

Stock	Buy / Short	Thesis	Current Price	Target Price
Dr. Peper Snapple Group, Inc.	BUY	<p>Dr. Pepper Snapple Group has positioned itself to gain market share in a competitive industry. Its expansion to Mexico and Latin America, both rapidly growing markets, will increase sales and stock value. Additionally, DPS's equity purchase of BodyArmor, a rapid growth sports drink company, will help drive future growth. DPS has also demonstrated a commitment to increasing shareholder value, both through stock repurchases and growing dividend payouts. DPS is a low-risk investment that can be counted on for consistent growth and returns. It is currently undervalued, and is a recommended a buy with a target price of \$99.74. This, when coupled with the dividend payout is a one-year return of around 15%.</p>	\$ 90.35	\$ 93.74
Luminex Corporation	BUY	<p>Luminex is a company with a well-managed capital structure that has acknowledged a quick growth of their assets and revenues during the past five years. In addition to expanding their product line through research and development the company also seeks partnerships with other organizations in order to have their researches sponsored and reduce their costs overall. In 2012 Luminex has entered a partnership with the Defense Threat Agency (D.T.A.) of the United-States to research and develop a defense project for the United-States government. This partnership may become an opportunity of a true and stable source of revenue for the company if it succeeds.</p> <p>The company has an impressive capital structure considering the industry they operate in which often requires an important amount of debt to be able to operate efficiently. Luminex has a current debt to Equity ratio of 0.09 and does not carry any long-term debt. This debt management increases the capacities of the firm to pursue business without being burdened by too much debt.</p> <p>Luminex Corporation also has an effective cost management that allows them to generate appropriate revenues. The operating income of the firm accounts for 16% of the revenues despite the fact that 21% of the total operation costs are used for the Research &amp; Development of new or existing products. This cost management is even more effective given the fact that the company did not have any interest expenses in the past years.</p>	\$ 19.24	\$ 23.19

<p>Lockheed Martin Corporation</p>	<p>BUY</p>	<p>Lockheed Martin is the world's largest defense contractor, but it is also the most diversified and the most prepared for future growth among all the aerospace &amp; defense companies. The defense industry is expected to return to a minimum of 3% growth in 2016, given the recent rise in global threats, and the increase in military expenditures in the U.S. and in key foreign nations. Due to its top-of-the-art and renowned products, LMT has secured future growth in product and service sales. LMT has succeeded to place itself as one of the top performers of the industry. The company is also committed in innovation and emerging technologies that have the potential to bring important sales to the company or even to create new markets. In 2015, the company generated a record \$5.1 billion from operations and returned \$5 billion to shareholders via an increasing dividend and an increasing share repurchase program strategy. The company also operated two major changes in its portfolio. First, it acquired for \$9 billion Sikorsky, which is the largest helicopter manufacturer. This acquisition added \$16 billion in backlog to LMT to reach a record of \$100 billion of backlog. The second strategic move was the decision to sell a part of its Information Services &amp; Global Services to Leidos for \$5 billion. The company decided to separate and combine this business with Leidos to create a more diversified competitor positioned for growth. Indeed, this market was becoming more and more competitive, and margins were decreasing and expected to decrease. The stock performance over time is pretty strong. It outperformed the industry and the market, and is showing good resistance during market selloffs. LMT appeared to be a very valuable investment to hold on the long term.</p>	<p>\$ 220.91</p>	<p>\$ 243.00</p>
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The Sherwin-Williams Co.	BUY	<p>Sherwin-Williams is already the leader in the United States in terms of paint sales, and looks to grow market share even further in 2016. The company has enjoyed a decrease in the cost of inputs thanks to many of the key components in coatings being derived from petrochemicals. The cost of inputs for the industry tends to lag behind changes in the price of oil. While the rebound may have already begun for the price per barrel, SHW should see a lower cost of materials for the remainder of the year, barring any unusual jumps in the price of oil. Thanks to this decrease in cost of goods sold, and an improvement in sales for three of the four business segments under the Sherwin-Williams brand, margins have improved greatly in 2015 and according to the company's financial statements and earnings calls, management is working hard to continue these improvements in 2016. Another key component of the company's improvements is continued acquisitions. Over the past five years the firm has acquired several small market share competitors in order to move into new markets, especially the southern and south-eastern United States. By purchasing competition rather than simply opening a new Sherwin-Williams location, it has made accessing new customers much easier and more effective. In the professional paint contracting business the majority of cost is in labor. Contractors are willing to pay a premium for SHW products because they beat competition in many aspects such as coverage, durability, cure time, and ease of application. These benefits combined with entry into new markets are driving sales of Sherwin-Williams paints up consistently. Another important element of the business that is estimated to grow in 2016 is housing starts and sales. Contractors have grown to trust the product, and now as the housing market continues to grow and</p>	\$ 288.69	\$ 310.83
Tower International Inc.	BUY	<p>Tower International is currently set up to see an increase in its value as its inputs of steel and aluminum have seen a reduction in price. This, with a growing demand for vehicles, will help drive value for TOWR. TOWR has further created value by selling off facilities that do not produce high enough margins. This is an attempt to improve margins in the future. Tower International has worked to have a diverse customer base to give them bargaining power rather than their customers. Tower International is considered a BUY at the price of \$25.81. Its one-year target is \$32.16 which is an upside potential of 24.6%.</p>	\$ 25.81	\$ 32.16

Morningstar Inc.	BUY	Morningstar is not a skyrocketing stock but a steady increasing stock which with its low beta of 0.44 and its constant value creation with a ROIC/WACC of around 2.60 makes the company a sure buy pick for anyone who is looking for a profit. Because the founder of the company has a majority ownership in it, he is seeking to increase its value and stock price through dividends issuance and stocks repurchase. The increase in revenue and growth cumulated to the company outperforming its industry prove that the company will reach a higher price.	\$ 83.93	\$ 96.00
AMAG Pharmaceuticals	BUY	AMAG Pharmaceuticals has positioned themselves with a high potential to become a major player within the biotechnology industry. The recent acquisitions of Lumara Health Inc. in November 2014, and CBR in August 2015, has generated exponential revenue growth for AMAG pharmaceuticals. These acquisitions also provide a catalyst for long term value creation for AMAG Pharmaceuticals. Such value creation has the potential to create substantial value for the shareholders of AMAG. In January 2016, the board of directors for AMAG Pharmaceuticals authorized a program to repurchase up to \$60 million in shares of common stock. As an analyst this suggests that the board for AMAG Pharmaceuticals believes their stock is undervalued in the market. The biotechnology industry as a whole has also demonstrated high growth, which is likely to continue in the near future.	\$ 21.63	\$ 33.80
Chipotle Mexican Grill	SHORT	Investor confidence and consumer confidence are currently taking a severe hit for Chipotle. This is because of the E. coli outbreak associated with Chipotle which occurred between December and February. Chipotle currently market that they serve only fresh ingredients. This is largely due to the very strict requirements there suppliers must comply with. The whole point of Chipotle is that it is clean. And recently they have begun to show us that they are not. The litigations have also been accruing recently; in direct relation to the health concerns. This outbreak will continue to hinder growth for the foreseeable future due to the direct effects it will have on financials. Diminishing the operating and gross margins as well as forecasted growth. Because of all of these concerns and issues it is likely that if another health issue occurred at Chipotle, then a highly unfavorable situation would most likely come about for Chipotle.	\$ 455.37	\$ 337.00

Foot Locker Inc.	BUY	<p>In recent years, there has been a health and fitness boom within the United States. The number of gym memberships have been increase steadily over time. With this increase, it creates a greater market for Foot Locker to supply for. Not only that, but current fitness members typically purchase new shoes for their athletic activities every year or so. This gives Footlocker a sustainable market going forward.</p> <p>The Summer Olympics is also another opportunity for Foot Locker to grow and create value within the very near future. The Summer Olympics creates awareness of fitness to consumers and also gives Foot Locker additional merchandise. In 2012 when the last Summer Olympics occurred, Footlocker experienced their greatest increase in revenue from the previous year at 11.4%, their greatest in recent history.</p>	\$ 65.22	\$ 81.41
Advanced Micro Devices	SHORT	<p>Advanced Micro Devices is in the semiconductor industry, with reported revenues of \$3,991 million in 2015. It is being reported that Intel is going to ink a deal to work with Advanced Micro Devices in the coming months, for AMD's patents. Intel currently has a deal with Advanced Micro Devices' rival, Nvidia, but the contract is set to expire on March 17, 2017. AMD has a competitive product at a cheaper cost than Nvidia, which makes it an attractive option for Intel. Nvidia has been reporting \$66 million in licensing revenue per quarter from Nvidia. This is a big reason why the stock price has gone up over 30% over the last few months. Even though it is likely that Intel will sign AMD, there is still a chance that they decide to stay with Nvidia, which will lead to the stock being severely overvalued. Also, the move wouldn't happen until March 17, 2017 when the contract is set to expire with Nvidia, which means for the next year they will see their revenue growth grow only slightly if at all. Although they have the possibility to increase their revenue if the Intel signing goes through, they have seen a drastic decrease in their revenue from 2014 to 2015. In 2014 they reported revenue of \$5,506 million to only \$3,991 million in 2015. This is a decrease of over 27.5% from year to year. This is due to the fact that the personal computer industry is declining along with the fact that they are losing market share to Intel. In 2006, they had about 50% market share of the CPU industry, while in 2016 they had only about 20% of the market share. This is due to the fact that there are many competitors, mainly Intel who is taking away market share from Advanced Micro Devices, and thus leading to reduced levels of revenue.</p>	\$ 2.93	\$ 2.30

## Macroeconomic Overview

### U.S. Markets

Index	Weekly % Change	YTD % Change
S&P 500	+1.33%	+0.28%
Dow Jones Industrial	+2.21%	+1.02%
NASDAQ Composite	+0.98%	-4.23%
Russell 2000	+1.31%	-3.01%
VIX	-15.03%	-23.01%

U.S. equities extended their winning streak to a fifth week last week, helped by a surprisingly dovish announcement from the Fed on Wednesday that helped erase the losses from the start of the week. The S&P 500 and the

Dow Jones, the most broadly used benchmarks of the American stock market, both managed to climb back into positive year-to-date territory with weekly gains of 1.33% and 2.21% respectively. Stocks were initially lower on Tuesday after the publication of February retail sales, which fell for a second month in a row. The



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

trend was reversed on Wednesday afternoon as soon as Fed chair Janet Yellen took the stage at two o'clock, and announced that the FOMC was revising its forecast down to 2 interest rate increases in 2016 from 4 initially. Small caps underperformed again, as did the NASDAQ which only gained 0.98% while the Russell 2000 rose 1.31%, and both indices are still down three to four percent

year-to-date. This fifth consecutive week of gains for U.S. stocks also caused a sharp decrease in volatility, as measured by the VIX which fell 15.03% and reached new lows for the year around 14%. The rally was also supported by the continuing rebound in oil prices, which also had the effect of sending energy stocks soaring. The price of WTI crude for delivery in April rose over \$40 for the first time since the start of the year to settle at \$40.22, up 4.77%, while Brent for May delivery rose 2.01% to \$41.2 a barrel. Precious metals followed equities last week, with a jump on Wednesday helping erase earlier losses. Gold rose 0.47% to \$1,255.37 an ounce, while silver gained 2.01% at \$15.80 after reaching \$16 for the first time in 2016. In corporate news, Canadian energy infrastructure leader TransCanada agreed to acquire Columbia Pipeline, a natural gas MLP, in a deal that would create one of the biggest natural gas companies in North America. Next week's economic calendar contains a couple of important releases, most notably February existing home sales on Monday, the March flash PMI on Tuesday, and February new home sales on Wednesday. On Thursday, durable goods orders figures for February should give investors additional insight into the state of factory activity, and initial jobless claims are expected to hold at record lows. The most important release of the week is due on Friday at 8:30 with the third estimate of fourth quarter GDP in the U.S, with the consensus of analysts calling for a 1% increase over Q4 2014.

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## International Markets

Index	Weekly % Change	YTD % Change
BE 500	+0.04%	-6.71%
Stoxx Europe 600	-0.15%	-6.59%
DAX	+1.22%	-7.37%
FTSE 100	+0.81%	-0.84%
CAC 40	-0.67%	-3.76%
Nikkei 225	-1.27%	-12.13%
Shanghai Composite	+3.35%	-16.5%
Shenzhen Composite	+5.27%	-20.43%

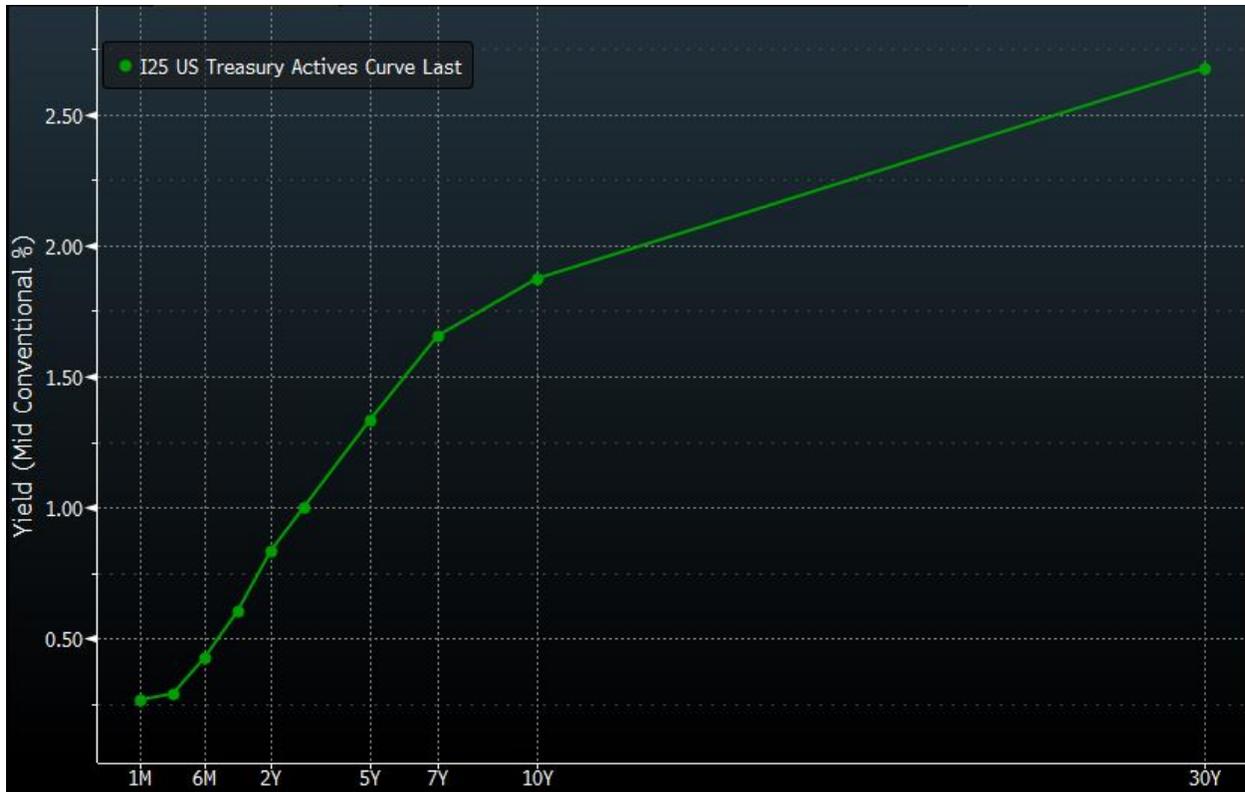
International stocks had a more contrasted week, as European stocks were mostly higher while Japan fell and China's stock market finally came back to life after weeks of declines. In Europe, Germany's DAX was the biggest outperformer with a weekly gain of 1.22%, while the FTSE 100 rose 0.81% in London. In France, markets had a rough week, with the CAC 40

logging four consecutive days of decline to finish the week down 0.67%. In Norway, the central bank cut its policy interest rate to a record low of 0.5%, giving a hint that it could become the next central bank to implement negative interest rates if need be. The broader Bloomberg European 500 Index finished the week almost unchanged at +0.04%, while the Stoxx Europe 600 fell 0.15%. Both benchmarks are still down over six percent year-to-date, reflecting growing concerns about a deteriorating macro environment in Europe. In Japan, the Nikkei plummeted on Thursday and Friday, in part because of an increasingly stronger yen which hurts companies' profits and thus the economy. The Japanese benchmark's weekly decline of 1.27% was limited by the gains logged earlier in the week. In China, stocks had their best week in over two months as expectations of increased government stimulus brought optimism back to a market that has been battered for several months. As a result, the Shanghai Composite rose 3.35% while the Shenzhen Composite Index rose 5.27%.

## Bond Report

This week, The US Treasury yields fell for the first time in four weeks. On Monday, yields decreased for two main reasons. First, the decline in oil prices increased the demand for safer assets such as government bonds. Secondly, everyone was waiting the outcome from the FED's meeting. Indeed, the U.S demonstrated a robust enough growth and inflation that increased investors' sentiment of a possible rate hike for this week. However, short-term Treasury yields, which are the most sensitive in FED's funds rate changes continued to climb as investors were selling their treasury notes ahead of the FED meeting. On Wednesday, Treasury yields fell after the FED said that it will left interest rates unchanged. Although this was not such a bring surprise, the FED also announced that it will cut the number of projected interest rate increase in half to two interest rate hikes for this year, compared to four in December. This means that the FED has revised downward its inflation projection. This sharp revision was not expected and led Treasury yields to fell accordingly. The two-year Treasury note fell 7.7 bps on Wednesday to 0.87%, its lowest level in two weeks. On Thursday, the yields continued to fell after following the FED's meeting which fuelled demand for government Treasury securities. This two consecutive days of decline represents the largest drop in six months. Thursday, positive economic data did not stop this rally in Treasuries since the two projected interest hikes were viewed by investors as a long-term worry from the FED. The bond market interpreted the FED's moves as an upcoming potential slowdown for the global economy, increasing the demand for safe assets such as government bonds. Over the week, the yield on the benchmark 10-year Treasury note fell 10 bps to 1.87% compare to 1.97 at the beginning of the week. The 2-year Treasury yield fell 13 bps to 0.84% compare to 0.97% at the beginning of the week. Among longer maturities, the yield on the 30-year Treasury bond fell 6 bps to 2.68%, from 2.74% earlier this week.





### What's next and key earnings

Several events are to be closely watch this week. First, the existing home sales report will be released. Home sales have been robust, however they have not been accelerating. For February, we are expecting to see home sales holding at a 5 million unit annual rate. On Tuesday, the PMI manufacturing index flash will be released. Surprisingly, the factory sector should be solid after a long period of contraction. We are expecting to see a consensus at 52.4 for March compare to a weak 51.0 in February. This is a clear rebound from February where growth in new orders was at its 3 years and a half low and both exports and backlogs were weak as well. On Wednesday, the new home sales report will be released. Like existing home sales, new homes sales have not been accelerating and are having difficulty to stay above 500,000 annualized. For February, we are expecting to see sales at 510,000 annualized rate, a positive increase from the low 494,000 for January. On Thursday, the durable goods orders report will be released. Despite gains made in January, we are not expected to see improvement for the month of February. Core capital goods order were robust in January but should be weaker for February with a consensus of -3%. Friday, the fourth-quarter GDP will be released. It is expected to remain unchanged from the last estimates with an increase of 1%. This report is greatly expected by investors since a gain in Q4 could have an impact on consumer spending.

## AMAG Pharmaceuticals, Inc.

AMAG

Analyst: Zach Collins

**BUY on AMAG**

**Price Target: \$ 33.80**

### Key Statistics as of 12/4/15

Market Price: \$21.63  
 Industry: Biotechnology  
 Market Cap: \$721.73 M  
 52-Week Range: \$20.22-77.73  
 1 Year Beta: .51

### Thesis Points:

- Recent Acquisitions provide substantial value creation
- Exponential revenue growth
- New share repurchase program
- High growth industry

### Company Description:

AMAG Pharmaceuticals, Inc. was founded in 1981. AMAG pharmaceuticals focuses their business and clinical expertise on developing and commercializing products that provide clear benefits and improve the lives of the intended consumers. AMAG has a diverse portfolio of products and services that primarily focus on maternal health, anemia management, iron deficiency, cancer supportive care, and umbilical cord stem cell storage and research. AMAG intends on continuing to expand the impact of these and future products and services for their patients by following their growth strategy, which includes organic growth, as well as the pursuit of products and companies that align with their existing therapeutic areas or those that could benefit from our proven core competencies. Currently, their primary sources of revenue come from sales of Makena, CBR Services and Feraheme.



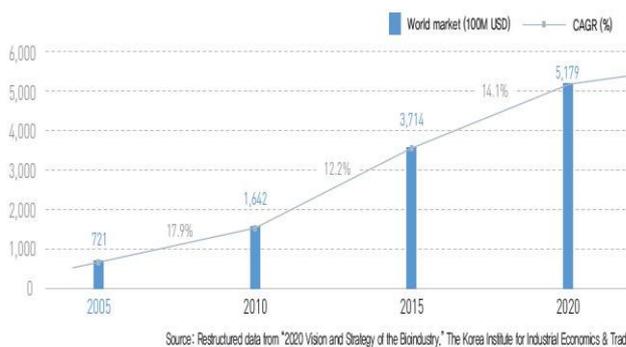
## Thesis

AMAG Pharmaceuticals has positioned themselves with a high potential to become a major player within the biotechnology industry. The recent acquisitions of Lumara Health Inc. in November 2014, and CBR in August 2015, has generated exponential revenue growth for AMAG pharmaceuticals. These acquisitions also provide a catalyst for long term value creation for AMAG Pharmaceuticals. Such value creation has the potential to create substantial value for the shareholders of AMAG. In January 2016, the board of directors for AMAG Pharmaceuticals authorized a program to repurchase up to \$60 million in shares of common stock. As an analyst this suggests that the board for AMAG Pharmaceuticals believes their stock is undervalued in the market. The biotechnology industry as a whole has also demonstrated high growth, which is likely to continue in the near future.

## Industry Outlook

The graph below illustrates the industry growth of the biotechnical industry since 2005, up to analysts' estimates of growth for 2020.

The BT Industry's World Market Outlook



As you can see there has been a significant increase in growth within the biotechnology industry over the past ten years. And as you can see from analysts' estimates for the next four years, this is a trend that is likely to continue in the upcoming future. The primary factors that have influenced this trend include advancements in technology, the development of new drugs, as well as significant improvements to existing drugs, as more in depth research becomes available. As technology continues to rapidly advance, the global

population continues to increase, and the expected life span of humans continues to rise, the demand for products within the biotechnology industry will continue to grow at an increasing rate. This provides high growth potential for any firm within this industry that can capitalize on this trend.

## Porter's Five Forces

### Bargaining power of suppliers: **HIGH**

AMAG Pharmaceuticals sources their particular inventory requirements through a number of different third party suppliers. Of which they do not have any long term contracts with. Due to the nature of the products for AMAG Pharmaceuticals, these materials must be purchased strictly from qualified suppliers.

### Bargaining power of customers: **LOW**

The products produced by AMAG Pharmaceuticals are specifically tailored toward certain consumers that need these products to improve the overall quality of their life.

### Threat of substitutes: **LOW**

The threat of substitutes for AMAG Pharmaceuticals is low as there are no alternatives for the specific products they produce. Consumers can turn to other biotechnology companies for similar products or services, but AMAG Pharmaceuticals possess the intellectual property for all of their specific products, meaning other products and services will not have the exact same effects.

### Existing rivalry: **HIGH**

The intensity of competition within the biotechnology industry is very high. Biotechnology firms are always trying to find a revolutionary drug or service that will change the industry. As bigger companies become interested in the intellectual property of smaller firms, many smaller biotechnical company's end up being bought out.

### Threat of new competition: **LOW**

The biotechnical industry is an industry with extremely high barriers to entry. As each drug these companies within the industry develop, years and years of extensive testing by the FDA must be completed and approved before any new drug can enter into the consumer market.

## Recent Acquisitions

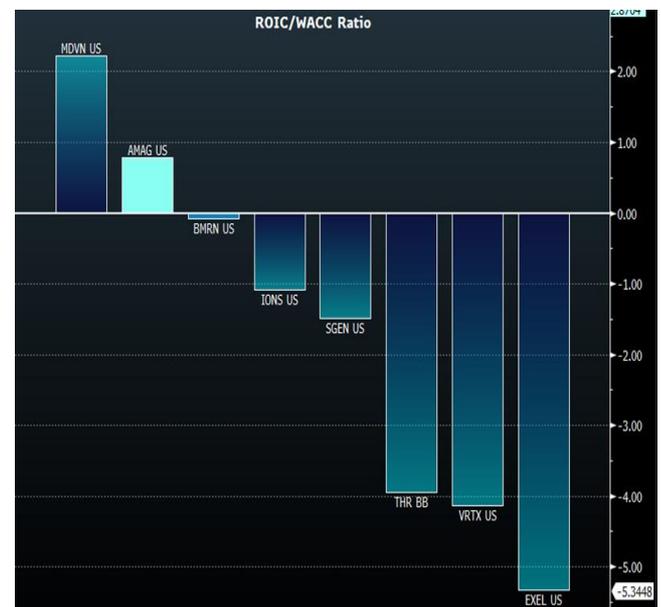
In November 2014, AMAG Pharmaceuticals acquired Lumara Health for \$600 million in cash consideration to gain access to the sales force of Makena. Makena (hydroxyprogesterone) is a man-made form of a female hormone called progesterone. Makena is used to lower the risk of premature birth in women, particularly for a woman who has already had a premature baby and may be at high risk. This drug is injected intramuscularly at a weekly dose of 250mg to be effective, and was approved by the FDA in February of 2011. Makena prescriptions are dispensed through the preferred pharmacy of the consumer or purchased directly by hospitals, government agencies and integrated delivery systems. Based on market research conducted by the research team at AMAG, they estimate that approximately 35% of the at-risk patient population uses Makena. This a considerable percentage of market share if you consider the market cap of this firm, as well as how quickly it has gained market share since its approval. There is also significant potential for Makena to acquire additional market share, as the sales and marketing teams at AMAG continue to focus on multi-channel distribution methods to promote Makena. AMAG has also developed a Makena Care Connection that will screen and enroll patients in financial assistance programs to help lower the out of pocket costs for commercially insured patients whose plans cover Makena.

In August 2015, AMAG Pharmaceuticals acquired CBR for \$700 million in cash consideration. CBR is the largest private newborn stem cell bank in the world, which offers pregnant women and their families the ability to preserve their newborns' umbilical cord blood and cord tissue for potential future use. This is an up and coming market in the biotechnology industry with significant growth potential. AMAG Pharmaceuticals market and sell CBR services directly to consumers who pay for their services. As of December 31, 2015, CBR stored approximately 633,000 umbilical cord blood and cord tissue units, which AMAG estimates to represent approximately more than half of all privately held umbilical cord blood and cord tissue units. CBR is the first stem cell bank to partner with reputable research institutions on FDA regulated clinical trials exploring the potential regenerative ability of these stem cells to

help treat conditions that have no cure today. In 2005, legislation on the education of umbilical cord preservation for future stem cell use and is regulated in more than 20 states that support educating expected parents on the use of stem cells. Stem cells have been used and proven to treat over 80 diseases including various cancers, blood disorders, immune disorders, metabolic disorders, spinal cord damage, and heart disease. In the 2014 fiscal year, revenue growth for AMAG was nearly 54%. And in the following year, AMAG generated revenue growth of 236%, from \$124 million in 2014, to \$418 million in 2015 as a result of these acquisitions.

The current level of liquidity for AMAG is considerably low due to the extensive amount of debt they had to take on for these acquisitions. But as their revenue growth continues to increase, and AMAG pays off their debt, the liquidity position of the firm will substantially improve.

The following cross sectional analysis shows AMAG Pharmaceuticals ROIC/WACC ratio compared to peers within the industry. The peers identified in this analysis include Medivation Inc. (MDVN), BioMarin Pharmaceutical Inc. (BMRN), Ionis Pharmaceuticals Inc. (IONS), Seattle Genetics Inc. (SGEN), Vertex Pharmaceuticals Inc. (VRTX), and Exelixis Inc. (EXEL).



This chart illustrates how AMAG Pharmaceuticals is generating a higher ROIC/WACC ratio than most of their peers. This demonstrates how AMAG is creating more value for their firm than that of their competitors within the industry.

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## Share Repurchase Program

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In January 2016, the board of directors authorized a share repurchase program to repurchase up to \$60 million in shares of the company common stock. This repurchase program does not have an expiration date, and can be discontinued at any time. This program allows AMAG Pharmaceuticals to purchase their stock from time to time under the discretion of AMAG top management. The timing and number of shares purchased will depend on a number of different factors, including the share price, the general macroeconomic conditions surrounding the market, the industry as a whole, the volume of shares traded, as well as the working capital requirements of the firm. The introduction of a share repurchase program suggests that the board of directors as well as the management team of AMAG believe their stock is currently undervalued and can prove to be a buy signal in the market.

The stock price of AMAG began to fall towards the end of July in 2015, when the FTC notified that they were conducting an investigation on the unfair methods of competition with respect to Makena. At this time the stock was trading at around \$75 a share. Investigations like this are fairly common within the biotechnical industry, but can have a significant impact on the markets view of the company. AMAG is confident that they will get through the investigation. If the investigation comes up empty, the stock price for AMAG will likely jump back up aggressively.

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premium was put on the stock when valuing it through the proforma. Despite the risk associated with this company as well as the recent decline in AMAG's stock price, the high return potential outweighs this level of risk. Especially when considering how close AMAG is to trading around their 52 week low. For the above reasons identified and the analysis conducted for AMAG financials, this stock is a BUY.

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## Conclusion

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After a thorough analysis of AMAG Pharmaceuticals it is clear that this company is undervalued. What cannot be emphasized enough is the high growth potential within this industry. And with the recent acquisitions made by AMAG Pharmaceuticals, they have positioned themselves in a way to capture a significant portion of additional market share, as well as create long lasting value to the firm. To compensate for the obvious riskiness of the firm in terms of their high level of debt, a substantial risk

**AMAG Pharmaceuticals, Inc.**  
(amag)

**CENTER FOR GLOBAL FINANCIAL STUDIES**

**BULLISH**

Analysis by Zach Collins

Current Price:

\$21.63

Intrinsic Value:

\$27.52

Target 1 year Return: 56.24%  
Probability of Price Increase: 100%

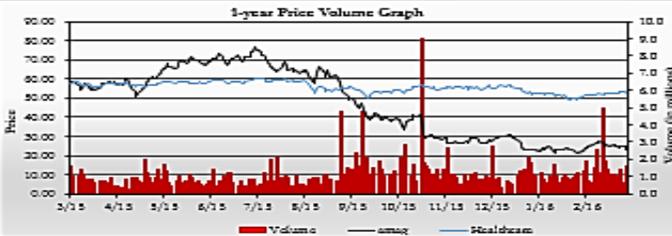
3/20/2016

Dividend Yield:

0.0%

Target Price:

\$33.80



Description	
AMAG Pharmaceuticals, Inc., specialty pharmaceutical company, provider of products and services with a focus on maternal health, anemia management, and cancer supportive care in the United States.	
General Information	
Sector	Healthcare
Industry	Biotechnology
Last Guidance	November 3, 2015
Next earnings date	May 4, 2016
Estimated Country Risk Premium	10.00%
Effective Tax Rate	40%
Effective Operating Tax Rate	-13%

Market Data	
Market Capitalization	\$721.73
Daily volume (mil)	0.72
Shares outstanding (mil)	34.75
Diluted shares outstanding (mil)	35.31
% shares held by institutions	55%
% shares held by investment Managers	8%
% shares held by hedge funds	37%
% shares held by insiders	0.95%
Short interest	22.42%
Days to cover short interest	6.43
52-week high	\$77.73
52-week low	\$20.22
Levered Beta	0.66
Volatility	49.33%

Quarter ending	Part Earning Surprise
12/31/2014	-1.28%
3/31/2015	5.78%
6/30/2015	28.75%
9/30/2015	-15.44%
12/31/2015	-5.80%
Mean	2.20%
Standard error	7.5%

EBITDA	Peer
28.26%	Aegerion Pharmaceuticals, Inc.
36.88%	Acarda Therapeutic, Inc.
101.22%	Inir Pharmaceuticals, Inc.
-26.39%	BioMarin Pharmaceutical Inc.
-38.73%	United Therapeutic Corporation
20.24%	Alexion Pharmaceutical, Inc.
25.1%	Haloxyme Therapeutic, Inc.
	Jazz Pharmaceuticals Public Limited Company

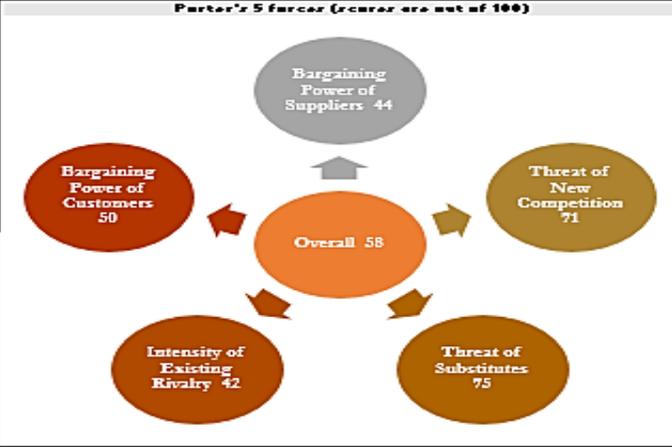
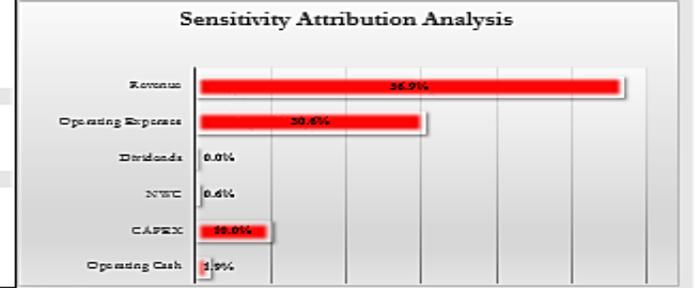


Management	Position
Heiden, William	Chief Executive Officer and President and Chief Operating Officer
Thamar, Frank	Chief Information Officer
McBride, Nathan	Chief Compliance Officer and Senior Vice President, Seco
Blasad, Robert	Vice President of Investor R
Vittiglio, Joseph	
Lennax, Linda	

Total compensation grant	Total return to shareholder
-16.25% per annum over 2y	70.22% per annum over 2y
5.69% per annum over 2y	9.81% per annum over 2y
N/A	N/A

Profitability	amag (LTM)	amag (5 years historical ave)	Industry (LTM)
ROIC	35.4%	-40.39%	12.40%
NOPAT Margin	84%	1.01%	19.7%
Revenue/Inverted Capital	0.42	-39.91	0.63
ROE	44.3%	9.24%	14.06%
Adjusted net margin	76%	-0.92%	16.8%
Revenue/Adjusted Book Value	0.58	-10.05	0.84

Capital Structure	amag (LTM)	amag (5 years historical ave)	Industry (LTM)
Total Debt/Common Equity (LTM)	0.96	0.16	0.17
Cost of Existing Debt	10.81%	18.90%	4.01%
Estimated Cost of new Borrowing	3.82%	3.97%	4.01%
CGFS Risk Rating	10.81%	B	CC
Unlevered Beta (LTM)	7.11%	0.47	0.96
WACC	10.81%	8.23%	12.08%



Period	Revenue growth
Base Year	236.3%
12/31/2016	30.6%
12/31/2017	20.8%
12/31/2018	7.5%
12/31/2019	3.0%
12/31/2020	3.0%
12/31/2021	3.0%
12/31/2022	3.0%
12/31/2023	3.0%
12/31/2024	3.0%
12/31/2025	3.0%
Continuing Period	3.0%

Valuation	NOPAT margin	ROIC/WACC
Base Year	83.6%	4.12
12/31/2016	24.4%	0.96
12/31/2017	26.0%	0.97
12/31/2018	22.2%	0.82
12/31/2019	22.3%	0.81
12/31/2020	23.5%	0.85
12/31/2021	22.4%	0.85
12/31/2022	21.5%	0.87
12/31/2023	20.6%	0.88
12/31/2024	19.8%	0.91
12/31/2025	19.1%	0.93
Continuing Period	18.4%	0.97

Period	Inverted Capital	Net Claim	Price per share
Base Year	\$5.72	\$717.50	\$27.86
12/31/2016	\$6.33	\$1,004.67	\$33.24
12/31/2017	\$14.71	\$1,152.99	\$36.48
12/31/2018	\$14.49	\$1,140.31	\$39.91
12/31/2019	\$987.78	\$1,148.50	\$43.46
12/31/2020	\$1,919.82	\$950.51	\$47.28
12/31/2021	\$2,407.35	\$751.53	\$50.95
12/31/2022	\$2,682.21	\$551.00	\$54.46
12/31/2023	\$2,772.21	\$351.36	\$57.71
12/31/2024	\$2,884.59	\$151.10	\$60.72
12/31/2025	\$2,803.97	-\$52.90	\$63.53
Continuing Period			



## Chipotle Mexican Grill

CMG: NYSE

**Analyst:** Peter Ostrowski

**Sector:** Consumer Staples

**Short**

Price Target: \$337

### Key Statistics as of 3/18/2016

Market Price:	\$455.37
Industry:	Consumer Staples
Market Cap:	\$13.7B
52-Week Range:	\$399-\$758
Beta:	.39

### Thesis Points:

- Health scare is driving away consumers
- Legal Trouble
- Increasing operating cost due to company's transformation
- Forecasted growth is now entirely uncertain

### Company Description:

Chipotle Mexican Grill, Inc. owns and operates quick serve Mexican restaurants. The Company operates restaurants throughout the United States.



## Thesis

Investor confidence and consumer confidence are currently taking a severe hit for Chipotle. This is because of the E. coli outbreak associated with Chipotle which occurred between December and February. Chipotle currently market that they serve only fresh ingredients. This is largely due to the very strict requirements there suppliers must comply with. The whole point of Chipotle is that it is clean. And recently they have begun to show us that they are not. The litigations have also been accruing recently; in direct relation to the health concerns. This outbreak will continue to hinder growth for the foreseeable future due to the direct effects it will have on financials. Diminishing the operating and gross margins as well as forecasted growth. Because of all of these concerns and issues it is likely that if another health issue occurred at Chipotle, then a highly unfavorable situation would most likely come about for Chipotle.

## Current Business Strategy

Chipotle currently operates 1971 stores across the globe with the majority existing in the United States. Their current strategy is to sell burritos, tacos and salads using only fresh ingredients. The current trademarks are “Food with Integrity”, “Fresh is not enough anymore”, “Responsibly Raised”, and “The Gourmet Restaurant Where You Eat with Your Hands”. This is not marketed as just a fast food restaurant; Chipotle is supposed to represent a higher standard through their food and ingredients. The strict regulations imposed on all of their products are engrained in their business.



**FOOD WITH INTEGRITY™**



The reason why it is so important to summarize the business strategy is to demonstrate the risk associated with this stock. Any new health concerns that are attributed to Chipotle will decrease the value of the company. They are not currently accomplishing their strategy as this report will demonstrate.

## Decreasing Customer Base

The E. Coli Outbreaks caused by Chipotle over the past few months have demonstrated a weakness in the fundamental aspect of their business. Chipotle is losing customers due to this. Chipotle was already on the verge of being written off as a value stock after reporting same store growth percentage as shown below:

12 Months Ending	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015
<b>Restaurant Sales</b>						
Revenue	1,835.9	2,269.5	2,731.2	3,214.6	4,108.3	4,501.2
Same Store Sales %	9.40	11.20	7.10	5.60	16.80	0.20
Number of Locations	1,084.00	1,229.00	1,409.00	1,589.00	1,772.00	1,994.00

Chipotle nearly had double digit growth in same store sales up until 2015. These demonstrate that increasing the number of locations is beginning to destroy value. The customer base is already there. Adding additional stores risks the chance of cannibalization. So increasing the number of restaurants with a decreasing customer base due to health concerns is a recipe for disaster. The decreasing customer base was shown during the 4th quarter for both loyal customers and less frequent customers. There was a YoY quarterly decrease in revenue of 14.6%. There was also a 700 basis point decline in restaurant operating margins.

It is likely that Chipotle will have at least a year of decreasing revenues. This is all assuming Chipotle is able to avoid health concerns for the rest of the year which is completely skeptical.

## Legal Troubles

It is nearly impossible to estimate the litigation and legal fees that Chipotle will receive in 2016. This is due to all of the current cases that are still in progress.

In December 2015, Chipotle was subpoenaed due to an ongoing investigation that was dated back to

January 2013. These matters are related to the norovirus incident that occurred in a Chipotle in August, 2015 and the norovirus incident in December, 2015. These investigations were conducted by the FDA and reported to the state of California. There are currently a broad range of investigations related to this matter that are undisclosed. Future losses that will be paid out in settlements are not estimated on the 10-k.

There is also currently a Shareholder Class Action suit that is being conducted to try to compensate purchasers of common stock between February 4, 2015 and January 5, 2016. These allegations are claiming that the company's stock price was artificially inflated due to a lack of information for "the company's quality controls and safeguards in relation to consumer and employee health." Essentially the reports are claiming that Chipotle should have included more information relating to the risk of their operation.

Chipotle is also currently being investigated in relation to labor laws. There are currently allegations claiming that Chipotle did not pay employees for overtime in certain locations. This was first discovered during an inspection in 2010 and has had subsequent complaints since then.

## Valuation

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Because of the current situation that Chipotle is now experiencing; it is necessary to discuss certain assumptions for the future. The two value drivers that are being hurt include operating costs and growth.

The operating margin is going to shrink for this year due to the increased expenditures related to the reforms being instated to decrease the chances of foodborne illness to consumers. I am estimating the operating costs to increase to 84% this year. An increase of 4% YoY.

In the earnings call the CEO stated that he did not expect a YoY increase in revenue for at least 5 quarters. This leads me to assume there will be a decrease in growth this year. I was conservative in my estimate of -2%.

## Conclusion

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I recommend a sell for Chipotle. A company that markets fresh and clean products is inclined to deliver on their proposals. Over the past few months; Chipotle has fallen short of this. This is largely due to the uncertainty associated with the possibility of future health concerns. In order to combat potential health concerns; Chipotle will be forced to increase operating expenses and will also have abnormal losses. These will hinder margins further as revenues shrink due to a decrease in customers eating at Chipotle. It will take Chipotle a while to recover from this; but for the current year I believe they will destroy shareholder value.

**Chipotle Mexican Grill, Inc.**  
**(CMG)**

Analysis by Peter Ostrowski  
3/19/2016

**CENTER FOR GLOBAL FINANCIAL STUDIES**

**BEARISH**

Target 1 year Return: -21.64%  
Probability of Price Increase: 4.33%

**Current Price:** \$455.37  
**Dividend Yield:** 0.0%

**Intrinsic Value:** \$337.77  
**Target Price:** \$356.84

**Description**  
Chipotle Mexican Grill, Inc., together with its subsidiaries, develops and operates fast-casual fresh Mexican food restaurants.

**General Information**

Sector	Consumer Discretionary
Industry	Hotels, Restaurants and Leisure
Last Guidance	November 3, 2015
Next earnings date	April 26, 2016
Estimated Country Risk Premium	6.53%
Effective Tax rate	40%
Effective Operating Tax rate	39%

**Market Data**

Market Capitalization	\$13,681.25
Daily volume (mil)	2.88
Shares outstanding (mil)	30.04
Diluted shares outstanding (mil)	31.49
% shares held by institutions	55%
% shares held by investments Managers	85%
% shares held by hedge funds	7%
% shares held by insiders	1.57%
Short interest	10.68%
Days to cover short interest	1.81
52-week high	\$758.61
52-week low	\$399.14
Levered Beta	0.58
Volatility	31.79%

**Past Earning Surprises**

Quarter ending	Revenue	EBITDA
12/31/2014	-0.48%	-1.89%
3/31/2015	-1.53%	7.09%
6/30/2015	-1.48%	1.49%
9/30/2015	0.00%	-0.15%
12/31/2015	-1.17%	10.85%
Mean	-0.93%	3.49%
Standard error	0.3%	2.4%

**Management**

Management	Position	Total compensations growth	Total return to shareholders
Ellis, M.	Founder, Chairman of the Board	35.15% per annum over 5y	22.64% per annum over 5y
Moran, Monty	Co-Chief Executive Officer	38.33% per annum over 5y	22.64% per annum over 5y
Hartung, Jack	Chief Financial Officer	33.56% per annum over 5y	22.64% per annum over 5y
Crumphacker, Mark	Chief Creative & Development	19.63% per annum over 5y	22.64% per annum over 5y
Ganser, Curt	Chief Information Officer	N/A	N/A
Salfridge, Gretchen	Restaurant Support Officer	N/A	N/A

**Profitability**

	CMG (LTM)	CMG (5 years historical average)	Industry (LTM)
ROIC	25.0%	26.58%	27.46%
NOPAT Margin	14%	13.66%	12.6%
Revenue/Invested Capital	1.76	1.95	2.18
ROE	18.5%	22.22%	35.13%
Adjusted net margin	14%	13.06%	10.8%
Revenue/Adjusted Book Value	1.35	1.70	3.26

**Invested Funds**

	CMG (LTM)	CMG (5 years historical average)	Industry (LTM)
Total Cash/Total Capital	16.5%	19.9%	19%
Estimated Operating Cash/Total Capital	3.2%	5.7%	N/A
Non-cash working Capital/Total Capital	-3.2%	-4.1%	-41%
Invested Capital/Total Capital	71.5%	74.0%	85%

**Capital Structure**

	CMG (LTM)	CMG (5 years historical average)	Industry (LTM)
Total Debt/Common Equity (LTM)	0.11	0.07	0.31
Cost of Existing Debt	2.41%	5.53%	4.56%
Estimated Cost of new Borrowing	2.41%	2.41%	4.14%
CGFS Risk Rating	2.41%	AA	BB
Unlevered Beta (LTM)	0.00%	0.77	0.90
WACC	2.41%	8.23%	8.21%

**Target Price Distribution--P(price↑)=4.33%**

**Sensitivity Attribution Analysis**

Revenue	47.2%
Operating Expenses	43.5%
Dividends	0.1%
NWC	0.5%
CAPEX	7.8%
Operating Cash	0.9%

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

Period	Revenue growth	Valuation NOPAT margin	ROIC/WACC
Base Year	9.6%	14.2%	3.89
12/31/2016	-3.4%	7.4%	1.73
12/31/2017	18.3%	10.9%	2.33
12/31/2018	17.3%	12.9%	3.01
12/31/2019	9.0%	10.8%	2.25
12/31/2020	12.5%	10.7%	2.16
12/31/2021	10.9%	10.7%	2.13
12/31/2022	9.3%	10.7%	2.04
12/31/2023	7.8%	10.8%	1.96
12/31/2024	6.2%	10.8%	1.88
12/31/2025	4.6%	10.8%	1.80
Continuing Period	3.0%	10.8%	1.72

Period	Invested Capital	Net Claims	Price per share
Base Year	\$1,061.60	\$768.10	\$333.29
12/31/2016	\$1,381.98	\$1,162.97	\$358.23
12/31/2017	\$1,888.29	\$709.19	\$387.20
12/31/2018	\$2,176.61	\$603.65	\$418.35
12/31/2019	\$2,560.65	\$352.73	\$453.71
12/31/2020	\$2,875.11	\$117.52	\$487.38
12/31/2021	\$3,649.06	-\$88.40	\$523.44
12/31/2022	\$3,846.47	-\$387.26	\$562.09
12/31/2023	\$4,634.03	-\$793.51	\$603.37
12/31/2024	\$5,267.09	-\$1,319.35	\$647.25
12/31/2025	\$5,867.59	-\$1,973.66	\$693.67
Continuing Period			

**Dr. Pepper Snapple Group, Inc.**  
NASDAQ: DPS

**Analyst:** Marianne Staudt  
**Sector:** Consumer  
Staples

**BUY**

Price Target: \$99.74

## Key Statistics as of 3/19/16

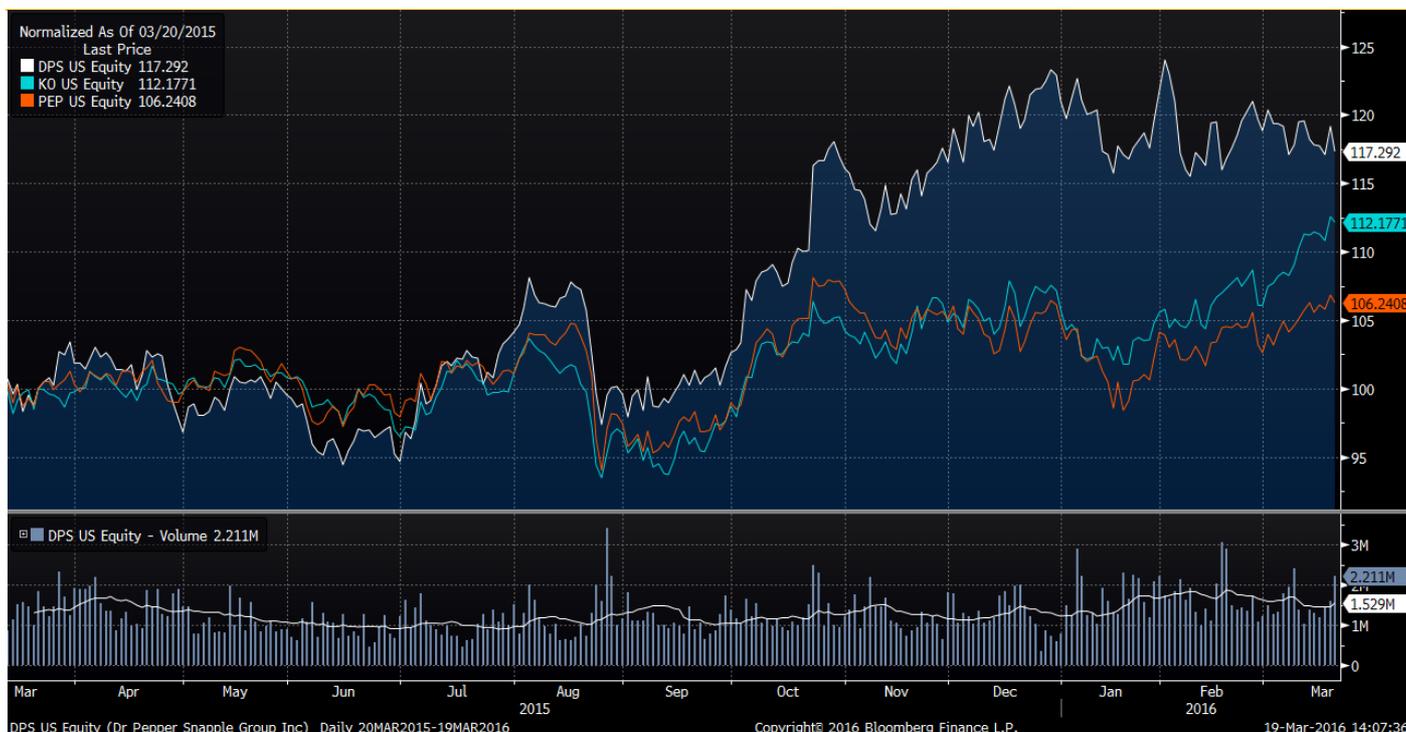
Market Price: \$90.35  
Industry: Beverages  
Market Cap: \$16,927.1  
52-Week Range: \$72-\$95.87  
Levered Beta: 0.39

## Thesis Points:

- Commitment to increasing shareholder value
- International expansion, specifically in Mexico and Latin America will increase sales and stock value
- Expansion into new industry through BodyArmor equity purchase will drive future growth

## Company Description:

Dr. Pepper Snapple Group, Inc. is a leading integrated brand owner, manufacturer, and distributor of non-alcoholic beverage in the United States, Canada, and Mexico. DPS offers a diverse product offering, including carbonated soft drinks (CSDs) and non-carbonated beverages (NCBs). They have over 35 brands sold in the US, with another dozen or so additional brands in Mexico and Canada. These products include teas, juices, sodas, water, and mixers. Their Brand portfolio includes popular CSD brands such as Dr. Pepper, Sunkist, 7UP, A&W, Canada Dry, Crush, Penafiel, and Schweppes, as well as NCB brands such as Snapple, Mott's, Hawaiian Punch, and many more.



## Thesis

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Dr. Pepper Snapple Group has positioned itself to gain market share in a competitive industry. Its expansion to Mexico and Latin America, both rapidly growing markets, will increase sales and stock value. Additionally, DPS's equity purchase of BodyArmor, a rapid growth sports drink company, will help drive future growth. DPS has also demonstrated a commitment to increasing shareholder value, both through stock repurchases and growing dividend payouts. DPS is a low-risk investment that can be counted on for consistent growth and returns. It is currently undervalued, and is a recommended a buy with a target price of \$99.74. This, when coupled with the dividend payout is a one-year return of around 15%.

## Industry Outlook

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The Beverage Industry as a whole has been relatively unaffected by the recent market downturn, oil uncertainty, and global macroeconomic risk. It has managed to successfully avoid the turmoil caused by the Chinese economic downturn and plummeting oil prices. This is because it is a slow changing industry, and regardless of what happens in the world, consumers in North America are not going to stop drinking soft drinks. While it is unlikely that DPS stock price is going to rise as quickly as some tech company, it is also unlikely to lose a lot of value either.

## Competitors

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It is no surprise that Dr. Pepper Snapple Group's main competitors are Coca-Cola and Pepsi. However, these two companies are significantly larger than DPS; Coca-Cola has a market cap of \$172 billion, and PepsiCo's market cap is \$136 billion. DPS market cap is tiny by comparison—at \$16 billion, it is less than 1/10 the size of Coke. Despite being direct competitors, DPS partners with Coke and Pepsi. In 2010, they licensed certain brands to PepsiCo. And Coca-Cola and executed agreements in which the two companies began offering Dr. Pepper and Diet Dr. Pepper in fountain accounts and their Freestyle Fountain program. The agreements have an initial periods of

20 years w/ automatic 20-year renewal. These partnerships are mutually beneficial for the companies involved, as Coca-Cola and Pepsi get to expand their product offering and Dr. Pepper realizes increased sales, and exposure, both domestically and abroad.

## Foreign Expansion

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Unlike its larger rivals, DPS does not have global presence. It operates in the US, Canada, Mexico, and the Caribbean. This puts DPS in a position to continue long-term growth in the future, while Coke and Pepsi struggle and remain stagnant. Dr. Pepper Snapple's current international revenue accounts for only around 15% of its total revenue. This, however, will grow significantly in coming years.

DPS is experiencing rapid growth in Mexico and Latin America. Mexico is the world's largest consumer of carbonated beverages, making it one of DPS's greatest drivers for growth. Last year's sales volume grew by 6% in Mexico and the Caribbean, reassuring strong growth in 2016 and in the future. Additionally, they were able to increase their Mexican product prices by 9%, increasing their net sales and overall profitability. With the Chinese economic downturn, it is refreshing to see diversification and expansion in Latin American markets rather than Asian markets.

Additionally, DPS bought back Snapple Asian Pacific rights in 2013 and signed a Western Europe license agreement in 2015. Both of these markets will become revenue growth drivers in the future

## Shareholder Value

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Dr. Pepper Snapple Group returns significant cash to shareholders through a combination of share repurchases and the issuance of dividends. Since the company's spin off in 2008, it has reduced share count 3.8% per year through common stock repurchases. In December of 2010, their Board authorized the repurchase of up to \$2 billion of their common stock outstanding. By the end of 2012, they had exhausted this authorization. On

November 17, 2011, the Board authorized an additional \$1 stock repurchase, which was completed during 2015. Lastly, on February 5, 2015, the Board once again authorized the repurchase of an additional \$1 billion. As of December 31, 2015, they had repurchased approximately 6.5 million shares, valued at approximately \$521 million. This repurchasing of shares will allow DPS to pay out higher dividends to shareholder's without increasing the net amount they are spending on dividends (as there are fewer shareholders). Therefore, as stock repurchases continue, DPS holders can expect consistent and even growing dividend payouts.

DPS's quarterly dividend has more than tripled since 2010. It currently offers a dividend yield of 2.3% and a ratio of 48%. These large dividends paired with significant share repurchases mean that



DPS returns nearly all of its earnings to its shareholders.

Investors in DPS can continue to expect high returns from DPS in the future, with expected EPS growth between 7% to 11% per year and a dividend yield of 2.31%, shareholder can expect total returns between 9.31% and 13.31% per year.

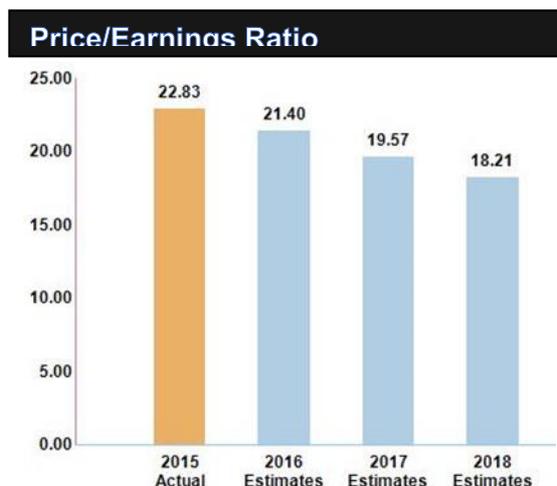
## Financials

Dr. Pepper Snapple's 2015 earnings showed promising results; DPS managed to maintain constant growth of net sales, which were up 3% in 2015. Income from operations grew 9% to \$1,312M, and it continued to grow dividends up to 2.3%. Additionally, both revenue and earnings per share exceeded expectations. DPS ended 2015 with EPS of \$4, an 11% increase from last year (\$3.59).

DPS has a P/E ratio of 23.17, which is high in comparison to other industries, but the lowest when compared to peers in its industry. When Dr. Pepper Snapple's P/E is compared to that of its competition, it shows undervaluation that could be capitalized on

	DPS	MNST	KO	PEP	Industry
P/E	23.17	44.34	26.21	26.79	23.96

Not only does DPS have low P/E relative to its peers, but it is expected to continue to fall, giving investors a strong buying opportunity.



Dr. Pepper Snapple Group has a return on invested capital of 18.02%, well above its weighted average cost of capital of 6.98%. Its ROIC/WACC is 2.58, demonstrating long term value creation. DPS's ROIC has risen steadily since 2009, and will continue to do so.

## Dr. Pepper Snapple Group Inc. Annual Data

	Dec09	Dec10	Dec11	Dec12	Dec13	Dec14	Dec15
ROIC	11.73	13.03	15.75	15.63	25.54	16.53	18.02

## BodyArmor

In August of 2015, Dr. Pepper bought an 11.7% equity stake in BodyArmor for \$20 million. BodyArmor is an upcoming growth brand in sports drink market. Sports Drinks make up an over \$6.3 billion industry, and although BodyArmor faces steep competition in a relatively saturated industry with Gatorade and Powerade, it has managed to nearly double sales in the last year. Prior to DPS

equity purchase, BodyArmor was in 20 states, mainly in convenience stores. It had a two year goal of being in all 50 states, and a five year goal of \$100 in sales. In 2014, BodyArmor did \$30M in sales, over \$50M in 2015, and is on track to do \$100M in 2016—making it well ahead of its five year plan. Currently, BodyArmor can be found in 40 states and 25,000 stores, due in large part to its access to DPS large distribution network.

Despite being in a very competitive and saturated industry, BodyArmor differentiates itself by offering a superior product with electrolytes, coconut water, and vitamins. It has no artificial colors or flavors and has 2.5 times the electrolytes found in other sports drinks.

DPS purchase of BodyArmor equity provides diversification away from their CSD products into a very attractive growth industry. While carbonated soft drink sales are declining across the country, non-carbonated beverage sales are growing at double the rate of carbonated—2% vs 4% for DPS. Adding BodyArmor continues DPS diversification away from CSDs into a hot growth market. While CSDs are a low growth product, the sports drink market continues to grow. From 2009 to 2014, the market grew at an avg. of 3.8% per year, and BodyArmor grew 180% in 2014—well ahead of market. This is why this deal is so important to Dr. Pepper—BodyArmor has the potential to gain market share and reach \$1B in sales. A company doing \$100M in sales in 2016 isn't a huge deal to a company as large as DPS, but a company doing \$1B annually in five years is. The growth potential for BodyArmor is huge, and will be a large value creator for DPS as it continues to grow in the coming years.

## Conclusion

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Dr. Pepper Snapple Group has been steadily beating analyst estimates; it beat estimates in all four quarters of 2015 and I expect it to continue to in the coming quarters. Its commitment to increasing shareholder value coupled with strong financials, international expansion, and the purchase of BodyArmor equity, position DPS for future growth

and value creation. With a current price of \$90.35 and a 1 year target of \$99.74, DPS offers a modest, yet reliable 12.45% return. Add the 2.3% dividend yield and investors can expect a total return of nearly 15%. While this is not astronomical, it offers investors a safe, yet reliable return, making it a BUY.

**Dr Pepper Snapple Group, Inc. (dps)**

Analysis by P.C. Principal  
3/20/2016

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**NEUTRAL**

Target 1 year Return: 12.45%  
Probability of Price Increase: 75.1%

**Current Price:** \$90.35  
**Dividend Yield:** 2.1%

**Intrinsic Value:** \$95.21  
**Target Price:** \$99.74

**Description:** Dr Pepper Snapple Group, Inc. operates as a brand owner, manufacturer, and distributor of non-alcoholic beverages in the United States, Mexico, and Canada.

**Market Data:** Market Capitalization: \$16,927.07; Daily Volume (ml): 2.21; Shares outstanding (ml): 187.35; Diluted shares outstanding (ml): 192.40; % shares held by institutions: 55%; % shares held by investment Managers: 85%; % shares held by hedge funds: 2%; % shares held by insiders: 0.33%; Short interest: 4.37%; Days to cover short interest: 5.27; 52-week high: \$95.87; 52-week low: \$72.00; Leveled Beta: 0.39; Volatility: 17.05%.

**General Information:** Sector: Consumer Staples; Industry: Beverages; Last Guidance: November 3, 2015; Next earnings date: April 22, 2016; Estimated Country Risk Premium: 6.00%; Effective Tax rate: 38%; Effective Operating Tax rate: 39%.

**Peers:** Coca-Cola Enterprises, Inc.; Alouette Beverage Corporation; PepsiCo, Inc.; The Coca-Cola Company; The Clorox Company; Coca-Cola Bottling Co. Consolidated.

**Past Earning Surprises**

Quarter ending	Revenue	EBITDA
12/31/2014	2.21%	-14.31%
3/31/2015	2.43%	4.56%
6/30/2015	0.00%	4.05%
9/30/2015	2.15%	1.97%
12/31/2015	10.7%	-0.72%
Mean	1.57%	-0.90%
Standard error	0.5%	3.5%

**Management**

Management	Position	Total compensations growth	Total return to shareholders
Young, Larry	Chief Executive Officer, Pce	8.21% per annum over 5y	6.53% per annum over 5y
Ellen, Martin	Chief Financial Officer and	-17.74% per annum over 4y	7.38% per annum over 4y
Hobson, Derry	Executive Vice President of	-2.86% per annum over 5y	6.53% per annum over 5y
Collins, Rodger	President of Packaged Bevera	4.34% per annum over 5y	6.53% per annum over 5y
Johnton, James	President of Beverage Concen	4.91% per annum over 5y	6.53% per annum over 5y
Stapleton, Angela	Financial Accounting Officer	N/A	N/A

**Sensitivity Attribution Analysis**

Category	Value
Revenue	74.7%
Operating Expenses	20.4%
Dividends	1.7%
NWC	0.2%
CAPEX	2.7%
Operating Cash	0.2%

**Profitability**

Profitability	dps (LTM)	dps (5 years historical average)	Industry (LTM)
ROIC	13.6%	7.83%	11.66%
NOPAT Margin	14%	11.12%	14.2%
Revenue/Invested Capital	0.99	0.71	0.82
ROE	15.5%	9.00%	13.49%
Adjusted net margin	12%	9.65%	12.5%
Revenue/Adjusted Book Value	1.24	0.93	1.08

**Invested Funds**

Invested Funds	dps (LTM)	dps (5 years historical average)	Industry (LTM)
Total Cash/Total Capital	12.6%	7.4%	19%
Estimated Operating Cash/Total Capital	2.4%	2.1%	N/A
Non-cash working Capital/Total Capital	-2.4%	-2.1%	7%
Invested Capital/Total Capital	88.5%	94.0%	75%

**Capital Structure**

Capital Structure	dps (LTM)	dps (5 years historical average)	Industry (LTM)
Total Debt / Common Equity (LTM)	0.22	0.32	0.19
Cost of Existing Debt	4.40%	4.82%	3.31%
Estimated Cost of new Borrowing	3.37%	3.14%	2.90%
CGFS Risk Rating	4.40%	A	B
Unlevered Beta (LTM)	3.95%	0.42	0.61
WACC	4.40%	5.33%	6.38%

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

**Valuation**

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	2.6%	13.8%	2.80
12/31/2016	1.4%	12.3%	2.52
12/31/2017	3.0%	12.6%	2.54
12/31/2018	2.9%	13.0%	2.52
12/31/2019	3.5%	13.5%	2.53
12/31/2020	2.9%	13.7%	2.47
12/31/2021	-1.7%	13.4%	2.23
12/31/2022	2.1%	13.7%	1.97
12/31/2023	2.1%	14.0%	1.94
12/31/2024	2.4%	13.9%	1.88
12/31/2025	2.7%	13.8%	1.81
Continuing Period	3.0%	13.7%	1.75

**Invested Capital**

Period	Invested Capital	Net Claims	Price per share
Base Year	\$6,049.10	\$3,073.00	\$94.29
12/31/2016	\$5,674.82	\$2,973.28	\$97.04
12/31/2017	\$5,802.27	\$2,979.38	\$99.94
12/31/2018	\$6,326.88	\$2,953.26	\$103.04
12/31/2019	\$6,360.31	\$2,941.68	\$106.33
12/31/2020	\$6,463.48	\$2,861.13	\$109.84
12/31/2021	\$6,650.52	\$3,796.59	\$113.64
12/31/2022	\$6,981.20	\$3,678.60	\$118.00
12/31/2023	\$7,322.28	\$3,557.58	\$122.63
12/31/2024	\$7,728.86	\$3,449.40	\$127.75
12/31/2025	\$8,101.23	\$3,388.51	\$132.98
Continuing Period			

## Foot Locker Inc.

FL

**Analyst:** Richard Acheson  
**Sector:** Consumer  
Discretionary

**BUY**

**Price Target: \$81.41**

### Key Statistics as of 3/19/16

Market Price:	\$65.22
Industry:	Specialty Retail
Market Cap:	\$8.9B
52-Week Range:	\$57.23 - \$77.25
Beta:	.55

### Thesis Points:

- The recent surge in health and fitness creates a greater market and increases demand for Foot Locker's products.
- The Summer Olympics are going to create additional revenue and value for Foot Locker.

### Company Description:

Foot Locker Inc. is one of the biggest retailers in athletic apparel and footwear. The company is currently selling in the United States, Canada, Australia, New Zealand, and Europe with a total of 3,423 stores. Not only do they operate inside brick and mortar stores, but they have an online presence as well generating \$865 million in revenue in 2014. The company generates revenue based on new trends and fashion statements within the athletic industry. They also have many different stores such as Lady Foot Locker, Kids Foot Locker, and Champs Sports catering to different demographics.



## Thesis

In recent years, there has been a health and fitness boom within the United States. The number of gym memberships have been increase steadily over time. With this increase, it creates a greater market for Foot Locker to supply for. Not only that, but current fitness members typically purchase new shoes for their athletic activities every year or so. This gives Footlocker a sustainable market going forward.

The Summer Olympics is also another opportunity for Foot Locker to grow and create value within the very near future. The Summer Olympics creates awareness of fitness to consumers and also gives Foot Locker additional merchandise. In 2012 when the last Summer Olympics occurred, Footlocker experienced their greatest increase in revenue from the previous year at 11.4%, their greatest in recent history.

## Porter's Five Forces

### Bargaining power of suppliers: **MEDIUM – 62.5**

Foot Locker is dependent on its suppliers like Nike and Under Armour to come out with new shoes that will keep up with new trends that appeal to the younger generation. If their suppliers lost this ability, Foot Locker's performance might suffer.

### Bargaining power of customers: **MEDIUM – 42.86**

Consumers have very little bargaining power when it comes to purchasing a certain NBA players shoe or accessory. Although there are many retailers that sell the same product, prices remain constantly high across the industry.

### Threat of substitutes: **MEDIUM – 58.33**

It's easy for customers to wear a shoe that is not sold at Footlocker. People can easy wear sandals, boots, or anything else but if consumers want the quality of a shoe that is sold at Foot Locker or any other sporting goods store, they must go to one of those stores. Foot Locker places itself as a retailer of a high quality

product so if a consumer wants that quality, there are not a lot of replacements.

### Existing rivalry: **MEDIUM – 41.67**

Existing rivals to Foot Locker include other retailers like Dicks Sporting Goods or Finish Line. These companies carry almost the same quality and inventory of Footlocker but there are not many others. The industry and demand for these products are relatively large so there is plenty of growth to go around.

### Threat of new competition: **MEDIUM – 54.17**

To directly compete with Foot Locker, a company would need a larger amount of capital in order to obtain the high quality products that Foot Locker offers. This industry also requires a good distribution network. Foot Locker thrives on the high traffic though their stores being located mainly within shopping malls. For a company to be considered a threat, they would have to expose themselves to the same amount of traffic that Foot Locker does.

## Financials

Foot Locker is in a great position financially, racking up consistent revenue growth in recent year as well as increasing consistent growth in gross, EBITDA, and net margins.

In Millions of USD	FY 2013	FY 2014	FY 2015	FY 2016
12 Months Ending	02/02/2013	02/01/2014	02/01/2015	01/30/2016
Market Capitalization	5,186.4	5,613.5	7,496.8	9,273.4
- Cash & Equivalents	928.0	867.0	967.0	1,021.0
+ Preferred & Other	0.0	0.0	0.0	0.0
+ Total Debt	133.0	139.0	134.0	130.0
Enterprise Value	4,391.4	4,885.5	6,663.8	8,382.4
Revenue, Adj	6,182.0	6,505.0	7,151.0	7,412.0
Growth %, YoY	9.9	5.2	9.9	3.6
Gross Profit, Adj	2,034.0	2,133.0	2,374.0	2,505.0
Margin %	32.9	32.8	33.2	33.8
EBITDA, Adj	740.0	805.0	946.0	1,090.0
Margin %	12.0	12.4	13.2	14.7
Net Income, Adj	404.0	435.0	522.0	606.0
Margin %	6.5	6.7	7.3	8.2
EPS, Adj	2.63	2.89	3.57	4.30
Growth %, YoY	45.9	10.1	23.7	20.4
Cash from Operations	416.0	530.0	712.0	-
Capital Expenditures	-163.0	-206.0	-190.0	-
Free Cash Flow	253.0	324.0	522.0	-

Foot Locker also has been able to keep their debt level low, giving the firm flexibility and opportunity for expansion. The only negative against Foot Locker is

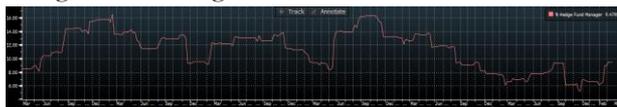
that they keep a lot of cash on hand not only recently but in past years as well. Investors would rather see this money being invested for a greater return rather than just sitting in a bank account. This does however, give Foot Locker even more of an incentive to expand. Analysts have been expecting for Foot Locker to expand their operations internationally in addition to the stores they already have, specifically in Europe.

## Ownership

Foot Locker is mainly owned by investment advisors and hedge fund managers. The ownership for hedge fund managers is historically low, having its highest percentage at 16 in 2013 and have been on a decline since. Although it has seen a recent increase of 2% within the past month, meaning hedge fund managers must be expecting an increase in price in the near future.

54) Ownership Type	03/13/16	Curr	Change
41) Investment Advisor	78.96	78.75	-0.21
42) Hedge Fund Manager	9.43	9.48	+0.05
43) Bank	4.86	4.88	+0.02
44) Pension Fund	2.54	2.56	+0.02
45) Government	1.52	1.63	+0.11
46) Individual	1.23	1.24	+0.01
47) Insurance Company	1.10	1.10	0.00
48) Other	0.14	0.14	0.00
49) Endowment	0.07	0.07	0.00

Hedge fund manager trend as follows:



## Risk Associated

As with any other company, there is a certain degree of risk with investing in Foot Locker. The most concerning risks are:

Changes in fashion trends can negatively effect on business: A lot of Foot Locker's business come from young males ages 12 – 25 that will purchase footwear and apparel according to current fashion trends. Foot Locker is very reliable on their suppliers to keep up with fashion trends.

Dependence on suppliers: Foot Locker must maintain a good relationship with their suppliers in order to be successful. Nike is most important in this case. 73% of Foot Locker's inventory comes from Nike. If anything were to happen to Nike, Foot Locker would take a hit financially as well.

## Valuation

The target price that was calculated in the pro forma was a target price of \$81.41 with an intrinsic value of \$75.53. According to the sensitivity analysis, Foot Locker's stock price is mainly sensitive to revenue growth and operating costs with a slight impact from capital expenditures. A conservative approach was taken when valuing Foot Locker, keeping the growth rate for the explicit period at 4%, which is 5% lower than what it has historically been. 3% was the input for the continuing period. Operating costs remained the same as historical and last reported at 86% in the valuation although Foot Locker has shown slight but consistent increases in their gross and net margins in the past. Lastly, what was also sensitive to the stock price was their beta. For Foot Locker the Beta was .78 historically and last reported was .55. For the forecast, a beta of .6 was given for the explicit period as well as a .85 for the continuing period. With these conservative inputs, the pro forma still calculated an intrinsic value that is \$10 over the current stock price, making Foot Locker undervalued.

## Conclusion

Foot Locker is currently undervalued at their current stock price of \$65.22. The market is not taking into account the large amount of opportunities for growth that this company has in front of them. When Foot Locker capitalizes on this growth from their different segments and events in the near future, the market should respond with a significant increase in stock price that is close to the target price that was calculated of \$81.41.

**Foot Locker, Inc. (fl)**
**CENTER FOR GLOBAL FINANCIAL STUDIES**
**BULLISH**

**Analysis by P.C. Principal**  
3/19/2016

**Current Price:** \$65.22  
**Dividend Yield:** 1.4%

**Intrinsic Value:** \$75.53  
**Target Price:** \$81.41

**Target 1 year Return:** 26.27%  
**Probability of Price Increase:** 95.33%

**Description**  
Foot Locker, Inc. operates as an athletic shoes and apparel retailer.

**Market Data**  
Market Capitalization: \$8,952.21  
Daily volume (mil): 2.16  
Shares outstanding (mil): 137.26  
Diluted shares outstanding (mil): 140.80  
% shares held by institutions: 105%  
% shares held by investments Managers: 88%  
% shares held by hedge funds: 7%  
% shares held by insiders: 1.19%  
Short interest: 16.05%  
Days to cover short interest: 8.50  
52 week high: \$77.25  
52-week low: \$57.23  
Levered Beta: 0.70  
Volatility: 28.11%

**General Information**  
Sector: Consumer Discretionary  
Industry: Specialty Retail  
Last Guidance: November 3, 2015  
Next earnings date: NM  
Estimated Country Risk Premium: 7.79%  
Effective Tax rate: 40%  
Effective Operating Tax rate: 41%

**Peers**  
Ralph Lauren Corporation  
Dick's Sporting Goods Inc.  
Under Armour, Inc.  
PVH Corp.  
Finish Line Inc.  
DSW Inc.  
V.F. Corporation  
Ascena Retail Group Inc.

**Past Earning Surprises**

Quarter ending	Revenue	EBITDA
1/31/2015	2.12%	4.99%
5/2/2015	0.07%	3.45%
8/1/2015	1.96%	16.32%
10/31/2015	0.68%	3.51%
1/30/2016	0.04%	1.03%
Mean	0.97%	5.86%
Standard error	0.5%	2.7%

**Target Price Distribution--P(price↑)=95.33%**

**Sensitivity Attribution Analysis**

Revenue	49.4%
Operating Expenses	32.9%
Dividends	0.3%
NWC	0.9%
CAPEX	16.2%
Operating Cash	0.3%

**Management**

Management	Position	Total compensations growth
Johnson, Richard	Chief Executive Officer, Pre	-100% per annum over 4y
Peters, Lauren	Chief Financial Officer and	-100% per annum over 4y
McHugh, Robert	Executive Vice President of	-100% per annum over 4y
Alvini, Paulette	Chief Human Resources Office	-100% per annum over 1y
Berk, Jeffrey	Senior Vice President of Rea	-100% per annum over 4y
Cipriano, Giovanna	Chief Accounting Officer and	N/M

**Profitability**

	fl (LTM)	fl (5 years historical average)	Industry (LTM)
ROIC	5.7%	17.23%	20.00%
NOPAT Margin	7%	21.98%	6.8%
Revenue/Invested Capital	0.80	0.78	2.96
ROE	7.1%	27.02%	24.00%
Adjusted net margin	6%	19.72%	6.4%
Revenue/Adjusted Book Value	1.11	1.37	3.74

**Invested Funds**

	fl (LTM)	fl (5 years historical average)	Industry (LTM)
Total Cash/Total Capital	8.9%	9.6%	15%
Estimated Operating Cash/Total Capital	3.2%	3.4%	N/A
Non-cash working Capital/Total Capital	7.7%	8.4%	17%
Invested Capital/Total Capital	94.5%	93.9%	85%

**Capital Structure**

	fl (LTM)	fl (5 years historical average)	Industry (LTM)
Total Debt/Common Equity (LTM)	0.56	0.66	0.23
Cost of Existing Debt	2.46%	8.37%	4.37%
Estimated Cost of new Borrowing	3.38%	2.75%	3.91%
CGFS Risk Rating	2.46%	A	AA
Unlevered Beta (LTM)	3.03%	0.78	0.92
WACC	2.46%	8.84%	9.58%

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

**Valuation**

Period	Revenue growth	NOPT margin	ROIC/WACC
Base Year	3.6%	7.0%	0.90
1/30/2017	4.8%	8.9%	0.93
1/30/2018	4.8%	10.7%	1.22
1/30/2019	3.8%	11.6%	1.31
1/30/2020	6.3%	12.9%	1.46
1/30/2021	6.4%	14.5%	1.70
1/30/2022	5.9%	14.3%	1.61
1/30/2023	5.3%	13.9%	1.51
1/30/2024	4.7%	13.7%	1.49
1/30/2025	4.1%	13.0%	1.35
1/30/2026	3.6%	12.6%	1.30
Continuing Period	3.0%	12.2%	1.22

**Invested Capital**

Period	Invested Capital	Net Claims	Price per share
Base Year	\$6,420.41	\$4,779.44	\$76.32
1/30/2017	\$7,337.39	\$3,728.57	\$82.67
1/30/2018	\$8,912.39	\$3,088.65	\$90.80
1/30/2019	\$8,861.36	\$2,203.66	\$99.74
1/30/2020	\$9,218.57	\$1,017.19	\$109.61
1/30/2021	\$10,848.15	\$91.32	\$120.41
1/30/2022	\$10,323.22	-\$1,006.66	\$131.59
1/30/2023	\$10,639.97	-\$2,519.16	\$144.51
1/30/2024	\$10,872.78	-\$3,505.05	\$156.19
1/30/2025	\$11,047.10	-\$4,887.68	\$168.14
1/30/2026	\$11,811.15	-\$6,089.52	\$180.21
Continuing Period			

## Luminex Corporation

NASDAQGS:LMNX

**Analyst:** Pierre Gouesclou

**Sector:** Healthcare

**BUY**

Price Target: \$23.19

### Key Statistics as of 03/18/2016

Market Price: \$19.24  
 Industry: Medical Instruments & Supplies  
 Market Cap: \$830.10 Million  
 52-Week Range: \$15.47-\$22.85  
 Beta: 0.18

### Thesis Points:

- Luminex is a small capitalization with high growth potential
- They have an impressive low debt amount for a Medical Instruments & Supplies company
- They have a very stable product line with a cutting edge technology
- Luminex is working with the Defense threat Reduction Agency of the United-States on a defense project

### Company Description:

Luminex Corporation is a company that develops, manufactures and sells biological testing technologies to pharmaceuticals and other related companies throughout the world. The company has a small product selection and uses its patented xMAP open-architecture multi-analyte platform in order to develop their products according to the need of their customers. Luminex Corporation turned public in 2000 with a share price of \$17. A small capitalization company with a nich market line and an increasing Net change in cash can be expect to have a very high probability to encounter an important growth of their stock price in the upcoming year. The companies Net change in cash went from \$-1.4 million in 2010 to \$36.9 million in 2015 du to their impressive cost and debt management across the years. Furthermore the company is established in Austin, Texas which implies that Luminex is subject to G.A.P.P. accounting rules and obligations and therefore represents a low risk of falcification regarding their financial results.



## Thesis

Luminex is a company with a well-managed capital structure that has acknowledged a quick growth of their assets and revenues during the past five years. In addition to expanding their product line through research and development the company also seeks partnerships with other organizations in order to have their researches sponsored and reduce their costs overall. In 2012 Luminex has entered a partnership with the Defense Threat Agency (D.T.A.) of the United-States to research and develop a defense project for the United-States government. This partnership may become an opportunity of a true and stable source of revenue for the company if it succeeds.

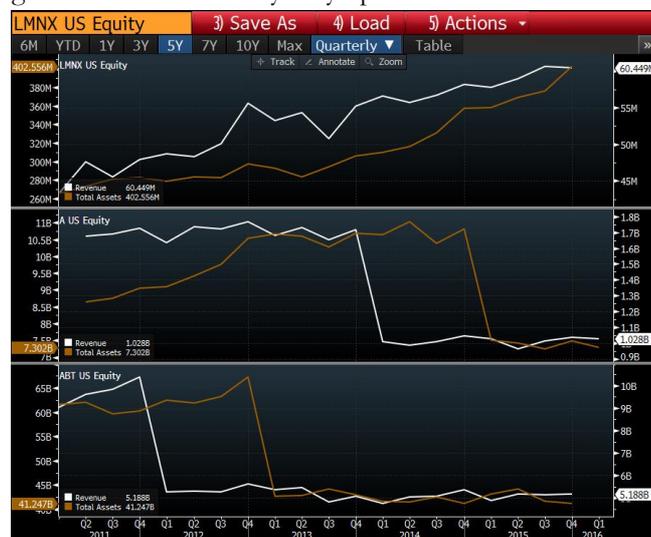
The company has an impressive capital structure considering the industry they operate in which often requires an important amount of debt to be able to operate efficiently. Luminex has a current debt to Equity ratio of 0.09 and does not carry any long-term debt. This debt management increases the capacities of the firm to pursue business without being burdened by too much debt.

Luminex Corporation also has an effective cost management that allows them to generate appropriate revenues. The operating income of the firm accounts for 16% of the revenues despite the fact that 21% of the total operation costs are used for the Research & Development of new or existing products. This cost management is even more effective given the fact that the company did not have any interest expenses in the past years.

## Industry Outlook

The Medical Instruments & Supplies Industry has flourished in the past years considering the downfall of healthcare companies overall at the end of 2015. With the increase of creation of new medical treatments and drugs these companies were able to increase their sales of high technology products in order to support these innovations. In addition to the increase in technology it can be expect that the increase of demographics will enhance the growth of such industries and generated additional demand for this type of products. Furthermore private and governmental organizations have been investing important amounts of cash into this sector in the hope to enhance their efficiency. In that aspect this industry receives important external investments, which allows them to reduce their overall costs. The chart below shows the Revenue and Total Assets of Luminex compared to two of its competitors: Agilent Technologies and ABBOT. Luminex has been efficient in his operations compared to his larger and more stable competitors these last years. The firm

has been constantly increasing its total assets and revenues when its competitors acknowledged a downfall of Revenue and assets. In the last year Luminex has encountered a high growth for the Industry they operate in.



## Product Line

Luminex Corporation product lines focuses mostly on three leading product lines: XMAP, XTAG and multiCode. In addition to these stable products the firm also launched their newly developed products: NxTAG and ARIES system. The ARIES system is a product that can generate IVD assays and give accurate results required in laboratories today. Globally, these products are systems that are incorporated into the machineries created by their licensed customers. Luminex pursues business directly with their customers in order to maintain a healthy relationship and be able to council more accurately their products. Outside of the license business Luminex also provides direct molecular diagnostic services to his customers. Because of their small product line the company is able to maintain a low cost of revenue.

## Customer

Luminex Corporation has a small pool of customers who account for most of their sales. Labcorp is the most important of these customers and represents 18% of their revenue overall. A small customer base implies that the loss of one of their customers can uncover a risk for the company. In order to palliate that risk the firm has developed an impressive technical operation department responsible in assisting any entity equipped with Luminex products across the board. This technical assistance is available 24/7 as a remote service and can act physically if required by the customers. In addition, Luminex's International Operations accounts for around 16% of their overall revenues generated through their subsidiaries

located in Canada, Netherlands, China, Japan, Hong-Kong and Europe. The International operation is a valuable asset for a company dealing in such products and can be proven to become a competitive advantage against other smaller competitors. This segment also implies possible currency, tax and inflation risks for the company in foreign countries. Currently the company has acknowledged a strong and steady growth of their sales in the United-States.



	FY 2012	FY 2013	FY 2014	FY 2015
<b>Revenue</b>	202.6 100.0%	213.4 100.0%	227.0 100.0%	237.7 100.0%
United States	167.9 82.9%	178.3 83.5%	187.9 82.8%	200.4 84.3%
Europe	17.4 8.6%	16.7 7.8%	17.8 7.9%	17.0 7.2%
Asia	10.9 5.4%	12.3 5.8%	14.9 6.5%	12.8 5.4%
Other Foreign	1.7 0.8%	1.8 0.9%	2.7 1.2%	4.2 1.8%
Canada	3.8 1.9%	3.0 1.4%	3.7 1.6%	3.2 1.4%
Australia	1.0 0.5%	1.3 0.6%	-	-
<b>Long Term Assets</b>	166.9 100.0%	159.7 100.0%	-	-
Australia	2.6 1.5%	2.4 1.5%	-	-
Other Foreign	0.0 0.0%	0.0 0.0%	-	-
Canada	48.9 29.3%	46.5 29.1%	-	-
Asia	0.2 0.1%	0.2 0.1%	-	-
Europe	1.4 0.9%	1.0 0.6%	-	-
United States	113.7 68.1%	109.4 68.5%	-	-

## Partnerships

Luminex like many companies are also expanding their Partnership projects in order to increase their output of new prototypes and product lines. Luminex has also expanded their network of Partners that are able to council and promote the products of the company. These Partners are to pay license fees to Luminex for each system they are able to provide to a potential customer.

In 2012 the company was granted \$12 million dollars by the Defense Threat Reduction Agency of the United-States. This Agency has only 47 contracts outstanding to companies and Luminex could acknowledge an increase in status if they succeed to fulfill this contract. Furthermore a possible success of this project could trigger additional governmental contracts and create new sources of investments and revenues for the company in the future.

Earlier this year Luminex enhanced their partnership with Bio-Techne regarding their product associations. Bio-Techne is a large Biotech firm with big access to international markets. This partnership consists in two specific segments. The first segment includes equipping Bio-Techne products with Xmap testing products developed by Luminex. The second segment is the distribution of Luminex systems by Bio-Techne on worldwide markets.

The most recent partnership of Luminex was signed with the Laboratory of Molecular Evolution & Bioinformatics, Biomedical Sciences Institute (University of São Paulo). The contract consists in enhancing the ability of Luminex products to foresee and detect the Zika virus that has an

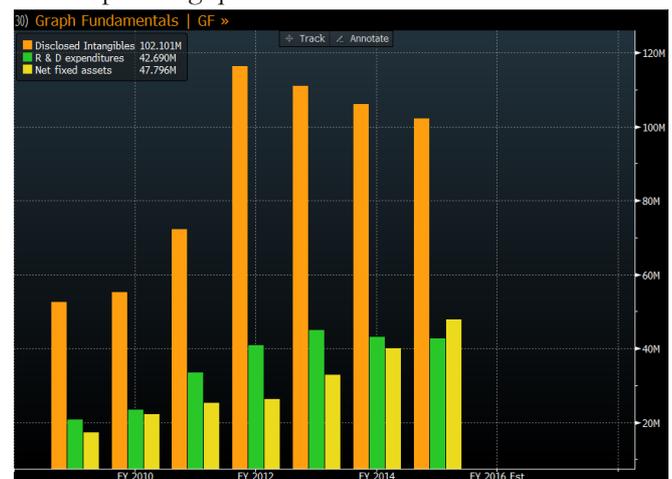
increasing presence and effect in South America. Such an agreement can prove to become a valuable asset for Luminex in the next months.

## Research & Development

Between 2010 and 2015 the company has increased their R&D expenses by 59% going from \$26.8 million in 2010 to \$42.7 million in 2015. These expenses have been focused on the optimization on ARIES system; the key new product of the company. These optimizations include finding new ways to use the system but also software and consumables that could be used to enhance the application of the system itself. In addition to the investment in the ARIES system the company managed to develop in 2015 a chemistry to run multiplexed test combining other products created by the company such as xTAG and xMAP. The research and development of the company is effective given the innovations they created.

## Intangibles and NPPE

In the last years the company has triggered an important purchase of Net property Plant and equipment (116% increase between 2010 and 2015) and financed this expansion by using cash issued from their operations. Luminex has also increased their purchase of other intangibles (+320%) such as patents and copyrights for their products. In the chart below is included the progression of the NPPE, intangibles and research and Development of the company. Luminex is experiencing a period of expansion and growth that is supported by their increase in Revenues overall. This aspect can prove to be a real driver towards an increase in stock price in the upcoming quarters.



Due to these increase in assets the company slightly increased their debt by 10% and their Equity by 57% thus modifying their capital structure into an Equity majority holding. The structure of their debt has also been modified in the last year turning away from long-term debt and taking over short-term

debt. As shown below the company paid of all of their debt in 2014. It is a true advantage for the small healthcare firm in the future.



### Financial analysis

Luminex has had very positive results in the past years. In 5 years the company managed to increase their Net Income by more than 600% from \$5.2 million in 2010 to \$36.9 million in 2015 without taking important additional debt. On the other hand the revenues of the company increased by 68% between 2010 and 2015 implying a growth of their activities.

On the Cash flow aspect even by consequently increasing the Capital expenditures the company managed to change the Net change in Cash from \$-1.4 million to \$36.9 million in 5 years. As a result of their strategies Luminex was able to change their Retained earnings from \$-61.7 million to \$48.1 million in a period of 5 years. Overall Luminex has a stable structure and does not oppose any financial risk for the years to come. The Bloomberg chart below shows the revenue and Total Debt to Total Asset of Luminex.

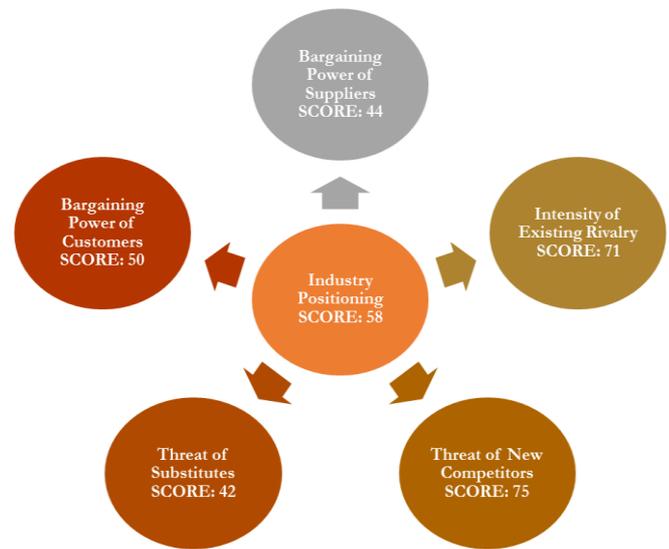


The company is currently following an increase of their revenues supported by a Total Debt to Total Asset of 0. Since the 2<sup>nd</sup> quarter of 2014 when the company deleted their debt the revenue has been increasing periodically in a seasonal way without weakening. In that aspect Luminex is

starting to shift towards a mostly Equity structure that might not be the most optimal structure but still provides more financial security. A small capitalization company with a mostly Equity structure implies a high return with a very low risk.



### Porter's 5 Forces



#### Bargaining Power of Customers :

According to the Porter analysis Luminex has an average bargaining Power of Customer of 55. Overall the bargaining power of customer is an advantage for companies such as Luminex. This type of small company has the advantage of a very specific niche and complex product with a very narrow amount of competitors. In that aspect the bargaining power of customers is very low and the demand for the product is Inelastic. Luminex customers will be willing to pay more for their products

since they are uncommon and of importance for their own line of business.

#### Bargaining Power of Suppliers :

Luminex has an overall important power of Suppliers for his industry. The fact that there is a high number of substitutes and an important competition between the different suppliers decreases the dependency of the company towards one source of supply. Furthermore the volume ordered is not critical for their suppliers and implies that Luminex does not have a certain amount of supply to purchase in order to keep suppliers. The main disadvantages for Luminex is the fact that inputs have important impacts on costs for them.

#### Intensity of Existing Rivalry :

The industry in which operates Luminex is small and includes very little competitors for these type of products. This represents an advantage for Luminex who will encounter less opposition when it will come to selling their product. In this Industry the Exit barriers are averagely sized and the governmental control in order to limit competition exists. Biotechnologies are very advanced and lucrative, this is why governments have tendencies to watch over a nurture these companies.

#### Threat of New Competitors :

Threat of new competitors is very low for this type of company. In this industry the Entry barriers are very high and selective mostly because advanced technologies are required in order to thrive. Furthermore Patents are a major factor for competition limitation and brand loyalty from customers. In other words companies all have their niche products with very specific attributes that certain types of customer are looking for. In that aspect Strong brand names are not important since smaller companies protect by patents can provide higher quality products that bigger firms. The only threat of new competitors can be provoked by the attractiveness of the high earning curves of the industry Luminex operates in. Potential competitors can see a possible return on investment in taking the risk to enter this market. On the other hand the fact that there is a high switching cost of customer can counterbalance hopes of entering such an enclosed market. Overall Luminex has a low threat of New competitors given the industry they operate in.

#### Threat of Substitutes :

In this type of business it is primordial to acknowledge the existence and efficiency of possible substitutes.

Luminex has a very low number of substitutes to which their present customers can turn towards. In addition, the costs of switching to a substitutes will be important since the customer will have to modify most of their processes to fit this substitute. Even if the consumer decided to substitute Luminex's products he would be switching for a substitute with equal or lower attributes than the Luminex product. The products provided by Luminex are highly performant and out-perform or equal the results and efficiency of their competitor's products.

### Conclusion

Overall Luminex has a stable structure and does not oppose any financial risk for the years to come. This aspect combined with a stable customer base and product line will ensure a positive future for the company. The company has been expanding both their physical and intangible presence by increasing their NPPE and intangible assets. Such purchases implies that the company is in a strong period of growth than can quickly become an opportunity to see the per share price increase at the maturity of these projects. The stock price is undervalued for the prospect of value creation behind their activities. In that aspect I recommend a Buy of LMNX with a 1 year target price of **\$23.19 (+20.53)**.

**Luminex Corporation**  
**(LMNX)**

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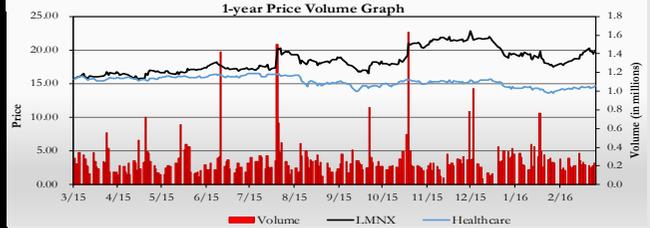
**BULLISH**

Analysis by Pierre Gouesclou  
3/18/2016

Current Price: **\$19.24**  
Divident Yield: **0.0%**

Intrinsic Value: **\$20.59**  
Target Price: **\$23.19**

Target 1 year Return: 20.53%  
Probability of Price Increase: 99.67%

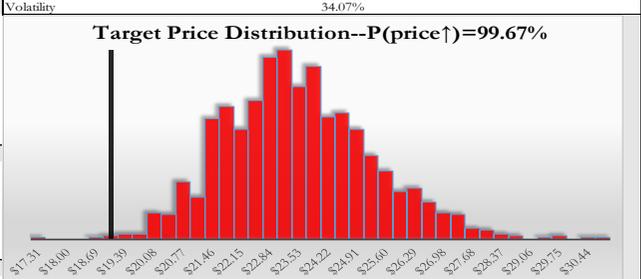


Description	
Luminex Corporation develops, manufactures, and sells proprietary biological testing technologies and products for the diagnostics, pharmaceutical, and life sciences industries worldwide.	
General Information	
Sector	Healthcare
Industry	Life Sciences Tools and Services
Last Guidance	November 3, 2015
Next earnings date	NM
Estimated Country Risk Premium	7.87%
Effective Tax rate	37%
Effective Operating Tax rate	67%

Market Data	
Market Capitalization	\$830.10
Daily volume (mil)	0.27
Shares outstanding (mil)	43.14
Diluted shares outstanding (mil)	42.64
% shares held by institutions	55%
% shares held by investments Managers	63%
% shares held by hedge funds	13%
% shares held by insiders	11.25%
Short interest	10.60%
Days to cover short interest	17.73
52 week high	\$22.85
52-week low	\$15.47
Levered Beta	0.18
Volatility	34.07%

Past Earning Surprises		
Quarter ending	Revenue	EBITDA
12/31/2014	0.22%	17.93%
3/31/2015	2.56%	6.12%
6/30/2015	3.23%	16.07%
9/30/2015	5.88%	24.60%
12/31/2015	0.38%	7.25%
Mean	2.46%	14.39%
Standard error	1.0%	3.5%

Peers	
Cepheid	
Affymetrix Inc.	
PerkinElmer Inc.	
Pacific Biosciences of California, Inc.	
Agilent Technologies, Inc.	
Sequenom Inc.	
NanoString Technologies, Inc.	
Bio-Techne Corp.	



Management	Position	Total compensations growth	Total return to shareholders
Shamir, Nachum	Chief Executive Officer, Pre	N/M	0% per annum over 0y
Currie, Harriss	Chief Financial Officer, Sen	-4.89% per annum over 5y	4.6% per annum over 5y
Bradley, Russell	Chief Marketing & Sales Offi	7.68% per annum over 5y	4.6% per annum over 5y
Martin, Kendel	Vice President of Accounting	N/M	N/M
Copa, Thomas	Vice President of Technology	N/M	N/M
Rew, Richard	Senior Vice President, Gener	N/M	N/M

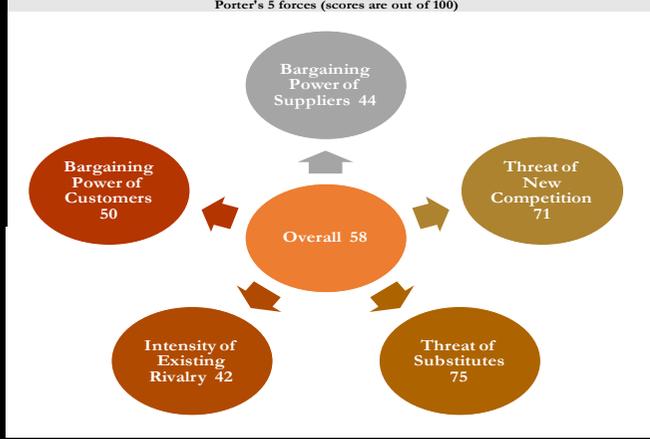
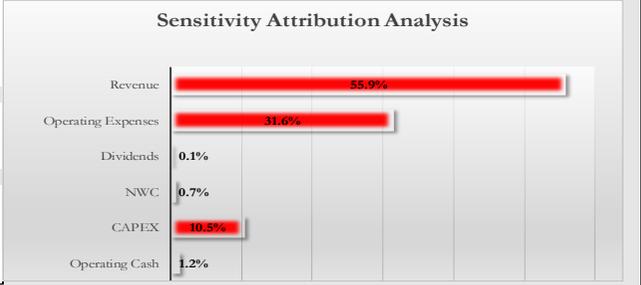
Profitability	LMNX (LTM)	LMNX (5 years historical average)	Industry (LTM)
ROIC	0.4%	9.25%	9.50%
NOPAT Margin	1%	9.96%	14.9%
Revenue/Invested Capital	0.75	0.93	0.64
ROE	0.4%	7.22%	10.64%
Adjusted net margin	0%	9.74%	13.3%
Revenue/Adjusted Book Value	0.72	0.74	0.80

Invested Funds	LMNX (LTM)	LMNX (5 years historical average)	Industry (LTM)
Total Cash/Total Capital	34.2%	27.9%	31%
Estimated Operating Cash/Total Capital	13.8%	15.0%	N/A
Non-cash working Capital/Total Capital	10.2%	13.7%	8%
Invested Capital/Total Capital	77.6%	85.0%	69%

Capital Structure	LMNX (LTM)	LMNX (5 years historical average)	Industry (LTM)
Total Debt/Common Equity (LTM)	0.02	0.02	0.15
Cost of Existing Debt	1.40%	4.65%	3.33%
Estimated Cost of new Borrowing	1.38%	1.38%	3.33%
CGFS Risk Rating	1.40%	AAA	B
Unlevered Beta (LTM)	0.00%	0.56	0.94
WACC	1.40%	7.33%	9.98%



Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	4.7%	0.6%	0.10
12/31/2016	5.3%	17.0%	2.86
12/31/2017	8.1%	16.5%	2.59
12/31/2018	14.3%	14.0%	2.16
12/31/2019	12.6%	14.4%	2.08
12/31/2020	-0.7%	14.8%	1.78
12/31/2021	8.4%	15.6%	1.89
12/31/2022	5.6%	16.1%	1.82
12/31/2023	5.3%	16.7%	1.78
12/31/2024	5.0%	17.3%	1.75
12/31/2025	4.8%	17.9%	1.73
Continuing Period	3.0%	18.5%	1.68

Period	Invested Capital	Net Claims	Price per share
Base Year	\$159.93	-\$59.95	\$21.91
12/31/2016	\$207.06	-\$84.51	\$23.01
12/31/2017	\$271.77	-\$108.23	\$24.21
12/31/2018	\$293.85	-\$110.76	\$25.52
12/31/2019	\$316.57	-\$118.71	\$27.00
12/31/2020	\$318.87	-\$171.30	\$28.66
12/31/2021	\$342.91	-\$202.74	\$30.45
12/31/2022	\$369.80	-\$241.68	\$32.32
12/31/2023	\$416.40	-\$287.06	\$34.35
12/31/2024	\$465.01	-\$338.38	\$36.55
12/31/2025	\$470.52	-\$395.89	\$38.93
Continuing Period			

## Advanced Micro Devices

NASDAQ: AMD

**Analyst:** Mark Gruber

**Sector:** Technology

### Short on AMD

Price Target: \$2.30

### Key Statistics as of 3/20/2016

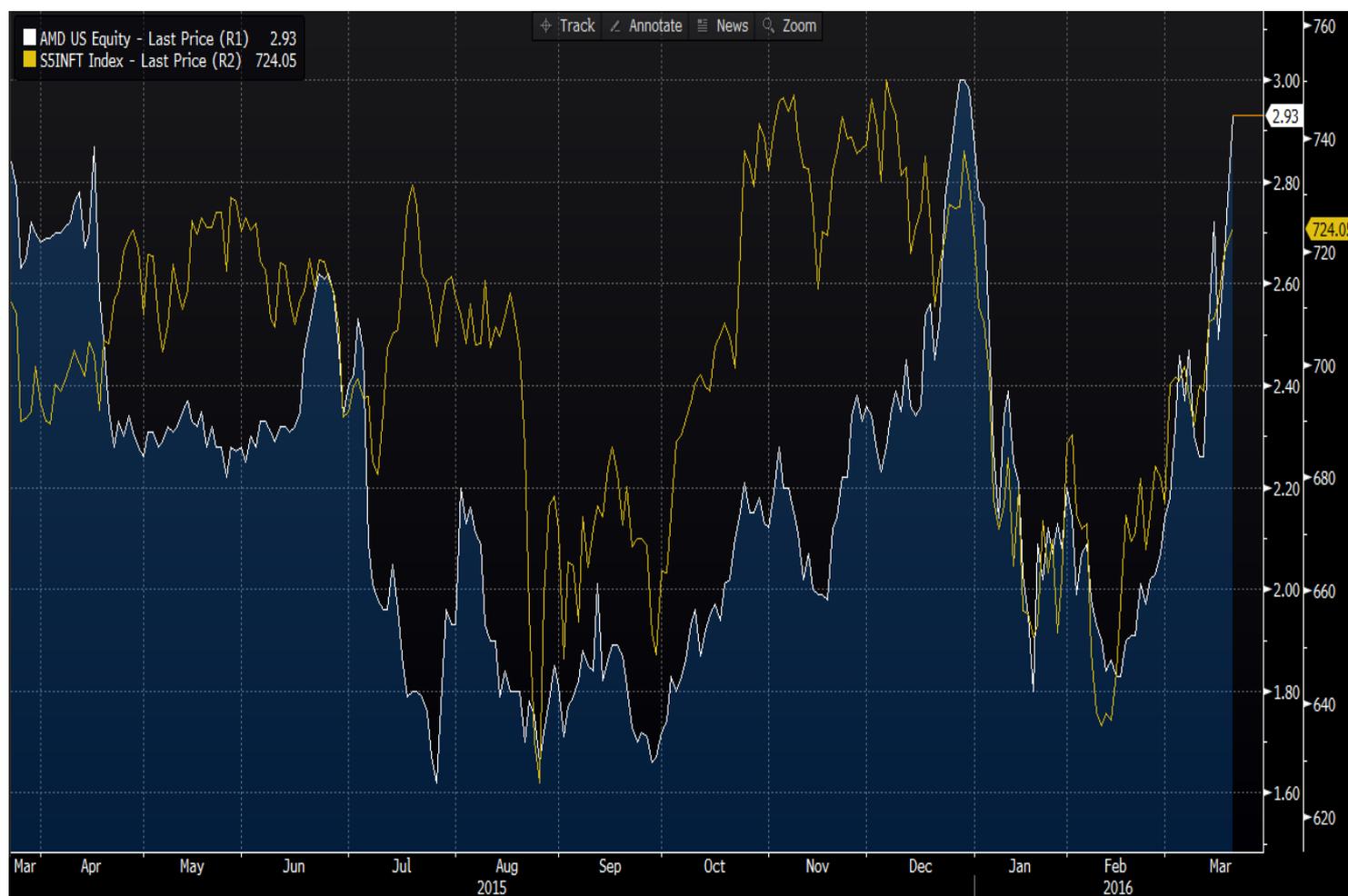
Market Price:	\$2.93
Industry:	Semiconductor
Market Cap:	2.32B
52-Week Range:	\$1.61-\$3.06
1 Year Beta:	1.65

### Thesis Points:

- Overreaction due to prospect of the Intel Signing
- 27.5% decrease in revenue from 2014 to 2015
- Shrinking CPU market share compiled with decreases in the personal computer industry

### Company Description:

Advanced Micro Devices (AMD) is a semiconductor company that designs and integrates technology that powers intelligent devices. Some products that Advanced Micro Devices have include personal computers, game consoles, and cloud servers. They are the commanding leader in the virtual reality world with about 83% market share in the industry. Some companies they work with include Sony and Microsoft. They are headquartered in Sunnyvale, California and were founded in 1969.



## Thesis

Advanced Micro Devices is in the semiconductor industry, with reported revenues of \$3,991 million in 2015. It is being reported that Intel is going to ink a deal to work with Advanced Micro Devices in the coming months, for AMD's patents. Intel currently has a deal with Advanced Micro Devices' rival, Nvidia, but the contract is set to expire on March 17, 2017. AMD has a competitive product at a cheaper cost than Nvidia, which makes it an attractive option for Intel. Nvidia has been reporting \$66 million in licensing revenue per quarter from Nvidia. This is a big reason why the stock price has gone up over 30% over the last few months. Even though it is likely that Intel will sign AMD, there is still a chance that they decide to stay with Nvidia, which will lead to the stock being severely overvalued. Also, the move wouldn't happen until March 17, 2017 when the contract is set to expire with Nvidia, which means for the next year they will see their revenue growth grow only slightly if at all. Although they have the possibility to increase their revenue if the Intel signing goes through, they have seen a drastic decrease in their revenue from 2014 to 2015. In 2014 they reported revenue of \$5,506 million to only \$3,991 million in 2015. This is a decrease of over 27.5% from year to year. This is due to the fact that the personal computer industry is declining along with the fact that they are losing market share to Intel. In 2006, they had about 50% market share of the CPU industry, while in 2016 they had only about 20% of the market share. This is due to the fact that there are many competitors, mainly Intel who is taking away market share from Advanced Micro Devices, and thus leading to reduced levels of revenue.

## Industry Outlook

The semiconductor industry is an industry with steadily increasing demand. Last year alone the Semi-conductor industry reported revenues of \$336 billion, whereas reported revenues were at \$304 billion in 2010. The World Semiconductor Trade Statistics predicts that demand will grow at a rate of about 3% over the next couple of

years. The fact that technology is constantly changing, and businesses have to stay up to date on the newest technologies means that there are no signs of demand slowing down in the future. Although the semiconductor industry is growing, the personal computer industry is slowly declining over the past few years. This is a big deal for Advanced Micro Devices as they gain significant revenue from that market.

## Financials

Advanced Micro Devices has seen their revenues decrease significantly since 2014. In 2014, they reported revenues of \$5,506 million, compared to only \$3,991 million in 2015. This is a 27.5% decrease in revenue from year to year. The biggest reason for the significant decrease in revenue is the decline in the personal computer market, along with losing market share in the CPU market. Advanced Micro Devices has seen their Free Cash Flow decrease over the last few years. It went from -193 million in 2014 to -322 million in 2015.

Year	2011	2012	2013	2014	2015
FCF(In Millions)	132	-471	-232	-193	-322

The ROIC/WACC has also drastically decreased. In 2014 they reported ROIC/WACC at -0.78 followed by -3.30 in 2015. This means that they are not creating additional value for their shareholders.

Year	2011	2012	2013	2014	2015	2016
ROIC/WACC	2.27	-4.73	0.38	-0.78	-3.3	-2.94

The eps has also declined significantly over the last year. In 2014 they reported eps as -0.53, compared to 2015 when they reported it as -0.84.

Year	2011	2012	2013	2014	2015
EPS	0.68	-1.6	-0.11	-0.53	-0.84

## Management

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Advanced Micro Devices is led by their President and CEO Dr. Lisa Su. She joined the company in 2012 after she was senior vice-president and general manager at Freescale Semiconductor Inc. She was named “2014 Executive of the Year” by EETimes. Chekib Akrouf, the Senior Vice President of the Infrastructure and Engineering joined AMD in 2008. Before joining he worked at Freescale Semiconductor where he had the same position. Jim Anderson, Senior Vice President and General Manager of the computing and graphics business group brings with him 20 years in the industry. Prior to Advanced Micro Devices he developed extended expertise in the industry by working at Intel Corporation. There he completed the acquisition where he successfully integrated the Axxia processor. Prior to the acquisition he worked at Avago Technologies. Lastly, James A Clifford, Senior Vice President of Global Operations, is responsible for the leading and executing design enablement. Prior to that, Jim worked at RF Micro Devices where he was Senior Vice President of Global Sourcing.

## Porters Five Forces

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As with all technology there is great competition in the industry. There are very low barriers to enter in the industry, which means that there is always a chance of new competition. The Bargaining power of suppliers is also high meaning that there are many substitutes. The bargaining power of customers is high because also competition is high, so companies can't charge a premium for their product. The intensity of existing rivalry is also very high in the industry. Lastly the threat of substitutes is very high, because once again there is very low barriers in the industry, so there is also great competition.

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## Conclusion

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Although the prospect of signing a deal with Intel is very compelling, the fact that Advanced

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Micro Devices has seen their revenue drastically decrease along with the slowing demand of the personal computer industry makes AMD overvalued. The stock has risen over 30% in the last month due to the fact that they may get a deal with Intel. During that time they showed drastic decreases in revenue along with a decrease of ROIC/WACC. Combine that with the fact that they are in a highly competitive industry will make it very hard for Advanced Micro Devices to validate their current price in the market.

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**Advanced Micro Devices, Inc. (AMD)**

Analysis by Mark Gruber  
3/20/2016

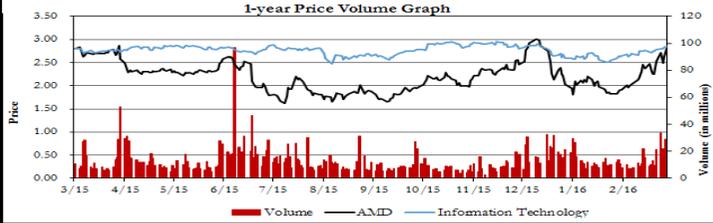
**CENTER FOR GLOBAL FINANCIAL STUDIES**

**BEARISH**

**Current Price:** \$2.93  
**Dividend Yield:** 0.0%

**Intrinsic Value:** \$2.00  
**Target Price:** \$2.30

**Target 1 year Return:** -21.5%  
**Probability of Price Increase:** 19.6%

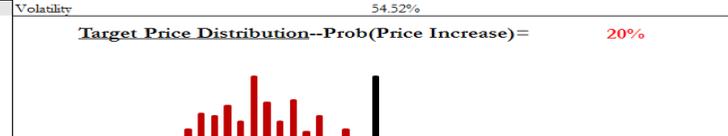


Description	
Advanced Micro Devices, Inc. operates as a semiconductor company worldwide.	
General Information	
Sector	Information Technology
Industry	Semiconductors and Semiconductor Equipment
Last Guidance	November 3, 2015
Next earnings date	NM
Estimated Country Risk Premium	8.62%
Effective Tax rate	35%
Effective Operating Tax rate	34%

Market Data	
Market Capitalization	\$2,324.22
Daily volume (mil)	26.33
Shares outstanding (mil)	793.25
Diluted shares outstanding (mil)	783.00
% shares held by institutions	16%
% shares held by investments Managers	35%
% shares held by hedge funds	3%
% shares held by insiders	0.61%
Short interest	16.19%
Days to cover short interest	8.52
52-week high	\$3.06
52-week low	\$1.61
Levered Beta	1.65
Volatility	54.52%

Past Earning Surprises		
Quarter ending	Revenue	EBITDA
12/27/2014	-0.31%	-91.28%
3/28/2015	-2.06%	-109.68%
6/27/2015	-0.67%	-309.91%
9/26/2015	6.55%	-262.47%
12/26/2015	0.34%	-344.72%
Mean	0.77%	-223.61%
Standard error	1.5%	52.0%

Peers	
Maxim Integrated Products, Inc.	7.81% per annum over 2y
NVIDIA Corporation	7.81% per annum over 2y
Xilinx Inc.	-23.08% per annum over 3y
Texas Instruments Inc.	0% per annum over 0y
Analog Devices, Inc.	N/M
ON Semiconductor Corp.	N/M
QUALCOMM Incorporated	N/M



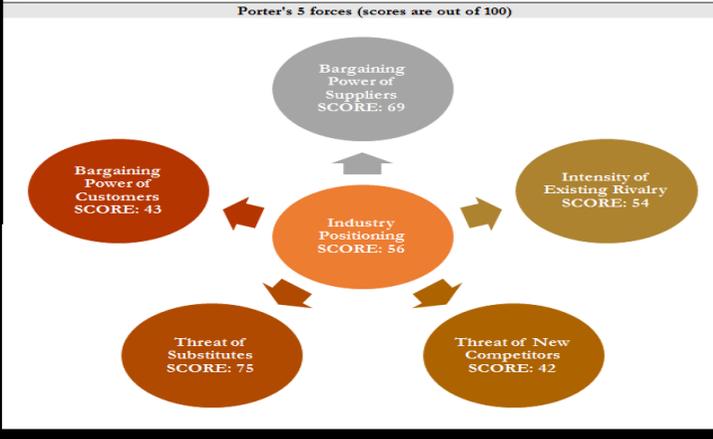
Management		
Su, Lisa	Position	Total compensations growth
Kumar, Devinder	Chief Executive Officer, Pre	39.8% per annum over 2y
Papermaster, Mark	Chief Financial Officer, Sen	56.33% per annum over 2y
Norrod, Forrest	Chief Technology Officer and	2.72% per annum over 3y
Clifford, James	Senior Vice President and Ge	N/M
Anh, Dinh	Senior Vice President of Glo	N/M
	Chief Accountant	N/M

Profitability		
ROIC	AMD (LTM)	AMD (5 years historical average)
NOPAT Margin	-15.0%	5.95%
Revenue/Invested Capital	-17%	2.58%
ROE	0.88	2.30
Adjusted net margin	-37.2%	0.41%
Revenue/Adjusted Book Value	-20%	0.37%
	1.86	1.11

Invested Funds		
Total Cash/Total Capital	AMD (LTM)	AMD (5 years historical average)
Estimated Operating Cash/Total Capital	19.9%	23.0%
Non-cash working Capital/Total Capital	12.7%	11.4%
Invested Capital/Total Capital	9.2%	4.3%
	93.4%	86.0%

Capital Structure		
Total Debt/Common Equity (LTM)	AMD (LTM)	AMD (5 years historical average)
Cost of Existing Debt	1.16	1.03
Estimated Cost of new Borrowing	7.02%	8.29%
CGFS Risk Rating	2.33%	1.42%
Unlevered Beta (LTM)	7.02%	AAA
WACC	7.15%	1.30
	7.02%	13.65%

Sensitivity Analysis		
Operating costs	84.8%	Revenue from operations
Operating Cash	-3.7%	
Non-cash working capital spending	1.8%	
Common dividends	3.3%	
Capital expenditures	-17.0%	



Period	Revenue growth	Valuation	ROIC/WACC
Base Year	-27.5%	NOPAT margin	-1.48
12/26/2016	2.0%	-17.0%	-0.68
12/26/2017	30.0%	-6.2%	0.61
12/26/2018	5.0%	-6.2%	-0.89
12/26/2019	4.0%	-2.9%	-0.45
12/26/2020	2.0%	-3.8%	-0.60
12/26/2021	0.5%	-1.3%	-0.21
12/26/2022	0.8%	1.7%	0.29
12/26/2023	1.1%	4.9%	0.91
12/26/2024	1.4%	8.3%	1.55
12/26/2025	1.7%	11.7%	2.03
Continuing Period	2.0%	15.0%	2.68

Period	Invested Capital	Net Claims	Price per share
Base Year	\$3,927.11	\$2,487.02	\$2.03
1/0/1900	\$4,421.83	\$2,783.20	\$2.27
1/0/1900	\$4,300.92	\$2,788.97	\$2.87
1/0/1900	\$4,382.67	\$3,000.67	\$3.51
1/0/1900	\$4,520.69	\$3,303.19	\$4.14
1/0/1900	\$3,691.19	\$3,637.72	\$4.73
1/0/1900	\$3,515.41	\$3,770.20	\$5.35
1/0/1900	\$3,745.00	\$3,772.90	\$6.02
1/0/1900	\$3,601.89	\$3,777.37	\$6.75
1/0/1900	\$3,635.88	\$3,809.60	\$7.57
1/0/1900	\$3,529.57	\$3,346.82	\$8.50



## Lockheed Martin Corporation

NYSE:LMT

**Analyst:** Pierre Riffard

**Sector:** Industrials

**BUY**

Price Target: \$243

### Key Statistics as of 03/18/2016

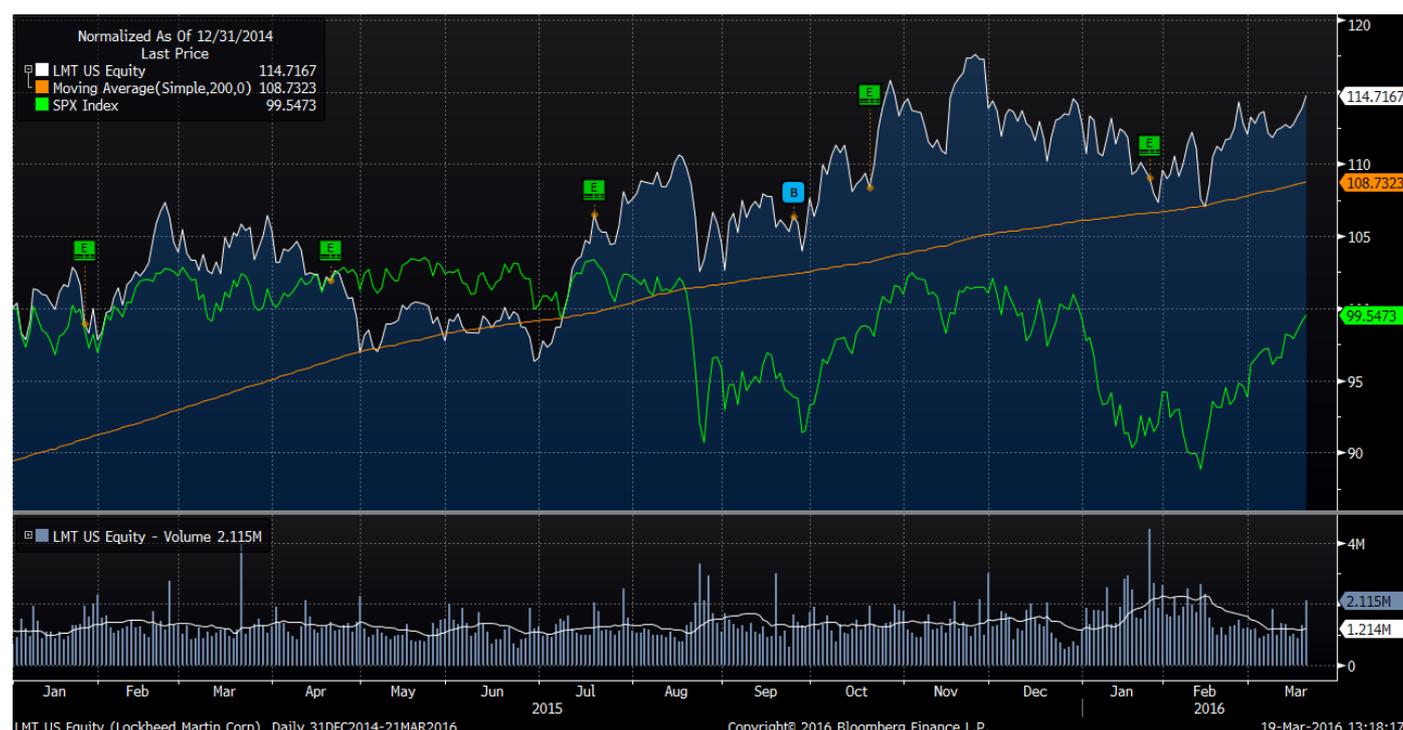
Market Price:	\$220.91
Industry:	Aerospace & Defense
Market Cap:	\$67.485B
52-Week Range:	\$181.91 - \$227.91
Beta:	0.62

### Thesis Points:

- The most diversified company among the industry, with recent acquisitions & spin-off, which reduces the unsystematic risks.
- Investing in innovative technologies and projects able to open the path for new markets.
- Improved financials making the company one of the industry's top performers.

### Company Description:

Lockheed Martin Corp. is an American global aerospace, defense, security and advanced technologies company. It is headquartered in Bethesda, Maryland and employs approximately 126,000 people worldwide. The company is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. Lockheed Martin is the world's largest defense contractor with 78% of its \$46 billion sales coming from the U.S. government. The company is operating five segments: Aeronautics, Information Systems & Global Solutions (IS&GS), Missiles and Fire Control (MFC), Mission Systems and Training (MST), and Space Systems. LMT is currently one of the most diversified aerospace & defense companies, manufacturing from warships and aircrafts to missiles, communication and radar systems. Apart from being the aerospace & defense industry leader, the company is also engaged in the Information Technology, Energy and Space markets. Contrary to most competitors, the company is greatly engaged in Emerging Technologies. In other words, an important part of Lockheed Martin's future is achieved via innovation. The company is working on solving enduring and emerging global challenges, which may open the path to new markets.



## Thesis

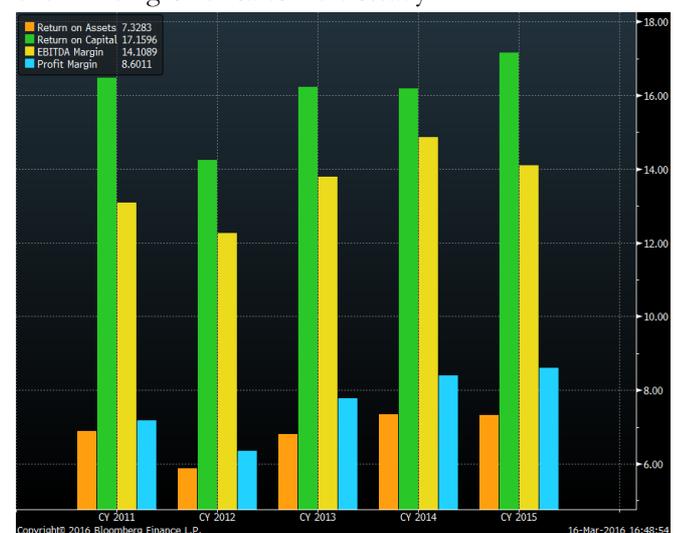
Lockheed Martin is the world's largest defense contractor, but it is also the most diversified and the most prepared for future growth among all the aerospace & defense companies. The defense industry is expected to return to a minimum of 3% growth in 2016, given the recent rise in global threats, and the increase in military expenditures in the U.S. and in key foreign nations. Due to its top-of-the-art and renowned products, LMT has secured future growth in product and service sales. LMT has succeeded to place itself as one of the top performers of the industry. The company is also committed in innovation and emerging technologies that have the potential to bring important sales to the company or even to create new markets. In 2015, the company generated a record \$5.1 billion from operations and returned \$5 billion to shareholders via an increasing dividend and an increasing share repurchase program strategy. The company also operated two major changes in its portfolio. First, it acquired for \$9 billion Sikorsky, which is the largest helicopter manufacturer. This acquisition added \$16 billion in backlog to LMT to reach a record of \$100 billion of backlog. The second strategic move was the decision to sell a part of its Information Services & Global Services to Leidos for \$5 billion. The company decided to separate and combine this business with Leidos to create a more diversified competitor positioned for growth. Indeed, this market was becoming more and more competitive, and margins were decreasing and expected to decrease. The stock performance over time is pretty strong. It outperformed the industry and the market, and is showing good resistance during market selloffs. LMT appeared to be a very valuable investment to hold on the long term.

## Industry Outlook

The Aerospace & Defense industry designs, manufactures, and services any type of aircrafts, and military assets including commercial planes, jet fighters, helicopters, space shuttles, tanks, armored vehicles, unmanned aircrafts, military ships, submarines, aircraft carriers, satellites, electronics, communications, softwares, missiles and any other kind of military products, commercial aircrafts or space products. Given the broad portfolio of LMT, the company is operating in every segments of that industry and its customers are both militaries and commercials. The main customers of the industry is nothing less than

governments willing to expand their military expenditures, and so are not only able but also willing to pay very high amounts to maintain their armed forces. The U.S., with a 2016 \$585 billion Defense Budget, has the world's biggest purchasing power and is the main customer of LMT. Then, one of the biggest and unique advantage the Aerospace and Defense industry has is that maturity does not actually exist. Knowing the current geopolitical situation, and even during all Mankind history, armed forces are always trying to expand. Even without will to expand, states will constantly need to equip, maintain, modernize, resupply, and inactivate military assets, which corresponds to the biggest proportion of military expenditures. In our current situation, the resurgence of global security threats, and growth in defense budget of countries like Russia, China will push the Defense budget to increase over the next years even if the next president of the United States of America is from the democratic party. According to Deloitte, the industry growth is expected to return to 3% for the fiscal year 2016.

Based on the financials of companies within the industry, we can attest that even with several cuts in the U.S. Defense budget, the growth in revenue over five years of defense companies followed a slow upward trend. The EBITDA margin increased from 13% to 14.1%. The profit margin went up from 7.15% to 7.85%. The return on assets and on equity also increased over five years, which demonstrates an efficient management of costs and capital structure even when growth sales were steady.



The stock performance of the industry outperformed the S&P500 since 2011. The S&P Aerospace & Defense index went up by 193%, whereas the market went up by 161% over five years.



## Porter's Five Forces

### Bargaining Power of Customers: **LOW**

The main customers of LMT are the U.S. government and foreign government that are in need of military products LMT is manufacturing, and as having the largest purchasing power worldwide, governments are able to pay huge amounts. Furthermore, LMT and the governments are working together on several projects, and all required R&D are paid by the government.

### Bargaining Power of Suppliers: **MEDIUM**

Suppliers are important to LMT in order to perform in time their contracts' obligations. Then, several partnerships have been made in order to work with suppliers on new projects. The competition between suppliers is high and due to the weight and influence of LMT within the industry, it is able to negotiate better terms or to change its supplier without great difficulties.

### Existing Rivalry: **HIGH**

The competition within the industry is quite high but LMT succeeded to place itself at the top of the industry, with military sales at \$35.5 billion in 2015 (Boeing military sales: \$30.7 billion). The main competitors are Boeing (NYSE:BA), Northrop Grumman (NYSE:NOC), Raytheon (NYSE:RTN), and General Dynamics (NYSE:GD). Even if the competition is high, LMT is benefitting from its influence over the industry and they are willing to make partnerships for major U.S. projects. More important, LMT, based on its portfolio, is the most diversified companies within the industry.

### Barriers to Entry: **HIGH**

The barriers to enter this market very high, and most of the companies that are succeeding have years of expertise. It requires huge capital, high-skilled engineers, designers, and workers, years of research & development, long periods of tests and relationship

with suppliers, U.S government, and foreign governments.

### Threat of Substitutes: **VERY LOW**

Such threats does not really exist. We may think about unmanned vehicles, but LMT and its competitors already are the manufacturers of such assets. The real threats relies more in innovation and on which company will deliver a new top-of-the-art and high-tech assets that governments around the world will buy at any price. On that level, the position of LMT is enviable. Indeed, innovation in emerging technologies is an essential business for LMT to prepare the future and to improve efficiency.

## Management

The management of LMT is quite resourceful and efficient based on their personal experiences within LMT, and based of their global knowledge of the market. A retired United States Air Force are part of the board of directors and can bring its influence and network to the benefit of the company. The majority of the executive officers worked for the company for several years at various positions, which is extremely beneficial to LMT's activity as executives are well aware of how the company is operating. Marillyn A. Hewson, Chairman, President and Chief Executive Officer, has served 33 years at Lockheed Martin at various positions of increasing responsibility. Furthermore, an important part of the compensations are based on bonuse and performance, giving executives incentives to be the most efficient as possible.

## Product Portfolio & Diversification

LMT product portfolio is one of the most diversified within the industry. Instead of being specialized in one or two areas like aeronautics, shipbuilding, or IT, LMT activities extends to Aerospace, Energy, Information Technology, Space, and Emerging Technologies. In other words, LMT portfolio is covering the majority of the industry's activities as well as some other industries activities.

The first and major business segment is Aeronautics. This segment is engaged in the research, design, development, manufacture, integration, sustainment, support and upgrade of advanced military aircrafts, including combat and air mobility aircrafts, unmanned vehicles and related technologies. The Aeronautics segment generated net sales of \$15.6 billion or 34% of

total sales in fiscal year 2015. The U.S. government accounted for 72% of the segment sales, and international customers accounted for 28%. The major programs includes the F-35 Lightning II Joint Strike Fighter, the C-130 Hercules, the F-16 Fighting Falcon, the C-5M Super Galaxy, and the F-22 Raptor. LMT is offering “low-cost” jet fighters like the F-16 (unit cost between \$15 to 20 million), as well as the F-22 Raptor (unit price higher than \$150 million), which the most advanced and lethal stealth fighter, or the F-35 (unit price between \$85 to \$116 million), which is the most expensive military program ever and the first fighter capable of vertical takeoff. The F-35 is generating 20% of total sales and 59% of Aeronautics sales. The production is expecting to increase over the next years given the growing demand from foreign governments and the USAF inventory objective of 2,443 aircrafts (or more than \$240 billion in sales based on the unit price).

The second business segment of LMT is Information Systems & Global Solutions. It provides advanced technology systems and expertise, integrated information technology, solutions and management services for civil, defense, intelligence, and other government customers. It also provides customers with support in data analytics, data center operations and air traffic management. It generated \$5.6 billion in sales, or 12% of total sales. The U.S. government accounted for 89% of sales, whereas international customers and U.S. commercial and other customers accounted for 9% and 2% respectively.

The third segment is Mission Systems and Training (MST). MST generated \$9.1 billion or 20% of total sales in 2015. It provides design, manufacture, service and support for military and civil helicopters, ship and submarine mission and combat systems, mission systems and sensors for aircrafts, sea and land-based missile defense systems, radar systems, the Littoral Combat Ship, simulation and training services, and unmanned systems and technologies. It also supports customers in cybersecurity and provides complex mission solutions for defense applications. The U.S. government accounted for 77% in sales, whereas international and commercial customers accounted for 22% and 1% respectively. LMT is the manufacturer of the Terminal High Altitude Area Defense (THAAD), which is the only anti-ballistic missile defense system with a success rate of 100%. There is a constant and growing demand for this asset today, especially in the Middle East, Eastern Europe and Asia.

The fourth segment of LMT is Space Systems. It generated \$9.1 billion in sales or 20% of total sales in 2015. This segment is engaged in the research & development, design, engineering and production of satellites, strategic and defensive missile systems and space transportation systems. It provides network-enabled situational awareness and integrates complex global systems to gather, analyze and securely distribute intelligence data. Space Systems is also responsible for classified systems and services in support of vital national security systems. The U.S. government, including the NASA, accounted for 97% of the segment sales, and U.S. commercial customers accounted for 2% in 2015.

### **Innovative & Emerging Technologies**

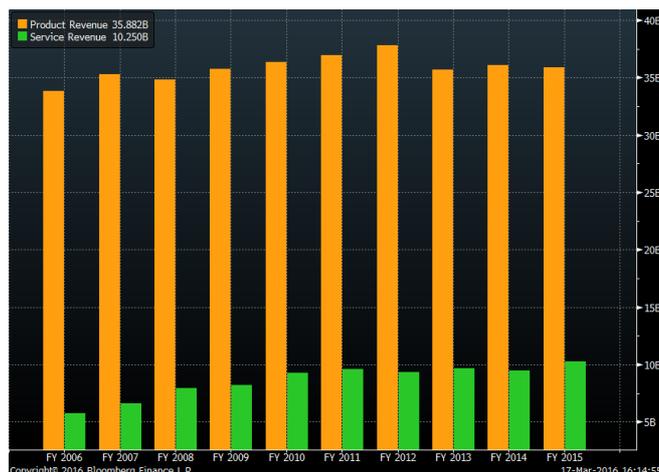
One of the competitive advantage of LMT is that the company is putting a huge importance on innovation, and on “solving enduring and emerging global challenges,” as described in the 2015 annual report. Innovation may open entirely new markets to the company, bring future growth, and gain a considerable technological advance on competitors. As of today (03/18/2016), the company is developing several emerging, profitable and publicly known technologies. On the military side, the company is at the forefront of Directed Energy. LMT has already started some successful trials of its laser weapons on the fields that can great a huge demand from military customers. The company is also at the forefront of autonomy/robotics technology. It developed a wide portfolio of air, ground and undersea autonomous vehicles that can intervene to help firefighters, or rescue teams in their operations for example. On 03/10/2016, NASA awarded LMT a \$20 million contract to develop a design for a new supersonic passenger jet. NASA selected LMT for its expertise in this area as LMT engineers were already working on new supersonic aircraft designs. On 03/16/2016, CEO and Chairman Marillyn Hewson stated that the company has made significant progress on hypersonic program and was producing an aerodynamic configuration that could reach Mach 6. The U.S. Department of Defence wants to deploy a “prompt global strike” capability that would enable it to hit targets worldwide within an hour with conventional or nuclear warheads.

The company is currently testing hybrid airships of various sizes that are able to access virtually anywhere in a wide range of weather conditions, without

requiring forward infrastructure or manpower. Such airships can open the path to a new transportation business. LMT hybrid airships can deliver cargo to remote areas with no proper infrastructure or hard weather. It can range from oil & gas exploration, or mining projects to remote villages in need of supplies. According to a declaration of Bob Boyd, LMT Hybrid Air Systems program manager, this new type of aircraft is already getting a lot of interest and can create a new market. Another under-development project that can create a huge source of revenue in the future is the fusion energy. On 10/15/2014, LMT told reporters it had made a technological breakthrough in developing a power source based on the nuclear fusion, and that it will be able to produce the first reactors around 2024. The reactor could fit on the back of a large truck and so can be used to power any kind of warships. Such technology could become a huge market for LMT, as projections show there will be a 40% to 50% increase in energy use over the next generation.

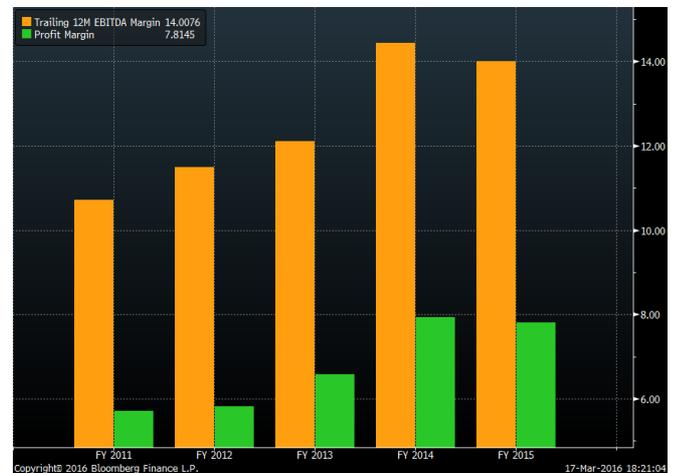
## Financials

Over 10 years, the growth in product revenue followed a small upward trend. It is primarily due to the U.S. defense budget cuts, but the growth in foreign military expenditures helped LMT and the industry to have a positive growth over the last 10 years. On the other side, the growth in service revenue was pretty good. The increase in service sales was primarily due to increased sustainment activities on Lockheed's aircrafts.



Over the last five years, LMT increased its EBITDA margin from 10.7% in 2011 to 14% in 2015. The profit margin followed the EBITDA and went up by 2.1% to reach 7.5% in 2015. Such profitability improvement were primarily due to huge performance improvement. For example, the costs of the F-35 went down by 50%

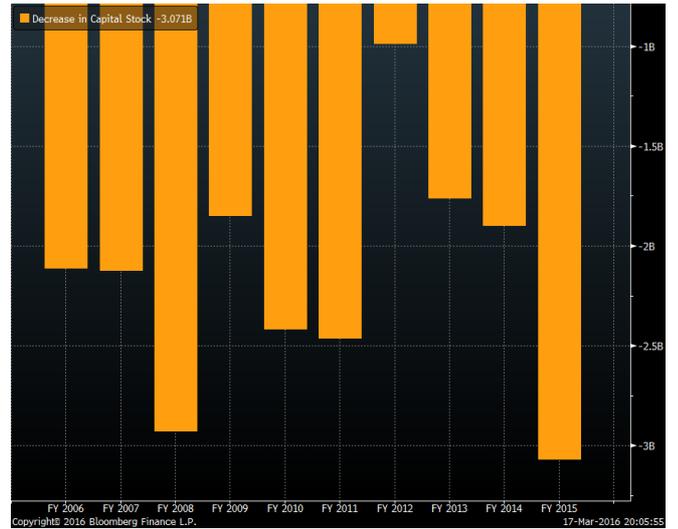
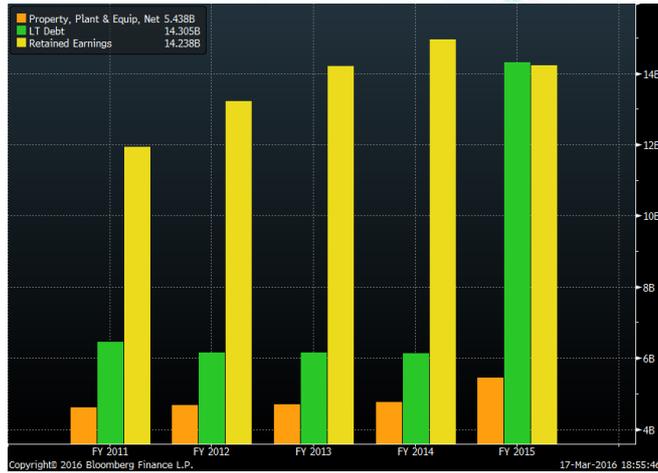
since the beginning of the program. Furthermore, on 03/08/2016, LMT announced it seeks to lay off up to 1,000 workers based on a voluntary program in its aeronautics business. The stock rose by more than 2% in reaction to the announcement.



When looking at the past five earnings, LMT is showing excellent skills in creating better-than-forecast surprises. 62.5%, 75% and 100% of its actual revenue, EBITDA, and EPS respectively exceeded analysts' estimates.

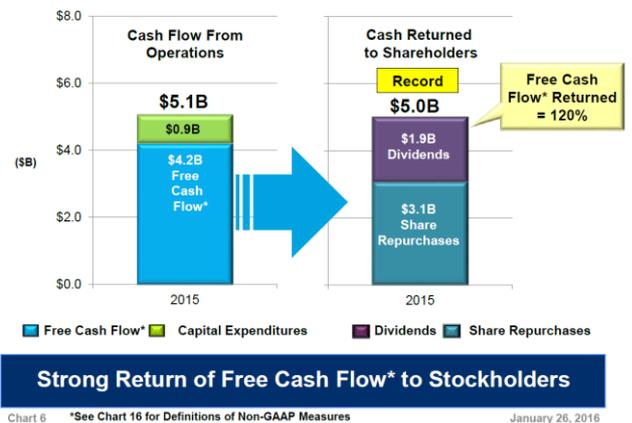


Over the past five years, the invested capital of LMT expended. NPPE slightly increased until 2014, and then increased by 14% in 2015 due to new offices abroad to improve the foreign activities, and to the acquisition of Sikorsky. Retained earnings constantly improved following the earnings' trend. Long-term debt went up by \$8 billion to reach \$14.3 billion in 2015. This debt was used to finance the Sikorsky acquisition, and decreased the overall cost of capital as LMT negotiated very good interest rates. It now represents around 29% of assets, but the D/E ratio is still very low at 0.13, well lower than the 0.21 industry average.



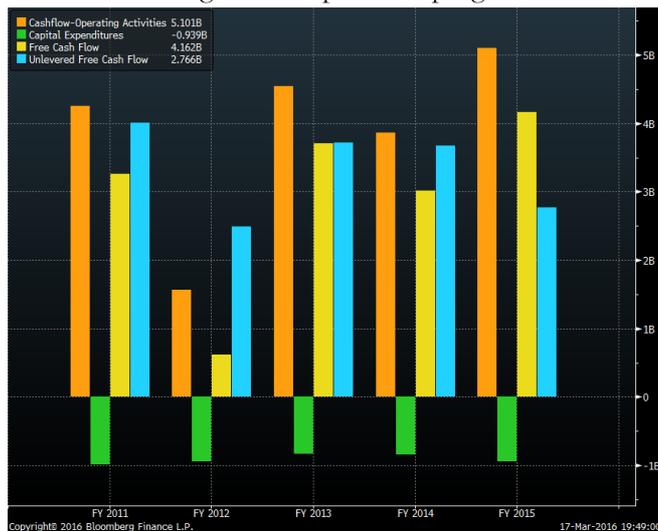
LMT is very efficient in generating cash and returning some to shareholders. Over five years, capital expenditures slightly diminished, but cash flow from operations, free cash flow, and unlevered free cash flow all improved. In 2015, the company generated \$5.1 billion from operations for the first time ever with \$939 million in capital expenditures. The company generated \$4.162 billion and \$ 2.766 billion in free cash flow and unlevered free cash flow respectively. As a result, LMT returned \$1.9 billion to shareholders (2015 payout ratio and dividend yield at 52% and 3.05% respectively, which are well higher than the industry average), and repurchased \$3.1 billion worth of shares. The company repurchased for \$1.9 billion and \$1.8 billion of shares in 2014 and 2013 respectively. On 09/24/2015, the Board of Directors approved another \$3.0 billion increase to its large share repurchase program.

### Cash Returned to Stockholders



### Recent Acquisition & Spin-off

Since June 2015, Lockheed Martin have taken two important strategic actions to modify its portfolio. First, Lockheed Martin completed the acquisition of Sikorsky on November, 6. Sikorsky is a military and commercial rotary-wing aircraft manufacturer leader. The acquisition cost consisted of \$9 billion funded with new debt issuances, commercial paper and cash on hand. The company used \$6 billion of proceeds borrowed under a 364-day revolving credit facility, \$2 billion of cash, and \$1 billion from the issuance of commercial paper. In Q4 2015, LMT repaid all of its credit facility outstanding borrowings with the issuance of \$7 billion fixed-interest-rate long term notes with maturity ranging from 3 years to 30 years, and interest rates ranging from 1.85% to 4.70%. We can see LMT used the current monetary policy at its advantage as it secured low interest rates. Furthermore, it generated a \$1.9 billion Net Present Value (NPV) of cash tax benefit.



- \$750 million maturing in 2018 with a fixed interest rate of 1.85% (the 2018 Notes);
- \$1.25 billion maturing in 2020 with a fixed interest rate of 2.50% (the 2020 Notes);
- \$500 million maturing in 2023 with a fixed interest rate of 3.10% (the 2023 Notes);
- \$2.0 billion maturing in 2026 with a fixed interest rate of 3.55% (the 2026 Notes);
- \$500 million maturing in 2036 with a fixed interest rate of 4.50% (the 2036 Notes); and
- \$2.0 billion maturing in 2046 with a fixed interest rate of 4.70% (the 2046 Notes).

Sikorsky responds to the strategy of expanding LMT business. According to the latest annual report, LMT is already seeing accelerated customers interest in both military and search and rescue opportunities emerging in the Middle East, Asia, and Eastern Europe. The acquisition of Sikorsky already added \$16 billion in backlog to reach almost \$100 billion in fiscal year 2015. The fact LMT acquired Sikorsky will create more value than United Technologies, which is the previous owner of Sikorsky. Since LMT is working for 40 years with Sikorsky, whose product portfolio aligns with LMT's own portfolio, opportunities of synergies and cycle time reduction will be created. In other words, LMT will be able to create economies of scale, increase efficiency and reduce overall costs. LMT will be able to use its expertise in doing business with governments to negotiate better contracts for Sikorsky, and to improve cash generation for both companies. Finally the acquisition of Sikorsky is creating innovation opportunities, which is one of the core value of LMT. The rotary wing area is in great demand and LMT wants to continue to invest in research and development. The market reaction following the acquisition announcement was positive. The stock went up from \$190 on 07/07/2015 to \$221 on 11/06/2015, when the acquisition was completed. The stock rose by 9% during the three weeks following the announcement in June.

The second strategic action put in place over the last fiscal year was the spin-off of LMT's government Information Systems & Global Solutions (IT&GS) business by separating and combining it with Leidos in a tax-free Reverse Morris Trust transaction. That merger will make Leidos the largest government services provider in the U.S, leaving LMT to focus more on complex military hardware. Leidos will finance the merger with \$3.2 billion in equity of the new combined company and with \$1.8 billion in special cash dividend to LMT. As a result, LMT shareholders will hold 50.5% of the new company's shares. Even if LMT has sold its IT&GS business, it has kept Mission IT and services, Energy Solutions and Space Services that will be consolidated in other LMT sectors. This combination is a way to create a more diversified firm positioned for growth, while unlocking value for LMT

shareholders. The new combined company will be able to provide unparalleled solutions in industries ranging from national security to health and life sciences, and will be 50.5% owned by LMT shareholders. The special cash dividends amount will be used to repay debt, and pay dividends or repurchase stocks. The spin-off will be also beneficial to LMT as the trend in revenue and margins started to decline due to an increasingly competitive environment, a continued downturn in federal agencies' IT budgets, and the fragmentation of large contracts into smaller ones awarded primarily on the basis of price. The new combined firm will become by far the largest and most developed government services provider in the marketplace, and so better prepared to face competitors.

## Competitors Comparison

When compared to competitors, LMT appeared to be one of the top performer. The sales growth Yoy is in line with the median of all the competitors. The 14.62% EBITDA margin is above the 12.92% industry median. And the 12.40% operating margin is at the top of the industry range with a median at 8.39%. Its net income margin is even 2.36% higher than the competitors' mean at 8.11%. Even when focusing on defense companies only, LMT is still part of the top performer. Its growth is in line with the industry, but both its EBITDA and operating margin are at the top of the industry range well higher than the industry mean at 14.62% and 12.40% respectively. Its net profit margin is 2% higher than the industry mean at 8.11%.

Metric	LMT	Low	Comp Range	High
Est P/E Current Yr	18.70	12.94		27.09
EV/Est EBITDA C...	11.63	6.20		16.00
Sales Growth Yo...	1.17	-16.77		25.32
EBITDA Margin (%)	14.62	3.38		15.24
LTM Operating M...	12.40	1.71		13.20

Name (IBICS Best Fit)	Sales Growth Yoy (%)	EBITDA Margin (%)	LTM Sales Growth	LTM Operating Margin	LTM Net Income Margin
Average	1.53%	12.92%	4.63%	8.39%	5.75%
100) LOCKHEED MARTIN CORP	1.17%	14.62%	1.17%	12.40%	8.11%
101) FINMECCANICA SPA	-11.38%	10.24%	-3.01%	6.86%	4.06%
102) SANE AB-AB	15.35%	9.68%	15.35%	7.67%	5.01%
103) RAYTHEON COMPANY	1.84%	13.62%	1.84%	11.55%	7.50%
104) GENERAL DYNAMICS C...	2.00%	14.74%	2.00%	13.20%	9.37%
105) BAE SYSTEMS PLC	8.79%	11.34%	8.79%	8.60%	5.83%
106) KOREA AEROSPACE IN...	25.32%	13.12%	25.32%	9.85%	6.22%
107) COBRAM PLC	11.90%	19.33%	11.90%	3.61%	0.60%
108) BOEING-CLASS A	-4.64%	13.44%	-6.53%	9.15%	3.48%
109) BEIJING AEROSPACE C...	-29.77%	5.51%	-2.15%	0.96%	2.94%

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

## Conclusion

Lockheed Martin seems to be much better prepared for innovation and future growth than competitors. Its recent portfolio changes, and constant performance improvement makes the company one of the most profitable among the industry. With very strong cash generation, the company is able to return a large portion of cash to shareholders via both increasing

dividends and increasing share repurchase program strategy. With a continuing period operating cost to revenue converging toward the industry at 85%, which seems to be completely feasible given the improvement history of the company, plus its recent portfolio changes, and commitment to innovation, and with an additional risk premium of 1% for the potential risk innovation may cause, the current stock price appears to be a bargain. The intrinsic value is valued at \$226.06 or 2.3% higher than the current price, and the 1-year target is valued at \$243.04 or a 1-year return of 13%. Given the past stock performance, its current efficient structure and operations, and its plans for the future associated with expectations on the geopolitical situations and technological advancements, LMT appears to continue to be a resistant stock, generating high returns for investors both in terms of capital gain and dividends or stock buybacks with some huge potential of growth in the near future that are not currently priced in the stock.

**Lockheed Martin Corporation (LMT)**

**CENTER FOR GLOBAL FINANCIAL STUDIES**

**NEUTRAL**

Analysis by Pierre Riffard  
3/18/2016

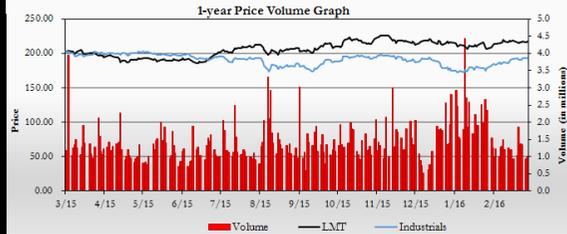
Current Price:  
Divident Yield:

\$220.91  
3.0%

Intrinsic Value  
Target Price:

\$226.06  
\$243.04

Target 1 year Return: 13.05%  
Probability of Price Increase: 92%



**Description**  
Lockheed Martin Corporation, a security and aerospace company, engages in the research, design, development, manufacture, integration, and sustainment of technology systems, products, and services worldwide.

**General Information**  
Sector: Industrials  
Industry: Aerospace and Defense  
Last Guidance: November 3, 2015  
Next earnings date: NM  
Estimated Country Risk Premium: 7.44%  
Effective Tax rate: 37%  
Effective Operating Tax rate: 44%

Market Data	
Market Capitalization	\$67,485.80
Daily volume (mil)	2.07
Shares outstanding (mil)	305.49
Diluted shares outstanding (mil)	314.70
% shares held by institutions	69%
% shares held by investments Managers	62%
% shares held by hedge funds	0%
% shares held by insiders	0.08%
Short interest	1.43%
Days to cover short interest	2.81
52 week high	\$227.91
52-week low	\$181.91
Levered Beta	0.63
Volatility	16.48%

Past Earning Surprises	
Quarter ending	Revenue
12/31/2014	5.26%
3/29/2015	-1.28%
6/28/2015	5.91%
9/27/2015	3.05%
12/31/2015	-0.01%
Mean	2.59%
Standard error	1.4%

Management	
Hewson, Marilyn	Chairman, Chief Executive Of
Tanner, Bruce	Chief Financial Officer and
Lavan, Marianne	Senior Vice President, Gener
Bennett, Dale	Executive Vice President of
Carvalho, Orlando	Executive Vice President of
Makoske, Rod	Senior Vice President of Cor

Profitability	
ROIC	-118.8%
NOPAT Margin	7%
Revenue/Invested Capital	-17.88
ROE	440.0%
Adjusted net margin	6%
Revenue/Adjusted Book Value	74.25

Invested Funds	
Total Cash/Total Capital	12.3%
Estimated Operating Cash/Total Capital	12.3%
Non-cash working Capital/Total Capital	22.6%
Invested Capital/Total Capital	72.9%

Capital Structure	
Total Debt/Common Equity (LTM)	0.14
Cost of Existing Debt	136.66%
Estimated Cost of new Borrowing	1.35%
CGFS Risk Rating	AAA
Unlevered Beta (LTM)	0.85
WACC	8.16%

EBITDA	
12/31/2014	-8.03%
3/29/2015	3.84%
6/28/2015	5.73%
9/27/2015	-14.52%
12/31/2015	1.61%
Mean	-2.27%
Standard error	3.9%

Peers	
Raytheon Company	
General Dynamics Corporation	
United Technologies Corporation	
Northrop Grumman Corporation	
The Boeing Company	
Honeywell International Inc.	
Textron Inc.	
L-3 Communications Holdings Inc.	

Total compensations growth	
Chairman, Chief Executive Of	42.61% per annum over 5y
Chief Financial Officer and	51.17% per annum over 6y
Senior Vice President, Gener	16.54% per annum over 2y
Executive Vice President of	N/M
Executive Vice President of	-2.32% per annum over 1y
Senior Vice President of Cor	N/M

Total return to shareholders	
Chairman, Chief Executive Of	6.19% per annum over 5y
Chief Financial Officer and	0.45% per annum over 6y
Senior Vice President, Gener	24.58% per annum over 2y
Executive Vice President of	N/M
Executive Vice President of	16.19% per annum over 1y
Senior Vice President of Cor	N/M

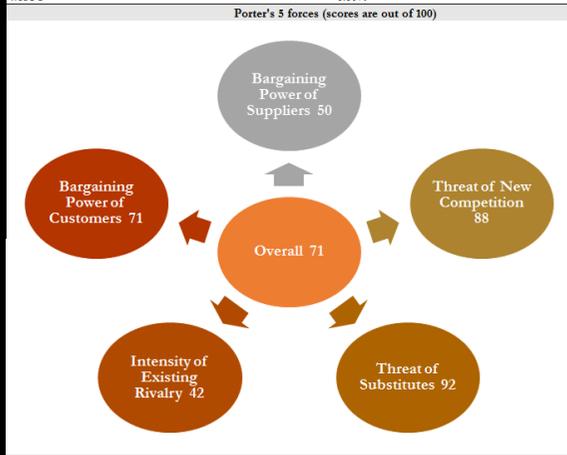
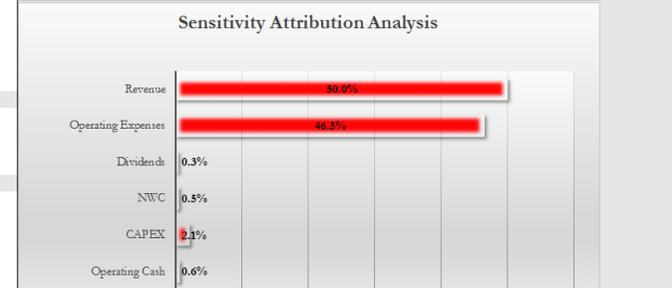
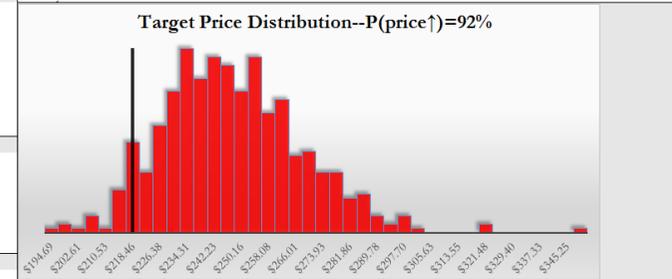
LMT (LTM)		Industry (LTM)	
LMT (5 years historical average)		Industry (LTM)	
ROIC	-22.42%	ROIC	15.20%
NOPAT Margin	7.33%	NOPAT Margin	8.3%
Revenue/Invested Capital	-3.06	Revenue/Invested Capital	1.83
ROE	-345.42%	ROE	17.85%
Adjusted net margin	6.69%	Adjusted net margin	7.8%
Revenue/Adjusted Book Value	-51.62	Revenue/Adjusted Book Value	2.30

LMT (LTM)		Industry (LTM)	
LMT (5 years historical average)		Industry (LTM)	
Total Cash/Total Capital	319.3%	Total Cash/Total Capital	20%
Estimated Operating Cash/Total Capital	102.1%	Estimated Operating Cash/Total Capital	N/A
Non-cash working Capital/Total Capital	-9.1%	Non-cash working Capital/Total Capital	13%
Invested Capital/Total Capital	-322.3%	Invested Capital/Total Capital	79%

LMT (LTM)		Industry (LTM)	
LMT (5 years historical average)		Industry (LTM)	
Total Debt/Common Equity (LTM)	-0.01	Total Debt/Common Equity (LTM)	0.21
Cost of Existing Debt	-104.81%	Cost of Existing Debt	4.18%
Estimated Cost of new Borrowing	4.54%	Estimated Cost of new Borrowing	4.18%
CGFS Risk Rating	CCC	CGFS Risk Rating	A
Unlevered Beta (LTM)	0.85	Unlevered Beta (LTM)	0.88
WACC	10.62%	WACC	8.96%



Period	Revenue growth	Valuation	NOPAT margin	ROIC/WACC
Base Year	1.2%		6.6%	-14.56
12/31/2016	9.1%		11.3%	11.55
12/31/2017	0.1%		11.9%	6.37
12/31/2018	5.4%		11.8%	6.07
12/31/2019	0.4%		12.1%	5.43
12/31/2020	4.2%		12.4%	5.38
12/31/2021	-6.9%		12.3%	4.44
12/31/2022	3.5%		12.2%	4.64
12/31/2023	3.5%		12.0%	4.34
12/31/2024	3.5%		11.8%	4.01
12/31/2025	3.5%		11.6%	3.73
Continuing Period	3.0%		11.4%	3.47

Period	Invested Capital	Net Claims	Price per share
Base Year	-\$2,348.12	\$7,163.25	\$223.86
12/31/2016	-\$6,565.70	\$7,365.24	\$241.75
12/31/2017	-\$9,224.45	\$2,875.52	\$260.84
12/31/2018	\$1,167.89	-\$1,135.67	\$280.16
12/31/2019	-\$2,580.49	-\$6,466.19	\$301.95
12/31/2020	\$6,469.03	-\$11,070.00	\$322.35
12/31/2021	\$12,080.18	-\$17,255.02	\$343.93
12/31/2022	\$13,096.12	-\$21,763.11	\$365.66
12/31/2023	\$14,733.29	-\$25,975.16	\$388.05
12/31/2024	\$15,691.29	-\$30,128.72	\$411.24
12/31/2025	\$17,162.95	-\$34,217.80	\$435.32
Continuing Period			

## The Sherwin-Williams Co.

NYSE:SHW

**Analyst:** Patrick Donovan

**Sector:** Materials

**BUY**

Price Target: \$310.83

### Key Statistics as of 3/19/2016

Market Price:	\$288.69
Industry:	Chemicals
Market Cap:	\$26.62B
52-Week Range:	\$218.27-294.35
Beta:	0.84

### Thesis Points:

- Increases in housing starts and existing home sales are driving sales of coatings higher.
- Decreases in the price of inputs have significantly improved the company's operating margins.
- Already leading the industry in market share, acquisitions have positioned SHW to capture more of both the consumer and contractor market in the coming year.

### Company Description:

Sherwin-Williams is an American company listed on the New York Stock Exchange. Known primarily for providing homeowners and contractors with the highest-quality paint products on the market, Sherwin has a reputation for delivering coatings that outperform competitors in every way. The company not only provides services and products to contractors and do-it-yourself consumers, but also to a variety of businesses who use their products as original equipment manufacturer coatings. The company is headquartered in Cleveland, Ohio where it was founded 150 years ago in 1866. Sherwin-Williams produces premium coatings products and has the largest market share of paint sales in the United States.

### Closing Price Graph

Displayed below is Sherwin-Williams share price over the past year. In green is the S&P 500, and in purple is the SPDR materials sector index. The graph, along with data, shows that Sherwin-Williams typically follows the markets, however in the last quarter has been able to outperform competitors very well.



## Thesis

Sherwin-Williams is already the leader in the United States in terms of paint sales, and looks to grow market share even further in 2016. The company has enjoyed a decrease in the cost of inputs thanks to many of the key components in coatings being derived from petrochemicals. The cost of inputs for the industry tends to lag behind changes in the price of oil. While the rebound may have already begun for the price per barrel, SHW should see a lower cost of materials for the remainder of the year, barring any unusual jumps in the price of oil. Thanks to this decrease in cost of goods sold, and an improvement in sales for three of the four business segments under the Sherwin-Williams brand, margins have improved greatly in 2015 and according to the company's financial statements and earnings calls, management is working hard to continue these improvements in 2016. Another key component of the company's improvements is continued acquisitions. Over the past five years the firm has acquired several small market share competitors in order to move into new markets, especially the southern and south-eastern United States. By purchasing competition rather than simply opening a new Sherwin-Williams location, it has made accessing new customers much easier and more effective. In the professional paint contracting business the majority of cost is in labor. Contractors are willing to pay a premium for SHW products because they beat competition in many aspects such as coverage, durability, cure time, and ease of application. These benefits combined with entry into new markets are driving sales of Sherwin-Williams paints up consistently. Another important element of the business that is estimated to grow in 2016 is housing starts and sales. Contractors have grown to trust the product, and now as the housing market continues to grow and rebound from the bubble in 2008, SHW has positioned itself to take advantage of growth in both starts and existing home sales.

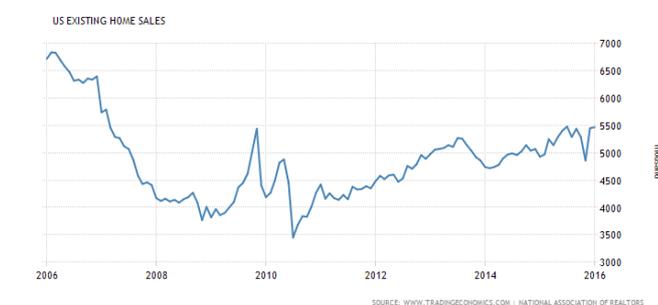
## Industry Outlook

The two primary markets for Sherwin-Williams are painting contractors and private consumers. There are several positive changes in the market occurring over the course of the 2015 and 2016 fiscal years that will affect the firm. One of the most impactful will be the

growth of housing starts in the coming year. Since 2008-09 the industry has been slowly but surely recovering but has yet to return to the peak level. Industry analysts and data from the U.S. census bureau point towards continued growth in starts and a convergence toward the peak level of 2008 within the next 3 years.



Since 2011 housing starts have doubled and the decrease in cost of many construction inputs has further pushed the rate at which starts are growing. Sherwin-Williams is positioned perfectly to take advantage of the situation as they have grown market share last year in both consumer and contractor sales. The key here, contractor sales, have grown for SHW from 40% of total sales to 60% in the last decade. As more contractors continue to build new homes, they will look toward the industry leader in coatings to help them finish their projects. The other end of the spectrum for customers is the consumer market. Consumers tend to purchase more paint products when existing home sales are increasing, this is because paint is seen as an inexpensive means of improving home value. As shown below, existing home sales are up this year and forecasted to continue growing in the next year, meaning more growth in sales for the consumer and contractor markets.



## Segment Analysis

The Sherwin-Williams company splits operations into four primary segments; paint stores, global finishes,

consumer group, and the Latin American coatings group. Paint stores are the largest segment by a significant margin, representing 63.6% of total revenue in 2015. In the most recent earnings call on January 28<sup>th</sup> 2016, the firm announced several improvements in efficiencies for the paint stores group. Citing specifically the reduction costs of inputs and processes and a sharp increase in customer demand. Paint stores service many of the professional painters who account for the majority of sales. As mentioned previously, acquisitions have increased the contractor market and these improvements in both cost and sales have helped improve the profit margin of the paint stores group by 19.9% in the 2015 fiscal year. Although other segments for Sherwin are less critical to the overall health of the company it is important to highlight some of the changes occurring in these operations as well. The consumer group saw sales rise 11.1% last year, mostly attributed to the introduction of HGTV home by Sherwin-Williams in Lowes stores. Once again, thanks to improvements in efficiency, specifically volume-driven operating efficiencies, profit margin for this segment improved 19.6% in 2015. For Sherwin's 2015 operations the only segment which saw a drop in profit was the global finishes group. Unfortunately, unfavorable changes in the currency markets due to an increase in the value of the U.S. dollar drove down revenues in this segment while sales improved.

## Management

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In January of 2016 Sherwin-Williams announced that John Morikis would replace Christopher Connor as CEO. Morikis had been the head of the paint stores division from 1999 to 2006, when he was promoted to COO. Connor will remain on the board most likely for the first two quarters of 2016 in order to facilitate a smooth transition for Morikis. His reputation has allowed the company to maintain spectacular ratings among industry analysts. In the past five years management has spent more than half of operating cash on repurchases and nearly 20% on dividends. The management team does a great job of improving shareholder value, and have a reputation for increasing market share at the same time.

## Porters Five Forces

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The valuation model created by Dr. Girard allows for an analysis of Porter's five forces. Scaled from 0-100 the results of this test can help give insight into how a firm is positioned amongst its peers. In terms of bargaining power of suppliers, customers and the intensity of existing rivalry, Sherwin-Williams falls right in the middle with scores of 50 for each category. The threat of substitutes for SHW falls around 67 points. This indicates that there is a high likelihood that customers are aware of, and have easy access to competitor's products. It is important to note, however that this score also indicates that customers are more likely to remain with Sherwin-Williams than try another product. It should come as no surprise that there are many other manufactures of paint, however Sherwin-Williams is the industry leader and has a more significant reputation of outstanding service. The final category of the five is threat of new competition, where SHW scores 75. This indicates a relatively low chance of new competition springing up and impacting SHW's business.

## Financials

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During the 2015 fiscal year management at Sherwin-Williams focused on improving efficiencies and growing market share with gusto. Based on the results from the annual report and the first earnings call from 2016 I was able to use the Proforma valuation model created by Dr. Girard to estimate the value of the company today and then proceed in forecasting the value in one years' time. Non-Adjusted revenue growth has been higher than the industry throughout the history of operations at Sherwin, however looking into the future I estimate that revenue growth will converge closer to the industry average of 5.4% per year. Operating costs will decrease slightly from current levels to 78%, just above the industry average due to the nature of SHW business. The company has had fairly consistent dividend yield and thus I estimated the future yields to be 1.5% of revenues. Based on all of my inputs the fair value today matches up exactly with how the market values Sherwin-Williams. With that in mind, the one year target price for SHW is \$310.83 and I am recommending a buy.



## Tower International Inc.

NYSE:TOWR

**Analyst:** Andrew Varone

**Sector:** Consumer Discretionary

**BUY**

Price Target: \$32.16

### Key Statistics as of 3/19/2016

Market Price:	\$25.81
Industry:	Auto Parts
Market Cap:	\$544.89M
52-Week Range:	\$19.36-\$31.41
Beta:	1.02

### Thesis Points:

- The auto industry has rebounded and will continue to see growth
- Low inputs cost from steel and aluminum as well as reduced operating cost creating value
- Diverse consumer portfolio and growing segments with higher margins

### Company Description:

Tower International Inc. is an integrated global manufacturer of engineered structural metal components and assemblies primarily serving automotive original equipment manufacturers or OEMs. The Company offers a product portfolio, supplying body-structure stampings, frame and other chassis structures, as well as complex welded assemblies.



## Thesis

Tower International is currently set up to see an increase in its value as its inputs of steel and aluminum have seen a reduction in price. This, with a growing demand for vehicles, will help drive value for TOWR. TOWR has further created value by selling off facilities that do not produce high enough margins. This is an attempt to improve margins in the future. Tower International has worked to have a diverse customer base to give them bargaining power rather than their customers. Tower International is considered a BUY at the price of \$25.81. Its one-year target is \$32.16 which is an upside potential of 24.6%.

## Porter's 5 Forces

The bargaining power of consumers is neutral. The auto parts industry is dependent upon strong relations with customers. Once a relationship is built, the customers will continue seeking the parts that the auto parts company supplies. If those parts are deemed reliable, the customers will continue to buy more. On the contrary, the automobile industry is an industry of margins. If margins can be expanded by switching to another customer, the relations built may be jeopardized.

The bargaining power of suppliers is low-neutral. Many suppliers to auto parts only supply to one or two companies. Because of this, the bargaining power is in favor of the auto parts company as a loss of a buyer to the supplier would be detrimental to their sales.

The competitive rivalry within the industry is high. There is a multitude of auto part companies that compete to have their product in the cars of a few major car distributors.

The barriers of entry to entry are high. There is a high capital requirement to get the machinery that is needed to put the parts together. There is also a learning curve and the best and most cost effective parts take time to discover.

The threat of substitutes is neutral. Currently, auto parts are interchangeable as the whole car is not required to be made. Parts or sections of the car can be outsourced then put together. Depending on the car, parts can only be bought from the specific dealer or bought anywhere. Lastly, technological advances will continue to make the current ways of producing cars cheaper.

## Cheaper Inputs

One of the vital inputs to auto parts production is steel. The price of steel has been down 71% over the course of the year. With the price of steel depreciating, auto parts makers will have a lower cost of goods sold, which will improve their margins. The reason for these lower steel prices is because iron ore, the material required to make steel, has started to depreciate once again after the price of iron hit its 52 week high.

Another input of auto parts is aluminum. Aluminum, like steel, has also seen a depreciation of its price. It is trading below \$0.70 a pound whereas it was above \$0.85 a pound a year ago.



## Rebounding Auto Industry

The recession was a huge hit to the auto industry. The amount of cars that were sold were cut in half by the time the recession was over. Since then, car sales have continued to increase due to an improving economy. Today, the number of cars that were sold has surpassed that of nine years ago, prior to the recession. This trend is expanded to continue and the number of cars that will be sold will continue to increase. This is a positive macro factor for the auto parts industry as a higher demand for cars will translate to a higher demand for auto parts.



Another area that helped to increase car sales the Federal Government set the federal funds rate to 0%. When the federal funds rate is 0%, all other interest rates are at the lowest without going into negative interest rates. These

low interest rates help encourage consumer spending. The Fed has raised the federal funds rate to 0.25%-0.50%. In the last Fed meeting, the Federal Reserve decided not to increase the rate each quarter, opting for only two increases this year. Those seeking a loan will try to receive one before the next increase in June. This will help continue to drive demand for the cars throughout the next quarter.

## Improving Margins

Tower International has made improving their margins a focus of their company. This has caused their company to sell facilities in Italy, China and Brazil. At the same time, they increased their revenues in North America by \$240 million. This discounting of certain facilities made revenues drop by 5.4% in 2015 compared to 2014. The company's EBITDA margin had a slight decrease by 0.7%. The company has a 5% revenue growth for the next couple of years. With revenues estimates for 2016 being close to that of 2014, the increase of margins can be seen with EBITDA margin reaching 10%. Then exceeding 10% for 2017, the highest that it has ever been.

The way the company will be able to improve their margins is by growing the segments with the highest margins. The segment of complex body assemblies has lower margins and revenues were decreased by \$200 million from 2014 to 2015. Contrary, lower vehicle structures and suspensions has high margins and revenues was increased by \$100 million during the same time frame.

## Diverse Customer Portfolio

Tower International has a multitude of customers that buy their auto parts for their cars. The leading customer, Ford, only accounts for 25% of the company's total revenues. Having a diverse customer portfolio will allow them to not be dependent on a single customer for a source of their income. If a customer does not want to pay the prices, Tower International has the bargaining power to increase sales to other customers.

Customer	
Ford	25%
Chrysler	16%
VW Group	12%
Fiat	8%
Volvo	7%
Nissan	7%
Toyota	6%
Daimler	5%
Chery	4%
BMW	2%
Honda	2%
Other	6%
Total	100%

## Cross-Sectional Analysis

With a cap size in \$500 million, Tower International is considered a small cap. Most other auto cap companies that are small cap have market cap sizes of at least \$2 billion. This makes Tower International a possible acquisition target if they consider to perform given the relations that they have with top car dealers.

A company that can be considered a direct competitor that has similar market size is Standard Motor. Standard Motor has a market cap of \$700 million. The revenue growth for the company is 4% which is lower than that of Tower International. Standard Motor currently has a higher stock price in the \$30. This is because they have higher margins than Tower currently has. This stands true for the entire industry as Tower International is expected to have operating expenses of 90%, while the industry average is only 85%. If they are able to cut cost then they will see significant value creation.

## Conclusion

Tower International is considered a buy due to the macro factors that are pressuring it. The auto industry has recovered leading to an increase in demand for auto parts. Also, the metals that the parts are made of have gone down again after rising which will help improve margins. From a firm based standpoint, TOWR is working to improve its margins by disposing of facilities that are not up to par.

**Tower International, Inc.**  
**(TOWR)**

**CENTER FOR GLOBAL FINANCIAL STUDIES**

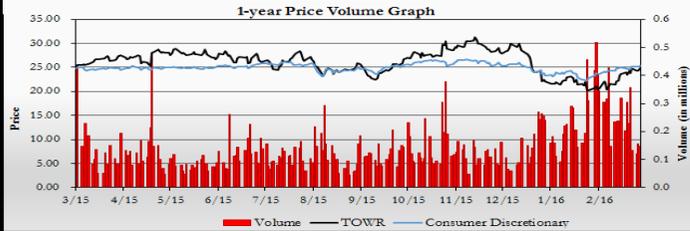
**BULLISH**

Analysis by Andrew Varone  
3/19/2016

Current Price: **\$25.81**  
Divident Yield: **0.4%**

Intrinsic Value: **\$26.20**  
Target Price: **\$32.16**

Target 1 year Return: **25.02%**  
Probability of Price Increase: **80%**



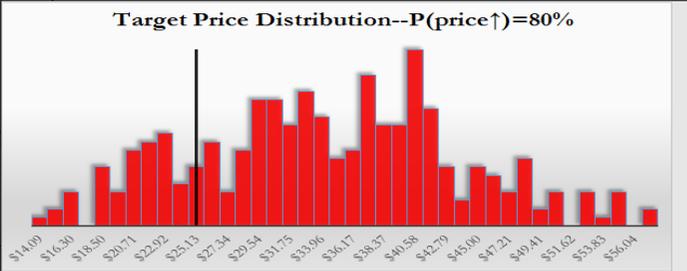
**Description**  
Tower International, Inc. manufactures and sells engineered automotive structural metal components and assemblies primarily for original equipment manufacturers.

**General Information**  
Sector: Consumer Discretionary  
Industry: Auto Components  
Last Guidance: November 3, 2015  
Next earnings date: N/M  
Estimated Country Risk Premium: 8.15%  
Effective Tax rate: 37%  
Effective Operating Tax rate: 129%

Market Data	
Market Capitalization	\$544.89
Daily volume (mil)	0.30
Shares outstanding (mil)	21.11
Diluted shares outstanding (mil)	21.41
% shares held by institutions	55%
% shares held by investments Managers	79%
% shares held by hedge funds	12%
% shares held by insiders	4.25%
Short interest	1.99%
Days to cover short interest	1.97
52 week high	\$31.41
52-week low	\$19.36
Levered Beta	1.72
Volatility	46.74%

Past Earning Surprises	
Quarter ending	Revenue
12/31/2014	-4.34%
3/31/2015	-1.98%
6/30/2015	-1.56%
9/30/2015	-2.45%
12/31/2015	0.98%
Mean	-1.87%
Standard error	0.9%

EBITDA		Peers	
Revenue	EBITDA	Company	EBITDA
12/31/2014	-22.74%	Gentex Corp.	
3/31/2015	-4.54%	American Axle & Manufacturing Holdings Inc.	
6/30/2015	-2.41%	BorgWarner Inc.	
9/30/2015	-8.17%	Visteon Corporation	
12/31/2015	-29.55%	Lear Corp.	
Mean	-13.48%	Tenneco Inc.	
Standard error	5.4%	Standard Motor Products Inc.	
		Johnson Controls Inc.	

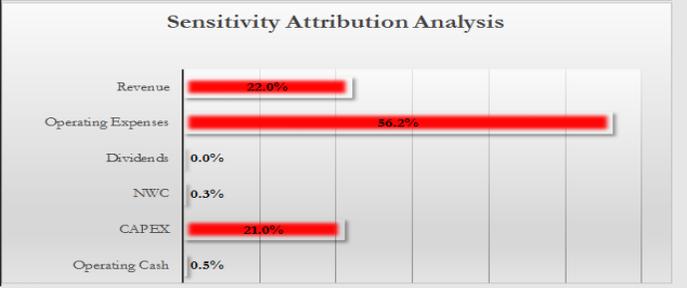


Management		Position	
Malcolm, Mark	Chief Executive Officer, Pre	50.24% per annum over 5y	N/M
Gouin, James	Chief Financial Officer and	10.61% per annum over 5y	N/M
Rajkovic, Michael	Chief Operating Officer and	12.12% per annum over 5y	N/M
Bernard, James	President of Americas	-1.64% per annum over 3y	10.12% per annum over 3y
Malmhagen, Pär	President of Tower Europe	-6.6% per annum over 1y	19.39% per annum over 1y
Kersten, Jeffrey	Principal Accounting Officer	N/M	N/M

Total compensations growth		Total return to shareholders	
50.24% per annum over 5y	N/M		
10.61% per annum over 5y	N/M		
12.12% per annum over 5y	N/M		
-1.64% per annum over 3y	10.12% per annum over 3y		
-6.6% per annum over 1y	19.39% per annum over 1y		
N/M	N/M		

Profitability		TOWR (LTM)		TOWR (5 years historical average)		Industry (LTM)	
ROIC	-15.8%	15.22%	12.12%				
NOPAT Margin	-8%	6.76%	6.8%				
Revenue/Invested Capital	1.88	2.25	1.78				
ROE	-36.2%	35.03%	15.41%				
Adjusted net margin	-9%	4.84%	6.2%				
Revenue/Adjusted Book Value	3.85	7.24	2.47				

Invested Funds		TOWR (LTM)		TOWR (5 years historical average)		Industry (LTM)	
Total Cash/Total Capital	13.4%	13.7%	9%				
Estimated Operating Cash/Total Capital	9.6%	10.6%	N/A				
Non-cash working Capital/Total Capital	-1.2%	1.2%	8%				
Invested Capital/Total Capital	96.5%	101.9%	87%				



Capital Structure		TOWR (LTM)		TOWR (5 years historical average)		Industry (LTM)	
Total Debt/Common Equity (LTM)	0.91	2.14	0.36				
Cost of Existing Debt	5.59%	10.11%	4.76%				
Estimated Cost of new Borrowing	2.41%	2.41%	4.76%				
CGFS Risk Rating	5.59%	AA	BBB				
Unlevered Beta (LTM)	5.19%	0.64	1.36				
WACC	5.59%	9.30%	12.84%				

Porter's 5 forces (scores are out of 100)		Revenue growth		Valuation	
Bargaining Power of Suppliers	44	Base Year	-5.4%	NOPAT margin	-8.4%
Bargaining Power of Customers	50	12/31/2016	5.0%	12/31/2016	6.0%
Overall	53	12/31/2017	4.8%	12/31/2017	6.1%
Threat of New Competition	71	12/31/2018	4.6%	12/31/2018	6.1%
Intensity of Existing Rivalry	17	12/31/2019	4.4%	12/31/2019	6.1%
Threat of Substitutes	67	12/31/2020	4.2%	12/31/2020	6.1%
		12/31/2021	4.0%	12/31/2021	6.1%
		12/31/2022	3.8%	12/31/2022	6.0%
		12/31/2023	3.6%	12/31/2023	5.9%
		12/31/2024	3.4%	12/31/2024	5.9%
		12/31/2025	3.2%	12/31/2025	5.8%
		Continuing Period	3.0%	Continuing Period	0.97

NOPAT margin		ROIC/WACC	
Base Year	-8.4%	12/31/2016	-1.56
12/31/2016	6.0%	12/31/2017	1.19
12/31/2017	6.1%	12/31/2018	1.16
12/31/2018	6.1%	12/31/2019	1.16
12/31/2019	6.1%	12/31/2020	1.14
12/31/2020	6.1%	12/31/2021	1.13
12/31/2021	6.1%	12/31/2022	1.10
12/31/2022	6.0%	12/31/2023	1.07
12/31/2023	5.9%	12/31/2024	1.05
12/31/2024	5.9%	12/31/2025	1.02
12/31/2025	5.8%	Continuing Period	1.00
Continuing Period	0.97		

Net Claims		Price per share	
Base Year	\$522.17	12/31/2016	\$26.47
12/31/2016	\$475.47	12/31/2017	\$32.33
12/31/2017	\$384.25	12/31/2018	\$38.84
12/31/2018	\$286.80	12/31/2019	\$45.67
12/31/2019	\$184.34	12/31/2020	\$52.76
12/31/2020	\$76.94	12/31/2021	\$60.12
12/31/2021	-\$41.06	12/31/2022	\$68.01
12/31/2022	-\$155.73	12/31/2023	\$75.79
12/31/2023	-\$273.66	12/31/2024	\$83.77
12/31/2024	-\$394.82	12/31/2025	\$91.97
12/31/2025	-\$519.14	Continuing Period	\$100.39

Invested Capital		Price per share	
Base Year	\$808.12	12/31/2016	\$26.47
12/31/2016	\$935.44	12/31/2017	\$32.33
12/31/2017	\$956.68	12/31/2018	\$38.84
12/31/2018	\$1,045.61	12/31/2019	\$45.67
12/31/2019	\$1,040.55	12/31/2020	\$52.76
12/31/2020	\$1,027.33	12/31/2021	\$60.12
12/31/2021	\$1,119.82	12/31/2022	\$68.01
12/31/2022	\$1,180.82	12/31/2023	\$75.79
12/31/2023	\$1,244.63	12/31/2024	\$83.77
12/31/2024	\$1,309.82	12/31/2025	\$91.97
12/31/2025	\$1,376.17	Continuing Period	\$100.39

**Morningstar Inc.**  
NASDAQ:MORN

**Analyst:** Florent Polito  
**Sector:** Consumer Disc.

**BUY**

Price Target: \$96

**Key Statistics** as of 03/17/2016

Market Price:	\$83.93
Industry:	Diversified Financial Services
Market Cap:	\$3,710M
52-Week Range:	\$71.89-86.88
Beta:	0.44

**Thesis Points:**

- The company is accelerating its repurchasing program, meaning it is thinking itself undervalued
- Its low beta and low volatility makes it a safe pick
- The company is outperforming the industry

**Company Description:**

Morningstar, Inc. is a leading provider of independent investment research in North America, Europe, Australia, and Asia. The company offers an extensive line of products and services for individual investors, financial advisors, asset managers, and retirement plan providers and sponsors. Morningstar provides data on more than 510,000 investment offerings, including stocks, mutual funds, and similar vehicles, along with real-time global market data on more than 17 million equities, indexes, futures, options, commodities, and precious metals, in addition to foreign exchange and Treasury markets. Morningstar also offers investment management services through its investment advisory subsidiaries, with more than \$180 billion in assets under advisement and management as of Dec. 31, 2015. The company has operations in 27 countries.



## Thesis

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Morningstar is not a skyrocketing stock but a steady increasing stock which with its low beta of 0.44 and its constant value creation with a ROIC/WACC of around 2.60 makes the company a sure buy pick for anyone who is looking for a profit. Because the founder of the company has a majority ownership in it, he is seeking to increase its value and stock price through dividends issuance and stocks repurchase. The increase in revenue and growth cumulated to the company outperforming its industry prove that the company will reach a higher price.

## Industry Outlook

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The Diversified Financial Services Industry in the Financials sector includes providers of a diverse range of financial services and/or with some interest in a wide range of financial services including banking, insurance and capital markets, but with no dominant business line. It also includes multi-sector holdings companies with significantly diversified holdings across three or more sectors, none of which contributes a majority of profit and/or sales. It includes as well specialized finance providers such as credit agencies, stock exchanges and specialty boutiques. Globally on the stock market, this sector has equaled the NASDAQ during the whole year, with a decrease of 2.85% where the NASDAQ lost 2.72% to date. But 2016 has given the industry a strong start, where the sector gained 5% since January while the NASDAQ lost 4.23%.

## Porter Five Forces

### Bargaining Power of Customers: Medium

The product can be considered very important to the customer and there is a relative large base of customers while the choice is limited, this makes the bargaining power of customers at a medium level, because as a paying data, the customers could always be tempting to look at free information on the internet.

### Bargaining Power of Suppliers: Inexistent

Morningstar does not have any suppliers.

### Threat of New Competition: High

Being an internet website, Morningstar is confronting to low barriers to entry, anyone can create a website, but what makes Morningstar influent is its people, because they are the one who transform information and create data and bring value to the company, so even if the threat is supposedly high, there is the requirement of a high credibility for new entrant to make it in the industry

### Threat of Substitutes: Low

There is no real substitutes when it comes to targeted data providence, the customers could possibly look at free information available on internet but there are rarely free of bias, and/or verified.

### Existing Rivalry: Medium

Morningstar has several big rival such as YahooFinance or SeekingAlpha when it comes to providing data, but in this industry there is almost no customer loyalty, and it is frequent to have customers checking all these sites when looking for information, therefore the rivalry does not really impact negatively the company

## Management

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Up to date, the company is owned at 57% by insiders, and 41% by institutions. The interesting point to notice is that 56% of the stocks are owned by the Founder, CEO and Chairman of the company Joseph D Mansueto. As a founder and major shareholder, the company is driven by a stakeholder who is focused on improving shareholder value as he said himself, increasing the likely of an increase in the stock during the incoming years. The increase of the dividends by 16% in 2015 reflects that position.

In 2014, the company introduced a performance share awards, granting the best performers shares awards, thus incenting the employees to do their best.

## Product Differentiation

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Morningstar is a data provider. They provide their products in 27 countries; the USA accounts for 75% of their revenue, followed by Europe, Australia, Canada and Asia. The company is selling investment researches, indexes, books, advisor, custom, and institutional software and services for redistributors,

brokerage firms, financial advisors, individual investors, insurance companies, investment banks and consultants, retirement plan providers and sponsors.

## Recent Acquisition

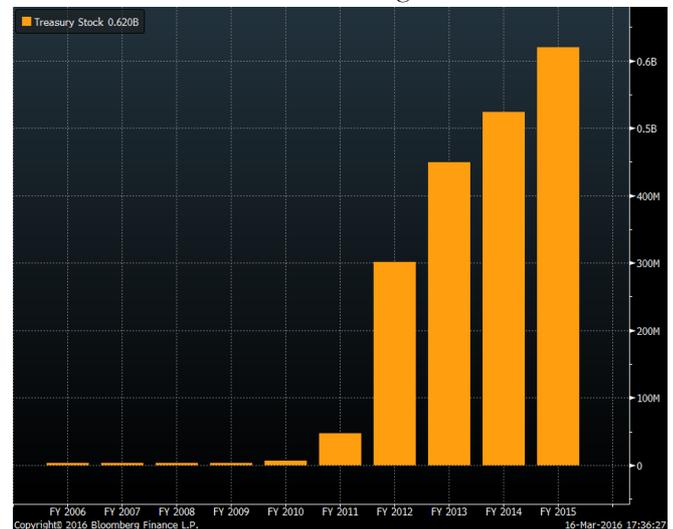
Morningstar present strategy is to acquire its franchises In November 2015, they acquired Total Rebalance Expert, an automated, tax-efficient investment portfolio rebalancing platform for financial advisors. tRx streamlines the rebalancing process for advisors and automates the complexities involved in rebalancing and managing portfolios. In June 2014, Morningstar acquired an additional 81.3% interest in HelloWallet Holdings, Inc, increasing they ownership from 18.7% to 100%. HelloWallet combines behavioral economics and the psychology of decision-making with sophisticated technology to provide personalized, unbiased financial guidance to U.S. workers and their families through their employer benefit plans. In April 2014, MORN acquired ByAllAccounts, Inc, a provider of innovative data aggregation technology for financial applications for \$27.9 million in cash. ByAllAccounts uses a knowledge-based process, including patented artificial intelligence technology, to collect, consolidate, and enrich financial account data and deliver it to virtually any platform. These acquisitions will increase the revenue of the company, and will strengthen the quality of the data provided by Morningstar, which will have for effect to solidify Morningstar credibility on the data market.

## Financials

Morningstar is a stock that outperforms its industry, which are the diversified financial services: the stock does better on average on several margins. The gross margin of MORN is 58.37% which is 31% more that the industry average of 27.37%. The EBITDA margin is 32.68% whereas the industry has an average of 23.42%. The operating margin is 24.56%, a 5% premium over the 19.67% that the industry has. The ROE of MORN is significantly above average with a return of 18.92% versus 9.95%.

Moreover the company has a ROIC/WACC ratio of 2.60, which means it creates a lot of value. The Debt/Equity ratio is 0.61 and their 1yr credit has an interest rate of 2.22% which is quite low and allows the company to satisfy its financial needs.

The company is also enterprising a repurchasing program since 2011, and the buyback has been intensified over the last years, thus drifting logically the price of the stock up, the company is still allowed to repurchase for \$376 million of stocks which means they have a large margin. The company bought back 492 million worth of stocks during 2015.



## Valuation

Running a proforma following the discounting of future cash flows, and after running a Monte Carlo simulation, the Intrinsic Value for MORN is \$89.98 and the target price is \$95.91, moreover there is a 94.33% of price increase, this is justified by a sensitivity analysis of the company which highlights a high sensitivity to revenue; as the revenue is constantly increasing, it verifies the fact that the stock is very likely to increase.

## Conclusion

Through its increase in revenue and its values, the company is very likely to keep its employees, and therefore manage to continue to provide quality data for its increasing customer base. The company outperforming is also outperforming its industry and its benchmark on a one year basis. Its strategy to repurchase stocks is a logical price increase driver, combined to the forecasted increase in cash flows and revenue.

**Morningstar Inc. (MORN)**

**CENTER FOR GLOBAL FINANCIAL STUDIES**

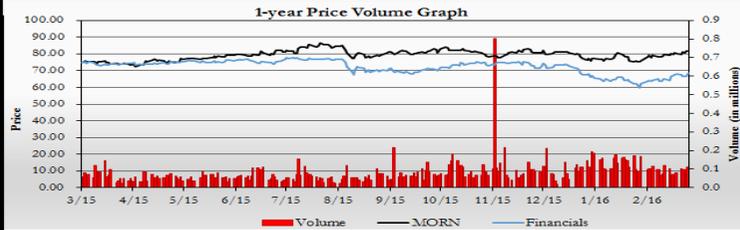
**NEUTRAL**

Analysis by Florent POLITO  
3/17/2016

Current Price: **\$83.17**  
Divident Yield: **1.0%**

Intrinsic Value: **\$89.98**  
Target Price: **\$95.91**

Target 1 year Return: **16.3%**  
Probability of Price Increase: **94.33%**

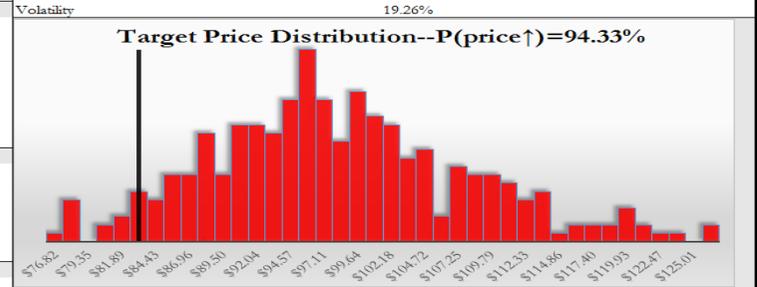


Description	
Morningstar, Inc. provides independent investment research services in North America, Europe, Australia, and Asia.	
General Information	
Sector	Financials
Industry	Diversified Financial Services
Last Guidance	November 3, 2015
Next earnings date	NM
Estimated Country Risk Premium	7.52%
Effective Tax rate	35%
Effective Operating Tax rate	34%

Market Data	
Market Capitalization	\$3,568.94
Daily volume (mil)	0.10
Shares outstanding (mil)	42.91
Diluted shares outstanding (mil)	44.30
% shares held by institutions	55%
% shares held by investments Managers	41%
% shares held by hedge funds	5%
% shares held by insiders	58.66%
Short interest	0.43%
Days to cover short interest	1.67
52 week high	\$86.88
52-week low	\$71.89
Levered Beta	0.54
Volatility	19.26%

Past Earning Surprises	
Quarter ending	Revenue
12/31/2014	-0.10%
3/31/2015	-4.95%
6/30/2015	1.61%
9/30/2015	-5.47%
12/31/2015	-1.32%
Mean	-2.05%
Standard error	1.4%

EBITDA	
12/31/2014	N/A
3/31/2015	N/A
6/30/2015	N/A
9/30/2015	N/A
12/31/2015	N/A
Mean	-2.05%
Standard error	1.4%



Management	
Mansueto, Joe	Founder, Executive Chairman
Biehler, Stéphane	Chief Financial Officer
Desmond, Bevin	Head of Global Markets and H
Idzorek, Thomas	Head of Investment Methodolo
Kapoor, Kunal	President
Miller, Heidi	Associate General Counsel an

Profitability	
ROIC	18.9%
NOPAT Margin	22%
Revenue/Invested Capital	0.88
ROE	17.4%
Adjusted net margin	21%
Revenue/Adjusted Book Value	0.82

Invested Funds	
Total Cash/Total Capital	23.4%
Estimated Operating Cash/Total Capital	10.2%
Non-cash working Capital/Total Capital	-10.2%
Invested Capital/Total Capital	84.6%

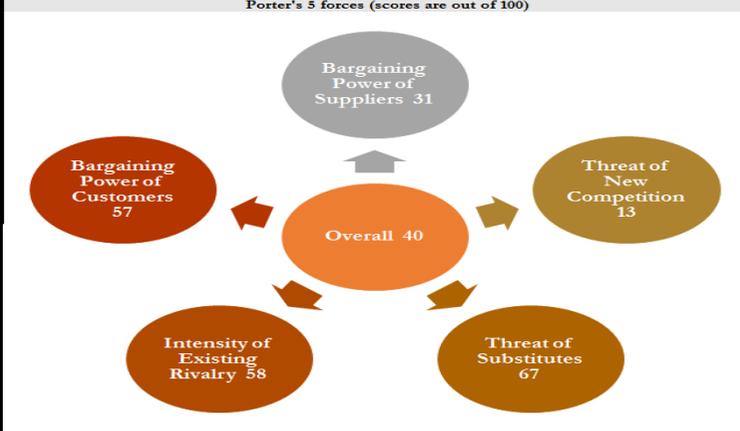
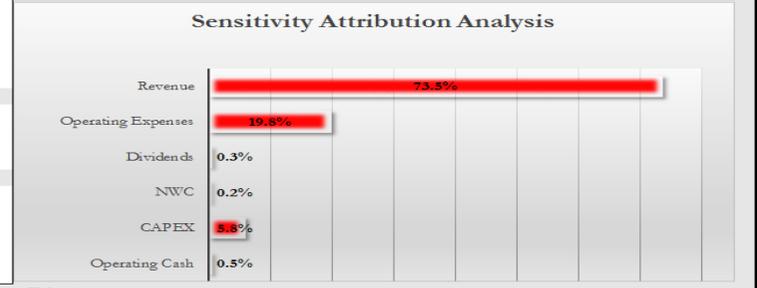
Capital Structure	
Total Debt/Common Equity (LTM)	0.07
Cost of Existing Debt	2.09%
Estimated Cost of new Borrowing	2.41%
CGFS Risk Rating	2.09%
Unlevered Beta (LTM)	0.00%
WACC	2.09%

Peers	
FactSet Research Systems Inc.	
Lee Enterprises, Incorporated	
Market Ltd.	
MSCI Inc.	
SINA Corporation	
The McClatchy Company	
New Media Investment Group Inc.	
Financial Engines, Inc.	

Total compensations growth	
1.03% per annum over 5y	
-5.3% per annum over 1y	
11.14% per annum over 5y	
18.15% per annum over 4y	

Total return to shareholders	
2.73% per annum over 5y	
-16.16% per annum over 1y	
2.73% per annum over 5y	
3.81% per annum over 4y	

MORN (LTM)		MORN (5 years historical average)		Industry (LTM)	
ROIC	17.79%	12.98%	12.98%	Industry (LTM)	24.7%
NOPAT Margin	20.26%	24.7%	24.7%		0.52
Revenue/Invested Capital	0.88	0.88	0.88		20.15%
ROE	14.36%	20.01%	20.01%		21.9%
Adjusted net margin	20.01%	0.72	0.72		0.92
Revenue/Adjusted Book Value	0.82				



Period	Revenue growth
Base Year	3.8%
12/31/2016	3.0%
12/31/2017	3.0%
12/31/2018	3.0%
12/31/2019	3.0%
12/31/2020	3.0%
12/31/2021	3.0%
12/31/2022	3.0%
12/31/2023	3.0%
12/31/2024	3.0%
12/31/2025	3.0%
Continuing Period	3.0%

Period	Invested Capital
Base Year	\$774.11
12/31/2016	\$791.44
12/31/2017	\$749.41
12/31/2018	\$762.84
12/31/2019	\$899.31
12/31/2020	\$898.99
12/31/2021	\$1,104.40
12/31/2022	\$1,129.20
12/31/2023	\$1,154.95
12/31/2024	\$1,181.69
12/31/2025	\$1,209.43
Continuing Period	

Valuation	
NOPAT margin	21.5%
ROIC/WACC	2.83
	2.70
	2.29
	2.33
	2.37
	2.41
	2.46
	2.50
	2.54
	2.58
	2.63
	2.67
Net Claims	
	\$69.83
	\$121.60
	\$5.56
	-\$111.90
	-\$230.80
	-\$352.47
	-\$474.27
	-\$597.59
	-\$722.46
	-\$848.91
	-\$976.96
Price per share	
	\$90.11
	\$96.03
	\$101.98
	\$108.01
	\$114.14
	\$120.40
	\$126.71
	\$133.11
	\$139.59
	\$146.15
	\$152.78