-market approval for SECURE-C Cervical Artificial Disc; and conducting other clinical trials for ACADIA Facet Replacement System, a motion preserving anatomic reconstruction of the facet joint intended for the treatment of spinal stenosis, as well as TRIUMPH Lumbar Disc, a motion preserving disc replacement inserted obliquely into the disc space from a posterolateral approach to address posterior spinal pathology and maintain important anterior anatomical structures. It also offers human tissue products, such as bone allografts, biomaterials, and soft tissue products for spine, orthopedics, sports medicine, dental, and wound care markets. The company sells its implants and related disposables primarily to hospitals through sales representatives and independent distributors in the United States and internationally. Globus Medical, Inc. was founded in 2003 and is headquartered in Audubon, Pennsylvania.





GMED has a significant potential for success. The company's biggest catalyst for an increase in stock price is its revenues. The recent three acquisitions increased the company's pipelines and should generate more sales. To become the most advanced pedicle screw system in the world is an area of focus for GMED. From a platform with a single system, GMED developed seven new systems in the last 18 month and expects to launch nine others in the next 18 months, positioning GMED as the biggest market player in this product. In addition, GMED plans to reward their sales representatives only on commissions so that they have an incentive to actually generate more sales, benefiting both the company and the representatives. Finally, the company forecasts a significant expansion in the years to come in both its domestic and international market.

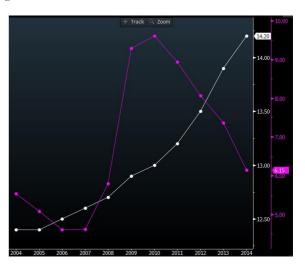
All of these factors should push Globus Medical's stock higher. The market seems to underestimate GMED's capacity to push CREO to the state of "most advanced product worldwide" in the spine industry.

Industry Outlook: Medical Devices

The medical devices industry is a very wide industry. It gathers simple oxygen masks to these very sophisticated life-supporting products. It is an industry with intense competition with a fast growth. There are a few factors driving the industry such as the aging population, the growth of emerging markets as well as increased regulations. GMED main area of activity is the spine market. This market is expected to increase in 2015 as it did in 2014. Marketed at \$11.6 billion in 2012, it is forecasted to grow at a CAGR of 5.1% from 2012 to 2017. Spine disorders are an important, if not the leading, drivers of healthcare costs worldwide. The effects of spine disorders range from a slight pain to paralysis. They are primarily explained by degenerative conditions in the spine, tumors, or trauma.

Siena Market Line 4th week of March 2015

The positive outlook of the industry is mainly explained by favorable patient demographics, a better and constantly improving technology leading to an increased demand for fusion procedures, as well as a possibility for earlier treatment thanks to disruptive technologies, as well as an increasing demand in international markets. The number of people over 60 is growing. The U.S. Department of Health and Human Services expects the "60+" to grow from 23% to 32% by 2050. In the last past years, improvements in healthcare and people's health awareness have led people to live more active lives at advanced ages, leading to an increase of spine surgeries.



On the chart above, the white line represents the US population above 65 years, clearly increasing. The pink line represents the US unemployment rate. Since 2010, it did not stop decreasing. Most of the American citizens rely on their job to have a health insurance. With the rate increasing, there is more people covered and therefore more people have access to these kinds of surgeries if needed. In addition, Obama's Affordable Care plan aims to cover every citizen in the US with a health insurance, once again increasing the potential patients for spinal surgeries.

Most of the American medical devices players are projecting their sales revenue to come from emerging markets to counteract the lower margins domestically. In the next 50 years, the BRIC markets are expected to replace the G6 countries.

Market >	BRAZIL	CHINA	EUROPE	INDIA	USA
Among device executives at companies with 250+ employees	29%	44%	37%	25%	43%



The chart on the previous page is from a survey answering "when you think about your company, which markets do you expect to have the strongest growth in 2015?" Starting 2015, China is expecting to outperform the European market in the medical devices industry. Fusion procedures have become basic procedures overtime and enable surgeons to treat advanced stages of spine disorders that were not possible in the past. Finally, disruptive technologies are gaining increased acceptance amongst both surgeons and patients. This could result in new surgeries performed and better outcome for patients.

Competitors

GMED's most significant competitors are described as Medtronic (a cardiac and vascular group, restorative therapies group, and diabetes group), DePuy Synthes Companies (orthopedic and neurological solutions), Stryker (orthopedics, medical surgery, neurotechnology, and spine), and NuVasive (applications for spine fusion surgery). The medical devices and spine market are very competitive markets. Any of these companies can develop a product that would directly or indirectly compete with GMED's products. Competition arises not only from the products proposed and the company's market shares but to have the best qualified scientific, management and sales personnel, acquiring technologies and technology licenses advantageous to the company. Due to the rapid change and the high sensitiveness of new products' introduction in the market, timing is a very important factor in the product development. On a revenue basis and in the whole subindustry of medical devices, GMED is in the top ten, behind the competitors listed above. However, on a size scale, GMED is a much smaller company with fewer resources.

Management

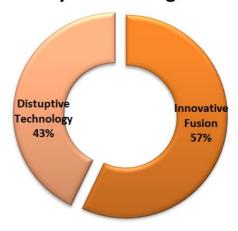
GMED's CEO David Paul is also the co-founder of Globus as well as its chairman. He is the principal executive officer of the company. Prior to founding Globus, he held various positions within Synthes Inc, including Director of Product Development. He has a background of research engineer as well. David Demski is GMED's current interim CFO, President, and Chief Operating Officer. He recently created the Cortnerstone Capital Lbo Fund in addition to the positions he holds at GMED. Most of the company's executives are in their

mid40-50s. It is a young company, ran by talented and dynamic people willing to push the company's growth further.

Pipeline

GMED pipeline is segmented into two categories: innovative fusion and disruptive technology. Innovative fusion products are made for treatments of spinal disorders for the entire spine and that have the flexibility to be used in different surgical approaches. Disruptive technology is a variety of products that represents a change in the way surgeons treat spinal disorders. They enable the treatment of spinal disorders to be made earlier in the continuum of care. They are aimed to reduce patients' recovery length as well as the risk to have a spinal disc disease associated with surgeries performed by fusion. Disruptive technology gathers both minimally invasive surgeries as well as alternatives surgeries not possible using regular fusion surgeries. For the year 2014, innovative fusion products had the largest segment sales with 57% of total revenues.

Sales by Product Segment



However, though the company's pipeline is divided in two categories, their products are not limited to a technology, a platform, or a surgical approach.

A human spine is divided into four sections: the cervical spine, the thoracic spine, the lumbar spine, and the sacral spine. Each of these sections requires specific products. Globally, the company offers 130 different products for the treatment of spine disorders. Innovative fusion products are made for treatment from the occiput (back of the head) to the sacrum (posterior of the pelvis), covering the four areas on the picture below. This category included the CREO system that would be





discussed The disruptive technologies product segment is a high-growth segment includes biomaterials technologies well interventional pain management solutions. product segment also proposes a range innovative fixations such as plates and pedicle screw systems that can be used

in minimally invasive procedures.





(PLYMOUTH – minimally invasive plate) (PROTEX Deformity – full line of monoaxial screws, rods, hooks and connectors)

Growth through acquisitions

Globus Medical has been very aggressive in its growth through acquisitions. The company first acquired Excelsius Surgical LLC on January 8th, 2014. Excelsius is a leading musculoskeletal implant manufacturer. The company created a robotic platform for spine, brain and therapeutic markets. It is designed to navigate and to facilitate surgical access as well as to enable surgeons to perform surgeries faster with greater accuracy. On October 23rd, 2014, GMED announced it had acquired Transplant Technologies of Texas (TTOT), an allograft tissue processor, for \$35 million upfront and \$15 million of milestone payments in the next three years. This vertical acquisition was a strategic move for the company to expand its regenerative biologic products. TTOT's

Siena Market Line 4th week of March 2015

acquisition had the primary goal of improving GMED's capabilities for the development of new and innovative human allograft tissue products in the future.

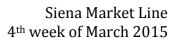
On February 25th, 2015, GMED announced the acquisition of Branch Medical Group (BMG) for \$52.9 million. BMG is GMED's largest third-party supplier. The acquisition is to be made on March 31st, 2015. BMG is a highly efficient manufacturer of precision medical devices that generates \$9.1 million adjusted EBITDA, representing EBITDA margins of 39%, better than GMED's EBITDA margins of 34.8%. BMG plans to invest between \$15 to \$17 million over the next three years to increase BMG's capacity as well as GMED's ability to double their sourcing through BMG. The vertical integration also aims to increase GMED's EBITDA by \$19 million per year by 2019. This is a strategic move as BMG should enable GMED to lower its costs structure as well as strengthened its control over the company's supply. The market underestimates this transaction. It is a cheap buy for GMED as it represents only 17% of its current cash balance. The company efficiency will increase GMED's operating margins over time. For the \$52.9 million invested, the company will immediately take \$9 million of EBITDA - 17% of the purchase price – since most of BMG's EBITDA already comes from GMED. With the decrease in the costs structure and the same level of efficiency, BMG's EBITDA of \$9.1 million should at least double in the next few years, improving GMED's bottom line.

Beyond these three acquisitions within only one year, all based on cash transactions; the company is looking for a partnership or to acquire even more suppliers. The company next target would be one of its metal suppliers, their needed raw materials. The market underestimates the benefits that all three companies are bringing to GMED, especially the potential coming for the new to come, BMG.

Growth through acquisitions

For the year 2014, the company added 16 new products. These additions added to the company's sales footprint, both domestically and internationally. Below is a chart representing the sales by geography in both 2013 and 2014.

-	% as total sales	2014	2013	\$Δ	% ∆
United Sales	90%	\$427,091	\$396,615	\$30,476	7.7%
International	10%	\$ 47,280	\$ 37,844	\$ 9,436	24.9%
Total	100%	\$474,371	\$434,459	\$39,912	9.2%





Total sales increased 9.2%, including increases of 7.7% in the US and 24.9% internationally. Domestically, this increase is explained by an increased existing penetration. Internationally, there was an increased existing penetration as well as a penetration of 5 new countries.

Moreover, there is an increased demand in international markets. The US comprises around 4% of the worldwide population but around half of all spine surgeries occur in the US. However, the improved standards of care globally with the European Conformity marked (CE) or FDA approvals in other markets should increase the international demand for spine products. For instance, though spine products have been FDA approved in the US, these products have to be CE marked for them to be sold in the European Union.

Around 600,000 spine surgeries are performed each year in the US, meaning that worldwide, around the same number are performed. In the ranking of the most common illness, back pain is ranked #15 behind acne, allergy, and asthma. In the top #15, it is one of the only, if not the only, that can be healed with surgery. There is an 80% chance that people will suffer from back pain in their lifetime. However, in the US, insurance companies are doing a pushback because of the costs that spine surgeries imply whereas in Europe, Spain and Turkey are becoming attractive medical facilities when it comes to back surgery. The costs of these kinds of surgeries are rising substantially. When done for comfort and not reasons, European countries propose competitive price, increasing the demand when insurance companies are creating a pushback because of the costs associated with these surgeries.

CREO: the most advanced pedicle screw in the world

CREO was introduced in 2010 as a single platform. Over the past 18 months, GMED has launched seven new systems to fit the platform and expects the launch nine other systems within the upcoming 18 months. The CREO platform has already been used in more than 6,000 surgeries worldwide and has excellent surgeons' feedback. The CREO platform is a stabilization system that enhances efficiency and ease of use by providing intuitively designed instrumentation and intraoperative versatility along with a complete array of implant options for treating complex spinal pathologies. All of that in

one single system. This system basically gives surgeons an option of action in any situations. With the development and efforts the company is putting in this product, the CREO platform should become GMED's top seller by the end of 2015-beginning of 2016. The system is seen as the world's most "advanced and comprehensive pedicle screw system in the world for treating a wide variety of complex deformity, degenerative and trauma pathologies through either an open or a minimally invasive approach" according to the CEO. CREO currently represents a market share of 7-8%. Thus, pedicle screw market share - thanks to the constant addition of new systems in the platform as well as no direct competitors - should skyrocket to become their largest product by 2015-2016.



The market seems to undervalue CREO's ability to drive GMED's growth. The new systems are creating new features that really improve an already performing platform.

Corporate: trainings & commissions

Globus Medical has a different corporate vision. First of all, the company proposes to train and educate surgeons for the safe and effective use of the company's products and resources. The company therefore invested in a center called Musculoskeletal Education and Research Center (MERC). This center provides training both internally and externally. The internal trainings are made in one of the company's laboratories whereas the external ones are made on a regional basis. The company also creates two day minimally invasive surgeries training programs. These trainings are a high focus for GMED.

In addition, the company's system of compensation is on its way to change. Currently, it is based on both a fixed salary and commissions. In order to improve its sales growth, the company wants to reward its sales representatives by only using commissions. The reason is simple. GMED wants its sales representatives to have



the best knowledge in its pipeline in order to have better sales skills. At the meantime, it is an incentive for sales representatives to sell GMED's values and product performances in order to achieve the best sales and therefore earn a good commission.

The company is very focused on the image its projects and the values it gives. The company is very bullish on its business. It sincerely believes in its ability to achieve significant growth performance and that there are share-taking opportunities in this competitive spine industry.

Financials and Valuation

Globus Medical Inc is a profitable company. It has a positive and double-digit growing net income as well as positive free cash flows as far as 2009. Since 2010, the company's EBITDA margin grew faster than the revenues, creating value. On average for the past few years, the EBITDA margin was 1.05 times greater than the revenues margin. For the year 2014, GMED's EBITDA margin represented 34.8% whereas revenues grew 9.2% only, being 3.8 times lower. In addition to a remarkable EBITDA growth, the company is debt-free since FY 2011. The last acquisitions have been paid with cash. Until FY2012, the company had more than 50% of its assets in cash. Starting FY2012, the company started to invest in short term marketable securities putting the cash balance to only 22% of total assets. Therefore, the postacquisitions cash balance of \$82.3 million represented 18% of the firm's total assets, excluding short term investments.

GMED's inventories are decomposed between raw materials, work in process, and finished goods. These finished goods inventory represented 88% of their total inventories in FY2014, showing the company's readiness to increase its competitiveness and distribution.

The factors impacting the most the cash flows this last fiscal year were the decrease in cash due to several acquisitions as well as the net change in long term investment. GMED received 4.5 times more proceeds than FY 2013 for approximately the same amount of investment, reducing the cash from investing activities. The company's operating margin is around 29% and the net income margin at 19.50%. In addition, the company's effective tax rate is decreasing since FY2010 to reach 33.29% in FY2014.

Siena Market Line 4th week of March 2015

Compared to its US direct competitors, GMED is in a comfortable financial situation. Its PE is around half the market at 24.04 times with a return on equity of 17.49%, 4 times higher than its competitors. The company is clearly undervalued by examining the multiples. The enterprise value of \$1.98 billion is 15 times lower than the peers' average. The enterprise value to EBITDA of 12.34 times is 1.7 times lower than the peers' average. In FY1, the multiple is forecasted at 11.10 times – similar to the peers' average – but in FY2, the multiple of 9.98 times is forecasted to be 2.77 times lower than the peers' average. Last but not least, the company price to cash flow multiple of 41.41 times, 1.4 times higher than the peers' average, is attractive to investors as GMED is an established slow growth company compared to its peers.

Conclusion

Thanks to its product development, its projects of expansion both domestically and internationally, its growth through acquisitions and the surgeons' training and the sales representatives' salary based only on commissions, the company has all of the drivers to increase their stock price. It is a debt-free, profitable company with high margins that creates value.

The one year target price is set around \$32 per share, creating an upside of more than 35% from the actual price of \$23.87 per share.



4%

Long term Growth

Terminal Value

N/A

		CENTER FO	R GLOBAL	FINANCIAL ST	<u>rudies</u>			
Globus Medical, Inc.	GMED	Analyst Laura Pladys	Current Price \$23.87	Intrinsic Value \$28.97	Target Value \$32.94	Divident Yield 0%	Target Return 37.99%	BULLISH
Gener	ral Info	<u>Peers</u>	Market Cap.			agement		
Sector	Healthcare	NuVasive, Inc.	\$2,124.73	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY201
Industry	Healthcare Equipment and Supplies	:		Paul, David	Co-Founder, Chairman, Chief E			
Last Guidance	Jan-06-2015			Dem ski, David	President, Interim Chief Financia			
Next earnings date	NM	<u></u>		Davidar, David	Co-Founder, Senior Vice Preside			\$ -
	et Data			Murphy, A.	Executive Vice President of US S			\$ -
Enterprise value	\$2,002.57			Payne, Steven			\$ -	\$ -
Market Capitalization	\$2,231.27	Thoratec Corp.	\$2,183.20	Williams, Anthony	Senior Vice President of Business	\$ -	\$ -	\$ -
Daily volume	0.23			Historical Performance				
Shares outstanding	94.71				GMED	Peers	Industry	All U.S. firms
Diluted shares outstanding	95.46	Tornier N.V.	\$1,281.06	Growth	8.9%	14.5%	13.0%	6.0%
% shares held by institutions	68.00%	Current Capital St	tructure	Retention Ratio	0.0%	257.4%	79.2%	55.0%
% shares held by insiders	27.77%	Total debt/market cap	0.00%	ROIC	15.2%	3.0%	17.1%	13.3%
Short interest	7.57%	Cost of Borrowing	0.00%	EBITA Margin	0.0%	16.5%	15.9%	13.7%
Days to cover short interest	17.52	Interest Coverage		Revenues/Invested capital	102.3%	63.5%	102.3%	202.3%
52 week high	\$27.00	Altman Z	13.62	Excess Cash/Revenue	52.0%	59.9%	36.3%	18.5%
52-week low	\$17.45	Debt Rating	AAA	Unlevered Beta	-0.05	0.88	0.88	0.95
5y Beta	0.05	Levered Beta	1.00	TEV/REV	3.9x	3.6x	3.3x	2.4x
6-month volatility	28.34%	WACC (based on market value weights)	8.11%	TEV/EBITDA	11.5x	24.2x	13.8x	11.3x
o month volatinty		ning Surprises	0.1170	TEV/EBITA	13.2x	27.8x	15.6x	15.4x
	Revenue	EBITDA	Norm. EPS	TEV/UFCF	42.2x	754.8x	29.5x	26.8x
Last Quarter	0.8%	6.1%	20.0%	TEV/OTCI		P Adjustments	27.33	20.0x
Last Quarter-1	4.1%	11.9%	14.3%	Operating Leases Capitalization	100%	Straightline	10 y	ears
Last Quarter -2	-5.2%	0.3%	0.0%	R&D Exp. Capitalization	100%	Straightline	10 y	
Last Quarter -3	0.5%	10.6%	9.1%	Expl./Drilling Exp. Capitalization		N/A	N/	
Last Quarter -4	0.0%	10.6%	13.6%	SG&A Capitalization	20%	Straightline	10 v	
Last Quarter -4	0.070	Proforma Assumptions	13.070	30021 Capitanzation	2070	Forecasted Profi		cars
		Period	Rev. Growth	Adj. Op. Cost/Rev	Revenue	NOPLAT	Invested capital	UFCF
Operating. Cash/Cash	0.0%	LTM	9%	51%	\$467.27	\$120.57	\$433.02	\$234.68
Unlevered Beta	1.00	LTM+1Y	8%	51%	\$503.25	\$136.00	\$600.38	\$82.76
Rev/Invested Capital	120.0%	LTM+2Y	7%	51%	\$536.43	\$150.41	\$647.82	\$102.97
Continuing Period Revenue Growth	4.0%	LTM+3Y	6%	51%	\$567.01	\$160.54	\$690.59	\$117.78
Long Term ROIC	12.3%	LTM+4Y	4%	50%	\$591.71	\$170.31	\$726.41	\$134.49
Invested Capital Growth	Equals to Maintenance	LTM+5Y	5%	50%	\$622.44	\$180.72	\$759.51	\$147.62
Justified TEV/REV	3.9x	LTM+6Y	4%	50%	\$649.50	\$188.21	\$791.85	\$155.87
Justified TEV/EBITDA	11.5x	LTM+7Y	4%	50%	\$677.05	\$195.72	\$822.53	\$165.04
Justified TEV/EBITA	13.2x	LTM+8Y	4%	51%	\$705.24	\$203.31	\$852.95	\$172.89
Justified TEV/UFCF	28.4x	LTM+9Y	4%	51%	\$734.16	\$211.04	\$883.90	\$180.09
	DOIC	WACC	<u>Valuat</u>		Territ Date	Oder delan	P. V	A.B. and Delan
	ROIC	WACC	EVA	Enterprise Value	Total Debt	Other claims	Equity	Adjusted Price
LTM	22.0%	8.1%	\$60.32	\$2,499.42	\$0.00	-\$223.30	\$2,722.71	\$29.78
LTM+1Y	31.4%	8.2%	\$139.29	\$2,775.06	\$0.00	-\$365.57	\$3,140.63	\$33.69
LTM+2Y	25.1%	8.3%	\$108.48	\$2,847.38	\$0.00	-\$470.55	\$3,317.93	\$35.57
LTM+3Y	24.8%	8.4%	\$113.08	\$2,953.51	\$0.00	-\$586.27	\$3,539.79	\$37.94
LTM+4Y	24.7%	8.5%	\$117.35	\$3,054.48	\$0.00	-\$715.15	\$3,769.63	\$40.38
LTM+5Y	24.9%	8.6%	\$123.59	\$3,155.36	\$0.00	-\$852.98	\$4,008.34	\$43.04
LTM+6Y	24.8%	8.7%	\$127.28	\$3,256.29	\$0.00	-\$998.85	\$4,255.14	\$45.55
LTM+7Y	24.7%	8.8%	\$130.86	\$3,359.42	\$0.00	-\$1,153.76	\$4,513.18	\$48.30
LTM+8Y	24.7%	8.9%	\$134.86	\$3,466.80	\$0.00	-\$1,316.82	\$4,783.61	\$51.19
LTM+9Y	24.7%	9.0%	\$139.09	\$3,577.67	\$0.00	-\$1,488.31	\$5,065.98	\$53.49
	_	Monte Carlo Simulation Ass			<u> </u>	Mont	e Carlo Simulation Re	
	Base	Stdev	Min	Max	Distribution		Intrinsic Value	1y-Target
Revenue Variation	0	10%	N/A	N/A	Normal	Mean est.	\$29.78	\$33.69
Op. Costs Variation	0	10%	N/A	N/A	Normal	σ(ε)	\$0.27	\$0.25
Market Risk Premium	6%	N/A	5%	7%	Triangular	3 σ(ε) adjusted price	\$28.97	\$32.94
	407	3.T / A	20/	140/	T-1 1	C . D .	C22 07	

3%

N/A

14%

N/A

Triangular

Normal

\$28.89

\$23.87

Current Price

Analysts' median est.



Glu Mobile, Inc.

GLUU: NasdaqGS

Analyst: Sector: Mark Papuzza Information Technology

BUY

Price Target: \$8.87

Key Statistics as of 3/24/15

Market Price: \$4.84 Industry: Software Market Cap: \$517.44M 52-Week Range: \$3.27-7.60 Beta: 3.39

Thesis Points:

- Celebrity Partnerships
- Diversified Portfolio
- Long-term Growth Opportunities
- Financials EBITDA growth and zero net debt

Company Description:

Glu Mobile Inc. develops, publishes, and markets a portfolio of games for the smartphones and tablet devices users. The company offers free-to-play action, casual, racing, and sports genre mobile games. It creates games based on its own brands, as well as based on third-party licensed brands. Glu Mobile Inc. markets, sells, and distributes its games primarily through direct-to-consumer digital storefronts worldwide. The company was formerly known as Sorrent, Inc. and changed its name to Glu Mobile Inc. in May 2005. Glu Mobile Inc. was incorporated in 2001 and is headquartered in San Francisco, California.





Glu Mobile is a leading global developer and publisher of free-to-play games for smartphone and tablet devices. With their recent announcements of partnerships with Hollywood celebrities, combined with their diversified portfolio of games and long-term growth opportunities, Glu mobile will continue to grow their EBITDA margins, and continue to generate value for the company and increase the price of their stock.

Celebrity Partnerships

Glu Mobile CEO Niccolo de Masi is capitalizing on a trend that has been growing in Hollywood - celebrities have become very interested in the gaming market as a way to both connect better with their fans, and to expand their brand. In June 2014, Glu Mobile teamed up with celebrity Kim Kardashian and launched their highly successful "Kim Kardashian: Hollywood" game. In this game, players create their own "aspiring celebrity" and join Kim Kardashian on their rise to fame and fortune. Players virtually live the life of a superstar and experience the glamorous life of Kardashian. Kardashian fans have received the game with open arms, and fortunately for Glu Mobile she has many of them. Kardashian has a social following of approximately 80 million people, and she actively advertises the game and encourages fans to download it. The game is free to download, but allows players to purchase additional items within the game, such as virtual clothes and virtual hairstyles, for real money. The majority of the revenue the game creates, however, is through advertisements. It reached the number one spot on the Apple App Store charts in 2014, and ended at number seven of topgrossing apps. The game has been downloaded over 28 million times since its release, and has brought in \$74.3 million in revenue for Glu Mobile, which equaled 31% of their overall revenue for the year. In order to keep the game popular and at the top of the charts the company has been steadily adding updates and new characters, and last week announced a sweepstakes competition for players. From March 20 through March 30, Glu Mobile is holding a "Meet Kim Sweepstakes." Game players will work to earn "K-tickets" in the game by completing various projects, and the more "Ktickets" one has, the better chance they have to win the

sweepstakes and meet Kardashian. Glu Mobile will be flying out five winners to California, paying for their hotel accommodations, and setting up a meet and greet with the celebrity. This allows the virtual world to become a reality for the winners, and will encourage more fans of Kardashian to download and play the game. As a result of the immense success Kardashian has brought to the company, and the great working relationship between the two, Glu Mobile has announced a new deal this past week with two celebrities close to Kim.

Kardashian's half-sisters Kendall and Kylie Jenner are set to join Glu Mobile in the gaming market. Kendall and Kylie have gathered a fan base through their reality TV show "Keeping Up With the Kardashians," and from their growing fame in the fashion industry. On March 17, 2015, Glu Mobile made the announcement that they will be creating a game starring Kendall and Kylie that will differentiate itself from Kardashian's game, yet compliment it. This will attract both users of Kardashian's game, and new users from the fans of the two younger stars. Kendall and Kylie share a combined social media following of 72 million. Niccolo de Masi is excited to have signed five-year contracts with each of the Jenner's, stating that they bring a "tremendous amount of brand power and social impact to an audience largely untapped by the gaming industry." This game is set to launch late this year, and is expected to follow the massive success seen with the "Kim Kardashian: Hollywood" game.

Glu Mobile has also recently announced a blockbuster partnership with one of the most popular musicians in the world today - Katy Perry. Following her half-time performance at the 2014 Super Bowl, the company broke the news that a five-year contract has been reached between the two. This is a huge partnership for two reasons. First, Glu Mobile is entering a new sphere in the gaming industry - music. This expands their brand in the gaming market, which will bring in new users they have not yet appealed to before. Second, Katy Perry has a social media following of approximately 170 million. With this vast amount of followers the company expects Perry's game to break many Glu Mobile records, specifically new revenue records for an individual title. Perry is known for her unique style, and while the company will not say what the game will entail just yet, it is sure to incorporate her uniqueness and put



the game in a class of its own.

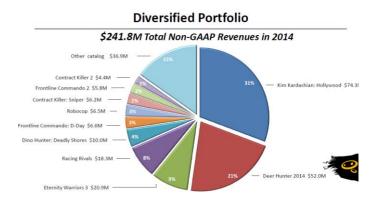
Glu Mobile is creating what they call a "celebrity gaming platform." The partnerships with Kim Kardashian, Kendall Jenner, Kylie Jenner, and Katy Perry are key steps in the right direction for the company, but they do not plan to stop there. The next priority for Glu Mobile is to partner with an athletic celebrity for a sports game, and incorporate more sports fans users to their business. Also in the news recently is celebrity music artist Kanye West. West mentioned in an interview last week that he is interested in entering the gaming market, and is currently working on a video game. He did not mention who he was working with, but there is a high possibility that he could be teaming up with the same company that his wife, Kim Kardashian, is working with. When asked about a potential partnership with West, Niccolo de Masi did not confirm or deny anything was in the works. Adding Kanye West and Katy Perry would be monumental for the company, as these are two of the most influential stars in the music industry today.

Glu Mobile is pioneering a new genre in gaming with their celebrity gaming platform. By the end of 2015, Kim Kardashian, Kendall Jenner, Kylie Jenner, and Katy Perry will bring approximately 300 million combined social media followers to the company. Niccolo de Masi signed each of these celebrities to five-year exclusive contracts because he believes that they will continue to increase their popularity and their brand, therefore bringing more success to the company. In working directly and hands-on with these celebrities, the games will benefit both the celebrities brands and Glu Mobile's brand.

Diversified Portfolio

A major concern when evaluating the value of gaming companies is if they can continue to produce successful games that will both sustain and grow their revenue. Some gaming companies have come out with "one-hit wonders," and depend on that one game to sustain their revenue. Some gaming companies focus on one or two games for the year, and bank on those to be successful. Glu Mobile believes in the approach of creating approximately a dozen games per year. The company does not focus solely on each individual launch, but on a series of launches of different brand games. For this 2015 year, Glu Mobile plans to launch 14 new games,

with the majority coming in the second half of the year. They plan to invest in the four genres of celebrity, action, racing and sports. Even when you exclude the company's highest revenue driving game "Kim Kardashian: Hollywood," the company still grew in revenue by 24% from 2013 to 2014. This clearly illustrates the importance of diversifying their portfolio of games. Glu Mobile is no one-hit wonder, and does not exclusively depend on its top game, because they have created so many other successful ones to attract users in the gaming market. So even as Glu Mobile introduces their newly acquired celebrities in games, other key games such as "Deer Hunter" and "Eternity Warriors" will continue to help grow their revenue. Illustrated below is the broken down revenue numbers each Glu Mobile game earned for the company during the 2014 year.



"Top grossing apps" are the apps that have generated the most revenue. As of December 2014, among the top 30 grossing games on the U.S. Apple app store, Glu Mobile was responsible for three. "Kim Kardashian: Hollywood" rested at #7 in the rankings, "Racing Rivals" at #23, and "Deer Hunter 2014" at #28. The games have spent 7 months, 8 months and 8 months, respectively, in the top 30 grossing games ranking. This demonstrates that the games Glu Mobile produces keeps players playing, and keeps revenue growing.

Staying Power of Top Grossing Games

| Control | Control



Long-term Growth Opportunities

The mobile gaming industry has grown immensely as of recent, and is projected to continue doing so. According to Newzoo's Quarterly Global Games Market Update, mobile gaming is a \$25 billion industry. This is a 42% increase over the prior year's value. Advances in technology and the increases in smartphone users are responsible for this jump, and both will continue to grow. Four out of every five smartphone users have currently played game apps on their phone, which is a huge opportunity for advertisements to be viewed. As a result, the amount of mobile ad spending will continue to increase greatly. The mobile gaming industry is estimated to be valued as a \$40 billion industry by 2017.

The mobile gaming industry is currently one of the fastest growing industries, and Glu Mobile is setting themselves up to be the leader of the industry. They continue to expand their celebrity platform, and have yet to sign a celebrity to a deal under five-years, ensuring that they will continue to work together as the industry surpasses the \$40 billion mark. They plan to expand their games in each genre, expand globally, and stay on top of the trends in the gaming industry.

The company had great financial success in 2014, and has a strong lineup of games to be released in 2015. In a time when the industry is peaking, Glu Mobile is taking all appropriate measures to take full advantage.

Financials

Two categories that stand out on Glu Mobile's balance sheet are the EBITDA margins, and their zero net debt. Glu Mobile has reached a positive EBITDA margin this past year, and it is projected to double during the 2015 year. Estimates show that it will continue to grow from there in the upcoming years. In 2016, the EBITDA margin is expected to outgrow the revenue margin. This demonstrates that the company is creating value, and eliminating operating expenses that are eating into their bottom line. Also noteworthy is the company's net debt. Glu Mobile possesses more cash than debt. The fact that they have enough liquidity to cover their liabilities should be very encouraging to investors.

Conclusion

I am recommending a buy on Glu Mobile, Inc. because they will grow financially as a result of their recent announcements of new celebrity partnerships, their diversified game portfolio that has continually brought in high revenues, and the long-term growth opportunities in the mobile gaming industry. In an expanding industry, Glu Mobile is making moves to become the industry leader. With the addition of three celebrities this year that will bring in a combined 240+ social media followers, Glu Mobile will increase the value of both their company and their share price.



		CENTER FOI	R GLOBAL I	FINANCIAL S'	TUDIES			
Glu Mobile, Inc.	GLUU	Analyst Mark Papuzza	Current Price \$4.83	Intrinsic Value \$8.07	Target Value \$8.87	Divident Yield 0%	Target Return 83.66%	BULLISH
Gene	ral Info	Peers	Market Cap.	\$0.07		nagement	0010070	
Sector	Information Technology	Zynga, Inc.	\$2,561.74	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014
Industry	Software	Electronic Arts Inc.	\$18,021.87	de Masi, Niccolo	Chairman, Chief Executive (\$ 1,676,889.00	\$
Last Guidance	Feb-04-2015	Forgame Holdings Limited	\$1,974.81	Ludwig, Eric	Chief Financial Officer, Chie		\$ 964,716.00	\$ -
Next earnings date	NM	Take-Two Interactive Software Inc.	\$2,158.16	Leichtner, Scott	Vice President, General Co		\$ 505,798.00	\$ -
	et Data	Activision Blizzard, Inc.	\$16,757.24	Akhavan, Christopher	President of Publishing		\$ 1,364,590.00	\$ -
Enterprise value	\$449.77	Capcom Co. Ltd.	\$128,993.73	Cannon, Gregory	Principal Accounting Office	•	\$ -	\$ -
Market Capitalization	\$520.68	Capacini Co. Eta.	ψ120,000.10	Chiang, Lisa	Director of Quality Assuran		\$ -	\$ -
Daily volume	1.07	Soul and Vibe Interactive Inc.	\$1.03	Historical Performance	Director or equality Assuran	. φ	Ψ	Ψ .
Shares outstanding	107.80	NHN Entertainment Corp.	\$1,123,728.35	TIISCOTICAL T ETTOTINATICE	GLUU	Peers	Industry	All U.S. firms
_	96.92				6.7%	1 6613		
Diluted shares outstanding		Ubisoft Entertainment SA	\$1,827.31	Growth			6.3%	6.0%
% shares held by institutions	48.00%	Current Capital S		Retention Ratio	0.0%		42.7%	61.6%
% shares held by insiders	0.61%	Total debt/market cap	0.00%	ROIC			20.0%	11.8%
Short interest	16.27%	Cost of Borrowing	0.00%	EBITA Margin	-6.1%	#VALUE!	14.0%	13.7%
Days to cover short interest	6.45	Interest Coverage		Revenues/Invested capital	51.5%		135.2%	202.3%
52 week high	\$7.60	Altman Z	2.92	Excess Cash/Revenue	#DIV/0!	#VALUE!	38.4%	18.5%
52-week low	\$3.27	Debt Rating	AAA	Unlevered Beta	1.95	2.27		0.95
5y Beta	2.91	Levered Beta	1.08	TEV/REV	1.2x		2.8x	2.4x
6-month volatility	64.00%	WACC (based on market value weig	8.22%	TEV/EBITDA	12.5x	18.9x		11.38
-		ing Surprises		TEV/EBITA	13.9x	28.6x		15.4%
	Revenue	EBITDA	Norm. EPS	TEV/UFCF	0.1x		22.48	26.8x
Last Quarter	19.5%	188.6%	450.0%		Non GAA	AP Adjustments		
Last Quarter-1	-1.9%	26.2%	54.5%	Operating Leases Capitalization	100%	Straightline	10 ye	ears
Last Quarter -2	5.9%			R&D Exp. Capitalization	100%	Straightline	10 y	
Last Quarter -3	19.0%	161.5%	200.0%	Expl./Drilling Exp. Capitalizatio		N/A	Ň	
Last Quarter -4	8.5%	463.6%	0.0%	SG&A Capitalization	0%	N/A	Ni	
East Quarter 1	0.074	Proforma Assumptions	0.074	Todal (Supraination	· · · · · · · · · · · · · · · · · · ·	Forecasted Pro		
		Period	Rev. Growth	Adj. Op. Cost/Rev	Revenue		Invested capital	UFCF
Operating, Cash/Cash	0.0%	LTM	111%	69%	\$223.15	\$6.47	\$363.56	\$6.47
Unlevered Beta	1.04	LTM+1Y	33%	67%	\$296.16	\$24.66	\$418.65	-\$30.43
Rev/Invested Capital	140.0%	LTM+2Y	19%	66%	\$351.48	\$40.91	\$450.23	\$9.33
Continuing Period Revenue Gro		LTM+3Y	18%	66%	\$416.25	\$56.27	\$477.96	\$28.54
Long Term ROIC	11.7%	LTM+4Y	-4%	65%	\$399.68	\$55.25	\$514.88	\$18.33
Invested Capital Growth	Equals to Maintenance	LTM+5Y	5%	65%	\$417.87	\$58.93	\$548.27	\$25.54
Justified TEV/REV	3.9x	LTM+6Y	9%	65%	\$454.03	\$64.90	\$589.67	\$23.51
Justified TEV/EBITDA	15.6x	LTM+7Y	7%	65%	\$487.60	\$70.80	\$618.42	\$42.04
Justified TEV/EBITA	19.5x	LTM+8Y	7%	65%	\$407.00 \$519.41	\$76.42	\$645.74	\$42.04 \$49.10
Justified TEV/UFCF	30.8x	LTM+9Y	6%	65%	\$515.41 \$549.99	\$81.92	\$672.69	\$45.10 \$54.97
Justined TEVPOPCP	30.0x	E I I MI+3 I	97. Yaluatio		\$043.33	\$01.32	\$612.63	\$04.57
	ROIC	VACC	EVA	Enterprise Yalue	Total Debt	Other claims	Equity	Adjusted Price
LTM	1.8%	8.2%	-\$23.40	\$863.41	\$0.00	-\$12.78	\$876.19	\$8.40
LTM+IY	6.8%	8.3%	-\$6.43	\$982.53	\$0.00	-\$20.41	\$1,002.95	\$9.62
LTM+2Y	9.8%	8.4%	\$6.07	\$1,069.23	\$0.00	-\$70.35	\$1,139.57	\$10.88
LTM+3Y	12.5%	8.5%	\$18.98	\$1,142.96	\$0.00	-\$142.43	\$1,285.40	\$12.20
LTM-4Y	11.6%	8.6%	\$15.09	\$1,216.08	\$0.00	-\$201.47	\$1,417.56	\$13.46
LTM+5Y	11.4%	8.7%	\$14.96	\$1,293.61	\$0.00	-\$269.49	\$1,563.10	\$14.83
LTM+6Y	11.8%	8.8%	\$17.80	\$1,384.10	\$0.00	-\$316.01	\$1,700.12	\$16.05
LTM+7Y	12.0%	8.9%	\$19.09	\$1,463.16	\$0.00	-\$372.38	\$1,835.53	\$17.33
LTM+8Y	12.4%	9.0%	\$21.52	\$1,544.38	\$0.00	-\$435.55	\$1,979.93	\$18.69
LTM+9Y	12.7%	9.1%	\$24.00	\$1,627.34	\$0.00	-\$505.90	\$2,133.23	\$19.79
	Base	Monte Carlo Simulation A Stdev		Max	Distribution		Carlo Simulation I	
Banania Variation						Mass		
Revenue Variation	0	10%	N/A	N/A	Normal	Mean est.	\$8.40	\$9.62
Op. Costs Variation	0	10%	N/A	N/A	Normal	σ(ε)	\$0.11	\$0.25
Market Risk Premium	6%	N/A	5%	7%	Triangular	σ(ε) adjusted pric_	\$8.07	\$8.87
Long term Growth	5%	N/A	3×	11%	Triangular	Current Price	\$4.83	40.77
Terminal Yalue	0	0.1	N/A	N/A	Normal	halysts' median es	t.	\$6.77

Remy Fields



Huntsman Corp.

NYSE:HUN Sector: Industrials

BUY

Price Target: \$31.56

Key Statistics as of 03/23/2015

Market Price: \$21.62
Industry: Chemicals
Market Cap: \$5.27 B

52-Week Range: \$20.36 – 29.33

Beta: 1.85

Thesis Points:

- Bearish catalysts becoming exhausted
- Lower oil prices will benefit long-term because of lower benzene raw material

Analyst:

Compelling valuation

Company Description:

Huntsman Corporation, together with its subsidiaries, manufactures and sells differentiated organic and inorganic chemical products worldwide. The company operates in five segments: Polyurethanes, Performance Products, Advanced Materials, Textile Effects, and Pigments and Additives. The Polyurethanes segment offers polyurethane chemicals, including methyl diphenyl diisocyanate, propylene oxide, and many more products that are used to produce rigid and flexible foams, as well as coatings, adhesives, sealants, and elastomers. The Performance Products segment provides amines, carbonates, surfactants, benzene, other performance chemicals, and technology licenses. The Advanced Materials segment offers liquid and solid epoxy resins; specialty resin compounds; cross-linking, matting, and curing agents; and epoxy, acrylic, and polyurethane-based formulations. The Textile Effects segment provides textile chemicals and dyes. The Pigments and Additives segment offers titanium dioxide, functional additives, color pigments, timber treatment, and water treatment chemicals. The company's products are used in various applications, including adhesives, aerospace, automotive, construction products, personal care and hygiene, durable and non-durable consumer products, electronics, medical, packaging, paints and coatings, power generation, refining, synthetic fiber, textile chemicals, and dye industries. Huntsman Corporation was founded in 1970 and is based in Salt Lake City, Utah.

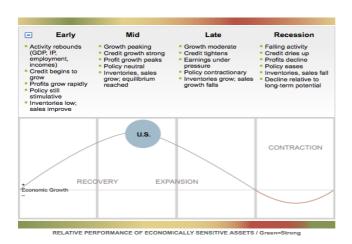




Huntsman Corporation is a BUY because they are currently undervalued. During the drop in oil prices their stock followed the plunge due to concern about global growth in their industry. They have also had to battle other bearish catalysts, such as, negative TiO2 trends, and the diminishing price of the Euro. Although these negative catalysts are not good for the company it has given investors an opportunity to invest in a healthy company at a much better value.

Industry Overview

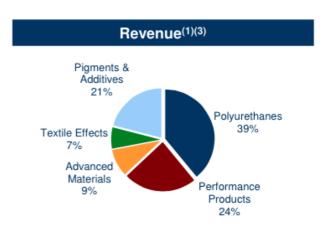
The industrial's industry is made up of airfreight services, commercial services, Aerospace & Defense, Rail Road Freights, Electrical Equipment, Construction, Airlines, and Highways/Rail Tracks. Generally speaking, this sector is made up of companies that produce goods used for construction and manufacturing. The sector tends to have a high correlation with the S&P 500 because its performance is based off the supply and demand in the construction and manufacturing of goods, which makes it a cyclical sector. If consumers are spending more, it is positive for this sector because they will be producing more goods for consumers to buy.



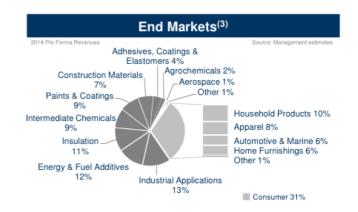
I would argue that the US's business cycle is in the mid part of the business cycle because of its growth, policies, and credit. Industrials tend to outperform the market during this period in the business cycle. Considering the above it is a good time to invest in this industry. Now the question is which company in the industry will be the best investment.

Huntsman Corporation has positioned themselves well

in the Industrials industry with a diversified portfolio of products. As a large chemical supplier to the industrials, Huntsman has positioned their products in the market so that each can bring in a significant amount of revenues. This strategic positioning leaves their highest percentage of revenues at 39% coming from their Polyurethane products. Below you can see the diversified product line.



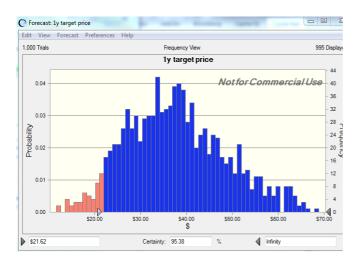
The diversified product line decreases the volatility of the company's revenue, which decreases the risk for an investor. If Polyurethanes revenues are slowing down due to something negative in that market it is not likely to be negatively affecting their performance products, or advanced materials. This is because of the different uses each of their products are used for. In addition, Huntsman Corporation sells their products to many different companies within industrials. Huntsman sells to more than just automakers, and aerospace, they are well diversified throughout the industrial sector.





Downside Risk

Before going into the thesis, I would like to address the downside risk of the company. The key risks that investors must consider are possible weaker economic trends and unexpected raw material inflation. economic conditions were to weaken, it would decrease HUN's revenues because consumers would not be spending as much. This decrease in spending would affect automakers, airlines, and other customers of Huntsman's products. This would lead to many people in the industry to lower forecasts, including HUN. These lower revenue expectations would also hurt EBITDA margin, and all the above would cause HUN's stock price to drop. Investors must also pay attention to the price of raw materials. HUN's EBITDA margins would decrease if raw materials saw. After running a Monte Carlo simulation the chance of the stock price being lower in a year then where it is now is only 5%. If it were to be lower, there is an opportunity that it could go as low as \$17, which would be about a 20% drop in the stock price.



Bearish Catalysts are becoming exhausted

Huntsman Corporation is undervalued because of the bearish catalysts it has faced over the past five months. The short interest reached about 15% at one point, which shows that the buy-side was worried about this company's ability to operate. The sell-side research has recently turned positive on the outlook of the stock. It is possible that the buy-side analysts will slowly follow the views of the sell-side researchers.

Furthermore, investors have been worried about the impact that the diminishing Euro will have on HUN's revenues. Investors have overestimated the damage the diminishing Euro will have on HUN's sales. Although Europe is 30% of revenues HUN has recently provided the public with a currency impact appraisal, which suggests EBITDA will come in 40 million below expectations. Although this is not good for the company it had already been priced in too heavily, which brought their stock down lower than it should be. Moreover, HUN has announced that they will be raising prices in Europe to lessen the damage done by the diminishing Euro. HUN has confidently said they are willing to walk away from business if customers are not willing to pay the price. HUN is in a good position to do this because their customers need their product to keep their own products efficient.

Lower Oil Prices

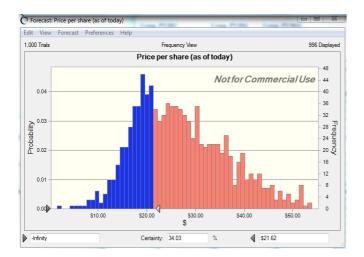
Although HUN's stock price has followed the price of oil on its downward spiral, they are likely to actually benefit due to the lower prices. HUN buys oil derivatives across its portfolio, such as, benzene, butane, propylene, and other oiled based petrochemicals. A key benefit that HUN will realize is the decreased price in benzene, which has been catching up to the decline in crude pricing. It has fell as much as \$2 per gallon, which would be a huge savings for HUN considering they purchase 200 million gallons of benzene a year. It will take some time for HUN to realize these savings because of the lag between seeing spot changes, raw material purchases, consumption, the conversion of benzene to the MDI products, sale of the products, and then the sales influx to the income statement. HUN should begin realizing this by the end of Q1 or early Q2.

Compelling Valuation

Investors are not using a fair multiple for valuing HUN at this point. Many investors are low balling their multiple because of the limited amount of FCF Huntsman Corporation creates. The poor FCF performance has been because of HUN's reoccurring restructuring initiatives. They have been beneficial for EBITDA, but to increase their EBITDA they have spent over 330 million for restructuring. These restructuring costs, which have led to poor CF is the reason for the poor multiples HUN has been given. As FCF improves



the stock is likely to receive a better multiple, which will increase the stock price. It is also important to consider that when looking at their multiples they seem to be trading in the realm of commodities, when they deserve to be trading at multiples of their specialty peers. They should be trading with their specialty peers because 75% of their EBITDA is from their specialty businesses, which are performing well and should be trading closer to peers' multiples.



The simulation above shows that there is a 65% chance that HUN's stock price is underpriced. Based off my estimates the fair value of this stock is \$24.53 (estimates can be seen on the last page).

Forecasts

In conclusion, the Huntsman Corporation is a BUY because they are currently undervalued. EV/EBITDA is in line with commodities, while they should be priced at a higher multiple with their specialty peers. This multiple has been brought down because of the poor performance of cash flows, which has been weak due to restructuring. This is soon to end and with the cash flows beginning to rise the multiple will follow. HUN's has had many bearish catalysts that are becoming exhausted, such as, the diminishing Euro, concerns of global growth, and negative TiO2 trends. HUN's has the ability to see a big turnaround this year after being down 4.7% last year. HUN's is also down 27% from their high in the past year. This has occurred because of the drop in oil prices and the other bearish catalysts mentioned earlier on. The turnaround will be possible because HUN's will be saving money because the decreasing price of oil has brought down the price of benzene, which is a product that Huntsman Corporation Finally, based off a simulation the buys in bulk.

downside of the stock is at 20%, while the upside is around 50%. The risk/reward of this stock is intriguing based off the valuation.



		CENTER FO	R GLOBAL	FINANCIAL ST	TUDIES			
Huntsman Corporation	HUN	Analyst Remy Fields	Current Price \$21.62	Intrinsic Value \$24.53	Target Value \$31.56	Divident Yield 2%	Target Return 48.34%	BULLISH
Gene	ral Info	Peers	Market Cap.		Man	nagement		
Sector	Materials	Eastman Chemical Co.	\$10,344.34	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014
Industry	Chemicals	Celanese Corporation	\$8,643.23	Huntsman, Jon	Founder and Executive Chairma	\$ 11,402,399.00	\$ 9,230,913.00	\$ -
Last Guidanœ	Feb-18-2015	E. I. du Pont de Nemours and Company	\$67,380.91	Huntsman, Peter	Chief Executive Officer, Presiden	\$ 13,795,100.00	\$ 10,560,155.00	\$ -
Next earnings date	NM	Ashland Inc.	\$8,857.61	Esplin, J.	Chief Financial Officer and Execu	\$ 2,761,253.00	\$ 2,335,922.00	\$ -
Mark	tet Data	The Dow Chemical Company	\$54,677.93	Hankins, Anthony	Chief Executive Officer of Asia P			\$ -
Enterprise value	\$9,821.82	Axiall Corporation	\$3,061.77	Turner, Simon	Division President of Pigments &			\$ -
Market Capitalization	\$5,302.82	PolyOne Corporation	\$3,393.82	Wright, Randy	Principal Accounting Officer, Via			s -
Daily volume	0.58	Westlake Chemical Corp.	\$8,942.67	Historical Performance	Timapai Masanting Smari, Vid	,	· ·	Ÿ -
Shares outstanding	245.05	Trinseo SA	\$959.79	Tistoricai i citorinanee	HUN	Peers	Industry	All U.S. firms
O .								
Diluted shares outstanding	246.00	FMC Corp.	\$7,986.25	Growth	3.7%	2.1%	5.6%	6.0%
% shares held by institutions	89.59%	Current Capital S	tructure	Retention Ratio	37.1%	34.7%	38.3%	61.6%
% shares held by insiders	4.14%	Total debt/market cap	53.00%	ROIC	20.3%	14.0%	18.9%	11.8%
Short interest	5.05%	Cost of Borrowing	4.85%	EBITA Margin	6.4%	10.6%	11.6%	13.7%
Days to cover short interest	3.46	Interest Coverage	406.83%	Revenues/Invested capital	151.0%	89.9%	164.8%	202.3%
52 week high	\$29.33	Altman Z	1.94	Exœss Cash/Revenue	4.9%	9.5%	12.8%	18.5%
52-week low	\$20.36	Debt Rating	CCC	Unlevered Beta	1.10	1.50	1.21	0.95
5v Beta	2.40	Levered Beta	2.56	TEV/REV	0.8x	1.2x	1.2x	2.4x
*	37.29%		9.85%					
6-month volatility	0.1.=2.7.	WACC (based on market value weights)	9.85%	TEV/EBITDA	8.2x	8.9x	8.6x	11.3x
		rning Surprises		TEV/EBITA	14.2x	12.2x	12.5x	15.4x
	Revenue	EBITDA	Norm. EPS	TEV/UFCF	21.9x	51.8x	23.3x	26.8x
Last Quarter	-0.5%	-3.9%	-10.8%		· · · · · · · · · · · · · · · · · · ·	AP Adjustments		
Last Quarter-1	-0.8%	-1.7%	13.2%	Operating Leases Capitalization	100%	Straightline	10 ye	
Last Quarter -2	2.7%	5.6%	22.9%	R&D Exp. Capitalization	100%	Straightline	10 ye	ars
Last Quarter -3	-2.1%	8.0%	7.5%	Expl./Drilling Exp. Capitalization	n 0%	N/A	N/.	A
Last Quarter -4	0.1%	6.5%	29.7%	SG&A Capitalization	0%	N/A	N/.	A
		Proforma Assumptions	P 0 1	A 11 O O (17)		Forecasted Profit		LIEGE
		Period	Rev. Growth	Adj. Op. Cost/Rev	Revenue	NOPLAT	Invested capital	UFCF
Operating. Cash/Cash	25.0%	LTM	5%	88%	\$11,578.00	\$390.59	\$8,730.55	\$390.59
Unlevered Beta	1.50	LTM+1Y	104%	88%	\$23,608.92	\$1,132.61	\$11,321.56	-\$1,458.40
Rev/Invested Capital	90.0%	LTM+2Y	3%	88%	\$24,314.05	\$1,306.66	\$11,051.96	\$1,576.25
Continuing Period Revenue Growth	2.0%	LTM+3Y	3%	88%	\$24,982.52	\$1,422.91	\$11,242.00	\$1,232.88
Long Term ROIC	14.9%	LTM+4Y	3%	88%	\$25,767.00	\$1,519.57	\$11,554.06	\$1,207.50
Invested Capital Growth	Equals to Maintenance	LTM+5Y	2%	87%	\$26,343.38	\$1,596.72	\$11,849.77	\$1,301.00
Justified TEV/REV	0.8x	LTM+6Y	2%	87%	\$26,896.27	\$1,625.14	\$12,498.06	\$976.85
Justified TEV/EBITDA	8.9x	LTM+7Y	2%	87%	\$27,453.72	\$1,655.38	\$12,880.16	\$1,273.28
Justified TEV/EBITA	14.2x	LTM+8Y	2%	87%	\$28,016.66	\$1,682.01	\$13,266.59	\$1,295.59
Justified TEV/UFCF	22.0x	LTM+9Y	2%	87%	\$28,585.81	\$1,703.28	\$13,631.15	\$1,338.72
Justined 111 V/ Of Gr	ELIVA	DIM: 71	Valuati	9171	\$20,303.01	91,703.20	913,031.13	91,330.72
	ROIC	WACC	EVA	Enterprise Value	Total Debt	Other claims	Equity	Adjusted Price
LTM	4.5%	9.8%	-\$469.03	\$12,340.06	\$5,206.00	\$1,274.00	\$5,860.06	\$25.49
LTM+1Y	13.0%	10.0%	\$337.72	\$15,928.63	\$6,171.41	\$2,237.92	\$7,519.30	\$32.31
LTM+2Y	11.5%	10.2%	\$152.93	\$16,565.64	\$6,171.41	\$1,248.46	\$9,145.77	\$37.79
LTM+3Y	12.9%	10.3%	\$292.64	\$16,451.25	\$6,171.41	\$636.27	\$9,643.57	\$40.13
LTM+4Y	13.5%	10.4%	\$360.55	\$16,739.23	\$6,171.41	\$98.86	\$10,468.96	\$43.63
LTM+5Y	13.8%	10.5%	\$393.58	\$17,103.22	\$6,171.41	-\$498.94	\$11,430.75	\$47,54
LTM+6Y	13.7%	10.6%	\$387.05	\$17,640.13	\$6,171.41	-\$771.90	\$12,240.61	\$50.94
LTM+7Y	13.2%	10.7%	\$325.69	\$18,143.31	\$6,171.41	-\$1,330.85	\$13,302.74	\$55.26
	13.1%	10.7%	\$323.69 \$307.72	\$18,615.83	\$6,171.41 \$6,171.41	-\$1,908.17	\$13,302.74 \$14,352.58	\$59.62
I TM+8V	1.7.170	10.770	\$307.72 \$273.47	\$18,615.85 \$19,120.71		-\$1,908.17 -\$2,529.63	\$14,352.58 \$15,478.92	\$59.62 \$63.17
LTM+8Y		10.00/		\$19.120.71	\$6,171.41	-32,529.65	\$15,4/8.92	\$65.1/
LTM+8Y LTM+9Y	12.8%	10.8%		4,				1c.
		10.8% Monte Carlo Simulation As Stdev		Max	Distribution		Carlo Simulation Res	ults 1y-Target
LTM+9Y	12.8% Base	Monte Carlo Simulation As Stdev	sumptions Min	Max		Monte	Carlo Simulation Res Intrinsic Value	1y-Target
LTM+9Y Revenue Variation	12.8% Base 0	Monte Carlo Simulation As Stdev 10%	sumptions Min N/A	Max N/A	Normal	Monte Mean est.	Carlo Simulation Res Intrinsic Value \$25.49	1y-Target \$32.31
LTM+9Y Revenue Variation Op. Costs Variation	12.8% Base 0 0	Monte Carlo Simulation As Stdev 10% 10%	sumptions Min N/A N/A	Max N/A N/A	Normal Normal	Monte Mean est. σ(ε)	Carlo Simulation Res Intrinsic Value \$25.49 \$0.32	\$32.31 \$0.25
LTM+9Y Revenue Variation Op. Costs Variation Market Risk Premium	12.8% Base 0 0 6%	Monte Carlo Simulation As Stdev 10% 10% N/A	Min N/A N/A 5%	Max N/A N/A 7%	Normal Normal Triangular	Mean est. $\sigma(\epsilon)$ 3 $\sigma(\epsilon)$ adjusted price	\$25.49 \$0.32 \$24.53	1y-Target \$32.31
LTM+9Y Revenue Variation Op. Costs Variation	12.8% Base 0 0	Monte Carlo Simulation As Stdev 10% 10%	sumptions Min N/A N/A	Max N/A N/A	Normal Normal	Monte Mean est. σ(ε)	Carlo Simulation Res Intrinsic Value \$25.49 \$0.32	\$32.31 \$0.25



LGI Homes, Inc.

NASDAQ: LGIH

Sector: Consumer Discretionary

BUY

Price Target: \$21

Key Statistics as of 3/25/2015

Market Price: \$15.20

Industry: Homebuilders
Market Cap: \$301.7 M
52-Week Range: \$12.21 - \$22.21

Beta: N/A

Thesis Points:

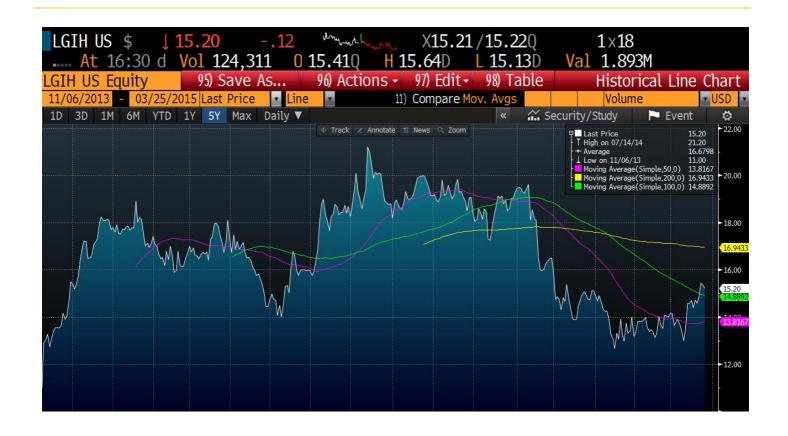
• The market has overreacted regarding the impact of the energy sector

Analyst: Kevin Akbaraly

- The market has not taken into consideration the new mortgage rules announced in late 2014
- LGI Homes' stock price is currently undervalued compared to its peers

Company Description:

LGI Homes was founded in 2003 and operates as a homebuilder. The company designs, constructs, markets, and sells homes in the U.S. by focusing particularly on entry-level homebuyers. LGIH launched its Terrata Homes brand division in November 2014 with the objective of expanding its business into a higher-price range bracket segment with expected sales prices of \$350,000. The homebuilding company also started its geographic expansion from its Texas-based operations into Arizona, Florida, Georgia, New Mexico, South Carolina and Colorado markets. As of December 2014, the company has sold 8,500 homes since inception and is headquartered in The Woodlands, Texas.





LGI Homes is a homebuilding company based in Texas with \$388M of revenues. The company focuses on entry-level homebuyers and has seen high growth coupled with high margins relative to peers over the past two years. However, the market seems to have overestimated the impact of declining energy prices on LGIH's expected revenues, and has not taken into consideration the new mortgage policies announced in late 2014. For these reasons, LGI Homes is currently undervalued compared to its peers, creating a good opportunity for investors to enter into a long position. A BUY is therefore recommended on LGI Homes with a 1-year target price of \$21.00, representing a 38% upside potential from current market price.

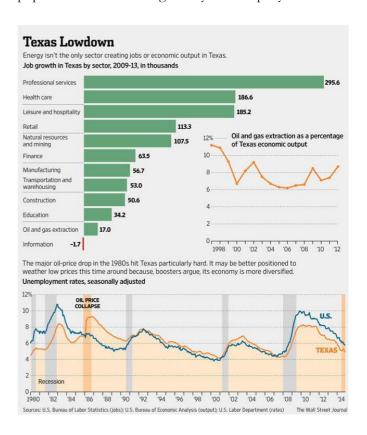
Overreaction over the Energy Sector in Texas

LGI Homes is headquartered in Texas, where the majority of the company's operations are concentrated. Texas is qualified as highly dependent on the energy sector due to its activities related to oil and gas extractions. With 14.2 million barrels extracted daily over Q3 2014, the U.S. remains the biggest worldwide oil producer since 2012, followed by Saudi Arabia (11.7 million barrels per day) and Russia (10.5 million barrels per day) with Texas accounting for the largest producing state within the U.S. Oil prices have dropped more than 50% since its mid-2014 level, and some companies operating within the sector are expected to struggle for survival in the near future. Following this trend, the market anticipates a reduction in revenues generated by the sector, followed by a cut-off in production, which in turn could lead to potential lay-offs and could worsen the situation even further. As a result, the market is anticipating lower demand over all durable goods within Texas because households are expected to see a reduction in their disposable incomes. By comparing LGIH's stock price to crude oil prices over the past two years, it is clear that LGIH's market price has been highly impacted by the drop in oil prices.

Siena Market Line 4th week of March 2015



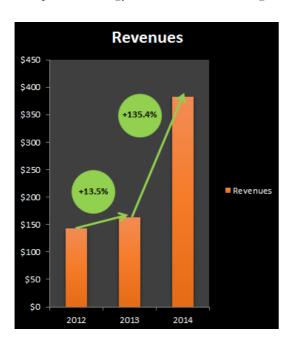
The impact that oil prices has had on LGIH over the past 6 months can therefore be a good opportunity for investors if the market's reaction turns to be overestimated. In order to rationalize the energy sector's impact on the company, we need first to take into consideration that Texas is becoming less and less dependent on the commodity market. Texas's regional GDP totaled \$138.8 billion in 2013 including \$16.2 billion coming from the mining sector, representing only 11.7% of total GDP. Additionally, the number of jobs that is related to resource extraction activities accounts for less than 3% of total employment within the state. As a result, the impact the energy sector has on Texas' economy concerns only a small portion of the population that is not targeted by the company.



The last report issued by the Bureau of Economic Analysis on March 25, 2015 says that Texas is ranked



second in the nation in term of population size with 27M inhabitants. The report also shows that per capita personal income increased to \$45,426 in 2014, in line with the national average of \$46,129. Looking at revenue growth rates over the period oil prices have been declining, LGIH has generated \$92.5M in Q3 2014, representing a 13% decline compared to Q2 2014, but still 143% higher on a YoY basis compared to Q3 2013. LGIH generated \$108.4M in Q4 2014 representing a 17% growth compared to Q3 2014, and 65% compared to Q4 2013. These results show that LGI Homes remained effective at selling homes during a period surrounded by uncertainties, which also shows the limited impact the energy sector has on LGIH's growth.



Finally, LGI Homes started an aggressive geographic expansion over the past two years. It should help the company lower its dependency on the Texan market in the future. In 2013, LGIH expanded its operations in Florida (Florida Division), Georgia (Southeast Division), and Arizona (Southwest Division) prior to its IPO. In 2014, the company acquired Oakmont Home Builders, Inc. and added the Charlotte market into its Southeast Division. In parallel, the company entered into the Denver Market for its Southwest Division and finally launched its Terrata Homes Division in San Antonio. The company closed its first Terrata deal during January 2015, but the management team has stated that they do not expect this segment to exceed 10% of LGIH's revenues over the year.

Siena Market Line 4th week of March 2015



The company's management team believes that it could expand its business model into new markets in order to diversify its revenue sources by focusing on high-growth markets. LGIH is therefore becoming less and less dependent on Texas, and even though the majority of the company's revenues are still generated from the state, investors can expect this to change in a near future. Indeed, the company's home closings represented 84% of Texas total home closings in 2013. In 2014, this percentage lowered to only 66.8% whereas the company still managed to grow this number by 16% on a YoY basis, in Texas only. The company has already reduced the portion of its inventory that was concentrated in Texas, and as of 2014, LGIH had less than one home available for sale out of two located outside of Texas.

	Texas S	egment
	2014	2013
Home Closing	66.85%	83.98%
Home Owned	68.43%	66.97%
Home Controlled	45.24%	75.87%
Total # of Home	12,697	10,706
Inventory	43.65%	54.24%
Inventory Value	43.86%	49.84%

Sanctioned for Convertible Notes

During November 2014 LGI Homes issued \$85M of convertible notes due in 2019 at an interest rate of 4.25% with a conversion price of \$21.52. The market has negatively reacted to the announcement, and LGIH's stock price dropped 8.5% on the following trading day. This sanction directly relates to the dilution impact the convertible notes would have on shares held by current investors. However, the company repurchased at the same time 1M shares at a market price of \$16.55. This repurchase program can partly offset the effect of dilution linked to newly convertible notes issued, and



appeared to be a good investment for the company. Another reason why the market has sanctioned LGIH following this announcement is a lack of transparency regarding the use of this capital. Indeed, the company only provided little information. The company stated that the debt would be used for lands and lots acquisition in addition of other general purposes. One option for the homebuilding company could be for merger and acquisition purposes as well. As LGIH starts to be more aggressive on its geographic expansion, the company might use a portion of this capital to expand its business more effectively in other areas. Nevertheless, the issuance of debt seems to be justified regarding the company's strategy over the coming years in order to build the required inventory to expand. In addition, the company has stated that they would increase their average prices in certain areas, which in turn would help the company increase its operating margins even further. Even though the issuance of debt seems to be justified to finance LGIH's high growth, the level of debt has been substantially increased from 16% to 49.3% of total assets. On the other hand, LGIH's times interest earned ratio decreased only to 10.3 times in 2014 from 13.4 times in 2013. As a result, this new level seems to be under control, and should lower investors' concerns in coming years.

Easing of Mortgage Rules

During November 2014, Fannie Mae and Freddie Mac announced a government-sponsored program that would ease the availability of mortgages within the U.S. Indeed, the government wanted to bring more people in the housing market after it felt that the economy has recovered enough to support such a program. The largest government mortgage entities have announced that they would lower the required down payments to 3 to 5% from the previous level of 20%. However, they also stated that they would need banks and private mortgage insurance companies to support the new program in order to limit risks of default from homebuyers. This new program should reduce credit scores required for mortgage eligibility from 742 to 620. Based on 2012's data, this would result in the addition of 15% to 20% of the American population into the housing market. Due to the population targeted by this program, LGI Homes is therefore well positioned to benefit from this increase in potential customers as the company targets specifically entry-level home buyers.

Additionally, due to the concerns raised by the energy sector within Texas, the market has not reacted to the announcement, meaning that investors can still benefit from current market price to enter into a long position.

LGI Homes' stock price is undervalued

LGI Homes has shown to be efficient at growing its revenues over the past years. Revenues increased by more than 135% from 2013 to 2014, with a compounded annual growth rate of 54% from 2010 to 2014 while competitors grew by 22.4% and the market retuned only 10% over the same period. The company has a strong focus on high growth markets, and expands strategically into these areas in order to increase shareholders' returns. Also, the rate at which the homebuilding company is converting renters into homeowners is increasing, showing the effectiveness of the company at growing the business. Moreover, LGI Homes has the highest margins amongst its competitors. Gross margins are about 27% while the average among peers is about 19.6%, followed by EBITDA margins of 11.5% compared to an average of only 6.5% for the company's peers. It might be related to the way the company acquires lots of lands, generally outside urban areas because of a cheaper price. This performance is even more impressive when we consider the fact that LGIH does not construct its homes by itself but outsources the construction process to third parties. The company has an inventory turnover of 1.5 times compared to an average of 1.0 times, meaning LGI Homes is able to convert its whole inventory into sales within only 243 days while competitors need on average 365 days. Despite all these good results, LGIH's stock price seems to lag behind the homebuilding market. Comparing the company's stock price to the S&P Homebuilders index, it is easy to see that LGIH has been left behind recently due to concerns related to energy prices.





LGIH's trailing Price Earnings ratio is 7.65 compared to an average of 20.3 over the past 2 years and 22.85 for peers. The forward P/E ratio is 5.71 times compared to an average of 12.75 times for its peers. EV/EBITDA is 11.13 times compared to an average of 20.80 times over the past 2 years for LGIH, and 19.92 times for its peers. Finally, EV/Revenues is 1.25 times compared to 2.13 times over the past two years and 1.44 times for the company's peers. Based on these multiples, we can also conclude that LGIH is significantly undervalued at the current price and should see a rebound in the near term.

Conclusion

To conclude, a BUY is recommended on LGI Homes (LGIH) with a 1-year target price at \$21, a potential upside of 38% based on the current price. The valuation of the homebuilder has been made using a proforma displayed on the last page of this report. The market is currently overestimating the impact of the energy sector on LGIH's return prospect. Following investors' preoccupations, the market did not react to the announcement made by Fannie Mae and Freddie Mac on new mortgage policies. However, the new program could company to expand its operations the geographically more effectively than expected. LGIH is expected to grow rapidly with high operating margins compared to its peers and offers investors an investment opportunity at the current market price.



													K OI IVI
LGI Homes, Inc.	LGIH	Kev	in Akbaraly	Curi	ent Price: 15.2	Lower Bound Intrin	sic Value: \$16.1	Lower Bound 1y	-Target: \$21.1	Dividend Yield:	0%	39.03%	
General In	nfo Consumer Discretionary		Market I	ata e 400 4	3 Symbol	NAME	Mada Car	TEV/EBITDA	Peers P/B	EBITDA Margin	Total Debt/TEV	EBIT/Int. Exp.	Altman 2
dustry	Household Durables		Enterprise value Market Capitalization	\$486.4 \$3,068.8		WCI Communities Inc.	Market Cap \$612.97	18.6x	1.4x	EBITDA Margin	1 otal Debt/TEV	32.3x	2.60
escription: LGI Homes Inc. designs constructs markets and	sells homes in Texas Arizona	, Florida, Georgia, New	Daily volume	0.3281		Century Communities, I	\$419.96	15.7x	1.1x	11%	37%	1,400.0x	2.62
exico, Colorado, North Carolina, and South Carolina, the Uni	nited States. The company was i	founded in 2003 and is	Shares outstanding	19.85	11102.000	Cintary Communicis, 1	¥117.70	10.74	****	11/0	5770	1,100.04	2.02
eadquartered in The Woodlands, Texas.			Diluted shares outstanding	21.20	NYSE:HOV	Hovnanian Enterprises 1	\$518.79	19.9x	NM	6%	85%	1.3x	1.59
			% shares held by institutions	105.9%	6								
			% shares held by insiders	18.8%	6 NYSE:BZH	D 11 1101.1	\$458.90	29 5x	1.8x	4%	84%	1.0x	1.65
			Short interest Days to cover short interest	10.8%	NYSE:BZH	Beazer Homes USA Inc.	\$458.90	29.5x	1.8x	4%	84%	1.0x	1.65
			52 week high	\$22.2	1 NYSE:MHO	M/I Homes, Inc.	\$571.89	12.0x	1.2x	7%	45%	6.4x	2.94
			52-week low	\$12.2		,							
			5y Beta		Peers' Median	_	\$518.79	18.6x	1.3x	7%	45%	6.4x	2.60
	.,		6-month volatility	44.03%	LGIH		\$301.70	10.2x	1.7x	12%	44%		3.21
rofessional	Managemer Title	nt Comp. FY2012	Comp. FY2013	Comp. FY201	4	LGII	I	<u> 1</u> P	Performance eers	Ind	ustry	All U.S	. firms
ipar, Eric	Chairman and Chief	\$ 550,206.00				Last	10y Med.	Last	10y Med.	Last	10y Med.	Last	10y Me
nider, Michael	President and Chief	\$ 607,538.00		\$ 1,048,844.00		8.1%	20.4%	6.18%	-3.19%	48.90%	10.50%	11.03%	11.85%
Ierdian, Charles	Chief Financial Officer,	\$ 316,889.00	\$ 969,974.00	\$ 638,637.00	0	12.2%	0.0%	6.16%	2.06%	10.02%	9.92%	13.64%	13.67%
ntton, Margaret	Chief Administrative	\$ -	\$ -	s -	Imputed Rev./Invested cap.	1.03	1.06	1.09	1.02	1.01	1.02	1.72	2.02
aton, Rachel	Chief Marketing Officer Executive Vice President	\$ -	\$ -	\$ -	Excess Cash/Total Cash Total Cash /Rev.	8.18% 8.18%	N/A 8.18%	15.02% 15.02%	26.00% 26.00%	12.87% 13.49%	16.04% 17.09%	23.11% 32.95%	18.48%
ipar, Jack Current Capital Structure		ı .	Past Ear	ning Surprises	Total Casti / Rev.	Last Guidance M		Next earnings date			ning Call Transcript:		30.207
otal debt/market cap	44.43%	1	Revenue	EBITDA	Norm. EPS	LGI Homes, Inc. reported u	naudited consolidated	l earnings results for the fo	urth quarter and full yes				nes of \$108.420
Cost of Borrowing	4.79%	Last Quarter	0.2%	0.0%	-2.7%	compared to \$65.453 million	n a year ago. Operatin	ig income was \$11.529 mil	lion compared to \$3.506	million a year ago. Income	before income taxes was	\$111.574 million comp	ared to \$9.917
nterest Coverage		Last Quarter-1	2.7%	-14.9%	0.0%	year ago. Net income was \$7						31 million a year ago. D	luted earnings 1
Ocht Rating	BBB	Last Quarter -2	6.1%	10.2%	39.4%	was \$0.34 compared to \$0.34	a year ago. Adjusted	earnings were \$8.0 million,	atter excluding \$0.5 milli	on of non-recurring expens	es, net of tax.		
y Beta VACC (based on market value weights)	0.90	Last Quarter -3 Last Quarter -4	3.5% 7.9%	1.8%	56.3%								
VACC (based on market value weights)	0.17.	nuing Period Assur	110.7.4	0.076	0.076	For the full year, the compa							
Ioney market rate as of today	0.54%	Risk-Free rate	2.7%	LT Op. Costs/Rev	90.0%	before income taxes was \$43				.211 million compared to \$3	21.737 million a year ago.	Net income attributable	to owners was
annual increase (decrease) in interest rates	0.10%	Op. Cash/Rev.	0.00%	LT WACC	9.8%	million compared to \$22.327	million a year ago. Di	luted earnings per share wa	s \$1.33.				
field Spread acceleration	1.2	Op. Cash/Cash	0.0%	LT Term ROIC	7.9%	The company offers the follo	wing guidance for 201	5. The Company believes i	will have between 50 ar	nd 55 active selling commun	nities at the end of 2015.	lose between 2.800 and	3.200 homes du
Iarginal Tax Rate	37.5%	LT Growth	3.0%	Growth in PPE	Equals to Maintenance	year, and generate EPS betw							
LT convergence estimates: wei		om the stability of		an/[maxmin.], or	estimated based on the "uniqu				competitive rivalry, th				Capitaliza
	Rev./Ca Last	pital 10y Median	LT Imputed	Growth 10y Median	LT Op. Cos Last	sts/Rev. 10y Median	Unleve Last	ered Beta 10y Median	TEV/Rev.	Multiples (10Y Histor TEV/EBITDA	rical Median Value) TEV/EBITA	TEV/UFCF	Operating L
GIH	1.03	1.06	140.3%	140.3%	87.6%	87.93%			1.8x	15.0x	15.2x		Straightli
cers	1.09	1.02	23.7%	-9.1%	93.5%	97.27%	1.26	1.12	1.2x	17.3x	20.5x	4.6x	10 years
rimary Industry	1.01	1.02	17.4%	1.9%	90.1%	92.96%	1.18	0.91	1.4x	17.4x	21.0x	29.4x	R&D Ex
ndustry	1.45	1.49	10.7%	4.7%	89.8%	90.96%	1.15	1.14	1.2x	11.3x	14.5x	26.7x	100%
ndustry Group ector	1.66 2.15	1.76	10.3%	6.2% 5.6%	87.2% 84.9%	87.52% 84.87%	1.05	1.13 1.05	1.4x 1.6x	11.1x 10.3x	14.0x 14.3x	28.3x 23.9x	Straightli
All U.S. Firms	1.72	2.16	6.6%	6.0%	80.4%	81.20%	0.98	0.95	2.4x	10.3x 11.3x	14.3x 15.4x	25.9x 26.8x	10 years Expl./Drillin
GDP	N/A	N/A	3.9%	3.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0%
LGIH long-run estimate	1.06	i	3.00%		90.009		1	1.15	1.4x	17.4x	21.0x	29.4x	Straightli
	TT/2014	FT.0045	F77/2046	TT/2045	Explicit Period Assum		F712020	TT/2024	FT 10000	TT/2022	F7.000.4		10 years
Growt	FY2014 th 135.4%	FY2015 30.0%	FY2016 25.0%	FY2017 20.0%	FY2018 18.0%	FY2019 16.0%	FY2020 12.0%	FY2021 8.0%	FY2022 5.0%	FY2023	FY2024 3.0%	to ∞ 3.0%	SG&A
Op.Costs/Re		87.6%	88.0%	88.5%	88.5%	88.5%	88.5%	88.5%	88,5%	88.5%	88,5%	90.0%	Straightli
WAC		8.65%	8.72%	8.83%	8.95%	9.10%	9.25%	9.38%	9.52%	9.63%	9.73%	9.8%	10 years
					ation						400%		
NOPLA'	LTM T \$30.2	LTM+1Y \$39.0	LTM+2Y \$47.0	LTM+3Y \$54.0	LTM+4Y \$63.8	LTM+5Y \$74.0	LTM+6Y \$82.9	LTM+7Y \$89.5	LTM+8Y \$94.0	LTM+9Y \$96.8	2508/		
Invested capita		\$39.0 \$483.3	\$47.0 \$595.8	\$54.0 \$708.2	\$63.8 \$829.2	\$955.9	\$82.9 \$1,069.3	\$89.5 \$1,152.0	\$1,207.7	\$1,242.9	33070	01 000	6x + 11.54%
ROI		10.5%	9.7%	9.1%	9.0%	8.9%	8.7%	8.4%	8.2%	8.0%	300%	y = 21.89%	ex + 11.54%
UFC		-\$71.46	-\$65.58	-\$58.38	-\$57.23	-\$52.69	-\$30.57	\$6.92	\$38.25	\$61.71	0.07/4		
EV		\$8.72	\$5.97	\$1.66	\$0.42	-\$1.66	-\$6.18	-\$11.56	-\$16.36	-\$20.00	250%		4
Terminal valu		2/12/0/	0704 44	2052.07	0007.04	24.420.00	24.274.20	04 070 00	24.440.55	\$1,404.32			y = 21.37%x
Enterprise value (mid-year adj. Total Deb		\$613.96 \$216.10	\$731.41 \$235.96	\$852.07 \$277.26	\$987.24 \$306.22	\$1,130.89 \$333.45	\$1,264.28 \$333.45	\$1,372.32 \$333.45	\$1,460.55 \$333.45	\$1,534.99 \$333.45	200%	- ////	
Minority Interes		\$0.00	\$233.96	\$0.00	\$0.00	\$333.45 \$0.00	\$333.45 \$0.00	\$333.45 \$0.00	\$333.45 \$0.00	\$0.00		11//	
Preferred Equit		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	150%		10.17%x - 46.839
Capitalized Operating lease		\$13.36	\$14.69	\$15.88	\$16.75	\$17.46	\$21.29	\$22.06	\$22.59	\$22.92	[//	
PV of Unfunded Pension Plan Liabilitie		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	100%	/	
Dilutive impact of options,warrants, and converts		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
Other claims on operating asset		\$0.00 \$29.64	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$2.64	\$0.00 \$44.73	\$0.00 \$119.45	\$0.00 \$220.50	50%		
Non-operating cash and LT investment Equity valu		\$29.64 \$414.14	\$0.00 \$480.76	\$0.00 \$558.93	\$0.00 \$664.26	\$0.00 \$779.98	\$2.64 \$912.18	\$44.73 \$1,061.54	\$119.45 \$1,223.96	\$220.50 \$1,399.11	L 7\		
Equity valu Shares outstandin		\$414.14 \$19.85	\$480.76 \$19.85	\$558.95 \$19.85	\$19.85	\$19.85	\$912.18 \$19.85	\$1,061.54 \$19.85	\$1,223.96 \$19.85	\$1,399.11 \$19.85	0%		
Price per share as of 3/26/201		\$21.70	\$25.13	\$29.38	\$34.81	\$40.94	\$47.67	\$55.34	\$63.67	\$70.49	500/		
	Monte C	arlo Simulation As	sumptions			Monte (Carlo Simulation R	esults			-50%	Ac. Growt	
_	Base	Stdev	Min	Max	Distribution	-	Intrinsic Value	1y-Target			-100% -	Ac. Growt Revenue C	h in Invested Cap
Revenue Variatio Op. Costs Variatio		10.0%	N/A N/A	N/A N/A	Normal Normal	Mean est.	\$16.38 \$0.11	\$21.70 \$0.19				NOPLAT	Growth Trend
Op. Costs Variatio Market Risk Premiur		10.0% N/A	N/A 5.0%	N/A 7.0%	Normal Triangular	$\sigma(\epsilon)$ 3 $\sigma(\epsilon)$ adjusted price	\$0.11 \$16.05	\$0.19 \$21.13	\overline{CCC}	TIC_	-150%	Invested C	apital Growth Tr
Long term Growt		N/A	-9.1%	140.3%	Triangular	Current Price	\$15.20	921.13		3FS			A A A
Terminal Valu		10.0%	N/A	N/A	Normal	Analysts' median est.		\$20.75			8 8 8 8 8	'ઇઇઇઇઇઇ	ರರ್ಕ್ಟಿ

Hugo Perrin Consumer Goods



Mannatech, Inc.

NASDAQGS:MTEX

BUY Price Target: \$31.10

Key Statistics as of 2/12/2014

Market Price: \$19.39

Industry: Personal Products

Market Cap: \$51.89 M 52-Week Range: \$11.51-31.97

Beta: -0.57

Thesis Points:

 Revenue growth based on both products innovation and higher demand for already existing merchandise.

Analyst:

Sector:

- Multilevel network marketing becomes more popular and should continue to grow
- The firm focuses on emerging markets that will bring revenues for the next five years.

Company Description:

Mannatech, Incorporated develops and sells health products. Its health products include nutritional supplements, health solutions for children, and additional nutrients. The company also offers weight and fitness products; and topical, skin care, and anti-aging products. The company markets and sells its products through network marketing in the United States, Canada, and Mexico; Austria, the Czech Republic, Denmark, Estonia, Finland, Germany, the Republic of Ireland, Namibia, the Netherlands, Norway, South Africa, Spain, Sweden, and the United Kingdom; and Australia, Japan, New Zealand, the Republic of Korea, Singapore, Taiwan, and Hong Kong. Mannatech, Incorporated was founded in 1993 and is headquartered in Coppell, Texas.





Recently, Mannatech has launched new products that customers are currently enjoying. As a consequence, the company has increased its sales. That growth in revenue is a key driver for the reduction of operating costs and therefore, value creation. Also, Mannatech is working under the multilevel network system, a new system embraced by a greater number of companies to sell their products. Few years ago, the firm faced charges on some of its products and their ability to cure diseases; the firm ended up paying damages. However, this decision did not bring negative effects on the firm's sales since. Another idea to consider is the idea that the firm has been targeting the Asian market as it appears to be the most promising market for the next coming years, followed by Europe. This geographic strategy should help at sustaining positive revenue growth.

Product Segmentation

Currently, Mannatech is selling its product under one segment. This segment gathers nutritional supplements, skin care and anti-aging products, and weight management and fitness products. It is also important to mention that such products are not approved by the FDA. However, this does not question their efficiency.

Health products:

The firm offers several nutritional supplements that enhance the overall health and wellness. Some of their products target children and bring health solutions and other nutrients designed to keep one's body system at optimal level. Mannatech offers a wide range of products among which are the Ambrotose products, one of the company's flagships.

Weight and Fitness:

Those products are designed to curb appetite and burn fat, build lean muscle tissue and support recovery from overexertion.

Skin Care and Anti-Aging:

Mannatech offers products based on more than 30 botanical ingredients designed to give the skin a "youthful appearance".

As of 2014, a small range of products accounted for the majority of the firm's sales.

Siena Market Line 2nd week of February 2015

		20:	14	2013			
	S	ales by	% of net	Sales by		% of net	
	F	roduct	sales	F	product	sales	
Advances Ambrotose	\$	63,791	33.60%	\$	59,894	33.70%	
Ambrotose	\$	10,895	5.70%	\$	10,939	6.20%	
Uth Skin Rejuvenation	\$	13,431	7.10%	\$	2,406	1.40%	
NutriVerus	\$	10,530	5.50%	\$	10,964	6.20%	
Total	\$	98,647	51.90%	\$	84,203	47.50%	

On the chart above, four different products accounted for a majority (51.9%) of the total sales in 2014. The two different products that generated the most sales are both based on Ambrotose, referring to the Health products segment. It has to be noticed that both products represented around the same volume of sales compared to the prior year. Nutriverus, which accounts for 7% of the total revenue, also belongs to the same family as the Ambrotose products. One of the products that saw a significant increase in sales is the Uth Skin Rejuvenation, products that is part of the Skin Care and Anti-Aging family. This product was launched in late 2013 and the projected growth for this type of product is significant, as this will be explained later.

Key statistics

In Millions of USD	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
12 Months Ending	2010-12-31	2011-12-31	2012-12-31	2013-12-31	2014-12-31
Market Capitalization	47.7	11.7	14.9	45.0	71.3
- Cash & Equivalents	21.6	18.1	14.4	20.4	28.0
+ Preferred & Other	0.0	0.0	0.0	0.0	0.0
+ Total Debt	2.5	2.2	1.7	1.2	1.8
Enterprise Value	28.6	-4.2	2.2	25.8	45.1
Revenue, Adj	228.1	200.7	173.4	177.4	190.1
Growth %, YoY	-21.3	-12.0	-13.6	2.3	7.1
Gross Profit, Adj	98.0	162.2	138.8	141.3	151.7
III Margin %	43.0	80.8	80.0	79.7	79.8
II EBITDA, Adj	0.0	-6.2	3.8	6.9	14.4
Margin %		-3.1	2.2	3.9	7.5
III Net Income, Adj	-10.6	-20.7	-1.4	3.2	6.5
Margin %	-4.7	-10.3	-0.8	1.8	
EPS, Adj	-4.00	-7.80	-0.52	1.18	2.40
Growth %, YoY	39.4	-95.0	93.3		103.4
Cash from Operations	4.0	-2.9	-1.5	8.5	9.4
Capital Expenditures	-1.8	-0.8	-0.4	-0.6	-1.5
III Free Cash Flow	2.2	-3.7	-1.9		7.9

Name	Revenue Growth	Gross Margin	Op Margin	Return On Assets	Return On Equity	Return On Capital
Average	63.57%	69.78%	-1.33k%	-17.97%	-33.07%	-35.84%
100) MANNATECH INC	7.13%	79.82%	6.70%	10.52%	23.70%	

The first table above depicts the firm's key statistics during the last four fiscal years. As for the revenue, after having decreased from 2010 to 2012, they are back up 2.3% and 7.1% respectively in 2013 and 2014. Along with this increase in revenue, Mannatech has been able to increase its EBITDA margin from negative 2.2% in 2011 to a positive 7.5% in 2014. Even if those margins can look somehow small, Mannatech is currently outperforming its peers in terms of gross margin, return on assets and return on equity.



While the operating expenses increased from \$136.57 million to \$138.989 million, or 1.8%, sales increased by 7.1%, triggering the idea that the company is becoming more profitable when it succeeds at generating additional revenue.

Revenue:

The company's revenue is based on sales of individual products, sales of the starter and renewal packs, and shipping fees.

In Q3 2013, the firm's initiated a loyalty program where customers would have a year to redeem points earned for products. This new program significantly contributed for the increase of revenue in 2014. Indeed, during 2014, the firm recognized \$17 million revenue and deferred \$21.2 million (net deferral of \$4.2 million), while the Mannatech recognized \$1.9 million and deferring \$7.3 million, resulting in a net deferral of \$5.4 million.

Without the launch of the Uth Skin Care product and the creation of the loyalty program, revenue would have increased only by \$0.1 million, or 0.05%. Those results prove that the firm is now currently able at generating revenue and increasing its EBITDA margin.

As mentioned earlier, even if Mannatech relies significantly on four flagships products (52% of sales), the company is still able to diversify and expand its market share.

Sales channels

Mannatech believes in a singular business plan where it sells its products and packs through a network of independent associates and members. In 2014, the firm relied on 230,000 independent associates and members in 24 different countries. By adopting this method, the firm thinks that it is cost effective and allows them to effectively introduce its products and communicate information about its business to the global marketplace. Hence, that method allows cutting on some of the firm's cost in marketing, advertising and products' promotion. Also, this system gives freedom to the clients who purchase for themselves or resale, which can increase the number of associates and clients overtime. All of the company's associates are independent contractors; Mannatech's revenue highly depends upon the retention and productivity of independent associates to maintain a long-term growth. Recently, the company introduced new incentives, such as travel incentives, which should motivate the associates' ambition and wish to achieve their goals. Even if the numbers of contractors declined by 6% to 230,000, the company has been able to increase its sales, mainly thanks to the loyalty program, as mentioned above. A recent survey provided by Business From Home ranked Mannatech's contractors at the 97th position in the industry in terms of compensation plans. Mannatech is constantly changing its methods when things are not efficiently working. Even if the network marketing method has some detractors, it has gained in popularity and some major companies have considered this system, such as Herbalife, Avon and Amvay, all being Mannatech's competitors. Those multinational companies have relied on that technique for several years and they look financially healthy and stable. Also, it is to consider that this system has bad reputation mainly due to the unsuccessful contractors' comments. This system is nothing close of being illegal; the products are sold at a given price following a certain demand and supply. Also, on February 24th, the Court dismissed claims stating that Herbalife was acting as an illegal pyramid scheme.

Scams Allegations

As many companies in this industry, Mannatech is currently being criticized for its products and their reliability. However, in February 2015, the company announced its 100th patent, which is exceptional for a company in the nutritional supplement company. The firm's financial statements show that Mannatech has only invested 0.8% of its sales in R&D, and never more than 5% of its sales during the last 10 years. Also, the company is constantly publishing its research in several websites, among which are the US National Library of Medicine and renowned public conferences. In early 2009, Mannatech and its former CEO, Samuel L. Caster have been charged with orchestrating an unlawful marketing scheme that exaggerated their products' health benefits. According to the state's enforcement action, "marketing materials falsely claimed that Mannatech's dietary supplements could cure and treat Down Syndrome, cystic fibrosis, cancer and other serious illnesses." Also, such products did not receive an approval by the US Food and Drug Administration to be labeled as a drug. Even if those allegations can send negative signals to the company's clients, the recent growth in sales seems to prove that clients did not truly consider this outcome. Also, Mannatech is currently stating in its website that any products that are sold are not approved by the FDA.



Geographic Sales

	20	14	2013			
North America	\$ 81	42.50%	\$	82	46.30%	
Asia/Pacific	\$ 92	48.60%	\$	80	45.30%	
EMEA	\$ 17	8.90%	\$	15	8.40%	
Total	\$ 190	100%	\$	177	100.00%	

In terms of geographic sales, Asia/Pacific became the number one region for the firm's sales in 2014, ahead of North America which represented 42.50% of the firm's sales, versus 48.6% for Asia/Pacific. Sales in the North America declined by 1.22% while sales increased by 15% in Asia. Another region that saw a significant increase in sales is EMEA, with an increase of 13%. Consequently, as the company has been hurt by the appreciation of the dollar in FY 2014, it is expected that the sales growth might be hurt for the coming year. Therefore, sales growth should not be as close as they were last year, being at 7.1%. Following that increase in the firm's sales, Mannatech has been able to reduce its inventories by 25% on a year over year basis. Accordingly, Mannatech has significantly decreased its Cash Conversion Cycle (CCC) to 69.57 days, versus 100.3 days in 2013. This follows the trend that started in 2011. The firm is slightly reversing to its pre-2011 period with a CCC of 53.5 days.

Growth forecasts

As for the forecasts, a report from Lucintel has estimated the revenue for skin care products to reach \$102.3 billion by 2018. The reports states that due to the increase in living standards and increase in spending power, this will drive the demand for newer skin care products. The demand will be consistent for anti-aging, anti-wrinkling and sun care products, where the two first families of products are sold by Mannatech. Over the next five years, it is predicted that Asia Pacific, followed by Europe are expected to drive growth. Consequently, the fact that Mannatech is currently significantly increasing its sales in Asia is a sign that the company is following the current market trend. In September 2014, the firm expanded into Asia with the opening of a new associate business center in Singapore. This move follows the opening in March 2014 of two new training centers in Korea, which demonstrates the firm's commitment to expand its global business and specifically target Asia.

Another report provided by Euromonitor International states that there is a steady real term growth of 7.2% to be expected to continue to 2017, with global health and wellness sales on the way to hit record high of \$1 trillion by 2017.



		CENTER FO	R GLOBAL	FINANCIAL ST	TUDIES			
Mannatech, Incorporated	MTEX	Analyst Hugo Perrin	Current Price \$19.60	Intrinsic Value \$26.56	Target Value \$31.08	Divident Yield 0%	Target Return	BULLISH
Genera	d Info	Peers	Market Cap.	Ψ20.30		agement	30.3770	
Sector	Consumer Staples	Lifevantage Corporation	\$78.09	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014
Industry	Personal Products	Reliv International, Inc.	\$14.74	Sinnott, Robert	Chief Executive Officer and Chie		\$ 429,410.00	\$ -
Last Guidanœ	(Invalid Identifier)			Bala, Alfredo	President	\$ 321,592.00	\$ 348,659.00	\$ -
Next earnings date	NM			Robbins, Marlin	Co-Founder, Director and Memb	\$ 2,638,216.00	\$ 2,460,902.00	\$ -
Market	t Data	Natural Alternatives International Inc.	\$37.36	Nicholls, S.	Chief Financial Officer and Princi	\$ - :	\$ -	\$ -
Enterprise value	\$25.27			Oberlton, Jerome	Chief Information Officer and V	\$ - :	\$ -	\$ -
Market Capitalization	\$51.51	Avon Rubber p.l.c.	\$241.60	Spinell, Gary	Senior Viœ President of Finance	\$ -	\$ -	\$ -
Daily volume	0.01			Historical Performance				
Shares outstanding	2.68				MTEX	Peers	Industry	All U.S. firms
Diluted shares outstanding	2.71	Lifeway Foods Inc.	\$348.99	Growth	-174.5%	8.2%	7.3%	6.0%
% shares held by institutions	18.11%	Current Capital	Structure	Retention Ratio	5.5%	127.4%	49.6%	61.6%
% shares held by insiders	35.82%	Total debt/market cap	6.94%	ROIC		2.8%	14.1%	11.8%
Short interest	1.14%	Cost of Borrowing	0.00%	EBITA Margin	1.1%	7.0%	12.5%	13.7%
Days to cover short interest	1.53	Interest Coverage	0.0076	Revenues/Invested capital	483.9%	235.0%	256.9%	202.3%
52 week high	\$31.97	Altman Z	4.53	Excess Cash/Revenue	8.1%	8.3%	9.9%	18.5%
52-week low	\$11.51	Debt Rating	AA	Unlevered Beta	0.57	0.60	1.11	0.95
5y Beta	1.19	Levered Beta	1.40	TEV/REV	0.2x	1.2x	1.7x	2.4x
6-month volatility	102.03%	WACC (based on market value weights)	7.43%	TEV/EBITDA	4.8x	11.9x	10.4x	11.3x
0-month volatility		ening Surprises	7.4370	TEV/EBITA	6.3x	16.2x	12.1x	15.4x
	Revenue	EBITDA	Norm. EPS	TEV/UFCF	4.3x	20.3x	20.3x	26.8x
Last Quarter	0.0%	0.0%	0.0%	TEV/ CICI		P Adjustments	20.JX	20.03
Last Quarter-1	0.0%	0.0%	0.0%	Operating Leases Capitalization	100%	Straightline	10 y	earc
Last Quarter -2	0.0%	0.0%	0.0%	R&D Exp. Capitalization	0%	N/A	N/	
Last Quarter -3	0.0%	0.0%	0.0%	Expl./Drilling Exp. Capitalization		N/A	N/	
Last Quarter -4	0.0%	0.0%	0.0%	SG&A Capitalization	0%	N/A	N/	
Last Quarter	0.070	Proforma Assumptions	0.070	occi oapitaniatori	070	Forecasted Profit		
		Period	Rev. Growth	Adj. Op. Cost/Rev	Revenue	NOPLAT	Invested capital	UFCF
Operating. Cash/Cash	0.0%	LTM	7%	91%	\$190.08	\$5.76	\$36.88	\$5.76
Unlevered Beta	1.00	LTM+1Y	1%	92%	\$191.98	\$6.27	\$37.18	\$5.97
Rev/Invested Capital	250.0%	LTM+2Y	1%	92%	\$194.29	\$6.42	\$37.11	\$6.49
Continuing Period Revenue Growth	1.0%	LTM+3Y	1%	92%	\$197.20	\$6.51	\$37.14	\$6.47
Long Term ROIC	10.5%	LTM+4Y	1%	92%	\$200.16	\$6.56	\$37.12	\$6.58
Invested Capital Growth	Equals to Maintenance	LTM+5Y	1%	93%	\$202.16	\$6.55	\$37.16	\$6.51
Justified TEV/REV	0.5x	LTM+6Y	1%	92%	\$204.18	\$6.38	\$42.52	\$1.02
Justified TEV/EBITDA	7.0x	LTM+7Y	1%	92%	\$206.22	\$6.34	\$43.34	\$5.53
Justified TEV/EBITA	8.0x	LTM+8Y	1%	93%	\$208.29	\$6.29	\$43.88	\$5.74
Justified TEV/UFCF	10.0x	LTM+9Y	1%	93%	\$210.37	\$6.26	\$44.19	\$5.95
	ROIC	WACC	<u>Valuatio</u> EVA	on Enterprise Value	Total Debt	Other claims	Equity	Adjusted Price
LTM	15.6%	7.4%	\$3.02	\$82.43	\$1.75	\$6.29	\$74.39	\$28.75
LTM+1Y	17.0%	7.7%	\$3.45	\$83.15	\$1.75	-\$3.91	\$85.31	\$32.91
LTM+2Y	17.3%	7.9%	\$3.50	\$83.04	\$1.75	-\$14.90	\$96.19	\$36.86
LTM+3Y	17.5%	8.0%	\$3.55	\$82.42	\$1.75	-\$26.15	\$106.82	\$40.87
LTM+4Y	17.7%	8.1%	\$3.55	\$81.84	\$1.75	-\$37.76	\$117.85	\$45.00
LTM+5Y	17.7%	8.2%	\$3.53 \$3.53	\$81.18	\$1.75 \$1.75	-\$49.55	\$117.83 \$128.98	\$49.07
LTM+6Y	17.2%	8.3%	\$3.78	\$86.34	\$1.75	-\$52.97	\$137.55	\$52.01
LTM+7Y	14.9%	8.4%	\$2.84	\$86.48	\$1.75	-\$59.93	\$137.55 \$144.65	\$54.76
LTM+8Y	14.5%	8.5%	\$2.65	\$87.36	\$1.75	-\$67.36	\$152.96	\$57.91
LTM+9Y	14.3%	8.5%	\$2.53	\$88.24	\$1.75 \$1.75	-\$75.28	\$152.96 \$161.77	\$60.45
Binity	11.370	Monte Carlo Simulation A		¥00.21	Q1.75		e Carlo Simulation Re	
1	Base	Stdev	Min	Max	Distribution		Intrinsic Value	1y-Target
Revenue Variation	0	10%	N/A	N/A	Normal	Mean est.	\$28.75	\$32.91
Op. Costs Variation	0	10%	N/A	N/A	Normal	σ(ε)	\$0.73	\$0.61
Market Risk Premium	6%	N/A	5%	7%	Triangular	3 σ(ε) adjusted price	\$26.56	\$31.08
Long term Growth	1%	N/A	-175%	8%	Triangular	Current Price	\$19.60	
Terminal Value	0	0.1	N/A	N/A	Normal	Analysts' median est.		\$0.00

Matthew Darcy



Orchids Paper Products Company

Amex: TIS

Sector: Consumer Staples

BUY

Price Target: \$49.10

Key Statistics as of 3/12/2015

Market Price: \$26.57

Industry: Household Products

Market Cap: \$232.7 M 52-Week Range: \$22.76-32.75

Beta: .591

Thesis Points:

- Profit margins are projected to expand
- Historic multiple valuation suggests the stock is undervalued.

Analyst:

- The current price of this stock is unjustifiably low
- A Monte Carlo simulation shows no downside risk

Company Description:

Orchids Paper Products Company manufactures and sells tissue products, in the United States. These products include paper towels, toilet paper, and paper napkins. The company offers its products under Colortex, My Size, Velvet, Big Mopper, Linen Soft, Soft & Fluffy, and Tackle brands. After a recent acquisition of Fabrica de Papel San Francisco, the company now uses the brand names Virtue, Truly Green, Golden Gate Paper, and Big Quality. The products are considered the bargain brand. It also sells parent rolls, which are essentially a work in progress inventory, to other companies that converter these rolls to a finished product. The company claims there are significant barriers to entry for this industry, especially due to capital expenditures. The company sells to discount retailers, grocery stores, grocery wholesalers and cooperatives, convenience stores, janitorial supply stores, and stores in the food service market. Orchids Paper Products Company was founded in 1976 and is headquartered in Pryor, Oklahoma. The company is funded with 13% debt, and the stock has a 5.26% dividend yield.

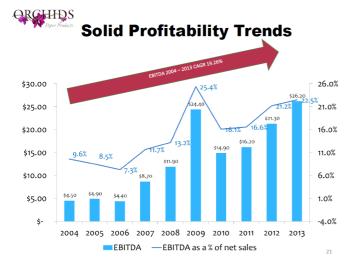




This company may not be the most exciting company on the American Exchange. However, the company is projecting expansion of its margins. More importantly, its stock is worth way more than its current price. The comparison between this stock's past and current valuation multiples, as well as the fundamental valuation of the stock price, show that this company is significantly undervalued. Using a Monte Carlo simulation, this stock has a minimum target price greater than its current price, which suggests there is no downside risk. All of these methods point to a BUY for Orchid Paper Products Company.

Margin Expansion

Orchid has seen a significant amount of margin expansion through 2013, and has plans to continue this trend. Shown below, the company's EBITDA margins have increased from 16% in 2010, to 22.5% in 2013.



The company has Capital Expenditures of about \$30 million in the past year, which has been invested in new machinery. Right now the company is in the process of switching their machines over. While the new machinery was being installed, the old equipment had to be demolished. These machines produce parent rolls, which are a form of work in progress inventory. This meant the company would have to purchase some of the parent rolls, to make up for its lack of production, which lead to a decrease in 2014 EBITDA margins, to 18.2%.

Once these machines are fully installed, however, the company's margins will be able to expand again.

In 2013, the company also had to purchase these parent rolls, in order to keep up with demand. The instalment of the new machinery will allow the company to produce for higher levels of demand.

Historical Relative Valuation

Historically, Orchid has been trading at a value that gives the company a P/E that is 2% higher than its competitors, and a P/BV that is 8% higher than competitors. These multiples are currently 11% and 8% lower than current competitor multiples, respectively. This suggests that the company is currently undervalued, because the company is trading at a discount to its competitors, when it usually trades at a premium. The same has happened with the companies implied enterprise value. The current multiples at which the company is trading, show that the company is trading at a discount compared to the past 2 years.

Currer	nt v	s 2Yr Ave	rage Histor	ical Pr	emium
Metric		Current	Hist Avg	Diff	# SD 3
Current Price					
1) NTM P/E		-11%	2%	-13%	-1.7
2) NTM EV/EBITDA		-27%	-22% *	-6%	-0.8
3) NTM EV/EBIT	₽	N.A.	N.A.	N.A.	N.A.
4) NTM EV/Rev		-11%	7%	-18%	-1.5
5) LF P/BV	₽.	-8%	8%	-16%	-1.9

Proforma Valuation

Using extremely conservative valuation assumptions, this stock has an intrinsic value of \$44.30, well above the current price of \$26.57. Even though this company has some potential risks, there is no justifiable way to value this stock at the market price. More detail on the key assumptions used can be found in the proforma shown below.

A Monte Carlo Simulation shows that the value of this company was most sensitive to revenue. So the question is. What assumptions for revenue give this stock a value near \$26.57?'

The value of the stock will not be reduced to its current market price, unless the company's revenue remains constant, through 2018. Alternatively, the revenue



growth must be stunted, at only 2%, for the next seven years. This is a completely unjustifiable assumption, because there is no data to suggest the possibility of such a poor performance.

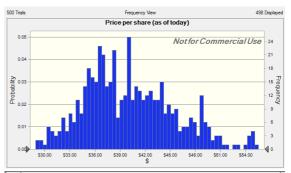
The assumption that causes the most variation in the value of this stock, second to revenue, is the assumption for operating margin. So the same question was raised for operating costs.

When the long term operating margin is reduced to a mere 10% from its current level of 18.2%, the stock becomes fairly valued. But this is another unjustifiable assumption. Remember that 2014 was a particularly bad year for Orchid, and the margins are actually projected to expand further, in future years. This means it is actually conservative, to value the company using its current margin. It is just too pessimistic to use a 10% margin; there is no way to justify such a large increase in operating costs to revenue.

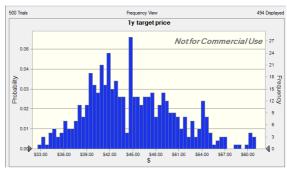
Limited Downside

When a Monte Carlo simulation is run on the valuation of this stock, the minimum intrinsic value is \$28.93, and the minimum one year target is \$32.65. This means, even with the most pessimistic concoction of inputs that excel could produce for this company (within a reasonable deviation from the key assumptions) Orchid still will produce a positive return of 28%. This is including the 5.26% dividend yield. The full output of this simulation can be seen in the column to the right.

This company's current price is so much lower than the stocks intrinsic value, that it has relatively no downside risk. That being said, the stock has been as low as \$22.76 within the last 52 weeks. So this can also be viewed as the stock's downside. In this event, the loss would only be 9.08%.



	Statistic	Forecast values
١	Trials	500
	Base Case	\$42.25
	Mean	\$40.23
	Median	\$39.68
	Mode	
	Standard Deviation	\$5.46
	Variance	\$29.80
	Skewness	0.5371
	Kurtosis	3.01
	Coeff. of Variation	0.1357
	Minimum	\$28.93
	Maximum	\$59.79
	Mean Std. Error	\$0.24



Statistic	Forecast values
▶ Trials	500
Base Case	\$46.98
Mean	\$44.97
Median	\$44.50
Mode	
Standard Deviation	\$5.90
Variance	\$34.81
Skewness	0.5240
Kurtosis	2.99
Coeff. of Variation	0.1312
Minimum	\$32.65
Maximum	\$65.78
Mean Std. Error	\$0.26



Potential Threats

This stock had seen a major price dip in august through September last year. The reason for this dip was a potential merger between Dollar General and Family Dollar. These are 2 of Orchids largest customers. The newly created company would account for around 60% of Orchids revenue, giving the new company an extreme amount of bargaining power over Orchid. This merger however, did not materialize, and the price began to recover. With the acquisition of Fabrica de Papel, Orchid took on another new customer, HEB which now accounts for 12% of revenue. Walmart is also contributing the strong costumer bargaining power, supplying 9% of Orchids revenue.

It is very unlikely for this threat to materialize ever, because family dollar is now being acquired by dollar tree. The acquisition will be completed on April 30th. There are no other large customers of Orchid that will benefit from a merger. The new threat to consider is that family dollar will begin using dollar tree's suppliers, instead of Orchid.

This would result in a reduction of the growth in revenue for year 2015 by 11%. After making this adjustment to the proforma, the fair value of this stock is still \$38.70, with a one year price target of \$42.80. It is also important to remember that this is an unlikely event, because family dollar will most likely keep their same suppliers. It is also possible that dollar tree take on orchid as a supplier, for their stores.

It is possible that when potential investors see this threat, the immediately move on to look at another company. It is important to remember, though, that when buying a stock, that the stock has a value. If there are future cash flows, then there is a value. Yes, this company has risks, but the potential return on its stock is more than enough to compensate for that risk.

Summary

When an investor sits down to find a stock, they often do not look towards consumer staples as a big payoff. This is even more correct for company's selling toilet paper. Often times, it is the unexpected, overlooked companies that can be purchased at the deepest discounts. When deciding whether to a purchase a stock, the most important consideration is what the value of the future cash flows is today. The value of the stock of Orchid Paper Products Company is \$49.10, and there is a chance to buy it today at \$26.57. The fact of the matter is, this stock is simply too cheap to justify. The company has decent income prospects, and barely any claims against operating assets. There is truly no reason it should be trading at such a low price. That is why Orchid is a BUY.



Last Guidance Oct-29-2014 Schroeder, Keith Chief Financial Officer and Secret \$ 390,056.00 \$ 393,078.00 Next earnings date NM Cascades, Inc \$673.67 Daniels, Dan Vice President of Sales & Marketi \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$			CENTER FO	R GLOBAL	FINANCIAL ST	ΓUDIES			
Source Commerce	Orchids Paper Products Company	is		\$26.68		\$49.14	5%	Target Return 89.45%	BULLISH
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Mach Capparisation \$2.50	· · · · · · · · · · · · · · · · · · ·				· · · · · · · · · · · · · · · · · · ·				\$ -
Dalyworker Oal)					Harper, Lonnie	Director of Engineering & Reliab	- \$	ş -	\$ -
Subsection Sub			The Procter & Gamble Company	\$224,169.34					
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Solution	-								All U.S. firms
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Slort interest	% shares held by institutions	38.90%	Current Capital Str	ructure	Retention Ratio	27.8%	27.0%	32.0%	61.6%
Short interest	% shares held by insiders	6.50%	Total debt/market cap	14.10%	ROIC	74.1%	4.5%	12.1%	11.8%
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Perform Assumptions									
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Sustified TEV/EBITA 14.1x	P '					,			\$20.53
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ROIC WACC EVA Enterprise Value Total Debt Other claims Equity	P '					_			\$21.86 \$23.10
ROIC WACC EVA Enterprise Value Total Debt Other claims Equity	Justified TEV/UPCF	14.2X	L1M+9Y			\$262.75	\$24.30	\$1/9.55	\$25.10
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Market Risk Premium 6% N/A 5% 7% Triangular 3 σ(ε) adjusted price \$44.33 Long term Growth 3% N/A 3% 14% Triangular Current Price \$26.68					•		Mean est.		\$49.92
Long term Growth 3% N/A 3% 14% Triangular Current Price \$26.68	1					Normal	σ(ε)		\$0.26
	Market Risk Premium	6%	N/A	5%	7%	Triangular	3 σ(ε) adjusted price	\$44.33	\$49.14
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	Terminal Value	0	0.1	N/A	N/A	Normal	Analysts' median est.		\$34.33

BUY

Sector: Industrial goods

Key Statistics as of 03/09/2015

Market Price: \$13.00

Industry: Aerospace/defense products

Market Cap: \$689.9

52-Week Range: \$9.03-\$17.28

Beta: 1.08

Thesis Points

- Opportunities for market growth
- Strong emphasis on advertising and R&D

Analyst:

Guillaume Valentin

Price Target: \$24.74

- Vertical integration
- U.S. Army opportunity
- Financial highlight

Company Description

Smith & Wesson, founded in 1852 and based in Springfield, Massachusetts, manufactures and sells firearms products in the United States and internationally. The company offers the following products: handguns (revolvers and pistols), long guns, hunting rifles, black powder firearms, handcuffs and firearms-related products and accessories. The company target both law enforcement and security agencies and individuals. The company also operates an online retail store to sell firearms accessories. The company sells its products under the Smith & Wesson, M&P, Thompson/Center Arms, and Performance Center brand names



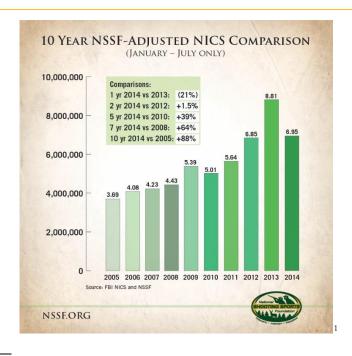
Smith & Wesson manufactures and sells firearms products top individual customers and professionals in the United States and internationally. The company is part of an industry than have been significantly growing over the past decade. In order to target new customers, the company had put an emphasis on research and development and marketing, by targeting women and first-time shooters. The company has recently pursued a vertical integration in order to be more competitive and more aggressively target its customers. Finally, the probability of a huge contract with the U.S. Army would eventually boost sales. With a very low P/E ratio, the company is currently undervalued.

Business overview



Smith & Wesson sells its products to both consumer and professional markets. For Q3FY2015 the company sold 89% of its products to the consumer market. In this market, firearms are used for sport and competition, personal defense, hunting and concealed carry. Consequently, the company sold 11% of its products to the professional customers. Professional customers use firearms for law enforcement, military, government. International sales are included in the professional segment. Finally, the company has two divisions in its business: firearms and accessories. The company sells its products under three brands: "Smith and Wesson" for sport, recreation, protection, and professional use. This brand has been on the firearms market for 162 years. Additionally, "M&P" brand is designed to be the most accurate, reliable, and ergonomically superior firearms brand. They are built to meet industry standards and their main qualities are to be durable and comfortable. Finally "Thompson Center" designs hunting and shooting guns since 1967. The company also offers limited edition and personalized "Smith and Wesson" and "M&P" firearms under its "Performance Center" division. The company is able to reach a broad range of customers thanks to the diversity of its products that can be used for many purposes.

Industry



¹ http://www.calgunlaws.com/us-gun-industry-sales-reflect-a-new-normal/

The chart above shows the total firearm sales in the United States from 2005 to 2014. We can see that sales rose at a compound annual growth rate of 6.54% from 2005 to 2014. Last year was an extraordinary one for firearm sales, a year unlike any other in the industry's history. In overall we can see a trend of almost uninterrupted rise over the past 10 years. Those who are hostile to firearms argue that people are no longer interested in guns because of the decline in sales in 2014. However, this was more attributable to a normalization of sales after an unusual volume of sales in 2013 said Steve Sanetti., NSSF President and CEO. According to a "Gallup Poll Social Series survey", the breakdown of top reasons for gun ownership is described as followed: Personal Safety/Protection - 60%, hunting - 36%, Recreation/Sport - 13%, Target Shooting - 8%. The company has also the opportunity to increase pistol sales to further align with the market. In 2010, the pistols to revolvers ratio was 1.4:1. This ratio is expected to increase to 4.1:1 in FY2014. It means that consumers are more and more interested in pistols. Smith and Wesson should take advantage of this market opportunity. The company should finally focus on two segments: new shooters and repeat customers. Concerning new shooters, in 2012, about 11% of sport shooters just began shooting in 2012. 18-34 year old age group makes up about $2/3^{rd}$ of new shooters. It means that these people might be interested in buying a gun for their own purpose. Additionally, 90% of people owning a handgun own multiple firearms. More importantly, those people own an average of 8.1 guns, which means that there is a huge market for gun renewal in the future. Smith & Wesson has the advantage to be one of the most famous brands in the firearm industry. It leads all firearm manufacturers in brand awareness. Even if the company is not the leader in sales in the industry, 1 out of 2 revolvers owned in the United States is a Smith & Wesson. It leads the industry in critical attribute ratings such as reliability, durability and accuracy, which makes it one of the best players to take advantage of these market opportunities. So even if Smith & Wesson is not ranked first in the number of units sold, it enjoys very strong brand recognition.

Strong emphasis on advertising and R&D

The company has a strong focus on research and development in order to develop new products and attract new customers in new markets. Smith & Wesson performs systematic review to track industry brands and consumer shifts, among its customers and new prospects. The company has a better understanding of its targeted customers thanks to proprietary information that portrays the average number and type of firearms owned by each individual. It results in a superior knowledge of the market and a better allocation of research and development capital spending. The company puts a lot of money in advertising in order to promote its brand.





Smith & Wesson is the sponsor of "Love at the First Shot", an NRA (National Rifle Association) series that focused on shooting sports for the first-timer. This series is presented by a Natalie Foster, which add brand recognition in both new shooters and women. The company also produces television and digital marketing campaigns geared toward women. The company is also the official provided of NRA-certified women instructors with eyes and ears protections. The NRA is nonprofit organization which aims to promote the constitutional right to keep and bear arms. It is the most powerful firearms organization in the United States and probably in the world. Therefore, Smith & Wesson is very well positioned in the market to promote its brand to prospects and existing customers. The company also designs guns that will be bought by women because of their specific look. Women currently represent 37% of new shooters versus 22% of established shooters. It means that in the long-run the proportion of women is established shooters is expected to increase. Smith & Wesson has understood this new market trend and is ready to take advantage of it. Additionally, as described below, the company has a strong emphasis on general research and development.

Smith & Wesson Holding Research and Development Expense (Quarterly) View Full Chart Chart



Smith & Wesson Holding Historical Research and Development Expense (Quarterly)

Above is the quarterly research and development spending of Smith and Wesson from 2011 to 2015. We can see that the company is spending more and more is R&D, with a record \$1.901 million for the quarter ending January 2015, even with a decline in sale during the last fiscal year. The company bases most of its new products development spending on market researches. The company performs surveys with firearm owners and purchase intenders. All of these results are benchmarked against database of prior sales in order to forecast future demand. The company develops new products each year. For 2015, it has come with 5 new M&P firearms that have different available customizations. Additionally, 2 new Thompson hunting rifles will be launched during 2015. The company constantly produces new products in order to comply with any new expectation from customers.

Vertical integration

In May 2014, Smith & Wesson has announced the purchase of "Deep River Plastics", a key polymer supplier. The deal was settled for \$24 M. Deep River Plastics delivers in-house custom plastic injection molding, rapid prototyping, and tooling that are extensively used in the manufacturing of firearms.² This purchase will incur several operational benefits for Smith and Wesson. It will increase flexibility in the production of firearms because the company will not rely anymore on a main supplier for the plastic used in its firearms. Additionally, it will lower production costs for the same reasons. By doing this vertical integration, the company reduces its risk within the supply chain. This acquisition is expected to have a positive impact in gross margin starting in Q32015. Smith & Wesson expects the payback period of this investment to be between 4 and 5 years, which is rather short. Additionally, Smith & Wesson successfully completed in December 2014 the acquisition Battenfeld Technologies for approximately \$130.5 million in cash. This company is the industry leader in providing hunting and shooting accessories. It will provide a broad and established platform for Smith & Wesson's firearms accessories business. This acquisition is expected to increase gross margin and generate cash for the company starting in FY2016. Additionally the company paid for all of these acquisitions in cash, which means that its stock is currently undervalued.

U.S. Army Opportunity

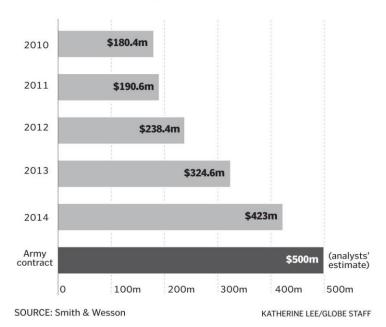
The Army announced that it will purchase new handguns anytime soon.³ The Army said it wants the new handgun to have "increased lethality, increased accuracy, improved ergonomics, and a higher degree of reliability/durability and shot larger bullets". This can possibly be the best professional contract Smith & Wesson could ever have. In the past, Smith & Wesson has supplied firearms to the FBI and US Marshals, so it has experience with government contracts. Its last federal contract came in 1996. The Army is expected to buy about 500,000 weapons as well as ammunition and accessories. It would include a rollover contract for years to come. The whole contract would amount to about \$500 million, which would be more than the total sales of Smith & Wesson for 2014, as presented in the chart below.

² http://ir.smith-wesson.com/mobile.view?c=90977&v=203&d=1&id=1911985

³ http://www.bostonglobe.com/business/2015/03/19/smith-wesson-takes-aim-army-pistol-contract/zfFukxIDJSkk4xg19zLuVK/story.html

Aiming for a big contract

A single contract to supply pistols to the US military could surpass an entire year's worth of handgun sales by Smith & Wesson.



Smith & Wesson is now waiting for the request of proposal. A request for proposal (RFP) is "a solicitation, often made through a bidding process, by an agency or company interested in procurement of a commodity, service or valuable asset, to potential suppliers to submit business proposals." Originally scheduled for January 2015, the RFP could come anytime soon. When the U.S. Army released a draft RFP during the fall 2014, Smith & Wesson expressed its interest by announcing a partnership with General Dynamics Corp, a defense company, to pursue this handgun deal. All of Smith & Wesson's competitors have remained silent about this opportunity. M&P pistols are strongly positioned to compete because they match all the U.S. Army requirements. If Smith & Wesson complete the deal its stock price will jump. Smith & Wesson has also the advantage of being an American company and a very famous brand in the gun industry.

Financials highlight

Smith & Wesson has a current P/E ratio of 13.68, which is significantly lower than the average 19.47 P/E of the market⁴ and the average of the industry, which means that the company is undervalued. Investors are not paying a lot considering the company's earnings. The company targets long-term gross margins in the range of 37% to 41% and long-term EBITDA above 20%. Since the company did not reach yet these targets it will lead to further profitability improvements in the near future and will drive the value of Smith & Wesson up.



The company has a 41.58% debt to equity ratio. This value has been rather steady over the past 2 years. Additionally, the company has 8.40% of WACC, which is rather low. It means that Smith & Wesson operates at its optimal capital structure, and tries to maximize the value of the company. Finally, the company had steady revenues growth over the past three years. It gross profit margin has increased. With the forecasted market opportunities in the near future, this is expected to increase further.

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⁴ http://www.multpl.com/

		CENTER FO	R GLOBAL	FINANCIAL ST	UDIES			
Smith & Wesson Holding	SWHC	Analyst GUILLAUME VALENTIN	Current Price \$13.01	Intrinsic Value \$22.18	Target Value \$24.74	Divident Yield	Target Return	BULLISH
Corporation General	1 Info	Peers	Market Cap.	\$22.18		agement	90.1770	
Sector	Consumer Discretionary	Sturm, Ruger & Co. Inc.	\$941.91	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014
Industry	Leisure Products	Callaway Golf Co.	\$745.68	Debney, P.	Chief Executive Officer, Presiden	•	•	*
Last Guidance	Mar-03-2015	Arctic Cat Inc.	\$492.76	Buchanan, Jeffrey	Chief Financial Officer, Principal			
Next earnings date	6/23/2015	Brunswick Corporation	\$4,828.65	Cicero, Robert	Chief Compliance Officer, Vice P			
Market		Remington Arms Company, LLC	ų 1,020.03	Smith, Mark	Vice President of Manufacturing		. ,	\$ 1,396,246.00
Enterprise value	\$930.51	Miroku Corporation	\$4,710.11	Sharp, Elizabeth	Vice President of Investor Relatio		. ,	\$ -
Market Capitalization	\$933.35	Polaris Industries Inc.	\$9,365.07	McPherson, Deana	Vice President and Corporate Co			s -
Daily volume	0.86	Colt Defense LLC	1.7	Historical Performance				
Shares outstanding	53.76	Vista Outdoor Inc.	\$2,710.49		SWHC	Peers	Industry	All U.S. firms
Diluted shares outstanding	55.01	Harley-Davidson, Inc.	\$12,853.94	Growth	45.6%	2.4%	5.2%	6.0%
% shares held by institutions	77.02%	Current Capital S		Retention Ratio	10.3%	12.3%	35.6%	61.6%
% shares held by insiders	1.80%	Total debt/market cap	29.55%	ROIC		31.1%	19.8%	11.8%
Short interest	17.87%	Cost of Borrowing	5.22%	EBITA Margin	10.1%	13.2%	10.1%	13.7%
Days to cover short interest	7.56	Interest Coverage	1027.86%	Revenues/Invested capital	261.2%	214.3%	220.5%	202.3%
52 week high	\$17.28	Altman Z	3.40	Exœss Cash/Revenue	11.0%	9.8%	12.4%	18.5%
52-week low	\$9.03	Debt Rating	BAA	Unlevered Beta	1.05	1.15	1.09	0.95
5y Beta	1.08	Levered Beta	1.38	TEV/REV	1.3x	1.6x	1.1x	2.4x
6-month volatility	41.34%	WACC (based on market value weights)	8.49%	TEV/EBITDA	9.2x	11.2x	10.8x	11.3x
, , , , , , , , , , , , , , , , , , , ,		rning Surprises		TEV/EBITA	13.1x	13.3x	12.1x	15.4x
	Revenue	EBITDA	Norm. EPS	TEV/UFCF	8.0x	18.7x	28.6x	26.8x
Last Quarter	4.6%	38.5%	66.7%			P Adjustments		
Last Quarter-1	1.9%	22.3%	28.6%	Operating Leases Capitalization	100%	Straightline	10 ye	ars
Last Quarter -2	-1.9%	10.6%	4.0%	R&D Exp. Capitalization	100%	Straightline	10 ye	ars
Last Quarter -3	4.2%	16.6%	10.0%	Expl./Drilling Exp. Capitalization		N/A	N/.	
Last Quarter -4	2.5%	10.0%	20.7%	SG&A Capitalization	0%	N/A	N/	A
		Proforma Assumptions				Forecasted Profit		
		Period	Rev. Growth	Adj. Op. Cost/Rev	Revenue	NOPLAT	Invested capital	UFCF
Operating. Cash/Cash	0.0%	LTM	-8%	75%	\$541.29	\$65.99	\$425.04	-\$119.19
Unlevered Beta	1.10	LTM+1Y	4%	73%	\$563.74	\$78.29	\$415.13	\$30.21
Rev/Invested Capital	100.0%	LTM+2Y	4%	71%	\$586.12	\$88.03	\$422.82	\$80.34
Continuing Period Revenue Growth	3.0%	LTM+3Y	3%	71%	\$606.16	\$94.81	\$429.61	\$88.03
Long Term ROIC	14.0%	LTM+4Y	3%	70%	\$625.51	\$100.50	\$435.97	\$94.14
Invested Capital Growth	Equals to Maintenance	LTM+5Y	3%	69%	\$644.98	\$105.72	\$445.00	\$96.68
Justified TEV/REV	1.5x	LTM+6Y	3%	69%	\$664.77	\$110.79	\$452.36	\$103.43
Justified TEV/EBITDA	8.0x	LTM+7Y	3%	69%	\$684.98	\$115.93	\$458.72	\$109.57
Justified TEV/EBITA	12.0x	LTM+8Y	3%	68%	\$705.70	\$121.22	\$464.92	\$115.02
Justified TEV/UFCF	12.0x	LTM+9Y	3%	68%	\$726.96	\$126.64	\$472.78	\$118.78
	ROIC	WACC	<u>Valuatio</u> EVA	Enterprise Value	Total Debt	Other claims	Equity	Adjusted Price
LTM	27.5%	8.5%	\$42.37	\$1,472.76	\$275.00	-\$28.41	\$1,226.17	\$23.14
			\$42.76	\$1,504.04	\$275.00	-\$118.79	\$1,347.83	\$25.49
LTM+1Y	19.0%	8.6%						\$27.79
LTM+2Y	21.2%	8.7%	\$52.40	\$1,563.20	\$275.00	-\$187.80	\$1,476.00	
LTM+2Y LTM+3Y	21.2% 22.4%	8.7% 8.8%	\$52.40 \$58.01	\$1,563.20 \$1,610.94	\$275.00	-\$264.79	\$1,600.73	\$30.12
LTM+2Y LTM+3Y LTM+4Y	21.2% 22.4% 23.4%	8.7% 8.8% 8.9%	\$52.40 \$58.01 \$62.65	\$1,563.20 \$1,610.94 \$1,655.74	\$275.00 \$275.00	-\$264.79 -\$348.29	\$1,600.73 \$1,729.04	\$32.51
LTM+2Y LTM+3Y LTM+4Y LTM+5Y	21.2% 22.4% 23.4% 24.2%	8.7% 8.8% 8.9% 9.0%	\$52.40 \$58.01 \$62.65 \$67.41	\$1,563.20 \$1,610.94 \$1,655.74 \$1,698.92	\$275.00 \$275.00 \$275.00	-\$264.79 -\$348.29 -\$434.97	\$1,600.73 \$1,729.04 \$1,858.89	\$32.51 \$35.05
LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y	21.2% 22.4% 23.4% 24.2% 24.9%	8.7% 8.8% 8.9% 9.0% 9.1%	\$52.40 \$58.01 \$62.65 \$67.41 \$71.02	\$1,563.20 \$1,610.94 \$1,655.74 \$1,698.92 \$1,744.45	\$275.00 \$275.00 \$275.00 \$275.00	-\$264.79 -\$348.29 -\$434.97 -\$529.29	\$1,600.73 \$1,729.04 \$1,858.89 \$1,998.74	\$32.51 \$35.05 \$37.56
LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y	21.2% 22.4% 23.4% 24.2% 24.9% 25.6%	8.7% 8.8% 8.9% 9.0% 9.1% 9.2%	\$52.40 \$58.01 \$62.65 \$67.41 \$71.02 \$74.89	\$1,563.20 \$1,610.94 \$1,655.74 \$1,698.92 \$1,744.45 \$1,788.10	\$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00	-\$264.79 -\$348.29 -\$434.97 -\$529.29 -\$630.78	\$1,600.73 \$1,729.04 \$1,858.89 \$1,998.74 \$2,143.88	\$32.51 \$35.05 \$37.56 \$40.27
LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y	21.2% 22.4% 23.4% 24.2% 24.9% 25.6% 26.4%	8.7% 8.8% 8.9% 9.0% 9.1% 9.2% 9.3%	\$52.40 \$58.01 \$62.65 \$67.41 \$71.02 \$74.89 \$79.14	\$1,563.20 \$1,610.94 \$1,655.74 \$1,698.92 \$1,744.45 \$1,788.10 \$1,830.47	\$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00	-\$264.79 -\$348.29 -\$434.97 -\$529.29 -\$630.78 -\$738.87	\$1,600.73 \$1,729.04 \$1,858.89 \$1,998.74 \$2,143.88 \$2,294.34	\$32.51 \$35.05 \$37.56 \$40.27 \$43.08
LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y	21.2% 22.4% 23.4% 24.2% 24.9% 25.6%	8.7% 8.8% 8.9% 9.0% 9.1% 9.2% 9.3%	\$52.40 \$58.01 \$62.65 \$67.41 \$71.02 \$74.89 \$79.14 \$83.85	\$1,563.20 \$1,610.94 \$1,655.74 \$1,698.92 \$1,744.45 \$1,788.10	\$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00	-\$264.79 -\$348.29 -\$434.97 -\$529.29 -\$630.78 -\$738.87 -\$852.08	\$1,600.73 \$1,729.04 \$1,858.89 \$1,998.74 \$2,143.88 \$2,294.34 \$2,448.46	\$32.51 \$35.05 \$37.56 \$40.27 \$43.08 \$45.54
LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y	21.2% 22.4% 23.4% 24.2% 24.9% 25.6% 26.4%	8.7% 8.8% 8.9% 9.0% 9.1% 9.2% 9.3%	\$52.40 \$58.01 \$62.65 \$67.41 \$71.02 \$74.89 \$79.14 \$83.85	\$1,563.20 \$1,610.94 \$1,655.74 \$1,698.92 \$1,744.45 \$1,788.10 \$1,830.47	\$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00	-\$264.79 -\$348.29 -\$434.97 -\$529.29 -\$630.78 -\$738.87 -\$852.08	\$1,600.73 \$1,729.04 \$1,858.89 \$1,998.74 \$2,143.88 \$2,294.34	\$32.51 \$35.05 \$37.56 \$40.27 \$43.08 \$45.54
LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y	21.2% 22.4% 23.4% 24.2% 24.9% 25.6% 26.4% 27.2%	8.7% 8.8% 8.9% 9.0% 9.1% 9.2% 9.3% 9.4% Monte Carlo Simulation As	\$52.40 \$58.01 \$62.65 \$67.41 \$71.02 \$74.89 \$79.14 \$83.85	\$1,563.20 \$1,610.94 \$1,655.74 \$1,698.92 \$1,744.45 \$1,788.10 \$1,830.47 \$1,871.38	\$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00	-\$264.79 -\$348.29 -\$434.97 -\$529.29 -\$630.78 -\$738.87 -\$852.08	\$1,600.73 \$1,729.04 \$1,858.89 \$1,998.74 \$2,143.88 \$2,294.34 \$2,448.46 • Carlo Simulation Res	\$32.51 \$35.05 \$37.56 \$40.27 \$43.08 \$45.54
LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y	21.2% 22.4% 23.4% 24.2% 24.9% 25.6% 26.4% 27.2% Base	8.7% 8.8% 8.9% 9.0% 9.1% 9.2% 9.3% 9.4% <u>Monte Carlo Simulation As</u> Stdev	\$52.40 \$58.01 \$62.65 \$67.41 \$71.02 \$74.89 \$79.14 \$83.85	\$1,563.20 \$1,610.94 \$1,655.74 \$1,698.92 \$1,744.45 \$1,788.10 \$1,830.47 \$1,871.38	\$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00	-\$264.79 -\$348.29 -\$434.97 -\$529.29 -\$630.78 -\$738.87 -\$852.08	\$1,600.73 \$1,729.04 \$1,858.89 \$1,998.74 \$2,143.88 \$2,294.34 \$2,2448.46 • Carlo Simulation Res Intrinsic Value	\$32.51 \$35.05 \$37.56 \$40.27 \$43.08 \$45.54 <u>ults</u>
LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+5Y LTM+7Y LTM+8Y LTM+9Y	21.2% 22.4% 23.4% 24.2% 24.9% 25.6% 26.4% 27.2% Base 0	8.7% 8.8% 8.9% 9.0% 9.1% 9.2% 9.3% 9.4% <u>Monte Carlo Simulation As</u> Stdey	\$52.40 \$58.01 \$62.65 \$67.41 \$71.02 \$74.89 \$79.14 \$83.85 sumptions Min N/A	\$1,563.20 \$1,610.94 \$1,655.74 \$1,698.92 \$1,744.45 \$1,788.10 \$1,830.47 \$1,871.38 Max N/A	\$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00	-\$264.79 -\$348.29 -\$434.97 -\$529.29 -\$630.78 -\$738.87 -\$852.08 Monte	\$1,600.73 \$1,729.04 \$1,858.89 \$1,998.74 \$2,143.88 \$2,294.34 \$2,448.46 **Carlo Simulation Res Intrinsic Value \$23.14	\$32.51 \$35.05 \$37.56 \$40.27 \$43.08 \$45.54 <u>ults</u> 1y-Target \$25.49
LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y Revenue Variation Op. Costs Variation	21.2% 22.4% 23.4% 24.2% 24.9% 25.6% 26.4% 27.2% Base 0	8.7% 8.8% 8.9% 9.0% 9.11% 9.2% 9.3% 9.4% Monte Carlo Simulation As Stdev 10%	\$52.40 \$58.01 \$62.65 \$67.41 \$71.02 \$74.89 \$79.14 \$83.85 sumptions Min N/A N/A	\$1,563.20 \$1,610.94 \$1,655.74 \$1,698.92 \$1,744.45 \$1,788.10 \$1,830.47 \$1,871.38 Max N/A N/A	\$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00	-\$264.79 -\$348.29 -\$434.97 -\$529.29 -\$630.78 -\$738.87 -\$852.08 Monte Mean est. σ(ε)	\$1,600.73 \$1,729.04 \$1,858.89 \$1,998.74 \$2,143.88 \$2,294.34 \$2,248.46 • Carlo Simulation Res Intrinsic Value \$23.14 \$0.32	\$32.51 \$35.05 \$37.56 \$40.27 \$43.08 \$45.54 ults 1y-Target \$25.49 \$0.25
LTM+2Y LTM+3Y LTM+4Y LTM+5Y LTM+6Y LTM+7Y LTM+8Y LTM+9Y Revenue Variation Op. Costs Variation Market Risk Premium	21.2% 22.4% 23.4% 24.2% 24.9% 25.6% 26.4% 27.2% Base 0 0	8.7% 8.8% 8.9% 9.0% 9.11% 9.2% 9.3% 9.4% Monte Carlo Simulation As Stdev 10% N/A	\$52.40 \$58.01 \$62.65 \$67.41 \$71.02 \$74.89 \$79.14 \$83.85 sumptions Min N/A N/A 5%	\$1,563.20 \$1,610.94 \$1,655.74 \$1,698.92 \$1,744.45 \$1,788.10 \$1,830.47 \$1,871.38 Max N/A N/A 7%	\$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00 \$275.00 Toistribution Normal Normal Triangular Triangular	-\$264.79 -\$348.29 -\$434.97 -\$529.29 -\$630.78 -\$738.87 -\$852.08 Monte Mean est. σ(e) 3 σ(e) adjusted price	\$1,600.73 \$1,729.04 \$1,858.89 \$1,998.74 \$2,143.88 \$2,294.34 \$2,448.46 ••••••••••••••••••••••••••••••••••••	\$32.51 \$35.05 \$37.56 \$40.27 \$43.08 \$45.54 ults 1y-Target \$25.49 \$0.25