

February 15, 2018

## Diplomat Pharmacy: DPLO

Peter Galante

Sector: Healthcare

Industry: Healthcare Services

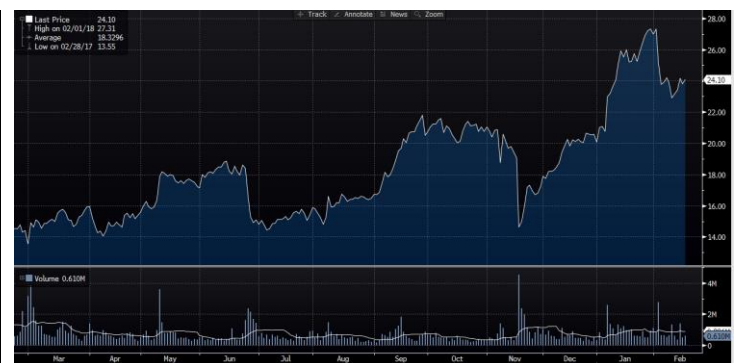
Current Price: \$24.10

Target Price: \$29.27

Diplomat Pharmacy, Inc. operates as an independent specialty pharmacy in the United States. The company stocks, dispenses, and distributes prescriptions for various biotechnology and specialty pharmaceutical manufacturers. Diplomat recently acquired full service, middle market pharmaceutical benefit manager capabilities.

### BUY

|                         |         |
|-------------------------|---------|
| Current Price:          | \$24.10 |
| Target Price:           | \$29.27 |
| Market Cap:             | 1.76B   |
| Beta:                   | 1.06    |
| D/E:                    | 16.32%  |
| ROIC:                   | 8.4%    |
| WACC:                   | 9.4%    |
| TTM Cash EBITDA Margin: | 2.2%    |



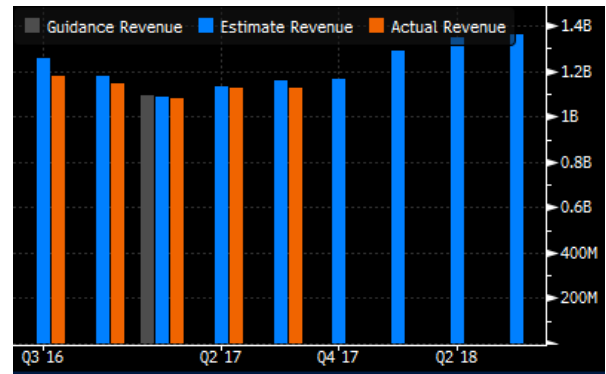
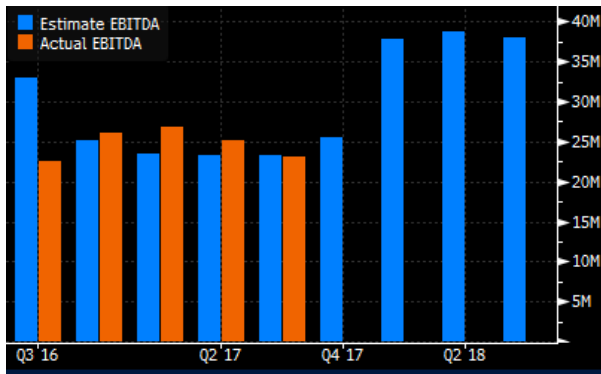
**Thesis:** Diplomat is underpriced in the market. With guidance offered for FY2018 EBITDA, the market has priced the stock lower than what these numbers suggest. Growth should continue for DPLO into the future as they realize synergies between their Spec Pharma Segment and their newly acquired PBM segment.

### Catalysts:

- **Short Term:** The market is pricing future EBITDA at a lower margin than guidance suggests.
- **Medium Term:** Development of PBM segment to diversify EBITDA. The new management team has PBM experience, and synergies with Specialty Pharmacy should be realized.
- **Long Term:** Specialty pharmacy industry trends. Bundled PBM and Specialty pharmacy services should make Diplomat an attractive option for middle market customers.

### Earnings Performance:

Diplomat has been subject to share price volatility around their earnings release. After Q3 2016, they reported revenue that was slightly below estimates, but missed consensus EBITDA by over \$10 million. This began a period where about 25% of their revenue was exposed to Direct and Indirect Remuneration Fees. There is a later section that goes deeper into these fees. Diplomat is still subject to these fees from their PBM contracts, and in the quarters since they were introduced EBITDA margin was down to the 1-2% range.



For 2017 earnings, management emphasized that their dip in revenue and miss of the estimates came from the loss of two major contracts. Management explained that these were contracts where the customer was happy with the Specialty Pharmacy service that Diplomat was providing, but they decided to pursue a contract with a PBM that has its own Specialty Pharmacy. PBMs that can provide bundled services were a major threat to Diplomat in the past. Revenue and EBITDA guidance for 2018 is optimistic, with growth in both coming from the acquisition of PBM services for Diplomat. Diplomat has focused on increasing internal accounting controls since their DIR Scandal in 2016. Since replacing their CFO, Diplomat has reported results more consistent with estimates.

## Segment Analysis:

Diplomat now has multiple operating segments. For the vast majority of Diplomat's existence, they have operated exclusively as an independent specialty pharmacy. They are the largest independent specialty pharmacy in the United States, with around 4% of the total market share. The three largest specialty pharmacies (Owned by CVS, Express Scripts, and Walgreens) make up around 60% of the market. For Diplomat, specialty pharmacy includes the distribution, and infusion services of specialty drugs. Specialty drugs are defined as high cost, high intensity, highly complicated and often drugs with limited availability. In the last twelve months the EBITDA margin for this segment was around 2.11%.

Diplomat's recent acquisitions in the PBM space met negative market reactions. Many analysts felt they overpaid for the two companies, and they utilized \$96 Million in common stock between the two deals. The larger transaction, LDI (\$595 million) was purchased at a multiple of 14.5x 2017 EBITDA. Diplomat expects both LDI and NPS to be accretive and synergy creating acquisitions. Combining the two companies EBITDA and Revenue for 2017 gives an estimated segment margin of 11.04%.

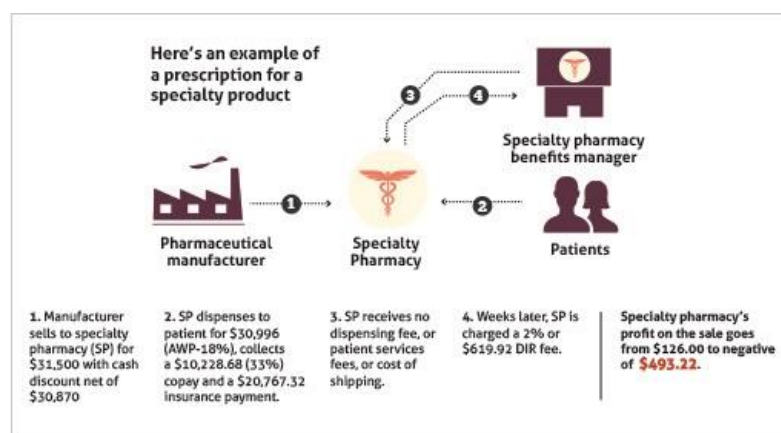
Diplomat also acquired hub service capabilities in the past. This is a very small segment, where the company acts as a relationship managing resource for drugs in the pipeline. This small segment has a 14.67% EBITDA margin.

| EBITDA Margin Comparison - Distribution Segment |        |
|---|--------|
| DPLO  | 2.20%  |
| McKesson  | 2.30%  |
| Amerisource Bergen                              | 1.30%  |
| Cardinal Health                                 | 2.30%  |
| EBITDA Margin Comparison - PBM Segment          |        |
| DPLO (NPS)                                      | 16.80% |
| DPLO (LDI)                                      | 10.60% |
| ESRX  | 7.50%  |
| CVS (pbm)                                       | 4.50%  |
| Optum Rx  | 5%     |

These are comparable companies or company segments to Diplomat's operations. Diplomat's distribution is consistent with similar companies. Their PBM additions have higher margins than other PBMs. Diplomat will seek out a different market than these three PBMs listed above. Diplomat is looking to provide highly customized service to middle market customers. The other PBMs that it can be compared to are focused on serving larger plans with a more uniform service provided.

## DIR Visibility:

One of the major issues that the market had with the DIR fee scandal was that management was unclear on how these fees were assessed. Quarter after quarter, they were unable to explain how they were getting billed. Questions raising concerns over this have been a large portion of their earnings calls for the recent quarters, and there is finally improvement on this front. Diplomat is negotiating new contracts with CVS's PBM service. In addition to this, management has announced that they have increased their visibility on how the fees are assessed, and that the fees should remain more stable moving forward. The increased visibility and more reliable accounting should relieve some of the downward pressure that Diplomat's share price is under.



Adapted from The Wall Street Journal.

## Acquisition of PBM Segment:

As previously mentioned, Diplomat's main threat when it came to customer retention and winning new contracts was bundled service offerings from PBMs with Specialty Pharmacy capabilities. LDI and NPS give Diplomat access to 855k covered lives from over 700 unique customers. Diplomat is used to providing highly specialized service for their distribution business, and they plan on bringing this high touch approach to the PBM market.

With around 25% of distribution revenue exposed to DIR fees, these PBMs will diversify the EBITDA of the company. A higher margin segment will work to improve margins, and the ability to bundle services will allow Diplomat to take advantage of industry trends. The two PBMs together mean that Diplomat will be able to offer full service to customers, and they are complementary products.

### NPS TRANSACTION SUMMARY



|                          |  |
|--------------------------|--|
| <b>Target</b>            | <ul style="list-style-type: none"> <li>Pharmaceutical Technologies, Inc., dba National Pharmaceutical Services (NPS)</li> <li>Full-service pharmacy benefit manager (PBM) with access to 475,000 member lives</li> <li>Based in Omaha, Nebraska</li> <li>Revenue: \$32 million (2017E) and Adjusted EBITDA: \$5.4 million (2017E)</li> </ul>           |
| <b>Purchase Price</b>    | <ul style="list-style-type: none"> <li>\$47 million purchase price</li> <li>Transaction includes real estate valued at ~\$10 million</li> </ul>  |
| <b>Consideration</b>     | <ul style="list-style-type: none"> <li>\$31 million in cash using cash on hand and existing credit facility</li> <li>\$16 million in common stock</li> <li>No contingent earn-out consideration</li> <li>Expected to be accretive to adjusted EPS in 2018</li> </ul>   |
| <b>Business Overview</b> | <ul style="list-style-type: none"> <li>Diversified mix of PBM lives</li> <li>Robust technology platform: In-house proprietary claims-processing system</li> <li>Captive mail-order pharmacy (Integrated HMO Pharmacy)</li> <li>Near-term synergy opportunities for specialty Rx volume</li> <li>Senior management team will remain in place</li> </ul> |
| <b>Closing</b>           | <ul style="list-style-type: none"> <li>Diplomat announced closing of the acquisition of NPS Nov. 29, 2017.</li> </ul>  |

### LDI TRANSACTION SUMMARY

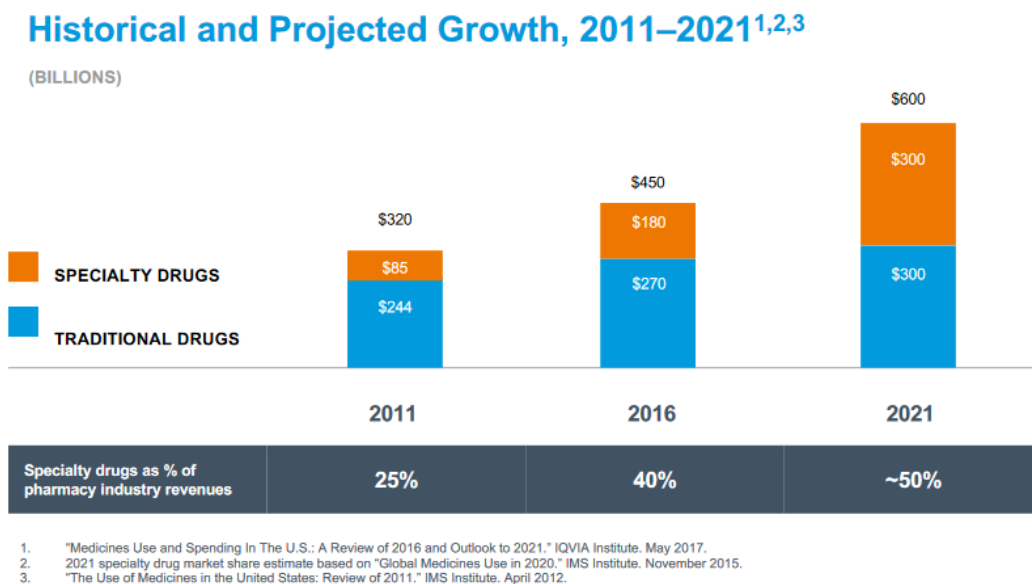


|                       |   |
|-----------------------|---|
| <b>Target</b>         | <ul style="list-style-type: none"> <li>LDI Integrated Pharmacy Services ("LDI")</li> <li>Full-service PBM with 2017E revenue of \$388 million and 2017E adjusted EBITDA of \$41 million</li> </ul>  |
| <b>Purchase Price</b> | <ul style="list-style-type: none"> <li>\$595 million gross purchase price <ul style="list-style-type: none"> <li>Represents ~14.5x on gross purchase price</li> </ul> </li> <li>\$540 million adjusted purchase price <ul style="list-style-type: none"> <li>~\$94 million tax shield (NPV ~\$55 million)</li> <li>Represents ~13.2x post tax shield benefit</li> </ul> </li> <li>\$4-6 million of synergies in Year 1 <ul style="list-style-type: none"> <li>Represents ~11.7x post synergies and post tax shield</li> </ul> </li> </ul> |
| <b>Consideration</b>  | <ul style="list-style-type: none"> <li>\$515 million in cash <ul style="list-style-type: none"> <li>Committed cash financing from a new \$795 million credit facility provided by JPMorgan and Capital One</li> </ul> </li> <li>~\$80 million in common stock, representing ~4.15 million shares</li> <li>Pro forma total leverage of ~4.6x LTM adjusted 2017 EBITDA; Expected to be between 2.0x-3.0x by mid 2019</li> <li>Expected to be accretive to adjusted EPS in 2018</li> </ul>   |
| <b>Closing</b>        | <ul style="list-style-type: none"> <li>Diplomat announced closing of the acquisition of LDI Dec. 20, 2017.</li> </ul>   |

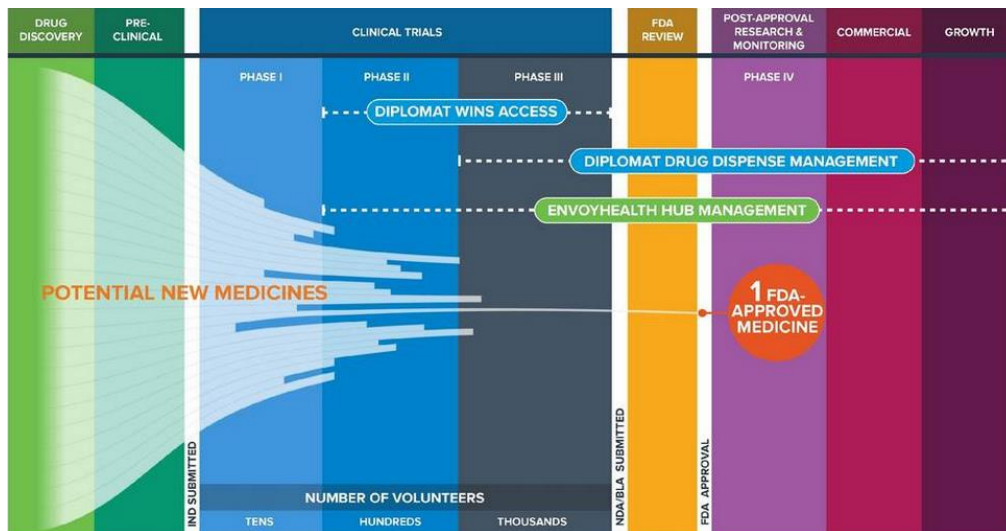
Diplomat's interim CEO has held many positions in the PBM space. He joins two other former Catamaran employees in the management team. Diplomat has built a team that will be successful in integrating and growing the new segment. Former CEO and Co-Founder Phil Hagerman has left Diplomat in a position to grow sustainably while improving profitability.

## Industry Outlook:

Specialty pharmacy is projected to grow at a rapid rate. In 2016 Specialty Pharmacy represented 40% of the pharmaceutical industry spend at \$180 million. By 2021, it is expected to be approaching 50% of the total spend, at over \$300 million. This increasing portion of the pharmaceutical spend is spent on 1% of covered employees.



Oncology drugs represent the largest portion of the specialty pipeline. This is an optimistic trend for Diplomat, as they have historically been successful in winning oncology contracts. With hub services offerings through their acquisition of Envoy health, and now the capability to offer bundled PBM/Specialty Pharmacy Services, Diplomat has never been in a better position to win contracts.



Key: IND: Investigational New Drug Application, NDA: New Drug Application, BLA: Biologics License Application

Proprietary and Confidential of Diplomat Pharmacy Inc.

Diplomat now has the capability to offer services from the earliest stage possible all the way through to approval and continued market growth.

## Valuation:

The market is currently undervaluing Diplomat based on 2018 guidance. The market seems to be pricing in an EBITDA margin of 2.65-2.75%. Based on 2018 guidance, EBITDA should be expected to be in the range of 2.9-3.2%. This gives a 1 year target price of \$29.

Guidance estimates were that revenue could range from \$5.3-\$5.6 Billion and EBITDA could range from \$164-\$170 Billion. This is approximately a 66% increase from 2017 to 2018 EBITDA.

In a pessimistic case where EBITDA margin sees no improvements, and revenue growth is lower by 1% in each year of the explicit period than in the base case, the price target is \$17.41.

In an optimistic case, where EBITDA increases to 3.2% in the base year and stays at that level, and revenue growth is constant with the base case, the one year target price is \$33.51

## Conclusion:

Diplomat Pharmacy has never been in a better position to win contracts than they are now. With full service middle market PBM offerings, and top quality Specialty Pharmacy distribution, Diplomat will take advantage of strong industry growth trends through new the bundled service offerings that customers are demanding. Their new management team has success in the PBM market, and the integration of the new segment is expected to be accretive to earnings and synergistic. In addition to growth prospects and margin

improvements, I believe that Diplomat is currently undervalued in the market based on 2018 guidance. I recommend Diplomat Pharmacy as a buy.



# Diplomat Pharmacy, Inc. (DPLO)

## CENTER FOR GLOBAL FINANCIAL STUDIES

**BULLISH**

Analysis by Peter Galante  
2/18/2018

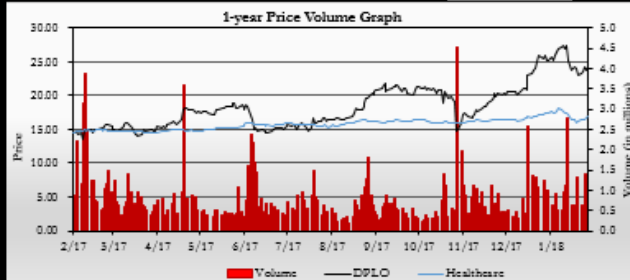
Current Price:  
Divident Yield:

\$24.10  
0.0%

Intrinsic Value  
Target Price:

\$26.34  
\$29.27

Target 1 year Return: 21.43%  
Probability of Price Increase: 100%



| Description   |                                   |
|---|-----------------------------------|
| Diplomat Pharmacy, Inc. operates as an independent specialty pharmacy in the United States. |                                   |
| General Information   |                                   |
| Sector  | Healthcare                        |
| Industry  | Healthcare Providers and Services |
| Last Guidance   | February 12, 2018                 |
| Next earnings date  | February 27, 2018                 |
| Market Assumptions  |                                   |
| Estimated Equity Risk Premium   | 5.69%                             |
| Effective Tax rate  | 21%                               |

| Market Data                           |            |
|---------------------------------------|------------|
| Market Capitalization                 | \$1,758.17 |
| Daily volume (mil)                    | 0.61       |
| Shares outstanding (mil)              | 72.95      |
| Diluted shares outstanding (mil)      | 68.18      |
| % shares held by institutions         | 109%       |
| % shares held by investments Managers | 56%        |
| % shares held by hedge funds          | 2%         |
| % shares held by insiders             | 27.68%     |
| Short interest                        | 11.06%     |
| Days to cover short interest          | 9.88       |
| 52 week high                          | \$27.78    |
| 52-week low                           | \$13.39    |
| Volatility                            | 0.00%      |

| Past Earning Surprises |         |
|------------------------|---------|
| Quarter ending         | Revenue |
| 9/30/2016              | -6.49%  |
| 12/31/2016             | -1.47%  |
| 3/31/2017              | -0.56%  |
| 6/30/2017              | -0.49%  |
| 9/30/2017              | -2.13%  |
| Mean                   | -2.24%  |
| Standard error         | 1.0%    |
| EBITDA                 |         |
| 9/30/2016              | -40.94% |
| 12/31/2016             | -18.73% |
| 3/31/2017              | 4.52%   |
| 6/30/2017              | -5.94%  |
| 9/30/2017              | -10.30% |
| Mean                   | -14.28% |
| Standard error         | 4.4%    |

| Market and Credit Scores                                     |  |
|--|--|
| Recommendation (STARS) Value--0                              |  |
| Recommendation (STARS) Description--0                        |  |
| Quality Ranking Value--0                                     |  |
| Quality Ranking Description--0                               |  |
| Short Score--3   |  |
| Market Signal Probability of Default % (Non-Ratings)--0.334% |  |
| CreditModel Score (Non-Ratings)--bb-                         |  |

| Industry and Segment Information   |                                   |
|------------------------------------|-----------------------------------|
| LTN Revenues by Geographic Segment | LTN Revenues by Business Segments |
| United States--100%                | Specialty Pharmacy Services--100% |
| Peers                              |                                   |
| Express Scripts Holding Company    | --                                |
| Premier, Inc.                      | --                                |
| Walgreens Boots Alliance, Inc.     | --                                |
| CVS Health Corporation             | --                                |

| Management       |                                       |
|------------------|---------------------------------------|
| Hagerman, Philip | Co-Founder & Chairman Emeritus        |
| Rice, Gary       | Executive Officer                     |
| Park, Jeffrey    | Interim CEO & Director                |
| Saban, Joel      | President                             |
| Kavthekar, Atul  | Chief Financial Officer and Treasurer |
| Brown, Stephen   | Chief Information Officer             |
| Position         |                                       |
| Hagerman, Philip | Co-Founder & Chairman Emeritus        |
| Rice, Gary       | Executive Officer                     |
| Park, Jeffrey    | Interim CEO & Director                |
| Saban, Joel      | President                             |
| Kavthekar, Atul  | Chief Financial Officer and Treasurer |
| Brown, Stephen   | Chief Information Officer             |

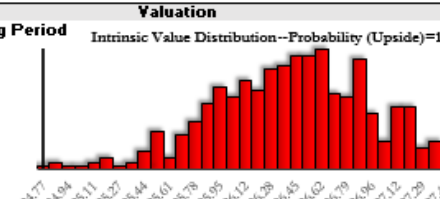
| Profitability             |                 |
|---------------------------|-----------------|
| DPLO (LTM)                | DPLO Historical |
| Return on Capital (GAAP)  | 8.4%            |
| Operating Margin          | 2%              |
| Revenue/Capital (GAAP)    | 4.74            |
| ROE (GAAP)                | 2.0%            |
| Net margin                | 0.3%            |
| Revenue/Book Value (GAAP) | 7.74            |
| Invested Funds            |                 |
| DPLO (LTM)                | DPLO Historical |
| Cash/Capital              | 3.0%            |
| NWC/Capital               | 20.3%           |
| Operating Assets/Capital  | 27.6%           |
| Goodwill/Capital          | 49.2%           |

| Capital Structure                                 |                 |
|---|-----------------|
| DPLO (LTM)  | DPLO Historical |
| Total Debt/Market Capitalization                  | 0.21            |
| Cost of Debt                                      | 5.2%            |
| CGFS Rating (F-score, Z-score, and default Probab | BBB             |
| WACC  | 8.1%            |

| Porter's 5 forces (Scores are percentiles)     |  |
|--|--|
| Bargaining Power of Suppliers-- MIDDLE TIER 36 |  |
| Bargaining Power of Customers-- MIDDLE TIER 64 |  |
| Threat of New Competition-- LOWEST TIER 29     |  |
| Intensity of Existing Rivalry-- MIDDLE TIER 42 |  |
| Threat of Substitutes-- HIGHEST TIER 100       |  |



| Forecast Assumptions      |     |
|---------------------------|-----|
| Revenue Growth CAGR       | 9%  |
| Average Operating Margin  | 3%  |
| Average Net Margin        | 2%  |
| Growth in Capital CAGR    | 10% |
| Growth in Claims CAGR     | 2%  |
| Average Return on Capital | 10% |
| Average Return on Equity  | 11% |
| Average Cost of Capital   | 9%  |
| Average Cost of EquityKe  | 11% |
| Explicit Period (6 years) |     |
| Revenue Growth CAGR       | 9%  |
| Average Operating Margin  | 3%  |
| Average Net Margin        | 2%  |
| Growth in Capital CAGR    | 10% |
| Growth in Claims CAGR     | 2%  |
| Average Return on Capital | 10% |
| Average Return on Equity  | 11% |
| Average Cost of Capital   | 9%  |
| Average Cost of EquityKe  | 11% |
| Continuing Period         |     |
| Revenue Growth CAGR       | 2%  |
| Average Operating Margin  | 4%  |
| Average Net Margin        | 3%  |
| Growth in Capital CAGR    | 2%  |
| Growth in Claims CAGR     | 2%  |
| Average Return on Capital | 11% |
| Average Return on Equity  | 11% |
| Average Cost of Capital   | 10% |
| Average Cost of EquityKe  | 11% |



| Sensitivity Attribution Analysis |       |
|----------------------------------|-------|
| Revenue                          | 48.2% |
| Operating costs                  | 47.8% |
| Capital expenditures             | 4.9%  |
| Discount Rate                    | 0.4%  |



November 9<sup>th</sup>, 2017

## LA-Z-Boy Inc. : LZB

Timothy Shumsky

Sector: Financial

Industry: Savings & Loans

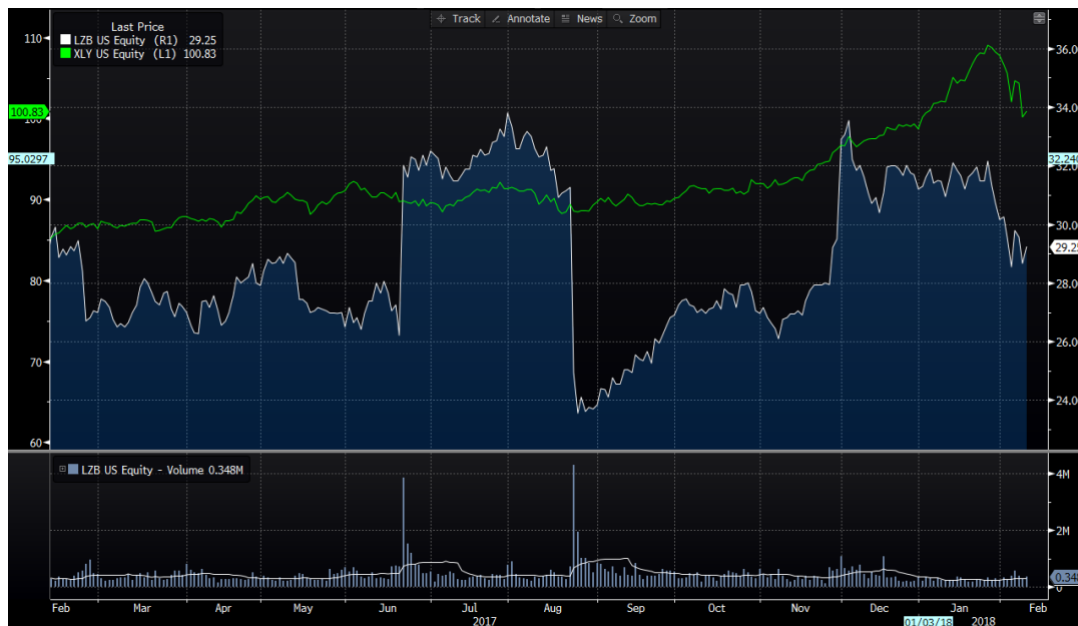
Current Price: \$29.55

Target Price: \$36.59

### BUY

|                 |         |
|-----------------|---------|
| Current Price:  | \$29.55 |
| Target Price:   | \$36.59 |
| Market Cap:     | 1.398B  |
| Average Volume: | .273M   |
| ROE:            | 14.26%  |
| Ke:             | 13.7%   |
| ROIC            | 14.98%  |
| WACC            | 13.7%   |

**Company Description:** LA-Z-Boy manufacturers and sells upholster furniture and functional storage units. The company has both corporate owned locations and franchised locations. LA-Z-Boy has also taken it upon themselves to develop a bigger online presence.



**Thesis:** La-Z-Boy is currently operating in an industry that has lagged behind

**Catalysts:**

the growing economy. The company seemingly benefits from both ends of the business cycle: peak and contraction. The company benefits from new home sales through outfitting new homes with decor. Home sales are typically strong during the peak of the business cycle, which this company benefits from. LA-Z-Boy can also be seen as defensive because demand for home furniture is typically seen as a necessity and thus is very inelastic. This is why it may perform well during a contraction.

- **Short Term (within the year):** The Company's stock price was hurt when they announced a change in directors. Due to the strong tenor of their board they should have no trouble replacing this position and restoring investor faith.
- **Mid Term (1-2 years):** Economic data has pointed to growth in jobs and in wages in those primed to buy first homes and upgrade starter homes. Unfortunately, this trend has not carried through to new home sales but should in the near future.
- **Long Term (3+):** The company is currently operating at very low operating and EBITDA margin in comparison with direct competitors. They should converge with competitors as they reach maturity in all fields.

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## August Price Shocks:

Looking at the technicals of the company over the past year, a point in August really jumps out. August 22<sup>nd</sup> saw the stock price fall from \$31.25 to \$24.95 - this represents a huge 25.25% decrease in price. This was due to margins shrinking in the upholstery segment. This news was also on the back of a change in director announcement just 8 days prior, which caused a huge near-5% drop. The drop 8 days prior meant that the margins announcement came during downward momentum. After reviewing this data, it is hard to assume there was not an overreaction. La-Z-Boy is a seasonal company, and it has struggled historically at this time. Couple this with the fact that it is now trying to deploy capital into the retail segment, which will obviously yield smaller margins, and the only explanation is an overreaction.

A final note is that although margins have returned to historic levels in the most recent earnings call, the price has certainly not; this again indicates that there was an overreaction in August and the stock is now mispriced.

## LA-Z-BOY INC FILES (8-K) Disclosing Change in Directors or Principal Officers

Edgar Glimpses | Monday, 14 August 2017 17:00 (EST)



Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(b) Resignation of Officer

Effective August 14, 2017, *Margaret L. Mueller* resigned as Chief Accounting Officer of *La-Z-Boy Incorporated* (the "Company"). *Ms. Mueller*, the Company's Vice President of Finance and Assistant Treasurer, remains with the Company through August 31, 2017. *Ms. Mueller's* resignation is not a result of any disagreement with the Company's independent auditors or any member of management on any matter of accounting principles or practices, financial statement disclosure or internal controls.






## Tax Implications:

Companies that are very sensitive to margins are often also sensitive to taxes. This makes sense, as taxes are a huge factor when looking at differences between operating margins and net margins. The company's effective tax rate for continuing operations for 2017 was 33.5%. It has also been accumulating deferred tax assets over the years. La-Z-Boy currently has \$40.1 million in deferred tax assets on its balance sheet. This amount of deferred tax assets is material, as it represents 42.7% of last year's net income.

Due to the new legislation, it can be assumed that La-Z-Boy's U.S. divisions will face a 21% corporate tax rate. The company currently uses a straight-line depreciation model for its property, plant, and equipment, as [stated in its 10K](#). Although it was hard to find what type of depreciation method La-Z-Boy used for taxes, it can be assumed the company uses a more aggressive model because of its ability to amass deferred tax assets.

La-Z-Boy currently gets 88% of its revenue from the US, 7% from Canada, and 5% from "Other". Assuming the "Other" segment of its revenues is a combination of mainly UK and Ireland, a weighted average of tax rates, if the revenue breakdown were to hold, would be 12.1225%. This tax breakdown seems aggressive, so 22% was used to

be slightly more conservative. The assumption is the company would not use any of its deferred tax assets in the model, although using them would lower its tax rate further.

| In Millions of USD except Per Share   |   |               | 2014 Y     |         | 2015 Y     |    | 2016 Y     |        | 2017 Y     |         |        |
|---|---|---------------|------------|---------|------------|----|------------|--------|------------|---------|--------|
| 12 Months Ending  |   |               | 04/26/2014 |         | 04/25/2015 |    | 04/30/2016 |        | 04/29/2017 |         |        |
|  |  | Revenue       | \$         | 1,357.3 | 100.0%     | \$ | 1,425.4    | 100.0% | \$         | 1,520.1 | 100.0% |
|  |   | United States | \$         | 1,167.3 | 86.0%      | \$ | 1,240.1    | 87.0%  | \$         | 1,337.7 | 88.0%  |
|  |   | Canada        | \$         | 108.6   | 8.0%       | \$ | 99.8       | 7.0%   | \$         | 106.4   | 7.0%   |
|  |   | Other         | \$         | 81.4    | 6.0%       | \$ | 85.5       | 6.0%   | \$         | 76.0    | 5.0%   |

|               |         |         |                       |          |  |
|---------------|---------|---------|-----------------------|----------|--|
|               |         | Segment | Tax Rate              |          |  |
|               | US      | 88%     | 21%                   | 18.4800% |  |
|               | Canada  | 7%      | 26.50%                | 1.8550%  |  |
| Other Segment | U.K.    | 2.50%   | 19%                   | 0.4750%  |  |
| Combined      | Ireland | 2.50%   | 12.50%                | 0.3125%  |  |
|               |         |         | Total Weight Average: | 21.1225% |  |

## Economic Data ratio:

The country has recently undergone significant growth. This growth is showcased in economic data. Data like unemployment rates being down over the past six months and wages being up indicate that growth has certainly had an impact. One piece of data that seems to be lagging is the housing market. New housing starts have just not followed in the success of wage growth and unemployment. This trend is odd, because as people received more money, an assumption can be made that they will either buy their first home or upgrade their current housing situation. Another perplexing reason why housing should have risen is due to the fact that unemployment rates have decreased in targeted age groups of 25-34 and 25-44; these are the precise age groups that would be buying their first house and upgrading from a starter home or a rental respectively.

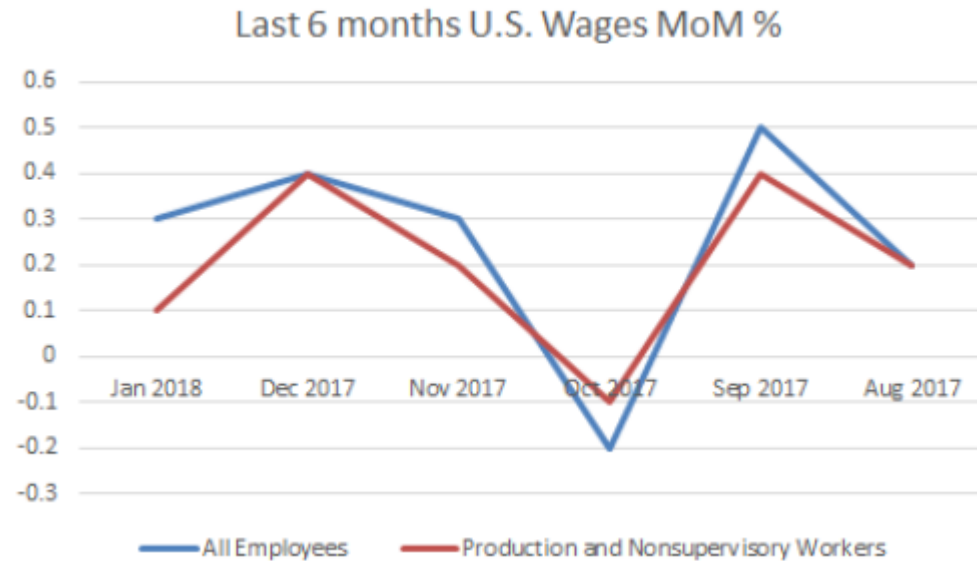
Although housing has been lagging, there may be critics who believe that it will not improve anytime soon due to expected interest rate increases with increases in inflation. A counter to this claim could be that interest rates have

been unprecedentedly low recently and a basic economics concept may apply: when something is very cheap or a small piece of a relatively larger income, buyers' demand will become more elastic. For these reasons, the housing market may see a boost. New houses should equate to more sales for a company that furnishes homes.

|                   | Jan 2018 | Dec 2017 | Nov 2017 | Oct 2017 | Sep 2017 | Aug 2017 |
|-------------------|----------|----------|----------|----------|----------|----------|
| Unemployment Rate | 4.1      | 4.1      | 4.1      | 4.1      | 4.2      | 4.4      |
| Age               |          |          |          |          |          |          |
| 16 and Over       | 4.1      | 4.1      | 4.1      | 4.1      | 4.2      | 4.4      |
| 16-19             | 13.9     | 13.6     | 15.9     | 13.7     | 13       | 13.8     |
| 20 and Older      | 3.8      | 3.7      | 3.7      | 3.7      | 3.9      | 4.1      |
| 20-24             | 7.4      | 7.1      | 7.1      | 7.2      | 7.6      | 7.2      |
| 25 and Over       | 3.4      | 3.4      | 3.3      | 3.3      | 3.5      | 3.7      |
| 25-54             | 3.5      | 3.4      | 3.4      | 3.4      | 3.5      | 3.9      |
| 25-34             | 4.3      | 4.5      | 4.3      | 4.4      | 4.4      | 4.9      |
| 35-44             | 3.1      | 3        | 3.1      | 3        | 3.2      | 3.4      |
| 45-54             | 3        | 2.7      | 2.7      | 2.7      | 3.1      | 3.4      |
| 55 and Over       | 3        | 3.3      | 3.1      | 3.1      | 3.2      | 3.2      |

Unemployment Rate (Seasonally Adjusted)





|                                       | Field | Jan 2018 | Dec 2017 | Nov 2017 | Oct 2017 | Sep 2017 | Aug 2017 |
|---------------------------------------|-------|----------|----------|----------|----------|----------|----------|
| Hourly Wages (MoM %)                  |       |          |          |          |          |          |          |
| All Employees                         | PR005 | 0.3      | 0.4      | 0.3      | -0.2     | 0.5      | 0.2      |
| Production and Nonsupervisory Workers | PR005 | 0.1      | 0.4      | 0.2      | -0.1     | 0.4      | 0.2      |

## Multiples model

Looking at the multiples, it was important to find peers that had similar operations as La-Z-Boy. To do this, the most important idea was that their segment must match, or at least serve as a proxy for, the segments of La-Z-Boy. To find reasonable competitors, it was essential to look for companies that had very efficient operations within the upholstery market. Efficiency was key, as La-Z-Boy had moved a lot of manufacturing to China and Thailand in order to achieve greater efficiency.



Next was tackling the idea of case goods being a very high-margin area which does not seem to be in maturity yet; because of this, the belief is that the company will begin to converge as it starts to reach maturity. Converging with competitors in the case goods section is the reason that Masco Corp. was added. Culp Inc. and Hooker Furniture Corp. serve as upholstery proxies; and Masonite International Corp. was added because it operates in a relatively similar space with a similar market cap, so there isn't much market cap bias here. In comparison with its peers, La-Z-Boy looks cheap in each of the four categories selected in this multiples valuation.

| Name                        | Mkt Cap (USD) | P/E   | P/B  | EV/EBITDA T12M | P/FCF |
|-----------------------------|---------------|-------|------|----------------|-------|
| Median                      | 1.38B         | 17.77 | 2.38 | 10.69          | 19.91 |
| 100) LA-Z-BOY INC           | 1.38B         | 17.45 | 2.35 | 7.81           | 12.03 |
| 101) CULP INC               | 369.33M       | 17.77 | 2.41 | 10.81          | 22.91 |
| 102) HOOKER FURNITURE CO... | 440.50M       | 13.88 | 1.98 | 10.69          | 19.91 |
| 103) MASONITE INTERNATIO... | 1.91B         | 20.15 | 2.91 | 10.41          | 19.35 |
| 104) MASCO CORP             | 13.20B        | 22.14 | --   | 12.04          | 22.82 |

### Dupont analysis:

|                         |                   |                 |                |   |                   |
|-------------------------|-------------------|-----------------|----------------|---|-------------------|
| ROE =                   | Net Profit Margin | X               | Asset Turnover | X | Equity Multiplier |
|                         |                   |                 |                |   |                   |
|                         |                   |                 |                |   |                   |
|                         |                   |                 |                |   |                   |
| Operating Profit Margin |                   | Interest Burden |                |   | Tax Burden        |
|                         |                   |                 |                |   |                   |

Looking at a company against its peers is a great way to see whether it has room for growth. A company underperforming its market can often converge with market averages when reaching maturity. A DuPont analysis is a great way to see La-Z-Boy against said peers. Using an extended DuPont analysis to look at net profit margin, La-Z-Boy looks to currently have an ROE of 14.65% over the LTM.

|       |       |        |         |   |        |        |
|-------|-------|--------|---------|---|--------|--------|
| LZB   |       |        |         |   |        | ROE    |
| ROE = | 5.59% | X      | 176.18% | X | 1.488  | 14.65% |
|       |       |        |         |   |        |        |
|       |       |        |         |   |        |        |
|       |       |        |         |   |        |        |
|       | 7.91% | 99.27% |         |   | 69.81% |        |

Looking at its competitor Culp Inc., it is clear that La-Z-Boy is outperforming the company, specifically in terms of asset turnover. The place where Culp is doing better than La-Z-Boy is in net profit margin. To address net profit margin, it has been broken down further. Upon further inspection, it is clear that Culp benefits from a lower tax burden and a greater operating margin. It would not be unreasonable to say that the tax benefits before could address some of the shortcomings. It is also not unreasonable to assume that La-Z-Boy could converge with these margins in the future.

|       |       |        |         |   |        |        |
|-------|-------|--------|---------|---|--------|--------|
| CULP  |       |        |         |   |        | ROE    |
| ROE = | 6.85% | X      | 156.07% | X | 1.313  | 14.04% |
|       |       |        |         |   |        |        |
|       |       |        |         |   |        |        |
|       |       |        |         |   |        |        |
|       | 9.05% | 94.01% |         |   | 80.52% |        |

When looking at a case goods competitor, Masco, it is clear Masco has much better margins. Looking at Masco serves the purpose of seeing what would happen if La-Z-Boy decided to inject some of its cash into this segment. The story is much the same - La-Z-Boy falls short in net profit margin. The difference here is that net profit margin is far higher, and that this entirely comes from a much better operating margin.

|       |        |        |         |   |         |  |
|-------|--------|--------|---------|---|---------|--|
| MAS   |        |        |         |   |         |  |
| ROE = | 7.23%  | X      | 137.32% | X | -34.484 |  |
|       |        |        |         |   |         |  |
|       |        |        |         |   |         |  |
|       |        |        |         |   |         |  |
|       | 14.88% | 80.09% |         |   | 60.65%  |  |

Assuming that La-Z-Boy is able to converge with competitors in the upholstery segment in both margins and tax burden, it would be able to achieve a very high ROE. If the company decides to inject some of its cash into the case

goods segment, a huge increase in margins may be seen. The ROE would become very high - far higher than that shown below.

|   |   |                |   |                   |        |
|---|---|----------------|---|-------------------|--------|
| <u>Assuming convergence with upholstery segment</u> |   |                |   |                   |        |
| Net Profit Margin                                   |   | Asset Turnover |   | Equity Multiplier |        |
| 6.33%   | X | 176.18%        | X | 1.488             | 16.59% |

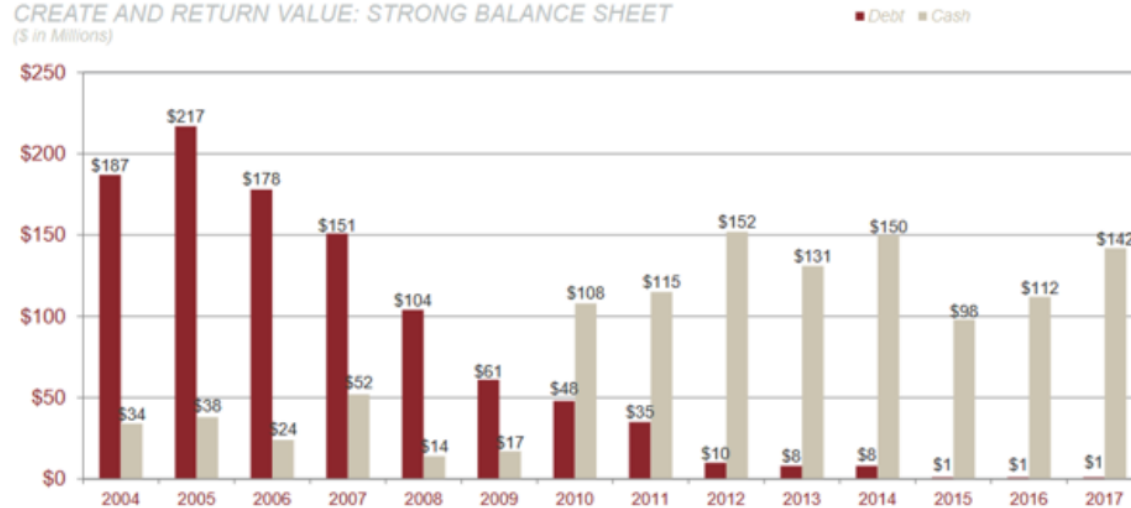
### Excess Liquidity:

After 2008's meltdown, La-Z-Boy decided to follow the path shown by many companies, especially those in the retail sector, and unlever its balance sheet. This was received with open arms initially, but as time progressed, the company has gone from reducing leverage to stockpiling cash. Although this is good in the sense that it gives investors a sense of security, at some point the company will have to use this cash.

La-Z-Boy is dominating the upholstery industry, so this may not be a great use of its cash, and the company has also been slowly purchasing its franchisees to gain a larger presence in retail. Although it has been repurchasing franchisees, this has not dramatically dwindled its cash holdings; actually, La-Z-Boy has increased its cash holdings while doing this over the past 3 years. The company seemingly has only one option - to deploy cash into the case goods industry, a segment that does not seem to be in maturity yet.

## CONSISTENT FINANCIAL PERFORMANCE

CREATE AND RETURN VALUE: STRONG BALANCE SHEET  
(\$ in Millions)



### Case Goods:

La-Z-Boy has capital it must deploy, and the only feasible option seems to be in its case goods segment. The proxy chosen here is Masco. More specifically, Masco's decorative architectural products and cabinetry segment, as these seem to be the best fit to what La-Z-Boy has or can add to its market line. Taking a weighted average of the two segments based off sales means that the proxy segment could have an operating margin of 15.73%.

Let's assume asset turnover holds and the company uses 70.42% of current cash holdings, \$100 million, as capex injection into the case goods segment. With capital injection of this magnitude, the company may come close to converging with its competitor Masco with regard to operating margins. This segment should grow to \$287.1 million, holding asset turnover constant. The segment should also have an operating margin of 15.73% if it were to converge with the weighted average of Masco's two proxy segments. Assuming the other two segments grow at a rate of 2%, which is near GDP growth, meaning they would be at maturity and also very conservative, the company

would have a weighted average operating margin of 9.863%. This would impute a 1-year target of \$36.33, according to the pro forma used.

## Conclusion:

---

La-Z-Boy is currently cash-rich and has the ability to dump it into an industry that currently holds greater margins than its upholstery segment. The company seems cheap on a multiples valuation standpoint. There looks to be some added benefit from economic data in the future, and this should boost revenues (these boosts were not added into the model due to conservatism). The company also looks as though there have been a couple of over-reactions. This, paired with thin volume, seems to have resulted in mispricings.

## La-Z-Boy Incorporated (LZB)

## CENTER FOR GLOBAL FINANCIAL STUDIES

**BULLISH**

Analysis by Timmmmy

Current Price:

\$29.25

Intrinsic Value

\$31.64

Target 1 year Return: 24.66%

2/9/2018

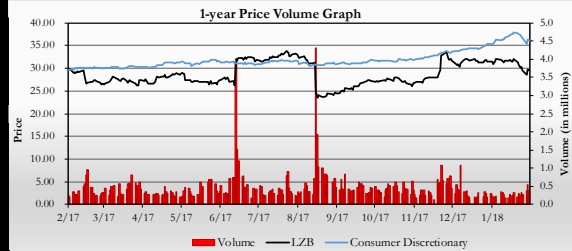
Divident Yield:

1.5%

Target Price

\$36.01

Probability of Price Increase: 96.33%



| Description   |                        |
|---|------------------------|
| La-Z-Boy Incorporated manufactures, markets, imports, exports, distributes, and retails upholstery furniture products, accessories, and casegoods furniture products in the United States, Canada, and internationally. |                        |
| General Information   |                        |
| Sector  | Consumer Discretionary |
| Industry  | Household Durables     |
| Last Guidance   | November 3, 2015       |
| Next earnings date  | February 21, 2018      |
| Estimated Country Risk Premium  | 5.85%                  |
| Effective Tax rate  | 22%                    |
| Effective Operating Tax rate  | 22%                    |

| Market Data                           |            |
|---------------------------------------|------------|
| Market Capitalization                 | \$1,384.04 |
| Daily volume (mil)                    | 0.35       |
| Shares outstanding (mil)              | 47.32      |
| Diluted shares outstanding (mil)      | 48.96      |
| % shares held by institutions         | 84%        |
| % shares held by investments Managers | 66%        |
| % shares held by hedge funds          | 6%         |
| % shares held by insiders             | 1.86%      |
| Short interest                        | 3.00%      |
| Days to cover short interest          | 3.53       |
| 52 week high                          | \$34.25    |
| 52-week low                           | \$23.15    |
| Volatility                            | 32.91%     |

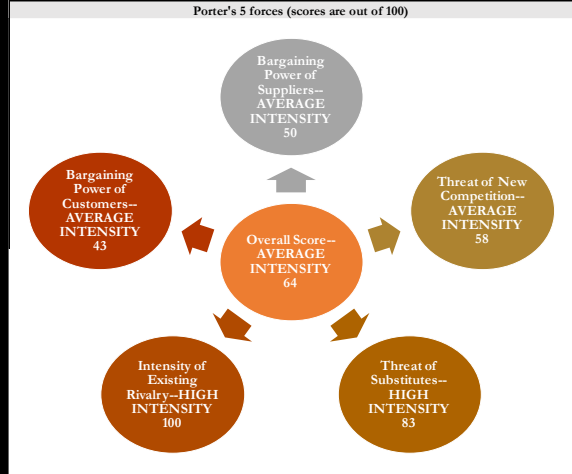
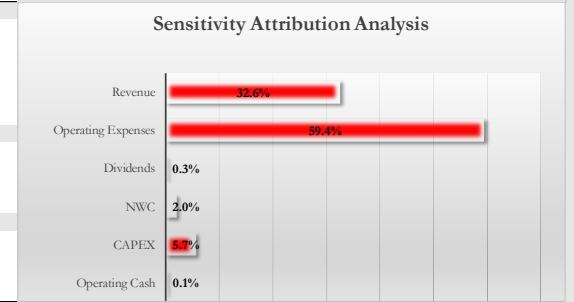
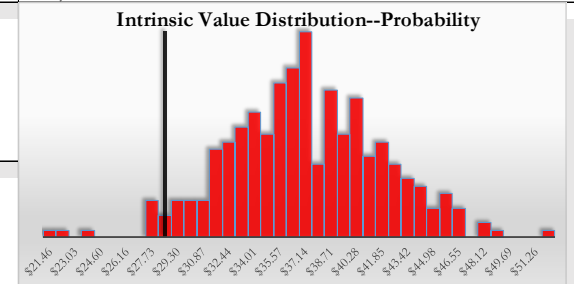
| Past Earning Surprises |         |         | Peers                            |
|------------------------|---------|---------|----------------------------------|
| Quarter ending         | Revenue | EBITDA  |                                  |
| 10/29/2016             | -0.14%  | 10.67%  | Tempur Sealy International, Inc. |
| 1/28/2017              | -1.71%  | -5.87%  | Sleep Number Corporation         |
| 4/29/2017              | 1.40%   | 12.41%  | Ethan Allen Interiors Inc.       |
| 7/29/2017              | -1.97%  | -22.65% | Hooker Furniture Corporation     |
| 10/28/2017             | 0.69%   | -7.55%  | RH                               |
| Mean                   | -0.35%  | -2.60%  | Natuzzi S.p.A.                   |
| Standard error         | 0.7%    | 6.5%    | Flexsteel Industries, Inc.       |
|                        |         |         | Leggett & Platt, Incorporated    |

| Management       | Position                     | Total compensations growth | Total return to shareholders |
|------------------|------------------------------|----------------------------|------------------------------|
| Darrow, Kurt     | Chairman, President & CEO    | 2.6% per annum over 6y     | 3.83% per annum over 6y      |
| Riccio, Louis    | Senior VP & CFO              | 2.15% per annum over 6y    | 3.83% per annum over 6y      |
| Collier, J.      | Senior VP, Chief Commercial  | 8.65% per annum over 3y    | 0.15% per annum over 3y      |
| Edwards, Darrell | Senior VP & Chief Supply Cha | 6.38% per annum over 3y    | 0.15% per annum over 3y      |
| Barnes, Lindsay  | Chief Accounting Officer, VP | N/M                        | N/M                          |
| Behen, David     | Chief Information Officer &  | N/M                        | N/M                          |

| Profitability             | LZB (LTM) | LZB (5 years historical average) | Peers' Median (LTM) |
|---------------------------|-----------|----------------------------------|---------------------|
| Return on Capital (GAAP)  | 21.8%     | 21.63%                           | 25.35%              |
| Operating Margin          | 6%        | 5.53%                            | 7.00%               |
| Revenue/Capital (GAAP)    | 3.51      | 3.91                             | 3.62                |
| ROE (GAAP)                | 14.3%     | 13.4%                            | -384.4%             |
| Net margin                | 5.5%      | 5.0%                             | 6.5%                |
| Revenue/Book Value (GAAP) | 2.58      | 2.69                             | -59.34              |

| Invested Funds           | LZB (LTM) | LZB (5 years historical average) | Peers' Median (LTM) |
|--------------------------|-----------|----------------------------------|---------------------|
| Cash/Capital             | 22.7%     | 27.5%                            | 19.6%               |
| NWC/Capital              | 28.4%     | 38.1%                            | 2.4%                |
| Operating Assets/Capital | 36.5%     | 32.3%                            | 61.2%               |
| Goodwill/Capital         | 12.3%     | 2.7%                             | 16.8%               |

| Capital Structure                                       | LZB (LTM) | LZB (5 years historical average) | Peers' Median (LTM) |
|---|-----------|----------------------------------|---------------------|
| Total Debt/Market Capitalization                        | 0.00      | 0.01                             | 0.35                |
| Cost of Existing Debt                                   | 193.3%    | 7.6%                             | 5.2%                |
| CGFS Rating (F-score, Z-score, and default Probability) | BBB       | BBB                              | BBB                 |
| WACC  | 8.8%      | 13.4%                            | 9.9%                |



| Porter's 5 forces (scores are out of 100) |                            | Valuation             |                             |
|---|----------------------------|-----------------------|-----------------------------|
| Period                                    | Revenue Growth Forecast    | NOPAT Margin Forecast | Revenue to Capital Forecast |
| Base Year                                 | 2%                         | 9.6%                  | 1.80                        |
| 10/28/2018                                | 3%                         | 9.5%                  | 1.85                        |
| 10/28/2019                                | 4%                         | 10.0%                 | 1.53                        |
| 10/28/2020                                | 4%                         | 10.4%                 | 1.34                        |
| 10/28/2021                                | 5%                         | 10.7%                 | 1.20                        |
| 10/28/2022                                | 4%                         | 10.6%                 | 1.09                        |
| 10/28/2023                                | 4%                         | 10.5%                 | 0.99                        |
| 10/28/2024                                | 3%                         | 10.6%                 | 0.91                        |
| 10/28/2025                                | 3%                         | 10.8%                 | 0.85                        |
| 10/28/2026                                | 3%                         | 10.6%                 | 0.79                        |
| 10/28/2027                                | 2%                         | 10.5%                 | 0.74                        |
| Continuing Period                         | 2%                         | 10.4%                 | 0.69                        |
| Period                                    | Return on Capital Forecast | WACC Forecast         | Price per share Forecast    |
| Base Year                                 | 17.3%                      | 8.8%                  | \$31.16                     |
| 10/28/2018                                | 17.6%                      | 8.4%                  | \$35.28                     |
| 10/28/2019                                | 15.3%                      | 8.1%                  | \$38.93                     |
| 10/28/2020                                | 14.0%                      | 8.2%                  | \$42.69                     |
| 10/28/2021                                | 12.9%                      | 8.7%                  | \$46.70                     |
| 10/28/2022                                | 11.5%                      | 8.8%                  | \$50.81                     |
| 10/28/2023                                | 10.4%                      | 8.9%                  | \$55.08                     |
| 10/28/2024                                | 9.7%                       | 9.1%                  | \$59.52                     |
| 10/28/2025                                | 9.2%                       | 9.2%                  | \$64.28                     |
| 10/28/2026                                | 8.4%                       | 9.3%                  | \$69.06                     |
| 10/28/2027                                | 7.8%                       | 9.5%                  | \$74.09                     |
| Continuing Period                         | 7.2%                       | 9.6%                  |                             |





February 17, 2018

## Monster Beverage Corp: (MNST)

Jacob Perry

**Sector:** Consumer Staples

**Industry:** Beverages

**Current Price:** \$65.61

**Target Price:** \$67.06

### Company Description:

Monster Beverage Corporation, based in Corona, California, is a US holding company that develops, markets, sells, and distributes energy drinks through its subsidiaries. Monster operates through three segments: Energy drinks, Strategic Brands, and other. They are currently stretching to new markets around the globe using different products to tailor their popularity to diverse cultures.

### SELL

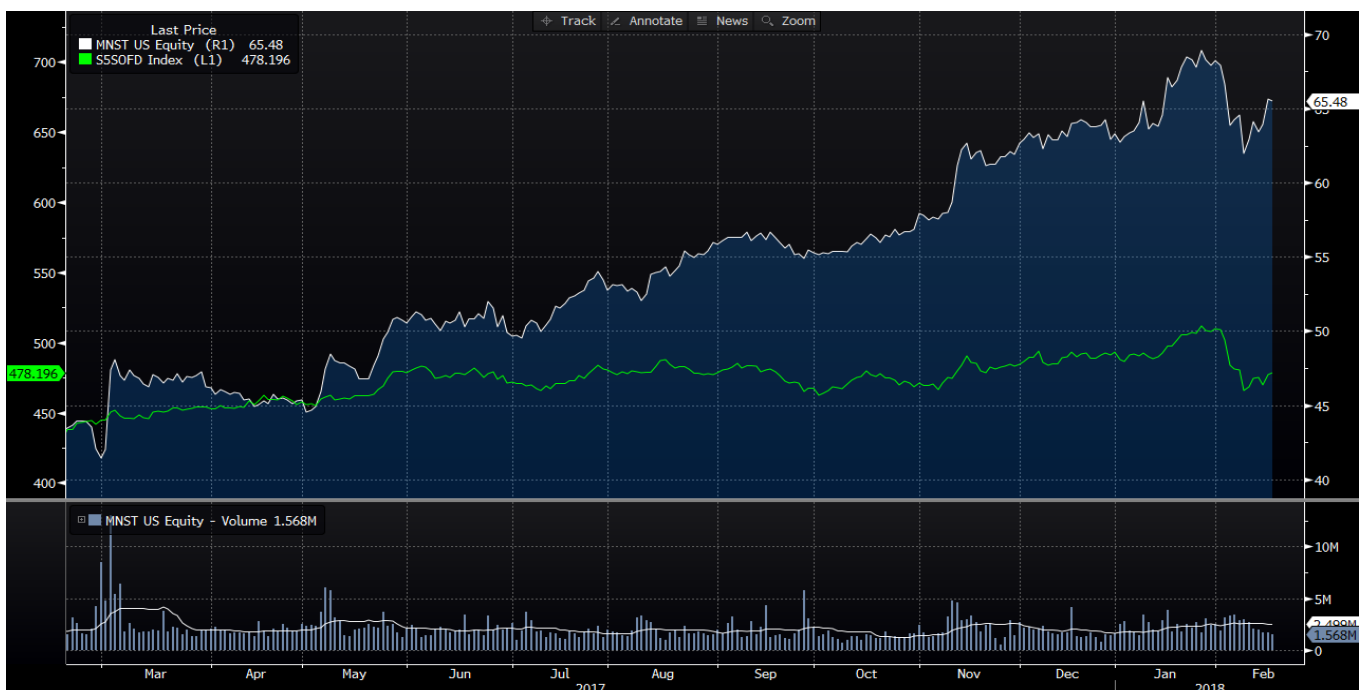
Current Price: \$65.61  
 Target Price: \$67.06  
 52 Week Range: \$41.02-\$70.215  
 Old Target Price: \$65.11

Market Cap: 36,928.3M  
 Volume: 1,567,948  
 Beta: 1.01

**Thesis:** Monster seeks to become a conglomerate of energy drink sales across the globe. Following the acquisition of strategic energy drink Coca-Cola brands in 2015, Monster has had an international-facing focus towards sales. There could be problem regarding their growth prospects given that over 70% of their revenue is generated within the United States. Dwindling attention on US sales could cause a loss in potential revenue sparking a downward trend of earnings for the next few years.

### Catalysts:

- Short Term(within the year): Product development and improvement
- Mid Term(1-2 years): Product placement in emerging Monster markets
- Long Term(3+): Monster brand recognition in untouched markets across Asia and Australia



## Earnings Performance:

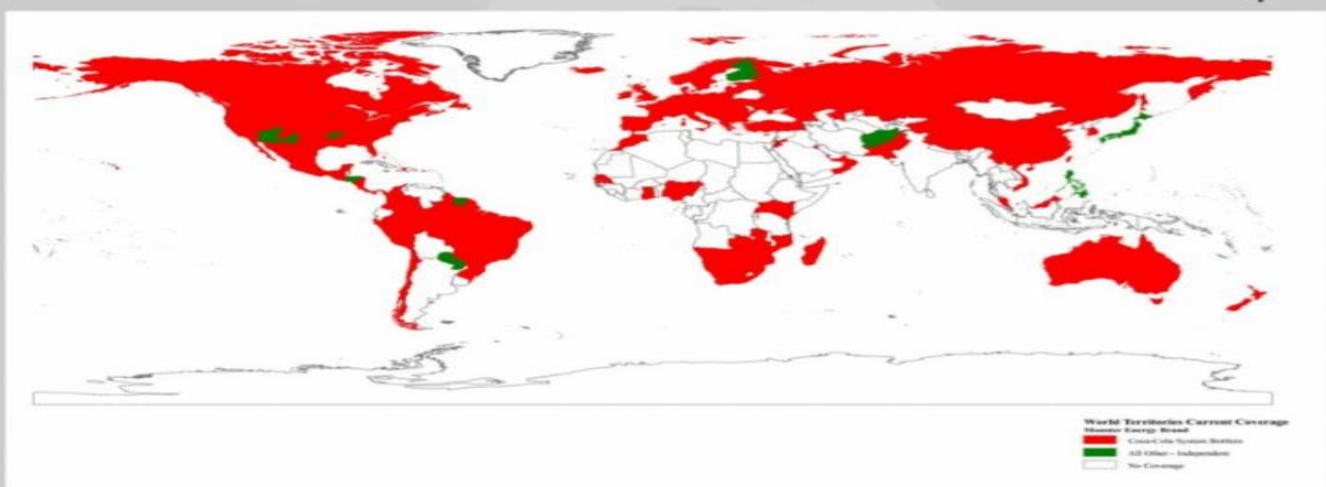
Monster Beverage Corporation has been in a steady decline since quarter four of 2016. Operating margin for 2017 decreased from over 40 percent to just above 34 percent. The six percent loss in operating margin was coupled with a six percent loss in profit margin as well, although the loss in profit margin was far greater than operating margin in the second quarter of 2017. Monster does has prospects in new international markets that could potentially boost Monster's profitability and earnings to new heights. Being realistic, those prospects will have to wait some time due to miscalculated ventures made by Monster in their attempt to break into new market segments around the globe. Monster has shown that they are having trouble managing their new plethora of strategic brands in regards to profitability. One of Monster's European energy drinks, Relentless, has seen a 47.7 percent decrease in market share in the last 13 weeks of 2017. In Great Britain, the entire energy drink category value growth declined 3.5 percent in the last 13 weeks of 2017 as well. Mexican markets have not been kind to Monster's Southern American energy drink, Burn, its growth has declined over 40 percent in the last 13 weeks of 2017. Burn also posted a loss in the value growth at that same time in Poland. Strategic brands have grown in market share slightly but they have not provided any earnings for that growth in market share and it might be a while until they do.



## International Brand Recognition:

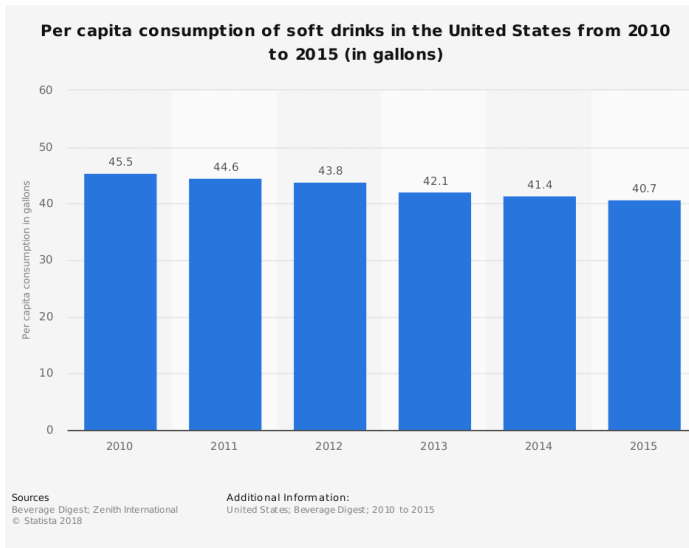
Monster Beverage Corporation has become synonymous with corporate sponsorship and advertisement. They have attempted to use this platform of media and recognition as a brand to establish a customer base to spread the Monster brand internationally. Monster is being sold around the world currently with other subsidiary brands sprinkled in different geographic areas. With well over half of the world covered by some Monster owned brand, they should have revenue streams coming in at paces far beyond the strategic brands' 8.9 percent.

### Distribution of Monster Energy Drinks

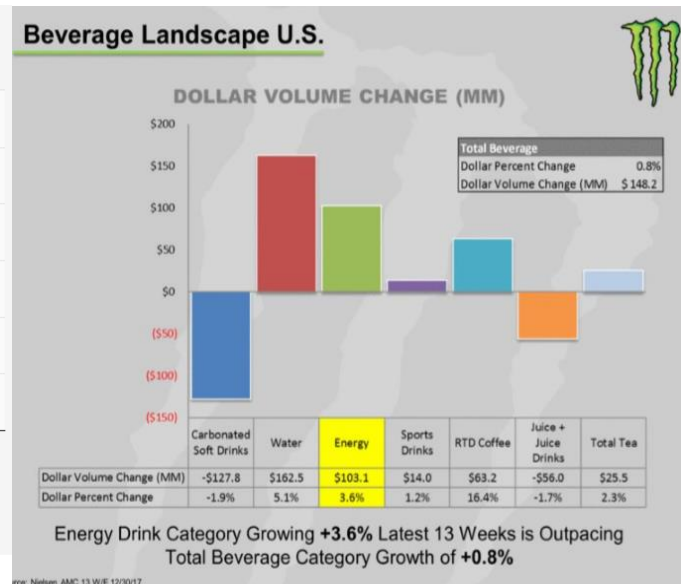


## Industry Outlook:

The energy drink segment of the beverage industry is a growing market. Globally, the energy drink market is expected to rise upwards of three billion dollars in the next year. In addition, they are expected to rise close to ten billion dollars in the next four to five years. Energy drinks are also a part of the larger soft drink sector which holds larger S&P 100 companies such as Coca-Cola and PepsiCo. The market share of the soft drink industry owned by Monster is a dismal 8.5 percent compared to PepsiCo's 27.2 percent and Coca-Cola's 13.7 percent. It is also important to remember that Gatorade, the world's leading sports drink is owned by PepsiCo as well. PepsiCo also owns Amp Energy, MTN Dew Kickstart, and Sobe, a tea-juice hybrid drink. This is all pertinent in regards to the declining rate of United States consumption of soft drinks. Within five years starting from



2010, consumption of gallons of soft drinks per capita has decreased by five gallons. Keeping steady at that rate would mean that the average American today would consume around 37 to 38 gallons of soft drinks in a year. Unlike the carbonated soft drinks sector, energy drinks in the United States have seen a slight boost in popularity. In the last 13 weeks of 2017, carbonated soft drinks had a volume change of 127.8 million dollars while energy drinks saw a 103 million dollar increase. The 3.6% increase in energy drink growth outpaced the total beverage category growth by 2.8 percent.



## Product Placement:

In 2015, Monster Beverage Corporation acquired all of Coca-Cola's energy business worldwide. A laundry list of energy companies including but not limited to NOS, Full Throttle, Burn, Mother, BU, Gladiator, and Samurai were exchanged for a 16.7 percent equity of Monster Beverage Corporation. These new strategic

## Energy Portfolio

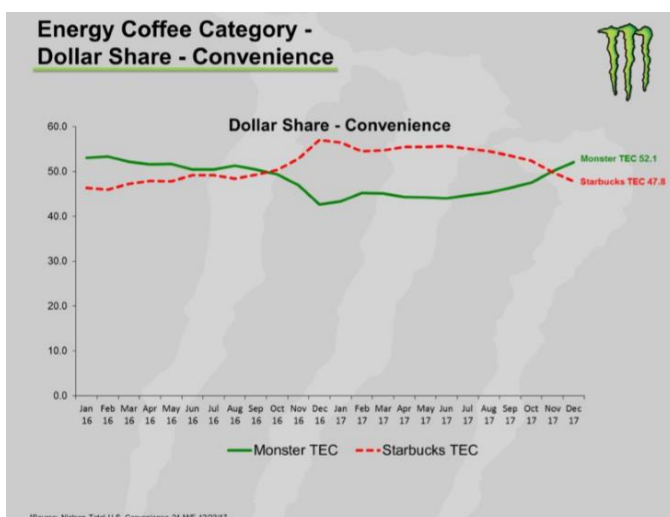


As of January 2018

brands became gateways to utilizing current Coca-Cola distribution systems. Since then, Monster has shown growth prospects in areas that are heavily competitive such as Western Europe. In areas with high growth potential such as Southeast Asia, Monster has only yielded low teens or even single-digit growth. In China, a key growth prospect for Monster, the last four weeks of 2017 have only seen 4.1 percent growth among monster and their portfolio which means any other brands owned by Monster in China made zero growth.

## New Products:

Monster Beverage Corporation has engaged in new product development within the past year in order to break into potential underserved markets according to Rodney Sacks, Monster CEO, in the last investors meeting in January 18<sup>th</sup>, 2018. Monster is in the midst of developing a coffee based drink to combat Starbucks' convenience coffee drinks. Currently, Monster sells their Monster Java drinks that combat Starbucks' Frappuccinos most commonly found at convenience stores. Monster and Starbucks have traded places multiple times within the energy coffee category for dollar share convenience. As of December 2017, Monster holds a higher dollar share rating of over 0.50 dollars. Within the upcoming year, Monster will



announce a new line of coffee based drinks that will be direct competitors to Starbucks' current line of convenience coffee drinks. Given their current position in the energy coffee market, this should prove to be a waste of capital due to their increased market share from the release of their Monster Java line. In addition to their upcoming coffee based drinks, Monster will also see in a new wave of energy drinks. They will be adding more flavors to their existing Monster energy line of carbonated energy drinks as well as adding new non-carbonated energy drinks in the form of the Monster Hydro line.



Monster Hydro will be made to have all of the components of a normal energy drink with the exception of added carbonation. Monster Hydro will be made to directly compete against competitors like Rockstar's Recovery series and AMP Zero. Lastly, Monster announced that they would be expanding into the protein shake market. Monster Muscle will come in a familiar protein-dairy based energy drink that will compete against giants Muscle Milk and Gatorade Recover. The expansion into new markets by Monster leaves themselves vulnerable to product failure risks that will not be recouped if they fail to gain traction in their respective markets. These expansions will be happening at the same time they will be pushing into new international markets.



## Ownership & Management:

| Top Ownership Type (%) |          |       |        |   |  |
|------------------------|----------|-------|--------|---|--|
| 54) Ownership Type     | 02/11/18 | Curr  | Change |   |  |
| 41) Investment Advisor | 62.81    | 65.08 | +2.27  | ↗ |  |
| 42) Corporation        | 23.27    | 21.88 | -1.39  | ↘ |  |
| 43) Hedge Fund Manager | 3.89     | 3.74  | -0.15  | ↘ |  |
| 44) Pension Fund       | 2.14     | 2.15  | +0.01  | ↗ |  |
| 45) Bank               | 2.57     | 1.94  | -0.63  | ↘ |  |
| 46) Individual         | 1.40     | 1.31  | -0.09  | ↘ |  |
| 47) Government         | 0.97     | 1.06  | +0.09  | ↗ |  |
| 48) Insurance Company  | 0.98     | 0.91  | -0.07  | ↘ |  |
| 49) Holding Company    | 0.80     | 0.76  | -0.04  | ↘ |  |

As stated earlier, a portion of Monster Beverage Corporation was acquired by Coca-Cola in exchange for strategic brands and distribution means owned by Coca-Cola. A majority of the corporate held equity of Monster is held by Coca-Cola at over 18 percent. Over

60 percent of Monster Beverage Corporation is owned by investment advisors such as mutual fund families like Vanguard and Fidelity. This shows a commitment by two very large investment firms that perceive Monster to have long-term growth potential. Only 3.9 percent of Monster's equity is owned by hedge funds meaning that there could be a relatively low perception of added growth potential in the short to mid-term



|     | Holder Name                      | Agg Position | MNST US ↓   | DPS US     |
|-----|----------------------------------|--------------|-------------|------------|
|     | Public Portfolios                |              |             |            |
| 1.  | COCA-COLA CO/THE                 | 104,603,767  | 102,121,602 | --         |
| 2.  | FMR LLC                          | 41,908,033   | 41,419,058  | --         |
| 3.  | FIDELITY MANAGEMENT & RESEARCH   | 42,892,321   | 39,507,250  | 2,915,762  |
|     | Detailed Information             |              |             |            |
| 4.  | VANGUARD GROUP                   | 48,274,041   | 29,820,593  | 18,453,448 |
| 5.  | VANGUARD GROUP INC               | 50,229,349   | 29,820,593  | 18,453,448 |
| 6.  | BRANDON LIMITED PARTNERSHIP NO 2 | 29,386,944   | 29,386,944  | --         |
| 7.  | LOOMIS SAYLES & COMPANY LP       | 22,996,279   | 22,996,125  | --         |
| 8.  | STATE STREET CORP                | 25,523,246   | 16,961,238  | 8,202,341  |
| 9.  | JENNISON ASSOCIATES LLC          | 13,126,248   | 13,126,248  | --         |
| 10. | WELLINGTON MANAGEMENT GROUP LLP  | 12,626,640   | 12,504,451  | 19,070     |
| 11. | BLACKROCK INSTITUTIONAL TRUST    | 17,272,122   | 10,821,466  | 5,949,026  |
| 12. | SANDS CAPITAL MANAGEMENT, LLC    | 10,131,493   | 10,131,493  | --         |
| 13. | TIAA CREF INVESTMENT MANAGEMENT  | 8,845,468    | 8,070,092   | 687,213    |
| 14. | BANK OF AMERICA CORPORATION      | 8,885,316    | 7,625,355   | 1,201,161  |
| 15. | ALLIANCEBERNSTEIN LP             | 7,666,443    | 7,139,230   | 476,783    |
| 16. | COLUMBIA MANAGEMENT INVESTMENT   | 6,648,374    | 6,543,580   | 72,125     |

outlooks. Monster's current equity float is also currently around 412 million dollars. Monster Beverage Corporation is being headed by CEO Rodney Sacks and CFO/COO Hilton Schlosberg who have been working in tandem since 1990. Seeing how the growth of Monster in the last thirty years has been exponential, compensation to c-suite executives seem like they could be low. In addition, about a tenth or less of the total compensations to executives are actual salaries. The rest of compensation to executives come in the form of options and other benefits.

| Monster Beverage Corp |                                 |  | FY 2016            |
|-----------------------|---------------------------------|--|--------------------|
| Name                  | Title                           |  | Total Compensation |
| 1) Rodney Sacks       | Chairman/CEO                    |  | 12,028,955 (USD)   |
| 2) Hilton Schlosberg  | Vice Chairman/Pres/CFO/COO/Secy |  | 11,995,786 (USD)   |
| 3) Mark Hall          | Chief Marketing Officer         |  | 4,092,571 (USD)    |
| 4) Thomas Kelly       | Senior VP:Finance               |  | 1,817,298 (USD)    |

## Conclusion:

Monster Beverage Corporations has good growth prospects in the long run and plenty of potential recognition among many different beverage sectors and markets across the world. Although they seem to have growth potential, it is hard to rationale a company that is stretching itself so thin in such a short time horizon. From the push for greater exposure in new geographic markets to the push for development of new products for different market segments, Monster will become out of its core profit competencies in the United States(which accounts for over 70% of Monster's revenue) which will sacrifice key earnings for the company's growth. Monster Beverage is growing at a rate which cannot be rationalized as a reason to buy or hold its equity. The real way to become the global conglomerate of energy drink products is to be fully acquired by Coca-Cola as to which Monster will have unlimited potential for growth and profitability. As of now, Monster is not a buy strategy.

# Monster Beverage Corporation (MNST)

## CENTER FOR GLOBAL FINANCIAL STUDIES

NEUTRAL

Analysis by Al Capone  
2/16/2018

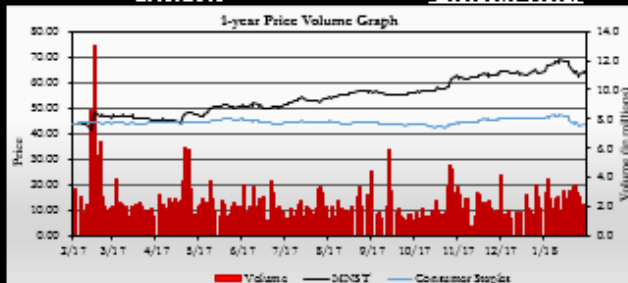
Current Price:  
Dividend Yield:

\$63.71  
0.0%

Intrinsic Value  
Target Price:

\$62.15  
\$67.06

Target 1 year Return: 5.27%  
Probability of Price Increase: 5%



**Description**  
Monster Beverage Corporation, through its subsidiaries, develops, markets, sells, and distributes energy drink beverages, soda, and its concentrate in the United States and internationally.

**General Information**  
Sector: Consumer Staples  
Industry: Beverage  
Last Guidance: February 12, 2018  
Next earnings date: February 23, 2018

**Market Assumptions**  
Estimated Equity Risk Premium: 5.24%  
Effective Tax rate: 22%

| Market Data                          |             |
|--------------------------------------|-------------|
| Market Capitalization                | \$35,749.63 |
| Daily volume (mil)                   | 0.82        |
| Shares outstanding (mil)             | 563.96      |
| Diluted shares outstanding (mil)     | 578.58      |
| % shares held by institutions        | 109%        |
| % shares held by investment managers | 58%         |
| % shares held by hedge funds         | 3%          |
| % shares held by insiders            | 1.61%       |
| Short interest                       | 1.03%       |
| Days to cover short interest         | 2.65        |
| 52 week high                         | \$70.22     |
| 52-week low                          | \$41.02     |
| Volatility                           | 30.02%      |

| Quarter Ending |        |
|----------------|--------|
| 9/30/2016      | -4.14% |
| 12/31/2016     | 3.80%  |
| 3/31/2017      | 0.21%  |
| 6/30/2017      | 1.01%  |
| 9/30/2017      | 1.05%  |
| Mean           | 0.39%  |
| Standard error | 1.0%   |

| Part Earning Surprise |         |
|-----------------------|---------|
| Revenue               | -4.14%  |
| EBITDA                | -17.05% |
|                       | 13.97%  |
|                       | -1.15%  |
|                       | -2.05%  |
|                       | -7.57%  |
|                       | -2.77%  |
|                       | 4.9%    |

| Market and Credit Scores                            |         |
|---|---------|
| Recommendation (STARS) Value                        | 3       |
| Recommendation (STARS) Description                  | Hold    |
| Quality Ranking Value                               | B+      |
| Quality Ranking Description                         | Average |
| Short Score   | 0       |
| Market Signal Probability of Default % (Non-Rating) | 0.006%  |
| Credit Model Score (Non-Rating)                     | N/A     |

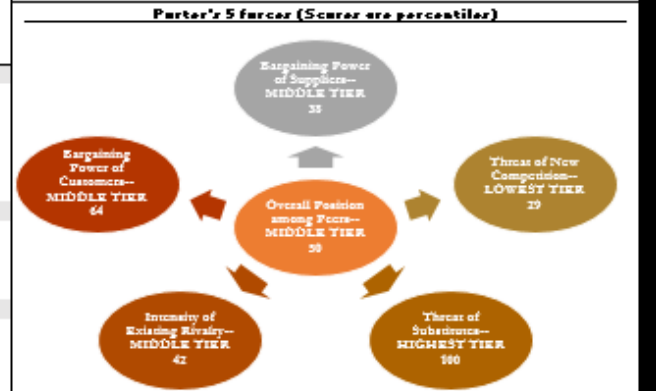
| Management        |  |
|-------------------|--|
| Sack, Rodney      | Chairman, Chief Executive Officer and Chairman |
| Schlarberg, Hilan | Vice Chairman, President, CFO, COO, Secretary  |
| Kelly, Thamar     | Senior Vice President of Finance               |

| Partitions                                     |                          |
|--|--------------------------|
| Chairman, Chief Executive Officer and Chairman | 0.67% per annum over 5y  |
| Vice Chairman, President, CFO, COO, Secretary  | 0.63% per annum over 5y  |
| Senior Vice President of Finance               | 29.64% per annum over 5y |

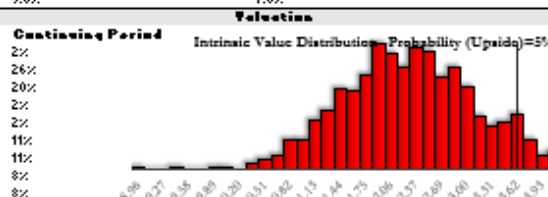
| Industry and Segment Information  |                                 |
|-----------------------------------|---------------------------------|
| LTM Revenue by Geographic Segment | LTM Revenue by Business Segment |
| United States--76%                | Monster Energy® Drinks--91%     |
| Outside the United States--24%    | Strategic Brands--9%            |
| --                                | Other--1%                       |
| --                                | --                              |
| --                                | --                              |

| Profitability   |       |
|---|-------|
| Return on Capital (GAAP)                                | 24.3% |
| Operating Margin  | 25%   |
| Revenue/Capital (GAAP)                                  | 0.96  |
| ROE (GAAP)  | 22.9% |
| Net margin  | 25.6% |
| Revenue/Book Value (GAAP)                               | 0.89  |
| Invested Funds  |       |
| Cap/Book Value  | 28.5% |
| NWC/Book Value  | 3.6%  |
| Operating Assets/Book Value                             | 35.5% |
| Goodwill/Book Value                                     | 32.3% |
| Capital Structure                                       |       |
| Total Debt/Market Capitalization                        | 0.01  |
| Cost of Debt  | 3.7%  |
| CGFS Rating (F+score, Z+score, and default Probability) | AA    |
| WACC  | 8.2%  |

| Total Compensation Growth |                         |
|---------------------------|-------------------------|
| 0.67% per annum over 5y   | 5.06% per annum over 5y |
| 0.63% per annum over 5y   | 5.06% per annum over 5y |
| 29.64% per annum over 5y  | 5.06% per annum over 5y |



| Forecast Assumptions      |     |
|---------------------------|-----|
| Revenue Growth CAGR       | 12% |
| Average Operating Margin  | 27% |
| Average Net Margin        | 21% |
| Growth in Capital CAGR    | 15% |
| Growth in Claims CAGR     | 11% |
| Average Return on Capital | 14% |
| Average Return on Equity  | 14% |
| Average Cost of Capital   | 8%  |
| Average Cost of Equity    | 8%  |



| Sensitivity Attribution Analysis |       |
|----------------------------------|-------|
| Revenue                          | 49.2% |
| Operating costs                  | 49.2% |
| Capital expenditures             | 0.7%  |
| Discount Rate                    | 0.7%  |

## Activision Blizzard, Inc. : ATVI

Paul Martinez

Sector: Information Technology  
 Industry: Entertainment Software  
 Current Price: \$72.03  
 Target Price: \$87.05

### BUY

|                 |                   |
|-----------------|-------------------|
| Current Price:  | \$72.03           |
| Target Price:   | \$87.05           |
| Market Cap:     | 54.341B           |
| Average Volume: | 6.2M              |
| 52 Week Range   | \$44.60 – \$74.94 |
| ROIC:           | 11.0%             |
| WACC:           | 9.0%              |
| D/E:            | 0.54              |

**Company Description:** Activision Blizzard, Inc. develops games for video game consoles, personal computers (PCs), and mobile devices. The company's products cover diverse game categories, including action/adventure, action sports, racing, role-playing, simulation, first-person action, music-based gaming, and strategy. The company publishes, and sells interactive software products and entertainment content through retail channels, digital downloads, and downloadable content.



**Thesis:** Activision Blizzard, Inc. is a worldwide leader in interactive entertainment content. Activision has been able to grow their company through innovation, highly successful franchises, and strategic acquisitions. Activision operates in three major segments that have year-over-year been able to exponentially grow revenues and improve operating margins. Management plans to continue this growth through their three strategic pillars for success and their 2018 capital allocation strategy. With these strategic pillars and initiatives, Activision will be able to expand margins and continue to create value through 2018.

### Catalysts:

- **Short Term (within the year):** Activision Blizzard, Inc. has announced the release of two new games during 2018, as well as new downloadable content for both Call of Duty and Destiny 2.
- **Mid Term (1-2 years):** Overwatch League expansion teams and the overall increase interest in eSports.
- **Long Term (3+):** Management's three strategic pillars and capital allocation strategy will continue to create value and drive the stock price.

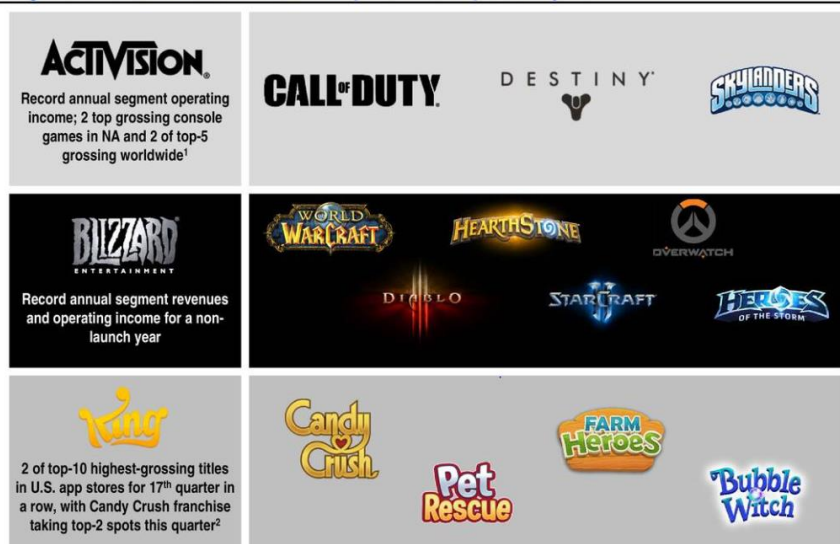
## Business Description:

Activision Blizzard, Inc. was incorporated in 1979, was originally incorporated in Santa Monica, California, and was reincorporated later on in Delaware. Activision Blizzard, Inc. operates as a developer and publisher of interactive entertainment content and services worldwide. The company develops and distributes content and services across all of the major gaming platforms, including video game consoles, personal computers, as well as mobile devices. The company is the largest producer of video games including some of the most successful franchises in the history of video games. Producing franchises such as, World of Warcraft (WoW), Guitar Hero, Candy Crush, Call of Duty, and Destiny. Activision also creates games based on licensed properties from large companies such as, Marvel, DreamWorks Animations, and EON Production. Activision Blizzard, Inc. sells products through many channels, but primarily through retailers and distributors, consumer electronic stores, discount warehouses, game specialty stores, and consumers through third-party distribution and licensing arrangements all over the world. The company can be further broken down into its three primary operating

segments: Activision Publishing, Inc., Blizzard Entertainment, Inc., and recently acquired King Digital Entertainment. Activision primarily focuses on the production of the Call of Duty Franchise as well as the Destiny games. Blizzard primarily focus is on PC gaming and takes charge of World of Warcraft with all of its content, as well as the new addition of Overwatch. Finally King's major product franchises focus on PC and mobile device gaming and handle the content of those applications. Activision Blizzard, Inc. has a strong business model and recently has obtained an impressive position in the industry by expanding their portfolio to reach over every video game platform.

### A Portfolio of Compelling Franchises

Eight \$1B+ franchises across our portfolio of primarily owned IP



## Growth Strategy:

Activision Blizzard, Inc. has been growing at a more than impressive rate and stock price has more than doubled since the Bjorklund fund originally bought shares towards the end of 2016. This last quarter Activision has experienced record-breaking financials in terms of revenues, operating margins and other key metrics like MAU's (Monthly Active Users). The company has had tons of success in its product lines and innovations; however, success has been primarily driven through managements three strategic pillar strategy. This is a core part of Activision's business model, is repeatedly mentioned in both the earnings call and annual-reports, and clearly is significant from the top-down. The three pillars consist of the following goals, the first would be expanding audience reach, followed by further driving deep consumer engagement, and finally to provide more opportunities for player investment. These pillars have been embedded into management's plan and they are committed to taking the correct initiatives to ensure success. First expanding



audience reach, by being able to reach more users on different platforms. The most recent major initiative in this area was the launch of the Overwatch League. The league attracted 12 world-class team owners’



representing cities all across the world, signing numerous league and team level sponsors. In its first week, the league reached 10 million unique viewers and had more than 280,000 average viewers on a per minute basis. This type of audience reach shows for the growing interest in E-Sports and the advertising capabilities that Activision can take advantage of going forward. Secondly, Activision has been focused on deepening consumer engagement across all their platforms. Activision Blizzard, Inc. has this previous quarter matched up with social media

giants like Facebook, and Instagram with daily time spent per user over 50 minutes for the second quarter in a row and this does not include time spent streaming. This goes to show that users are continuously coming back and are involved to the point, that when they get on to play a game they will be playing for a while. This brings us to the last strategic pillar, providing more opportunities for player investment. As said in their last earnings call, “In-game services, features and content continue to engage our fans and help drive our results, delivering a Q4 record of over \$1 billion of in-game net bookings and an annual record of over \$4 billion”. Activision has been able to encourage further investment by continuously releasing new downloadable content and in-game purchases. These three strategic pillars allows management to pursue their goals and visions and continue to grow their business.

## Segment Breakdown:

As mentioned earlier, Activision Blizzard, Inc. operates in three primary segments. The first being Activision, the second being Blizzard, and finally King. Activision also operates in a four segment called MLG (Major League Gaming), this segment provides a non-material amount of revenues, but provides an online-streaming service and promotes the E-Sports segment bringing more exposure to the games and the company as a whole. Activision produces the majority of revenues, composing approximately 39% of total revenues. Activision also has the largest GAAP operating margin at about 38%. Activision had a very successful fourth quarter,

### Fourth Quarter and 2017 Segment Results

Ongoing pipeline of content, services, and features led to over-performance

|                                | ACTIVISION  | BLIZZARD ENTERTAINMENT  | KING   |
|--------------------------------|---|---|--|
| Q4 Segment Net Revenues:       | \$1,337M  | \$599M  | \$516M   |
| Q4 Segment Operating Income:   | \$634M<br>47%   | \$160M<br>27%   | \$162M<br>31%  |
| 2017 Segment Net Revenues:     | \$2,628M  | \$2,139M  | \$1,998M   |
| 2017 Segment Operating Income: | \$1,005M<br>38%   | \$712M<br>33%   | \$700M<br>35%  |
| Key Highlights:                | <ul style="list-style-type: none"> <li>Record annual segment OI of \$1B+ and operating margin of 38%+, driven by Call of Duty: WWII, Destiny 2, and Crash Bandicoot N. Sane Trilogy</li> <li>Q4 segment revenues increased 16% year-over-year, and OI increased 32% in the same period</li> </ul> | <ul style="list-style-type: none"> <li>Record annual segment revenues and OI for a year with no major game release as Blizzard delivered continuous content across franchises including Overwatch, Hearthstone, and World of Warcraft®</li> </ul> | <ul style="list-style-type: none"> <li>Annual segment revenues and operating income up 7% and 12%, respectively, on a pro-forma basis including the 2016 pre-acquisition period for King on the strength of Candy Crush and focus on improvements in engagement &amp; player investment</li> </ul> |

which lead to their best year ever with segment records in both operating income and operating margins. Revenues grew 16% and operating income grew 32% year-over-year. This is a positive sign for Activision Blizzard, Inc. this shows that the largest segment has the largest margin and is growing the fastest. This will lead to increasing amount of operating cash flows and continuous value creation. Following Activision's segment, Blizzard revenues compose approximately 31% of total revenues and has an operating margin of 33%. Blizzard also generated record results for the year with no major game release. Revenues primarily came through a steady stream of content and events across their franchises, in particular Overwatch, Hearthstone, and World of Warcraft. With this being said, fiscal Q4 was slightly down on the year, but provided a 2017 operating margin of 33% as mentioned. Blizzard also has implemented key growth initiatives, which are exhibited through the new Overwatch League and the two-year contract recently signed with Twitch. Finally composing about 30% of total revenues, King Entertainment, has an operating margin of about 35%. King Revenue increased 7%, and operating income increased 12% year-over-year. Overall, margins have expanded year-over-year, however, took a slight hit on growth in fiscal Q4. This slight compression in growth was due to strategic investments in marketing live titles to profitability drive reach (Q4 Earnings Call). To summarize, all segments are performing at record highs and are growing revenues and expanding margins, this will result in an increase in both top and bottom lines.

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## **Company Performance:**

Activision Blizzard, Inc. has been growing substantially over the last twelve months (LTM). A low stock price of \$45.08 last February and now are trading around \$70.19. This growth has come both organically and inorganically. Organically Activision and Blizzard have been growing revenues through their successful game franchises. Inorganically the acquisition of King Entertainment in late 2016 has allowed the company to grow substantially, reach a completely new audience, and generate incremental cash flows. The company has historically beaten their competitors in many aspects, but recently has fallen slightly behind. With this being said, I believe that the market is missing some key factors in their pricing of the stock, which is leaving ATVI undervalued. These factors will propel Activision above competitors in terms of margins and profitability as well as propel stock price beyond their 52 week high. First being the extremely high amortization costs of their intangible assets. Activision has been paying large costs from the King Acquisition in terms of amortizing their intangible assets that were acquired. With this decreasing, net income margin can be expected to improve in the future. Secondly, the upgrade in credit rating to BBB, allowed Activision to refinance and lock in lower rates on their debt at a lower price. This will lower interest expenses and allow for larger net income margins. In addition to these cost-cutting aspects, Activision Blizzard, Inc. has ramped up their ad business and plans to continue to increase these through 2018. With record breaking MAU's and an increasing audience reach we can expect to see large supplemental revenue growth. Finally, management's capital allocation strategy has been a key component of Activision's performance over the past couple of years. Management plans on allocating its capital by increasing dividends, paying back over \$1 billion dollars of debt through 2018, as well as buying back approximately \$1 billion dollars' worth of shares. Although some of these aspects are being priced into the current market price, I believe that these are going to make a



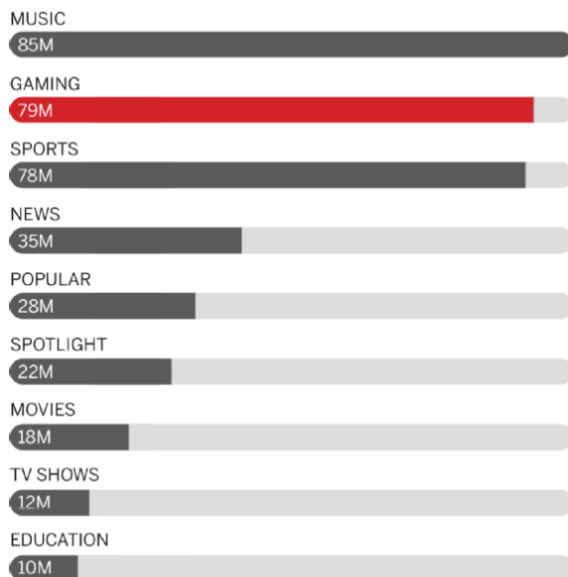
greater impact than what those are expecting. For these reasons and many others, I believe that Activision will see an increase in both operating cash flows as well as net income margins.

| COMMON SIZE VIEW            |                          |              |                |              |
|-----------------------------|--------------------------|--------------|----------------|--------------|
|                             | 6-year Historical Median |              | Last 12 Months |              |
|                             | ATVI                     | Competitors  | ATVI           | Competitors  |
| COR/Rev                     | 34.6%                    | 39.6%        | 35.4%          | 34.3%        |
| (SGA+Other)/Rev             | 33.1%                    | 39.1%        | 38.3%          | 48.1%        |
| DPR/Rev                     | 3.9%                     |              | 1.9%           | 0.0%         |
| <b>EBITDA Margin</b>        | <b>28.3%</b>             | <b>21.3%</b> | <b>24.4%</b>   | <b>17.6%</b> |
| Interest exp/Rev            | 2.2%                     | 0.4%         | 0.1%           | 0.3%         |
| AMORT/Rev                   | 2.0%                     |              | 10.8%          | 0.0%         |
| SBC/REV                     | 2.3%                     |              | 2.5%           | 0.0%         |
| Other Non-Operating Exp/Rev | 2.6%                     | -1.6%        | 3.1%           | 1.7%         |
| Taxes/Rev                   | 5.0%                     | 2.8%         | 0.9%           | 2.8%         |
| <b>Net Margin</b>           | <b>14.2%</b>             | <b>19.7%</b> | <b>7.1%</b>    | <b>12.8%</b> |
| Cash/Capital                | 24.5%                    | 52.6%        | 28.5%          | 46%          |
| NWC/Capital                 | -10.9%                   | -4.4%        | -10.5%         | -2%          |
| Operating Assets/Capital    | 35.1%                    | 43.9%        | 23.0%          | 45%          |
| Goodwill/Capital            | 51.3%                    | 7.9%         | 59.0%          | 11%          |
| Debt/Capital                | 21.5%                    | 13.9%        | 28.2%          | 10%          |
| Other Claims/Capital        | 0.0%                     | 0.5%         | 0.0%           | 0%           |
| Book Value/Capital          | 78.5%                    | 85.6%        | 71.8%          | 89.4%        |

## Industry Outlook:

The technology sector is growing exponentially as time goes on and more technology becomes available. With this being said, the home entertainment industry is becoming more and more abundant. With an increase in

**PRESENTED WITHOUT** comment: as an overall category, gaming has more YouTube followers than news, movies and education combined.

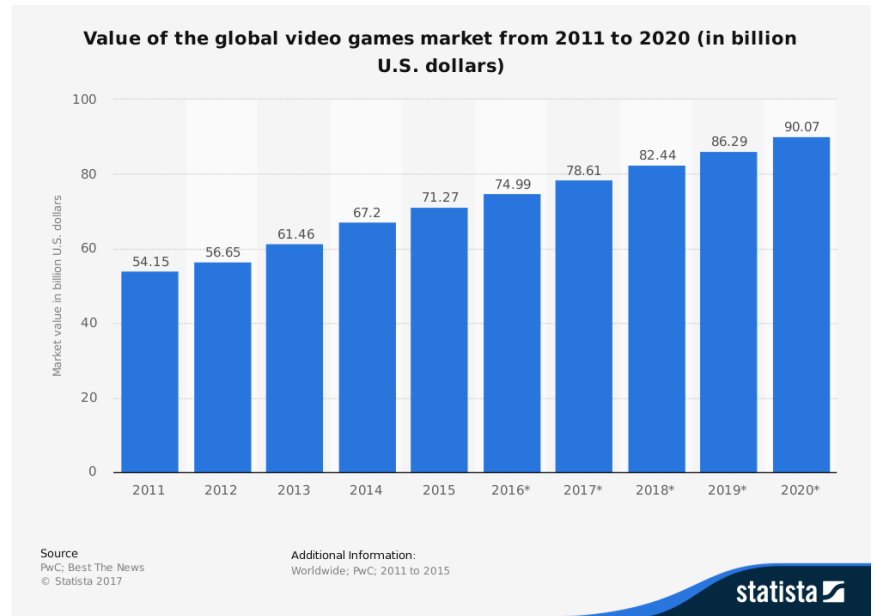


ESPN.com illustration

types of video games and different platforms of gaming like augmented reality and virtual reality games, we can see an increase in interest and users. Furthermore, now more than ever there is a growing audience and potential in eSports. As you can see from the graph on the left, gaming is the second most followed channels on YouTube, holding a position above both sports and the news. This increase in interest can also be illustrated through new streaming services that are specifically for gaming, in example, Twitch, Discord, and Activision's very own, MLG (Major League Gaming). As mentioned in a recent Forbes article, "Gaming communities rely on continued buzz to sustain player interest. This mainly comes from community-generated content. YouTube has since been filled with gaming footage and commentaries revolving around popular multiplayer games. Streaming platform Twitch continues to experience monumental growth. In order to develop its user base, Twitch recently

announced that the company is working on new tools for gamers to monetize their streams". Activision has placed itself in a very advantageous position with these current trends by solidifying long-term contracts with Twitch and by creating and producing the Overwatch League. With all of this being said, I believe that Activision Blizzard is in the perfect position to take advantage of all of these trends. They currently have every platform covered from console gaming, PC gaming, as well as mobile device gaming. This industry has

seen growth and is going to continue to see growth. As you can tell from the chart at the bottom, within the next few years the video game market is going to be valued at close to 100 billion dollars. Being a leader in this industry will only help Activision Blizzard, Inc. going forward and will continue to be the trademark for videogame franchises.



## Ownership Summary:

Primarily Investment Advisors own Activision Blizzard, Inc. This position over the past year has increased significantly from 72.76% to 80.46%. Meanwhile, Hedge Funds have decreased their position by approximately 4.4%. I believe that this decrease comes primarily in profit taking. As mentioned earlier, Activision stock price has increased more than 50% over the past year, and Hedge Funds generally have a shorter-term focus so this fits into their schedule. Another positive sign in relation to their ownership is their extremely low short interest. As a percent of float, short interest is below 1%. This shows that not many individuals or institutions believe that Activision's stock price is going to decrease. As mentioned, Investment Advisors position has increased pretty substantially over the past year, which is another positive sign for investors showing that more funds and advisors are going long on Activision Blizzard, Inc. Out of all the Investment Advisor's, Fidelity owns close to 13% of the company. Currently total diluted shares outstanding are 776 million; however, management has stated that they plan to buy back a billion dollars' worth of shares throughout 2018. This will increase value to the shareholders and increase EPS, which is beneficial to both shareholders and management.

| Compare Current Stats Against |          | 02/15/17 |        |
|-------------------------------|----------|----------|--------|
| Ownership Type                | 02/12/17 | Curr ↓   | Change |
| 11) Investment Advisor        | 72.76    | 80.46    | +7.70  |
| 12) Hedge Fund Manager        | 11.72    | 7.35     | -4.37  |
| 13) Corporation               | 5.12     | 4.14     | -0.98  |
| 14) Pension Fund              | 2.00     | 2.08     | +0.08  |
| 15) Bank                      | 2.66     | 2.05     | -0.61  |
| 16) Individual                | 1.22     | 1.00     | -0.22  |
| 17) Government                | 1.09     | 0.95     | -0.14  |
| 18) Insurance Company         | 0.62     | 0.84     | +0.22  |
| 19) Sovereign Wealth Fund     | 0.71     | 0.62     | -0.09  |
| 20) Unclassified              | 1.89     | 0.22     | -1.67  |
| 21) Brokerage                 | 0.12     | 0.22     | +0.10  |

## Conclusion:

In conclusion, Activision Blizzard, Inc. is an industry leader in home entertainment software industry and a leading producer of videogames. Activision Blizzard, Inc. has established an impressive portfolio of successful videogame franchises that have made them the household name for videogames. Management has developed a strong growth strategy that has continuously proven to be successful allowing for organic growth. This organic growth has been seen through the development of their existing franchises as well as the ability to create new franchises. Activision has found a successful capital allocation process in which they continue to reinvest money into the correct areas of the company. The company will continue to grow because of three strategic pillars that were mentioned. One being expanding audience reach, this will allow more exposure to the company as well as allow for the future occurrence of ad revenue, which management has been speaking about as of recently. Second being the ability to deepen player engagement. The ability to keep users active and returning creates a loyalty to the company, which will result in future revenues. Finally, to provide more opportunities for player investment. If the users are continuously coming back to the play the game they will be more than willing to purchase additional content, in example, downloadable purchases as well as in-game add-ons. This will allow Activision to see an increase in digital revenues and be able to increase their product mix accordingly. To conclude, I believe that Activision Blizzard, Inc. is a successful company that has experienced large growth over the last couple of years, but is not close to done growing. I believe that this company will continue to grow through 2018 and some years after that as well. Activision is an industry leader in a successful and growing industry. I would suggest buying more of this stock to add to our portfolio.

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## Activision Blizzard, Inc. (ATVI)

# CENTER FOR GLOBAL FINANCIAL STUDIES

**BULLISH**

Analysis by Paul Martinez

Current Price:

**\$72.03**

Intrinsic Value

**\$80.89**

Target 1 year Return: 21.35%

2/16/2018

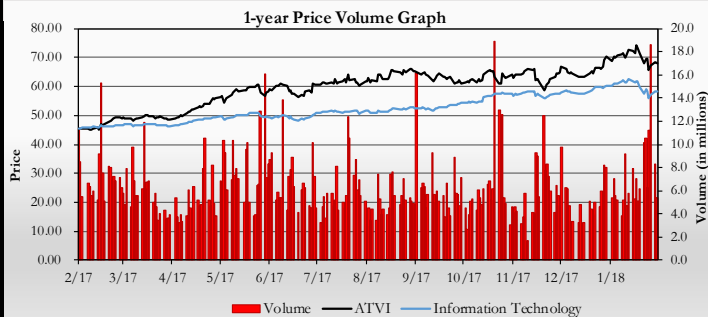
Dividend Yield:

**0.5%**

Target Price

**\$87.05**

Probability of Price Increase: 100%



| Description   |                        |
|---|------------------------|
| Activision Blizzard, Inc. develops and publishes games for video game consoles, personal computers (PC), mobile devices, and online social platforms. |                        |
| General Information   |                        |
| Sector  | Information Technology |
| Industry  | Software               |
| Last Guidance   | February 12, 2018      |
| Next earnings date  | May 4, 2018            |
| Market Assumptions  |                        |
| Estimated Equity Risk Premium   | 6.06%                  |
| Effective Tax rate  | 22%                    |

| Market Data                           |             |
|---------------------------------------|-------------|
| Market Capitalization                 | \$52,662.33 |
| Daily volume (mil)                    | 4.80        |
| Shares outstanding (mil)              | 756.10      |
| Diluted shares outstanding (mil)      | 766.00      |
| % shares held by institutions         | 109%        |
| % shares held by investments Managers | 73%         |
| % shares held by hedge funds          | 8%          |
| % shares held by insiders             | 1.39%       |
| Short interest                        | 0.90%       |
| Days to cover short interest          | 1.11        |
| 52 week high                          | \$74.95     |
| 52-week low                           | \$44.60     |
| Volatility                            | 27.01%      |

| Past Earning Surprises |         |          |
|------------------------|---------|----------|
| Quarter ending         | Revenue | EBITDA   |
| 12/31/2016             | -15.27% | -22.03%  |
| 3/31/2017              | 58.71%  | 167.42%  |
| 6/30/2017              | 33.14%  | 52.56%   |
| 9/30/2017              | -6.51%  | -17.65%  |
| 12/31/2017             | -18.93% | -155.59% |
| Mean                   | 10.23%  | 4.94%    |
| Standard error         | 1.0%    | 15.4%    |

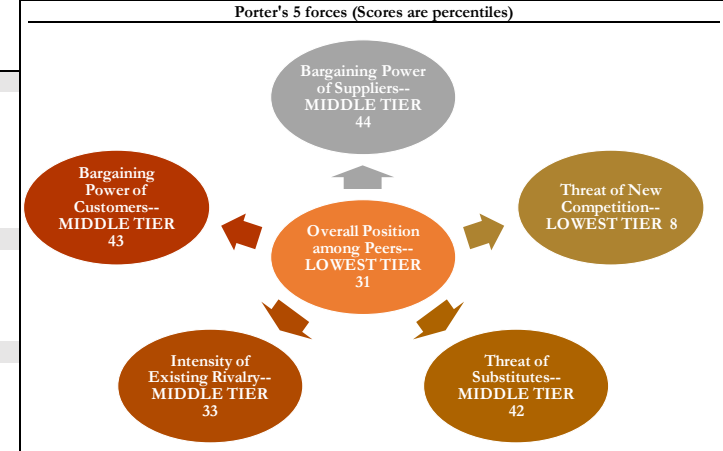
| Market and Credit Scores                             |         |
|--|---------|
| Recommendation (STARS) Value--2                      |         |
| Recommendation (STARS) Description--Sell             |         |
| Quality Ranking Value--B+                            |         |
| Quality Ranking Description--Average                 |         |
| Short Score--0                                       |         |
| Market Signal Probability of Default % (Non-Ratings) | -0.087% |
| CreditModel Score (Non-Ratings)--bbb-                |         |

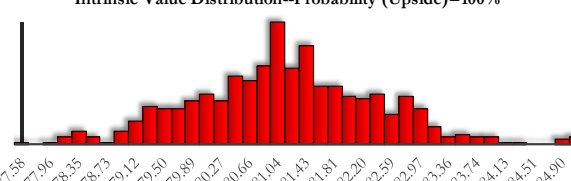
| Industry and Segment Information    |  |
|-------------------------------------|--|
| LTM Revenues by Geographic Segments | LTM Revenues by Business Segments                    |
| EMEA--35%                           | Activision--37%                                      |
| Asia Pacific--13%                   | Blizzard--30%  |
| Americas--51%                       | King--28%  |
| --                                  | Other Segments--6%                                   |
| --                                  | Unallocated Net Effect from Deferral of Net Revenues |

| Management         | Position  | Total Compensations Growth | Stock Price Growth During Tenure |
|--------------------|---|----------------------------|----------------------------------|
| Kotick, Robert     | CEO & Director                                  | 31.75% per annum over 5y   | 0.73% per annum over 5y          |
| Durkin, Dennis     | Chief Corporate Officer                         | -40% per annum over 4y     | 18.3% per annum over 4y          |
| Morhaime, Michael  | President & CEO of Blizzard Entertainment Inc   | 10.12% per annum over 5y   | 0.73% per annum over 5y          |
| Zacconi, Riccardo  | Executive Officer & CEO of King Digital Enterta |                            | 0% per annum over 0y             |
| Johnson, Collister | President & COO                                 |                            |                                  |
| Neumann, Spencer   | Chief Financial Officer                         |                            |                                  |

| Profitability   | ATVI (LTM) | ATVI Historical | Peers' Median (LTM) |
|---|------------|-----------------|---------------------|
| Return on Capital (GAAP)  | 10.7%      | 9.62%           | 32.88%              |
| Operating Margin  | 24%        | 28.26%          | 17.64%              |
| Revenue/Capital (GAAP)  | 0.44       | 0.34            | 1.86                |
| ROE (GAAP)  | 4.5%       | 5.6%            | 8.6%                |
| Net margin  | 7.1%       | 12.4%           | 9.6%                |
| Revenue/Book Value (GAAP)   | 0.63       | 0.45            | 0.90                |
| Invested Funds  | ATVI (LTM) | ATVI Historical | Peers' Median (LTM) |
| Cash/Capital  | 28.5%      | 24.5%           | 45.8%               |
| NWC/Capital   | -10.5%     | -10.9%          | -1.5%               |
| Operating Assets/Capital  | 23.0%      | 35.1%           | 44.7%               |
| Goodwill/Capital  | 59.0%      | 51.3%           | 11.0%               |
| Capital Structure   | ATVI (LTM) | ATVI Historical | Peers' Median (LTM) |
| Total Debt/Market Capitalization                                      | 0.28       | 0.21            | 0.10                |
| Cost of Debt  | 3.1%       | 3.9%            | 90.0%               |
| CGFS Rating (I <sup>2</sup> -score, Z-score, and default Probability) | BB         |                 |                     |
| WACC  | 9.6%       | 9.1%            | 96.0%               |

| Peers                               |                                |
|-------------------------------------|--------------------------------|
| Electronic Arts Inc.                | Nintendo Co., Ltd.             |
| Take-Two Interactive Software, Inc. | Changyou.com Limited           |
| Zynga Inc.                          | Frontier Developments Plc      |
| NEXON Co., Ltd.                     | Square Enix Holdings Co., Ltd. |
| Ubisoft Entertainment SA            | Beijing Kunlun Tech Co., Ltd.  |



| Forecast Assumptions      |     | Explicit Period (11 years) | Continuing Period | Valuation  |  | Sensitivity Attribution Analysis |       |
|---------------------------|-----|----------------------------|-------------------|--|--|----------------------------------|-------|
| Revenue Growth CAGR       | 12% | 12%                        | 2%                | <b>Intrinsic Value Distribution--Probability (Upside)=100%</b><br> |  | Revenue                          | 47.2% |
| Average Operating Margin  | 32% | 32%                        | 25%               |  |  | Operating costs                  | 46.5% |
| Average Net Margin        | 25% | 25%                        | 22%               |  |  | Capital expenditures             | 5.9%  |
| Growth in Capital CAGR    | 10% | 10%                        | 2%                |  |  | Discount Rate                    | 0.4%  |
| Growth in Claims CAGR     | 0%  | 0%                         | 2%                |  |  |                                  |       |
| Average Return on Capital | 11% | 10%                        | 10%               |  |  |                                  |       |
| Average Return on Equity  | 12% | 12%                        | 10%               |  |  |                                  |       |
| Average Cost of Capital   | 9%  | 9%                         | 9%                |  |  |                                  |       |
| Average Cost of Equity    | 9%  | 9%                         | 9%                |  |  |                                  |       |

February 16, 2018

## Activision Blizzard, Inc: ATVI

Zachary DeLeonardo

Sector: Technology

Industry: Application Software

Current Price: \$70.19

Target Price: \$84.02

## Company Description:

Activision Blizzard is a multiplatform software company that develops games for PC, console, and mobile devices. The company operates through three main segments: Activision, Blizzard, and King. Activision Blizzard creates value through brand name franchises such as Call of Duty, World of Warcraft, Overwatch, Destiny, and the Candy Crush Saga.

### Buy

|                  |         |
|------------------|---------|
| Current Price:   | \$70.19 |
| Target Price:    | \$84.02 |
| Market Cap:      | \$52.9B |
| Avg. Volume:     | 6.1M    |
| Beta:            | .99     |
| S&P Debt Rating: | BBB     |
| ROE:             | 4.4%    |
| WACC:            | 9.6%    |
| ROIC:            | 10.71%  |
| EBITDA Margin:   | 36.47   |



**Thesis:** Activision Blizzard is the best positioned software company in its industry through brand recognition of popular franchises. Their acquisition of King Digital Entertainment launched them into the mobile device arena with the highest grossing mobile game of all time, Candy Crush Saga. With their increasing revenue growth and effective capital management, Activision Blizzard is positioned to increase in share price well past its 52-week high.

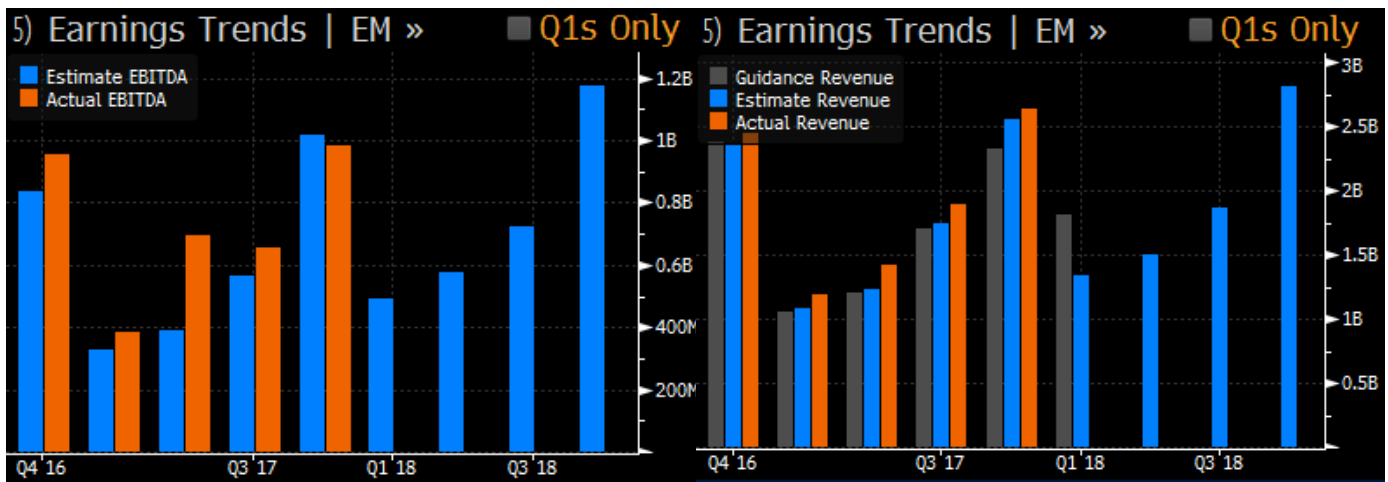
### Catalysts:

- **Short Term(within the year):** Traction of new online eSports league, continued revenue growth from latest franchise installments
- **Mid Term(1-2 years):** Further additions to popular franchises that will drive growth
- **Long Term(3+):** Increasing mobile device use by younger generations, high demand for franchise expansion

## Earnings:

Activision Blizzard reported a Q4 revenue increase of 16% YoY along with an increase in operating income of 32% due to strong momentum from early release of Call of Duty: WWII, Destiny 2, and Crash Bandicoot N. Sane Trilogy leading into the holiday season. Activision Blizzard has historically lower revenues in all other quarters compared to Q4, where major game launches are strategically planned for maximum exposure during a heavy consumption period in North America. Below, the chart on the left shows analyst estimates and actual EBITDA results for the last 5 quarters along with future projections for EBITDA. The chart on the right shows analyst estimates and actuals for revenue for the last 5 quarters along with future projections for revenue.





Activision Blizzard was below analyst estimates for EBITDA in quarter 4 but shows slight YoY growth for the same quarter. In terms of revenue, ATVI also follows a constant uptick all year with total revenue of 7.017B for FY 2017 compared to FY 2016 of 6.608B, a 6.19% YoY growth. Strong earnings can be attributed to the latest installment in the Call of Duty franchise - the number one grossing console game worldwide in 2017, making the franchise number one globally again for 8 out of the last 9 years. Analyst revenue estimates and guidance for every quarter in 2017 were outperformed.

## Segment Analysis:

Activision Blizzard operates 3 main sectors: Activision, Blizzard, and King. Activision produces stand out console and PC games such as the Call of Duty Franchise, Destiny Franchise, and Skylanders. Blizzard's focus is more on player-versus-player online games and where their front-runners are World of Warcraft, Hearthstone, Overwatch, Diablo, Starcraft, and Heroes of the Storm. King is their mobile device platform that includes Candy Crush, Pet Rescue, Farm Heroes, and Bubble Witch.

|                                       | <b>ACTIVISION</b>  | <b>BILZARD</b><br>ENTERTAINMENT  | <b>King</b>   |
|---------------------------------------|--|--|---|
| <b>Q4 Segment Net Revenues:</b>       | \$1,337M   | \$599M   | \$516M  |
| <b>Q4 Segment Operating Income:</b>   | \$634M<br>47%  | \$160M<br>27%  | \$162M<br>31%   |
| <b>2017 Segment Net Revenues:</b>     | \$2,628M   | \$2,139M   | \$1,998M  |
| <b>2017 Segment Operating Income:</b> | \$1,005M<br>38%  | \$712M<br>33%  | \$700M<br>35%   |
| <b>Key Highlights:</b>                | <ul style="list-style-type: none"> <li>Record annual segment OI of \$1B+ and operating margin of 38%+, driven by <b>Call of Duty: WWII</b>, <b>Destiny 2</b>, and <b>Crash Bandicoot N. Sane Trilogy</b></li> <li>Q4 segment revenues increased 16% year-over-year, and OI increased 32% in the same period</li> </ul> | <ul style="list-style-type: none"> <li>Record annual segment revenues and OI for a year with no major game release as Blizzard delivered continuous content across franchises including <b>Overwatch</b>, <b>Hearthstone</b>, and <b>World of Warcraft®</b></li> </ul> | <ul style="list-style-type: none"> <li>Annual segment revenues and operating income up 7% and 12%, respectively, on a pro-forma basis including the 2016 pre-acquisition period for King on the strength of <b>Candy Crush</b> and focus on improvements in engagement &amp; player investment</li> </ul> |

The chart above is from the earnings call slideshow from Activision Blizzard. King was acquired in 2016, increasing revenues from 4.664B for FY 2015 to 6.608B for FY 2016, where King accounted for 25.4% of that. From 2016 to 2017, King has improved revenues from 1.586B in FY 2016 to 1.998B in FY 2017, becoming almost 30% of Activision Blizzards total revenue. Blizzard is positioned for heavy growth in 2018 with the recent launch and future growth initiatives of the Overwatch league, an online professional gaming league where viewers can watch 12 major teams compete online. Blizzard has posted 40M+ MAUs(monthly active users) for the 6<sup>th</sup> quarter in a row with expected growth due to the league. King has 290M+ MAUs while Activision has 55M+ MAUs. In the Q4 earnings call transcript, Codd Johnson (President and COO) stated, “For Activision Blizzard and King overall, daily time spent per user was over 50 minutes for the second quarter in a row, placing us on par with Facebook’s time per day across Facebook, Instagram and Messenger. Now, that 50 minutes per day is just the time spent in our games; it does not include the growing popularity of watching our games on other online platforms.”

## Ownership:

Ownership in Activision Blizzard has recently declined from the last filing date of 2/11/18. This selling of shares can be attributed to an industry wide shift where the S&P500 dropped more than 10%. The application software industry followed the market drop, which was indicative of more than just a bearish trading day, but of a correctional period after too long of an uptrend in the market.

| 54) Ownership Type        | 02/11/18 | Curr  | Change |
|---------------------------|----------|-------|--------|
| 41) Investment Advisor    | 77.39    | 80.46 | +3.07  |
| 42) Hedge Fund Manager    | 9.02     | 7.35  | -1.67  |
| 43) Corporation           | 4.47     | 4.14  | -0.33  |
| 44) Pension Fund          | 2.19     | 2.08  | -0.11  |
| 45) Bank                  | 2.36     | 2.05  | -0.31  |
| 46) Individual            | 1.40     | 1.00  | -0.40  |
| 47) Government            | 1.03     | 0.95  | -0.08  |
| 48) Insurance Company     | 0.96     | 0.84  | -0.12  |
| 49) Sovereign Wealth Fund | 0.67     | 0.62  | -0.05  |

Despite the recent dip, which was industry wide and not specific to ATVI, top holders such as hedge fund managers still have confidence in ATVI’s value. The short ratio is currently at 1.1352 with 1.1 days to cover. With such low short interest, it’s clear that top investors are in long positions, anticipating value creation in the future.

## Competition:

Gaming software is an incredibly competitive market. Threat of new substitutes are high due to the multitude of different gaming genres, the possibility of users overplaying and eventually getting bored of games, and in the mobile platform arena, new games are easily created at little cost. However, Activision Blizzard combats new substitutes through rigorous installments of new downloadable content for existing games, such as the Zombies packages add-on for Call of Duty, along with updating new characters and weapons in Overwatch. Maintaining updates and adding content to existing franchises is a must to keep user interest away from other substitutes. Of course, users are not going to only play one game, but as long as franchises still maintain current updates, users will keep going back to Activision Blizzard games over buying brand new games.



| Name                          | Ticker  | Mkt Cap↓ | Rev - 1 Yr Gr:Q | YTD Tot Ret | OPM LF |
|-------------------------------|---------|----------|-----------------|-------------|--------|
| Median                        |         | 38.65B   | 1.44%           | 11.29%      | 10.82% |
| 100) ACTIVISION BLIZZARD INC  | ATVI US | 53.07B   | 1.44%           | 10.85%      | 10.82% |
| 101) NINTENDO CO LTD          | 7974 JP | 61.23B   | 177.08%         | 11.29%      | 24.12% |
| 102) ELECTRONIC ARTS INC      | EA US   | 38.65B   | 0.96%           | 19.95%      | -1.81% |
| 103) TAKE-TWO INTERACTIVE ... | TTWO US | 12.25B   | 0.92%           | -2.50%      | 1.84%  |
| 104) SS&C TECHNOLOGIES HOL... | SSNC US | 10.29B   | 9.34%           | 23.52%      | 25.84% |

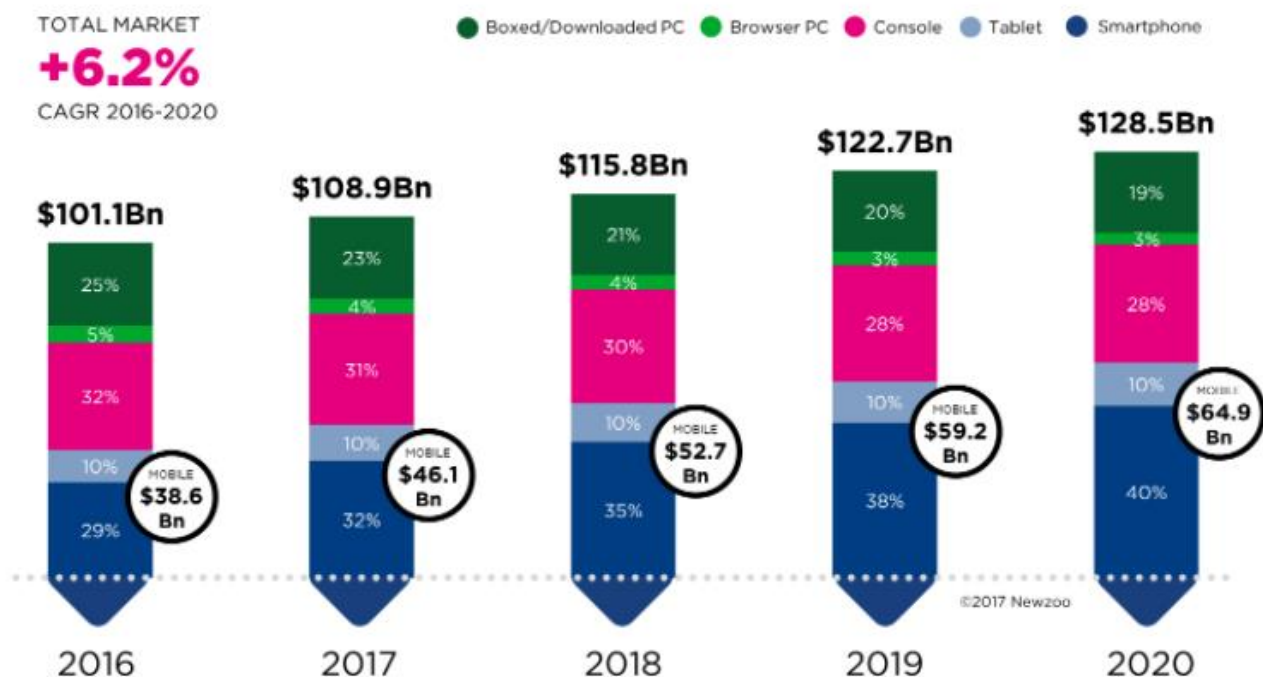
Nintendo as a competitor must be taken lightly, where a majority of their revenues come from actual console sales, in 2017 that being the Nintendo Switch, which accounts for their major revenue growth YoY(application software 4.96% of total revenue). However, using them as a peer due to their similar market cap, Activision Blizzard actively keeps up with operating margin compared to Electronic Arts and Take-Two Interactive. In terms of software development, Activision Blizzard is the clear industry titan when it comes to operating margin. On the revenue side, Activision Blizzard is also maintaining the industry median, which is also inflated due to Nintendo. In terms of actual games, no other competitor has the brand recognition that Activision Blizzard does. This is a highly important factor in this industry due to reputation of quality games that include top notch graphics, plot, user friendly controls, and overall an enjoyable gaming experience.

## Industry Outlook:

The video game industry adds, on average, about \$11.7B a year to U.S. GDP. With annual salaries averaging around \$97,000, this industry is highly competitive. In terms of console games, most of the market share is positioned to the top companies with resources to roll out blockbuster games. However, mobile

## 2016-2020 GLOBAL GAMES MARKET






FORECAST PER SEGMENT TOWARD 2020



device games are also growing and require far less brand recognition, expenses, and software engines to program. Above is an industry outlook for the global games market with a CARG of 6.2% through 2020. Mobile gaming is positioned to be the highest growing segment compared to consoles, PC, digital downloads, and tablet gaming. Mobile gaming is gaining traction due to younger generations acquiring smartphones very young. Millennials and generation z are gaming software's target demographics for mobile gaming in the coming years where the average age for owning a smartphone is 10.3 years old. With the shift moving from hard copy games on console and PC, the industry is making a major shift to digital download mobile applications.

## Capital Structure:

Activision Blizzard is composed of 91.6% equity and 8.4% debt resulting in a WACC of 9.6%. Competitors have a lower WACC, where Electronic Arts has a WACC of 9.1% and Ubisoft at 7.9%. Electronic Arts maintains 3.5% debt while Ubisoft maintains 17.1% debt. Ubisoft's cost of debt of .6% allows them to carry more debt than others in the industry, whereas Activision Blizzard's cost of debt is 1.4% and Electronic Arts' cost of debt is 2.8%. There is a huge potential for future mergers and acquisitions within the gaming industry with such low levels of debt.

| 12 Months Ending   | 12/31/2014      | 12/31/2015      | 12/31/2016      | 12/31/2017      |
|--|-----------------|-----------------|-----------------|-----------------|
|  <b>Market Capitalization</b>     | <b>14,546.9</b> | <b>28,432.6</b> | <b>26,919.5</b> | <b>47,876.2</b> |
|  <b>- Cash &amp; Equivalents</b> | <b>4,858.0</b>  | <b>1,823.0</b>  | <b>3,245.0</b>  | <b>4,713.0</b>  |
|  <b>+ Preferred &amp; Other</b> | <b>0.0</b>      | <b>0.0</b>      | <b>0.0</b>      | <b>0.0</b>      |
|  <b>+ Total Debt</b>            | <b>4,324.0</b>  | <b>4,074.0</b>  | <b>4,887.0</b>  | <b>4,390.0</b>  |
|  <b>Enterprise Value</b>        | <b>14,012.9</b> | <b>30,683.6</b> | <b>28,561.5</b> | <b>47,553.2</b> |

## Conclusion:

In conclusion, Activision Blizzard, Inc. is a buy at its current price. This is due to industry trends in the application software industry and opportunity to capitalize on future installments of global leading game franchises. Compared to the competitors, Activision Blizzard maintains increasing margins and revenue growth with momentum from the latest releases of franchise games such as Call of Duty: WWII, Destiny 2, and Overwatch eSports league. With zero net debt, Activision Blizzard is well positioned to further acquire companies in the future and add to their multiplatform business model. The company's one-year target price of \$84.02, a 20.19% is reasonable based on the analysis. Activision Blizzard is well positioned to beat its 52-week high and create value for its investors.

## Activision Blizzard, Inc. (ATVI)

## CENTER FOR GLOBAL FINANCIAL STUDIES

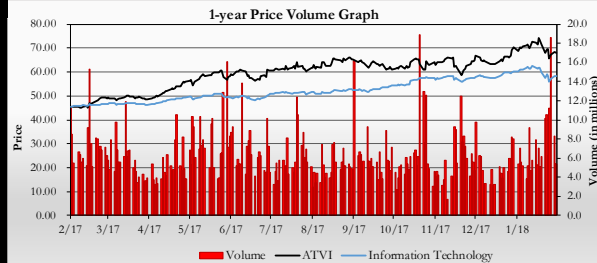
**BULLISH**

Analysis by Zachary DeLeonardo  
2/16/2018

Current Price: **\$70.19**  
Divident Yield: **0.5%**

Intrinsic Value **\$77.43**  
Target Price **\$84.02**

Target 1 year Return: 20.19%  
Probability of Price Increase: 100%



**Description**  
Activision Blizzard, Inc. develops and publishes games for video game consoles, personal computers (PC), mobile devices, and online social platforms.

**General Information**  
Sector Information Technology  
Industry Software  
Last Guidance February 12, 2018  
Next earnings date May 4, 2018

**Market Assumptions**  
Estimated Equity Risk Premium 7.15%  
Effective Tax rate 25%

**Market Data**  
Market Capitalization \$54,431.60  
Daily volume (mil) 6.15  
Shares outstanding (mil) 756.10  
Diluted shares outstanding (mil) 766.00  
% shares held by institutions 109%  
% shares held by investments Managers 73%  
% shares held by hedge funds 8%  
% shares held by insiders 1.39%  
Short interest 0.90%  
Days to cover short interest 1.11  
52 week high \$74.95  
52-week low \$44.60  
Volatility 27.01%

| Past Earning Surprises |         |          |
|------------------------|---------|----------|
| Quarter ending         | Revenue | EBITDA   |
| 12/31/2016             | -15.27% | -22.03%  |
| 3/31/2017              | 58.71%  | 167.42%  |
| 6/30/2017              | 33.14%  | 52.56%   |
| 9/30/2017              | -6.51%  | -17.65%  |
| 12/31/2017             | -18.93% | -155.59% |
| Mean                   | 10.23%  | 4.94%    |
| Standard error         | 1.0%    | 4.7%     |

| Management         | Position  | Total Compensation Growth |
|--------------------|---|---------------------------|
| Kotick, Robert     | CEO & Director                                  | 31.75% per annum over 5y  |
| Durkin, Dennis     | Chief Corporate Officer                         | -40% per annum over 4y    |
| Morhaime, Michael  | President & CEO of Blizzard Entertainment Inc   | 10.12% per annum over 5y  |
| Zacconi, Riccardo  | Executive Officer & CEO of King Digital Enterta |                           |
| Johnson, Collister | President & COO                                 |                           |
| Neumann, Spencer   | Chief Financial Officer                         |                           |

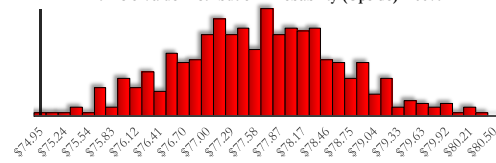
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| Operating Margin          | 24%        | 28.26%          | 17.15%              |
| Revenue/Capital (GAAP)    | 0.42       | 0.32            | 1.94                |
| ROE (GAAP)                | 4.4%       | 5.3%            | 6.5%                |
| Net margin                | 6.9%       | 11.7%           | 6.5%                |
| Revenue/Book Value (GAAP) | 0.63       | 0.45            | 1.01                |

| Invested Funds           | ATVI (LTM) | ATVI Historical | Peers' Median (LTM) |
|--------------------------|------------|-----------------|---------------------|
| Cash/Capital             | 28.5%      | 24.5%           | 41.8%               |
| NWC/Capital              | -10.5%     | -10.9%          | -4.3%               |
| Operating Assets/Capital | 23.0%      | 35.1%           | 51.3%               |
| Goodwill/Capital         | 59.0%      | 51.3%           | 11.2%               |

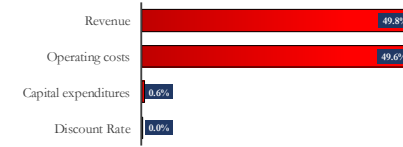
| Capital Structure                                       | ATVI (LTM) | ATVI Historical | Peers' Median (LTM) |
|---|------------|-----------------|---------------------|
| Total Debt/Market Capitalization                        | 0.28       | 0.21            | 0.08                |
| Cost of Debt  | 3.1%       | 3.9%            | 4.8%                |
| CGFS Rating (F-score, Z-score, and default Probability) | BB         |                 |                     |
| WACC  | 9.3%       | 9.2%            | 10.8%               |

| Forecast Assumptions      | Explicit Period (7 years) | Continuing Period |
|---------------------------|---------------------------|-------------------|
| Revenue Growth CAGR       | 12%                       | 2%                |
| Average Operating Margin  | 33%                       | 28%               |
| Average Net Margin        | 29%                       | 26%               |
| Growth in Capital CAGR    | 10%                       | 2%                |
| Growth in Claims CAGR     | 0%                        | 2%                |
| Average Return on Capital | 12%                       | 11%               |
| Average Return on Equity  | 13%                       | 11%               |
| Average Cost of Capital   | 10%                       | 10%               |
| Average Cost of EquityKe  | 10%                       | 10%               |

Intrinsic Value Distribution--Probability (Upside)=100%



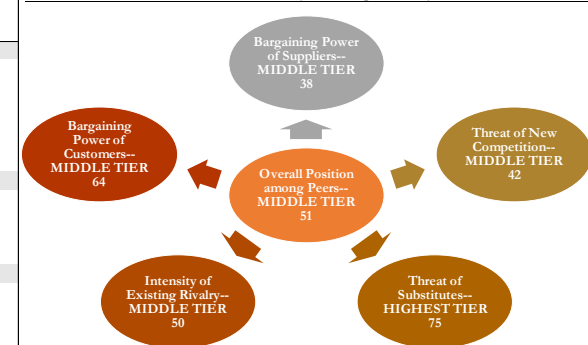
Sensitivity Attribution Analysis



| Industry and Segment Information    |  |
|-------------------------------------|--|
| LTN Revenues by Geographic Segments | LTN Revenues by Business Segments                    |
| EMEA--35%                           | Activision--37%                                      |
| Asia Pacific--13%                   | Blizzard--30%  |
| Americas--51%                       | King--28%  |
| --                                  | Other Segments--6%                                   |
| --                                  | Unallocated Net Effect from Deferral of Net Revenues |

| Peers                               |                           |
|-------------------------------------|---------------------------|
| Electronic Arts Inc.                | Nintendo Co., Ltd.        |
| Take-Two Interactive Software, Inc. | Changyou.com Limited      |
| Zynga Inc.                          | Frontier Developments Plc |
| --                                  | --                        |
| Ubisoft Entertainment SA            | --                        |

Porter's 5 forces (Scores are percentiles)



January 2, 2018

**Approach Resources (NASDAQ:AREX)**

Eric Bjorklund

**Sector: Oil, Gas & Consumable Fuels**

**Industry: Energy**

**Current Price: \$3.02**

**Target Price: \$18.87**

Approach Resources is a small Oil, Gas and Consumable Fuels company that primarily does business in the Permian Basin of West Texas. While they use the traditional drilling method, they also aim to tap into fuel pockets via Horizontal Drilling and fracking, which gives them the benefit of reaching geographically difficult pockets of oil and natural gas. They pride themselves on a low cost structure compared to other companies in the Western Texas region.

## HOLD

Current Price: \$3.02  
 Target Price: \$18.87  
 Market Cap: 286.90M  
 Beta: 1.887  
 Other key Metrics/Ratios  
 Long Term Debt/ Equity: 88.52  
 Revenue/ Avg Assets: 0.08  
 Adj ROE: -7.57  
 Days to Cover: 10.77  
 Shrs out/Float: 94.1M/44.2M

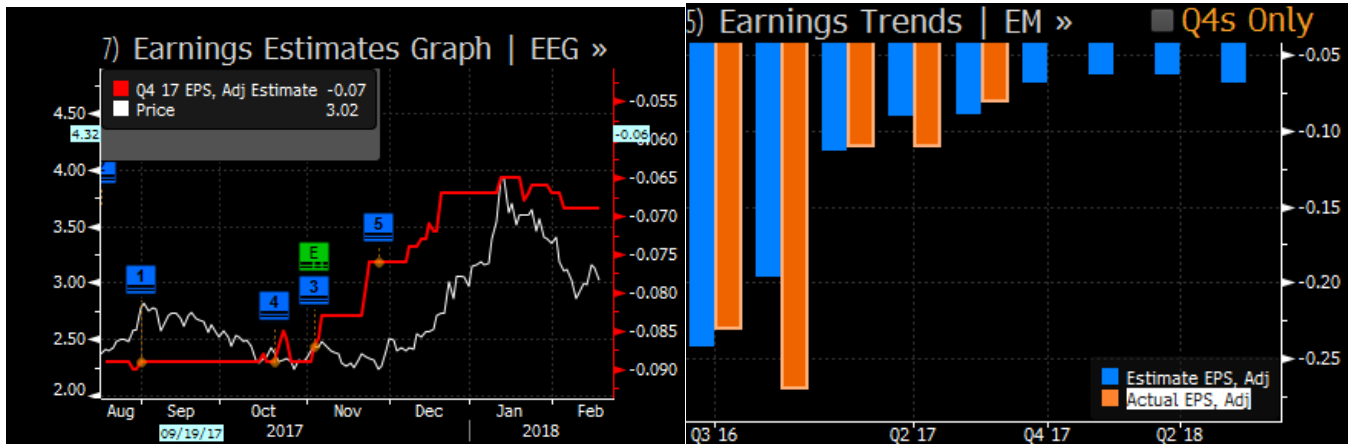


**Thesis:** AREX is a holding that has potential upside, but it is reliant on several factors. Its success hinges heavily upon the price of oil going to \$200/barrel in the next 15 years in order to achieve a growth in revenue of 9% in the explicit period. Aside from this, AREX must drill into the 1500 well sites it has marked out, while still keeping to its low cost model, which could pose a challenge. Being a company with zero cash reserves and high probability of default, it brings about the question of sustainability of the company. AREX maintains value through the large amounts of valuable assets in a lucrative territory. Due to the possibility for upside, but many contingencies regarding liquidity, it is best to hold this stock for the time being.

**Catalysts:** Forward looking projections that call for positive/negative outlook that will strengthen your thesis. Example:

- Short Term(within the year): Continue low cost efficiency drilling model, expand via positive operating cash flows
- Mid Term(1-2 years): Expand into the over 1500 identified undrilled locations
- Long Term(3+): Oil prices per barrel to trend upwards, potential of a buyout

## Earnings Performance:



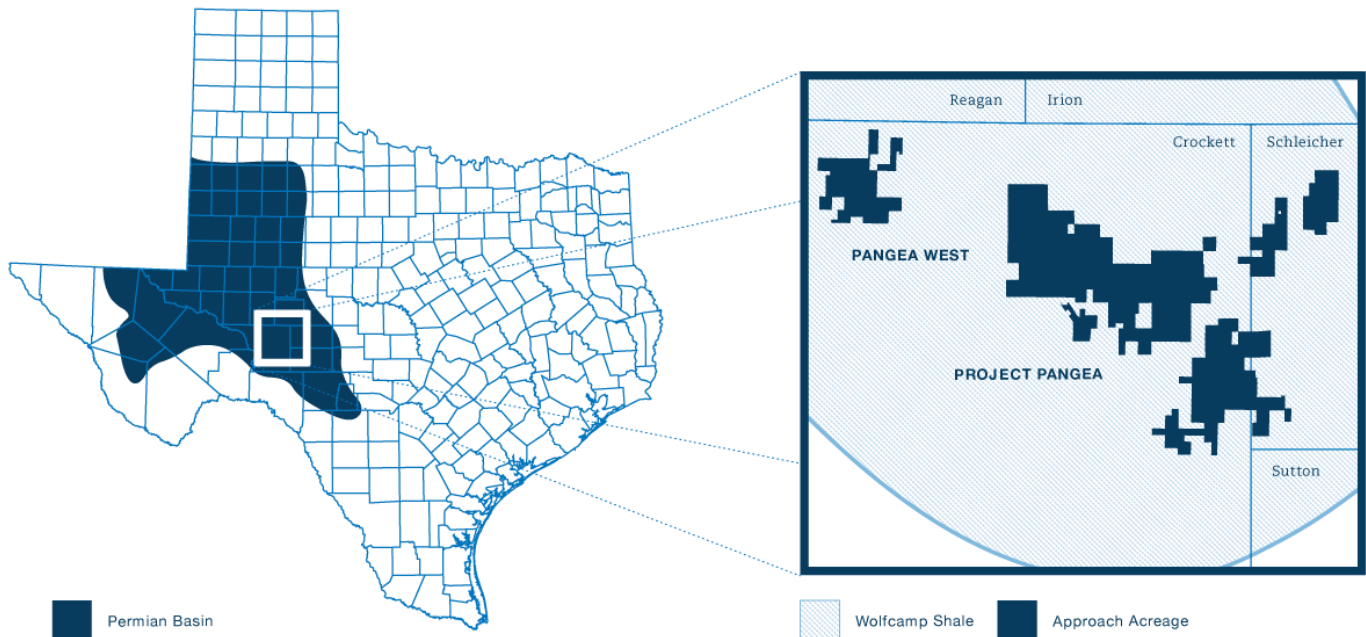
Approach Resources has been trending towards a positive EPS in recent years, but it is still negative due to the low price of oil per barrel. This low cost forces AREX to lower their capital expenditures in order to preserve liquidity. They cannot afford to keep all of the drill sites open and still generate revenue that makes it worth it.

| Name<br>(BI Peers)  | Mkt Cap | Last Px | Tot Assets<br>LF | Chg Pct 1M | Rev - 1 Yr<br>Gr:Y | EPS - 1 Yr<br>Gr:Y | ROE     | Dvd 12M         |
|---|---------|---------|------------------|------------|--------------------|--------------------|---------|-----------------|
| Median  | 7.38B   | 52.18   | 6.24B            | -14.38%    | 7.04%              | -2.22%             | 3.33%   | 0.18%           |
| 100) APPROACH RESOURCES INC   | 284.14M | 3.02    | 1.09B            | -16.57%    | -47.54%            | -189.03%           | -6.33%  | --              |
| 101) PIONEER NATURAL RESO...  | 30.42B  | 178.79  | 17.00B           | -2.04%     | 15.66%             | -38.55%            | 3.33%   | 0.04%           |
| 102) CONCHO RESOURCES INC   | 21.79B  | 146.52  | 13.48B           | -6.51%     | -7.23%             | -7.54%             | 3.22%   | --              |
| 103) PARSLEY ENERGY INC-CL...   | 7.38B   | 23.46   | 8.05B            | -18.31%    | 59.09%             | -2.22%             | 2.22%   | --              |
| 104) DIAMONDBACK ENERGY INC   | 12.16B  | 123.88  | 7.77B            | -3.23%     | 129.39%            | 178.49%            | 11.44%  | --              |
| 105) RSP PERMIAN INC  | 5.58B   | 35.19   | 6.24B            | -14.38%    | -6.38%             | -9.52%             | 3.36%   | --              |
| 106) CIMAREX ENERGY CO  | 9.42B   | 98.73   | 5.04B            | -21.54%    | 51.80%             | 559.31%            | 17.54%  | 0.32%           |
| 107) ENERGEN CORP   | 5.07B   | 52.18   | 4.85B            | -8.90%     | -47.94%            | 85.76%             | -0.47%  | --              |
| 108) LAREDO PETROLEUM INC   | 2.03B   | 8.36    | 2.02B            | -23.44%    | 7.04%              | 400.10%            | 124.22% | --              |
| (Accounting Adjustments: Adjusted for Abnormal Items When Applicable) |         |         |                  |            |                    |                    |         | 10 Analyze List |

AREX is one of the smallest public companies in this sector operating out of the Permian Basin. They do have a considerable amount of assets, but are inhibited by the large amount of debt they have (\$498M) and zero cash reserves. They have the lowest EPS growth rate of any of their competitors as well. Due to a drop in their stock by 17% in the past month, they have outpaced their competitors by -5% growth in price. AREX is a volatile stock with a beta of 1.887.

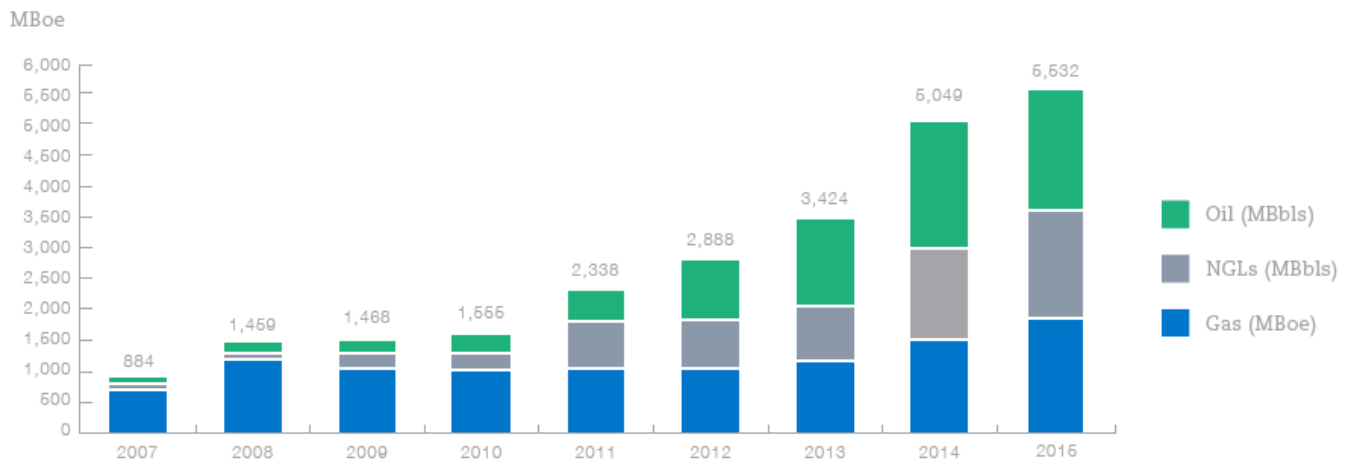


## Western Texas and the Permian Basin



Approach Resources does its business in the Permian Basin located in Western Texas. The size of the basin is approximately 250 miles wide and 300 miles long. It owns 138,000 gross acres of land used for drilling (.36% of the basin). Much of their recent drilling has been focused on the Wolfcamp shale illustrated above. AREX is one of the smallest companies operating out of this region. The largest players are Occidental Petroleum, Exxon, Concho, Chevron and Apache. Due to recent advances in Horizontal Directional Drilling (HDD) and Hydraulic Fracturing, it has made accessible new deposits of oil and natural gas and increased the efficiency of drilling in the region.

## AREX Production Growth (2007-Present)



AREX has grown in production steadily since 2010 after adoption new methods of drilling. AREX prides itself on its low cost structure of drilling, but this inhibits their expansion of wells.

## Commodity Price vs Revenue Growth



AREX's growth in revenue is tied strongly with the price of oil per barrel and natural gas. Being a small firm, if the price of oil/gas drops, they may shut down drilling wells that prove to be uneconomical to run. In recent years, with a drop in price of crude oil per barrel and natural gas, they have reduced their capital expenditures and slowed their drilling in order to preserve liquidity.

| Entity       | CAGR   |
|--------------|--------|
| AREX Revenue | -8.03% |
| Oil          | -7.94% |
| Natural Gas  | -4.85% |

## New Drilling

AREX has over 1500 new drilling locations identified, which could prove beneficial for growth. On average, it costs \$3.5 Million to develop a new well. Expansion could prove to be an issue for AREX even though they have the locations identified due to their low cash reserves, high long-term debt outstanding and poor credit. In 2016, AREX only developed 6 new wells using positive cash flow from operations. This does not disprove that a large expansion is not feasible, but their LT debt of \$498.3mm combined with a Z-score of -.03 does not give them flexibility to borrow to tap into these new drilling locations. With a Debt to Equity



ratio of 88.52, AREX relies heavily on borrowing to finance their operations. If their ability to borrow is slowed down, their ability to expand is greatly inhibited.

## Oil Prices and Industry Outlook

As mentioned before, AREX is highly susceptible to the price of oil. The price of their shares is correlated with the price of oil as shown in the graph. From this, we can determine that a rise in the price of oil can be very beneficial for shareholders. Data before 2010 on this correlation is not very useful, due to the less efficient ways of drilling AREX used, but once their methods became consistent with the industry, the correlation is unmistakable. Assuming the price of oil jumps to \$200/barrel in the next 15 years, a growth rate of 10% is achievable, which can justify a growth in revenue of 9% in the explicit period. This is the single most important catalyst for the success of this company, as they cannot function at a competitive rate while oil prices decline, as you can see by the price of their share in comparison to the price of oil per barrel.

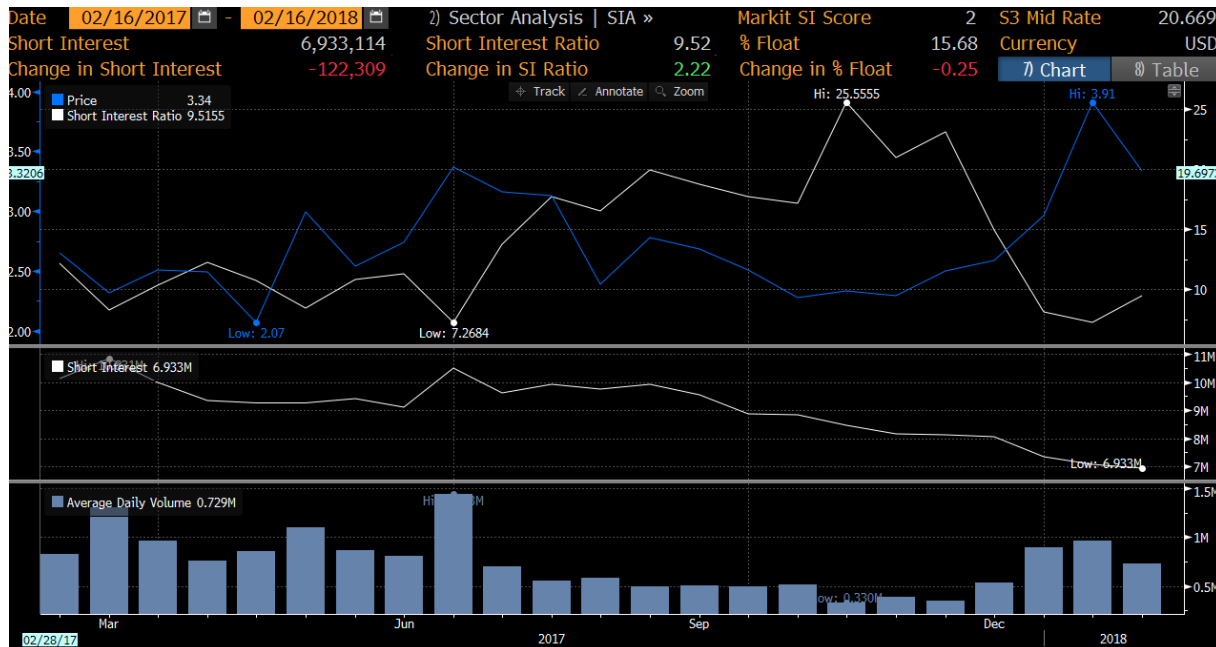


The entire Oil and Natural Gas industry is poised to continue its upward trend in the near future. United States based firms stand to benefit more so than overseas companies due to unrest in the Middle East and Nigerian militant groups targeting oil drilling sites. The U.S. continues to trend towards an oil independent nation, especially with new methods of drilling becoming the norm. In the longer term (15 years) we can start to see a shift towards renewable energy which can cause some concern. This combined with depleting resources could stand to increase the price of oil considerably.

## Potential for Buyout

Although AREX lacks strong expansion ability, they have a considerable amount of assets for a company their size. With one of the smallest market caps of an oil company in the region at \$284.14M, they have total assets of \$1.09B, making them a potential target for buyout by a larger firm in the region. Companies such as Exxon have been aggressive in acquiring smaller drillers in recent years. In 2017, Exxon doubled its holdings in the Permian Basin. With a purchase of 275,000 acres of land exchanged for \$5.6 Billion in stock, Exxon proved that bigger companies are actively shopping land in the region. In addition to Exxon, WPX Energy, Diamondback Energy, and Noble Energy have all paid billions to expand in the region in recent years. A takeover of AREX by a company with the ability to tap into the 1500 well sites could be mutually beneficial as AREX is sitting on a considerable amount of resources without the ability to access them due to low working capital. Assets in the Permian Basin are at a premium right now due to the ability to make strong returns even with oil being priced low. For example, Permian oil can be pumped at prices around \$53/ barrel, while other U.S. shale fields require a price of \$60/barrel to pump economically.

## Short Interest and Days to Cover



AREX has a high Short Interest Ratio at 9.52. This, combined with the double helix shape of the graph lines shows that short sellers are having a tough time valuing this volatile stock. With the short positions open for longer periods, electing to short sell could be detrimental.

## Conclusion:

Approach Resources has the potential to generate value for shareholders, but it is inhibited by its lack of working capital and slow expansion. Its low cost method makes it inexpensive to run day-to-day operations, but it also does not give them the ability to tap into all of their resources. The success of the company is dependent on the price of oil, which has the potential to grow exponentially in the next 15 years. For every increase in the price of oil and natural gas, we can expect to see the value of the stock climb. At this point and time, a hold is our greatest chance at regaining some of the loss we have gotten from holding this stock. While there is upside, it is not large or clear enough in order to warrant a buy. If we were to sell our holding of this stock, we would have to realize the full extent of the loss in the fund. There is strong potential to recoup some, if not all of this due to the value of the assets of AREX. A buyout could happen at a premium, or an increase in oil prices could raise the value of the stock. AREX is at a stalemate until this happens, as they cannot expand into their territory as fast as they would like due to cash and lending constraints. If the explicit period growth rate of 9% holds true, this company has a nice upside. Unfortunately, this is contingent on many factors out of control of management. Managerial culture has been actively trying to solve the company's issues, as illustrated by the executive pay cut of around 10% per executive with the exception of their CFO at a -49% pay cut. This gives me faith in that the managers want to fix the losses. Selling AREX at this point could be a mistake, as it is poised to grow with the industry. Buying AREX could also be a mistake as the company could fail. Our best bet of recuperating our loss is to hold and

trust that the price of oil will increase as well as the managers more efficiently using their over \$1 Billion worth of assets.

## Approach Resources, Inc. (AREX)

## CENTER FOR GLOBAL FINANCIAL STUDIES

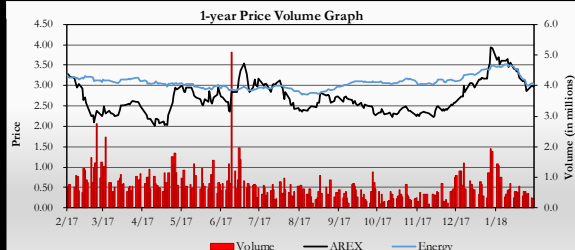
**BULLISH**

Analysis by Eric Bjorklund  
2/16/2018

Current Price: **\$3.13**  
Divident Yield: **0.0%**

Intrinsic Value: **\$5.37**  
Target Price: **\$18.87**

Target 1 year Return: 502.99%  
Probability of Price Increase: 100%



**Description**  
Approach Resources, Inc., an independent energy company, focuses on the acquisition, exploration, development, and production of unconventional oil and gas reserves in the United States.

**General Information**  
Sector: Energy  
Industry: Oil, Gas and Consumable Fuels  
Last Guidance: February 12, 2018  
Next earnings date: March 8, 2018

**Market Assumptions**  
Estimated Equity Risk Premium: 5.00%  
Effective Tax rate: 21%

| Market Data                           |          |
|---------------------------------------|----------|
| Market Capitalization                 | \$286.90 |
| Daily volume (mil)                    | 0.32     |
| Shares outstanding (mil)              | 90.79    |
| Diluted shares outstanding (mil)      | 71.28    |
| % shares held by institutions         | 109%     |
| % shares held by investments Managers | 16%      |
| % shares held by hedge funds          | 3%       |
| % shares held by insiders             | 5.12%    |
| Short interest                        | 7.64%    |
| Days to cover short interest          | 10.77    |
| 52 week high                          | \$4.21   |
| 52-week low                           | \$1.93   |
| Volatility                            | 85.14%   |

| Past Earning Surprises |         |         |
|------------------------|---------|---------|
| Quarter ending         | Revenue | EBITDA  |
| 9/30/2016              | -2.67%  | -2.71%  |
| 12/31/2016             | 0.63%   | -37.60% |
| 3/31/2017              | 0.63%   | 29.24%  |
| 6/30/2017              | -2.84%  | -27.68% |
| 9/30/2017              | 1.42%   | -34.92% |
| Mean                   | -0.57%  | -14.73% |
| Standard error         | 1.0%    | 4.4%    |

| Market and Credit Scores                             |         |
|--|---------|
| Recommendation (STARS) Value--0                      |         |
| Recommendation (STARS) Description--0                |         |
| Quality Ranking Value--C                             |         |
| Quality Ranking Description--Lowest                  |         |
| Short Score--2                                       |         |
| Market Signal Probability of Default % (Non-Ratings) | -1.707% |
| CreditModel Score (Non-Ratings)--b+                  |         |

| Industry and Segment Information    |   |
|-------------------------------------|---|
| LTM Revenues by Geographic Segments | LTM Revenues by Business Segments                             |
| United States--100%                 | Exploration and Production of Oil, NGLs and Natural Gas--100% |

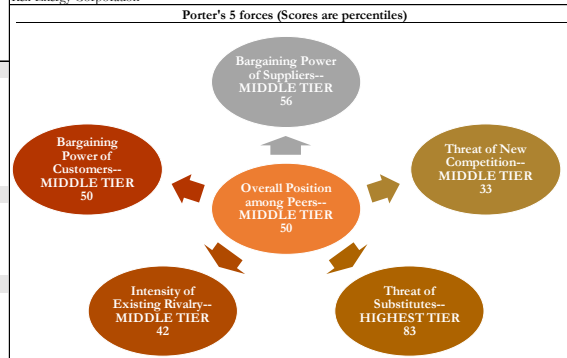
| Management     | Position  | Total Compensations Growth |
|----------------|---|----------------------------|
| Craft, J.      | Founder, Chairman and Chief Executive Officer   | -11.28% per annum over 5y  |
| Yang, Qingming | President and Chief Operating Officer           | -9.27% per annum over 5y   |
| Krylov, Sergei | Chief Financial Officer and Executive Vice Pres | -49.35% per annum over 2y  |
| Henderson, J.  | Chief Administrative Officer and Corporate Sec  | -11.59% per annum over 5y  |
| ogle, Suzanne  | Vice President of Investor Relations and Corpor |                            |
| Dazey, Josh    | VP & General Counsel                            |                            |

| Stock Price Growth During Tenure |                           |
|----------------------------------|---------------------------|
|                                  | -6.68% per annum over 5y  |
|                                  | -9.27% per annum over 5y  |
|                                  | -6.68% per annum over 5y  |
|                                  | -27.59% per annum over 2y |
|                                  | -6.68% per annum over 5y  |

| Peers                         |                          |
|-------------------------------|--------------------------|
| Earthstone Energy, Inc.       | PetroQuest Energy, Inc.  |
| Contango Oil & Gas Company    | Callon Petroleum Company |
| Abraxas Petroleum Corporation | --                       |
| SRG Energy Inc.               | --                       |
| Rex Energy Corporation        | --                       |

| Profitability             |                 |                     |
|---------------------------|-----------------|---------------------|
| AREX (LTM)                | AREX Historical | Peers' Median (LTM) |
| Return on Capital (GAAP)  | -2.9%           | 1.54%               |
| Operating Margin          | -38%            | 5.04%               |
| Revenue/Capital (GAAP)    | 0.08            | 0.31                |
| ROE (GAAP)                |                 | 5.6%                |
| Net margin                |                 | 17.6%               |
| Revenue/Book Value (GAAP) | %VALUE!         | 0.32                |

| Invested Funds           |                 |                     |
|--------------------------|-----------------|---------------------|
| AREX (LTM)               | AREX Historical | Peers' Median (LTM) |
| Cash/Capital             | -0.3%           | 1.1%                |
| NWC/Capital              | -1.6%           | -0.6%               |
| Operating Assets/Capital | 101.9%          | 99.5%               |
| Goodwill/Capital         | 0.0%            | 0.0%                |

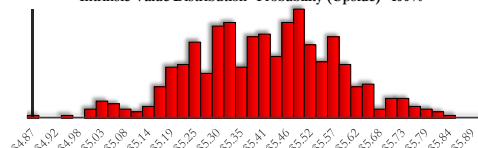


| Capital Structure                                       |                 |                     |
|---|-----------------|---------------------|
| AREX (LTM)  | AREX Historical | Peers' Median (LTM) |
| Total Debt/Market Capitalization                        | 0.41            | 0.29                |
| Cost of Debt  | 5.2%            | 5.2%                |
| CGIS Rating (F-score, Z-score, and default Probability) | CC              |                     |
| WACC  | 11.8%           | 8.4%                |

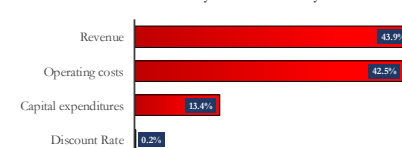
### Valuation

| Forecast Assumptions      |                   |     |
|---------------------------|-------------------|-----|
| Explicit Period (6 years) | Continuing Period |     |
| Revenue Growth CAGR       | 2%                | 9%  |
| Average Operating Margin  | 53%               | 55% |
| Average Net Margin        | -2%               | 23% |
| Growth in Capital CAGR    | 2%                | 2%  |
| Growth in Claims CAGR     | 3%                | 2%  |
| Average Return on Capital | 4%                | 9%  |
| Average Return on Equity  | 2%                | 12% |
| Average Cost of Capital   | 4%                | 6%  |
| Average Cost of EquityKe  | 10%               | 10% |

### Intrinsic Value Distribution--Probability (Upside)=100%



### Sensitivity Attribution Analysis



February, 14, 2017

## Callaway Golf Company: ELY

John Graziano

**Sector:** Consumer Discretionary

**Industry:** Sporting Goods

**Current Price:** \$15.22

**Target Price:** \$18.43

**Company Description:** Callaway Golf Company operates out of Carlsbad, CA. Where the company designs, develops, and markets golf clubs, balls, and golf accessories. The company manufactures titanium drivers, fairway woods, irons, wedges and putters. Callaway is a leader in advanced golf technology both domestically and internationally. Along with the manufacturing of clubs and balls, Callaway has recently acquired companies on the apparel side of the golf business.

### BUY

Current Price: \$15.22

Target Price: \$18.43

Market Cap: 1.465B

Average Volume: 1.03M

D/E Ratio: 0.13

ROIC: 11.6%

WACC: 9.63%

Short Interest: 6.58%/6.5 Days



### Thesis:

Callaway Golf Company is poised to build off a strong FY 2017 where the company saw growth in every segment within every sector. The new Rogue technology will further differentiate Callaway versus the competition within the golf club space. The new ChromeSoft golf ball will take an even larger bite out of Titleist's market-leading position. Lastly, the continued incorporation of the OGIO and TravisMathew acquisitions will spur growth in the golf industry's leading category. This will lead to an increase in share price for Callaway over the following year.

### Catalysts:

- **Short Term(within the year):** Strong Q1 as expressed in Q4 2017 Earnings Call, Continued margin growth in ball segment
- **Mid Term(1-2 years):** Runway for growth in both TravisMathew and OGIO acquisitions, turnaround in golf industry as a whole
- **Long Term(3+):** Continued M&A success, Possible gain from TopGolf IPO



## Industry Performance and Outlook:

The golf industry has been under a great deal of pressure from both external and internal factors. This resulted in the bankruptcy of the major retailer in the space (GolfSmith) in late 2016 and the exit of major players such as Nike. However, as the 2018 season is coming into focus it appears that trend is bottoming out. According to Golf Datatech the equipment portion of the industry was down about 2% in 2017, with apparel being up 6% over the same period. This led to an increase in sales of 1% combined which makes Callaway's revenue increase of 20% year over year very impressive. The most recent Golf Datatech outlook for 2018 stated that



“Consumer research in late 2017 suggested the US Golfer is finally adjusting to higher prices for new equipment, the reduced new product cadence by the major manufacturers (which means fewer close outs/price point offerings), as well as higher launch pricing, all of which have driven ASP's to record levels in most categories of golf products across both hard and soft goods.”

These higher ASP's will lead to increasing top line growth and operating margins for industry players that are well positioned such as Callaway. Along with these positive factors, a stronger overall macroeconomic environment coupled with the recently issued tax cut will lead to higher consumer confidence and an increase in disposable income. All of these factors should lead to an expanding industry in 2018.

---

## Business Segments:

In early 2017, Callaway restructured from two business segments (clubs and balls) to three business segments (clubs, balls, and gear, accessories, other). Callaway holds market-leading positions throughout its golf club segment, is second in market share to Acushnet in golf balls, and just beginning in the gear space through the recent acquisitions of OGIO and TravisMathew. Callaway reported an increase in YoY net sales of 20% due increases in sales across all geographies and operating segments.

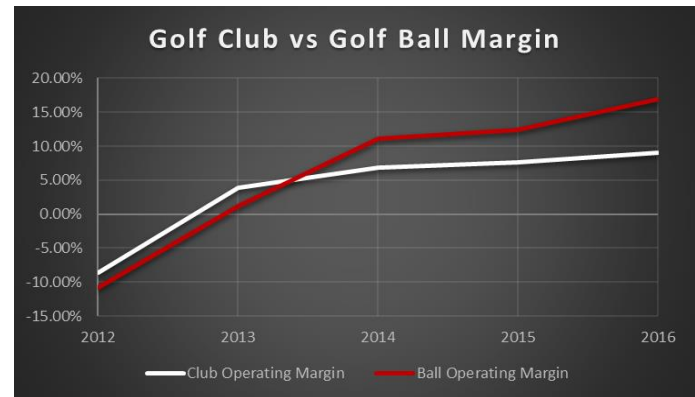
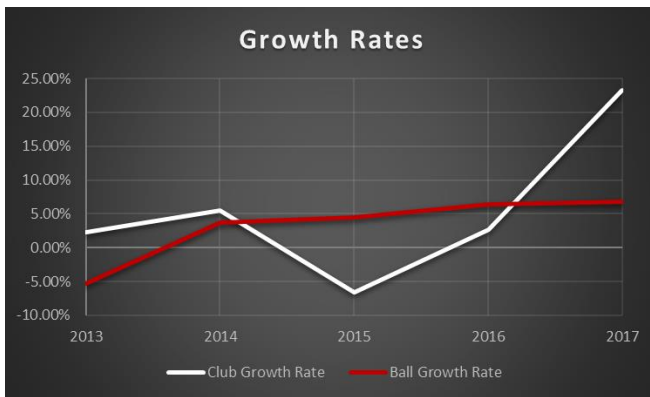


**Golf Clubs:** The club segment is where Callaway has been excelling in recent years holding the number one dollar market share across the board in golf clubs. This has led to a 25.1% market share in clubs which is up roughly 2.5% year over year. A major driver of market share and sales increases in 2017 was the breakout success of the EPIC line of woods containing Callaway's jailbreak technology. According to a Golf WRX study of eight randomly selected individuals, EPIC drivers produced a 5.175 MPH gain in ball speed, 9.837 more yards in carry distance, and 11.675 more yards in total distance versus what the individuals were currently using. This success helped the company advance rapidly in woods and an updated version of Jailbreak Technology will be in the Rogue line of drivers and woods debuting in early 2018.

**Golf Balls:** This segment is where Callaway is becoming a major disruptor with its new technology in their topline ChromeSoft and ChromeSoft X golf balls. Callaway currently holds a 14.3% market share which has solidified its second place spot in the golf world. Second place is important because as of right now Titleist



(Acushnet: GOLF) continues to be the dominant force in the golf ball industry. In the beginning of 2018 Callaway is releasing an updated ChromeSoft that contains a graphene layer which should increase performance dramatically. Callaway is so confident in this new technology that they have raised prices by 13% to \$44.99 a dozen which is still below Titleist's Pro V1 and Pro V1X which come in at \$56 a dozen. In this segment Callaway should see significant YoY growth in terms of both net sales and gross margin improvement.

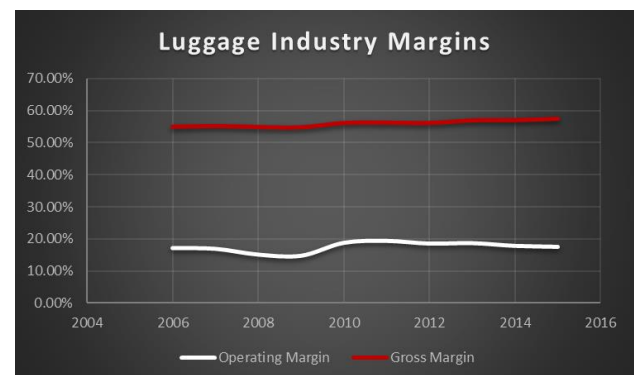


**Gear, Accessories, and Other:** The newest of the segments for Callaway was created in order to accommodate the company's expansion into tangential businesses. This was kicked off with the initiation of an apparel joint venture in Japan which has been successful so far. The two recent acquisitions of OGIO and TravisMathew fall into this segment as well. This is the segment with the largest runway to growth and the highest margin capabilities as evidenced by Titleist's margins in their comparable segment.

## Recent Acquisitions/Investments:

Callaway has completed two major acquisitions in the last twelve months in OGIO and TravisMathew. These companies are both tangential to the golf industry with OGIO producing hard goods such as bags and backpacks and TravisMathew producing golf and other lifestyle apparel. According to the Q4 earnings call both businesses are either on or ahead of schedule post acquisition. Combined they contributed around 65-70M in net sales increases over last year. This is coupled with better operating margins in comparison with the rest of Callaway's core golf businesses.

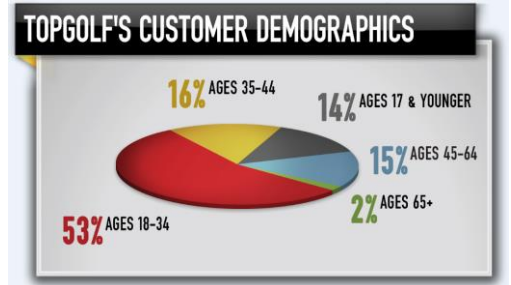
**OGIO:** The OGIO acquisition was completed in January, 2017 at an adjusted all cash purchase price of \$65.95M which translates to an EV/EBITDA multiple of 6.5x. OGIO gives Callaway another means of revenue within the golf bag portion of the industry. Where Callaway maintains a classic look and feel, OGIO can market to a younger demographic with fresher design. OGIO also makes various other bags including travel, athletic and schoolbags, this gives Callaway exposure to a less seasonal industry as well. The luggage industry is also a much higher margin industry both in terms of operating margin and gross margin OGIO contributed around \$50M in revenue to Callaway for the full year of 2017.



**TravisMathew:** The TravisMathew acquisition was completed at the end of August 2017 for \$124.6M in an all cash transaction. This resulted in Callaway paying a 10.1 EV/EBITDA multiple which expensive. The price is

justified by the fact that there are significant brand synergies between the two companies. Travis Mathew had full year revenue of \$60M of which around \$20M is attributable to Callaway. In the Q4 conference call, Travis Mathew guidance included double-digit growth accompanied with improving gross and operating margins. Titleist's operating margin for their gear and apparel segment of business has hovered right around 32.5% which is a drastic increase in margin compared to Callaway. In the future these acquisitions will enhance margins, EBITDA, and free cash flow. The development of these acquisitions, without debt, will lead to increase in value and therefor an increase in stock price.

**TopGolf Investment:** TopGolf blends technology and entertainment to create a driving range that is mixed with an upscale bar/nightclub to create a one of a kind consumer experience. Over 2017, TopGolf attracted 13M unique guests to 40 locations world-wide. Callaway recently invested \$20M more into the company bringing the total cost of Callaway's investment to \$70.5M which has a street value of over \$290M. This equates to around \$3.00 of Callaway's share price.



## Tour Staff:

Any major golf brand needs PGA Tour exposure, what better promotes a brand than having the best players in the world use your product? Callaway has some of the most recognizable stars in golf with Phil Mickelson, Jim Furyk, and Tom Watson. Callaway also has some of the brightest young players in the game in Daniel Berger, Patrick Reed, and Maverick McNeely. Callaway recently signed the defending Master's champion Sergio Garcia. Sergio also managed to win in his first tournament with a full bag of Callaway equipment. The tour players have also been very positive on the new ChromeSoft containing the graphene layer which is a good sign for the mass marketing of the ball.

## Debt:

Callaway carries little to no long term debt on a regular basis. The little debt they do have is in a \$330M revolving credit facility which is secured by certain assets, including cash (to the extent pledged by the Company), inventory and accounts receivable of the Company's subsidiaries in the United States, Canada and the United Kingdom. The average applicable interest rate to this portion of debt is as of the end of 2017, 3.18%. There is also a revolving credit line used specifically for business done in Japan which amounts to 3-4B yen that has been extended from a one-year term to a three-year term as of February 2018.

## 2018 Outlook:

Callaway is looking to build off of a strong FY2017 that saw great success in the Drivers and Woods line and an increase in golf ball market share which is key. There will be three main drivers for advancement in 2018 as far as Callaway is concerned. First, market conditions should continue to build off of the strong close to 2017 and begin to show growth for 2018. Next, on the Q4 conference call Callaway senior executives were very optimistic on the launch cadence for 2018 which includes the Rogue family and new ChromeSoft ball in the first half of the year. Lastly, the continued integration, growth, and margin improvements from both the OGIO and Travis Mathew acquisitions going forward. These three factors will lead to growth company company wide and in turn an increase in stock price.

## Conclusion:

Taking into account the increasing market share, more beneficial product mix, and the on or ahead of schedule acquisitions, Callaway should be poised for another year of growth. Starting in 2018 the company will see improving EBITDA margin which by 2025 should increase to around 14%. Along with a company-wide revenue growth of 5% this will lead to share price appreciation in both the near and long term windows. My one-year price target for Callaway is \$18.43. for a return of 15.81%.

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## Callaway Golf Company (ELY)

## CENTER FOR GLOBAL FINANCIAL STUDIES

NEUTRAL

Analysis by John Graziano

2/16/2018

Current Price:

\$15.99

Divident Yield:

0.3%

Intrinsic Value

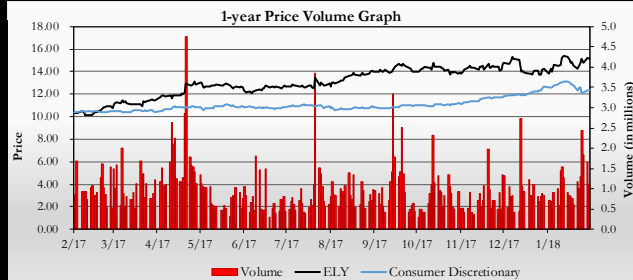
\$18.52

Target Price

\$18.37

Target 1 year Return: 15.12%

Probability of Price Increase: 100%



| Description   |                        |
|---|------------------------|
| Callaway Golf Company, together with its subsidiaries, designs, manufactures, and sells golf clubs, golf balls, golf bags, and other golf-related accessories in the United States and internationally. |                        |
| General Information   |                        |
| Sector  | Consumer Discretionary |
| Industry  | Leisure Products       |
| Last Guidance   | February 12, 2018      |
| Next earnings date  | April 23, 2018         |
| Market Assumptions  |                        |
| Estimated Equity Risk Premium   | 6.18%                  |
| Effective Tax rate  | 26%                    |

| Market Data                           |            |
|---------------------------------------|------------|
| Market Capitalization                 | \$1,464.37 |
| Daily volume (mil)                    | 0.81       |
| Shares outstanding (mil)              | 94.54      |
| Diluted shares outstanding (mil)      | 96.58      |
| % shares held by institutions         | 109%       |
| % shares held by investments Managers | 73%        |
| % shares held by hedge funds          | 8%         |
| % shares held by insiders             | 1.50%      |
| Short interest                        | 6.48%      |
| Days to cover short interest          | 6.57       |
| 52 week high                          | \$15.95    |
| 52-week low                           | \$9.99     |
| Volatility                            | 25.60%     |

| Past Earning Surprises |         |
|------------------------|---------|
| Quarter ending         | Revenue |
| 12/31/2016             | -3.65%  |
| 3/31/2017              | 9.28%   |
| 6/30/2017              | 3.45%   |
| 9/30/2017              | 15.70%  |
| 12/31/2017             | 4.73%   |
| Mean                   | 5.90%   |
| Standard error         | 1.0%    |

| EBITDA         |          |
|----------------|----------|
| 12/31/2016     | 14.11%   |
| 3/31/2017      | 23.52%   |
| 6/30/2017      | 9.90%    |
| 9/30/2017      | 1212.02% |
| 12/31/2017     | -19.03%  |
| Mean           | 248.10%  |
| Standard error | 12.8%    |

| Market and Credit Scores                             |         |
|--|---------|
| Recommendation (STARS) Value--0                      |         |
| Recommendation (STARS) Description--0                |         |
| Quality Ranking Value--B-                            |         |
| Quality Ranking Description--Lower                   |         |
| Short Score--2                                       |         |
| Market Signal Probability of Default % (Non-Ratings) | -0.617% |
| CreditModel Score (Non-Ratings)--bbb-                |         |

| Management       |   |
|------------------|---|
| Brewer, Oliver   | CEO, President & Director                         |
| Lynch, Brian     | CFO, Senior VP, General Counsel & Secretary       |
| Leposky, Mark    | Senior Vice President of Global Operations        |
| Howie, Neil      | Managing Director of Europe, Middle East & Africa |
| Thomas, Jennifer | Chief Accounting Officer and Vice President       |
| Burke, Patrick   | Vice President of Finance & Investor Relations    |

| Total Compensations Growth |  |
|----------------------------|--|
| 2.38% per annum over 4y    |  |
| 13.63% per annum over 2y   |  |
| 6.39% per annum over 3y    |  |
| 8.95% per annum over 4y    |  |

| Industry and Segment Information    |  |
|-------------------------------------|--|
| LTN Revenues by Geographic Segments | LTM Revenues by Business Segments                    |
| United States--54%                  | Golf Clubs (Excluding Gear/ Accessories/ Other)--61% |
| Europe--13%                         | Golf Balls--15%                                      |
| Japan--19%                          | Gear/ Accessories/ Other--23%                        |
| Rest of Asia--7%                    | --   |
| Other Countries--6%                 | --   |

| Profitability             |                |
|---------------------------|----------------|
| ELY (LTM)                 | ELY Historical |
| Return on Capital (GAAP)  | 11.1%          |
| Operating Margin          | 9%             |
| Revenue/Capital (GAAP)    | 1.27           |
| ROE (GAAP)                | 5.0%           |
| Net margin                | 3.3%           |
| Revenue/Book Value (GAAP) | 1.50           |

| Peers' Median (LTM) |  |
|---------------------|--|
| 21.30%              |  |
| 10.55%              |  |
| 2.02                |  |
| 44.5%               |  |
| 5.3%                |  |
| 8.36                |  |

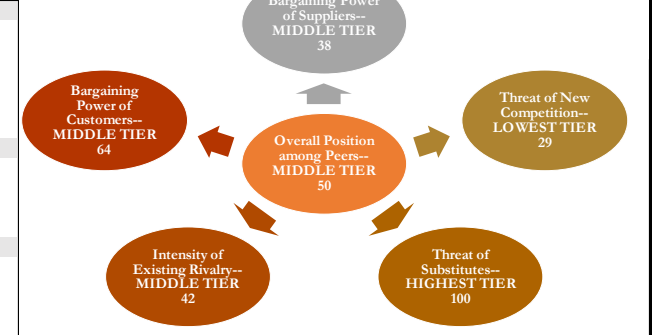
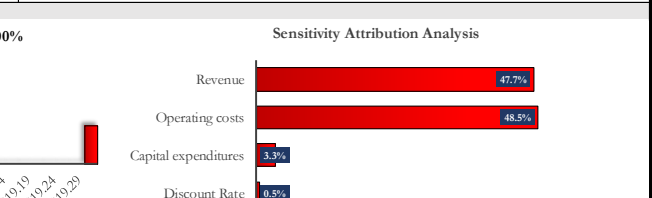
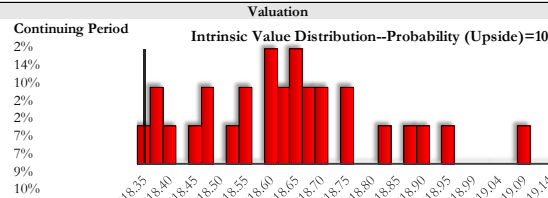
| Invested Funds            |                |
|---------------------------|----------------|
| ELY (LTM)                 | ELY Historical |
| Cash/ Capital             | 9.6%           |
| NWC/ Capital              | 16.2%          |
| Operating Assets/ Capital | 74.2%          |
| Goodwill/ Capital         | 0.0%           |

| Peers' Median (LTM) |  |
|---------------------|--|
| 16.3%               |  |
| 17.8%               |  |
| 51.1%               |  |
| 14.8%               |  |

| Capital Structure                                       |                |
|---|----------------|
| ELY (LTM)   | ELY Historical |
| Total Debt/Market Capitalization                        | 0.15           |
| Cost of Debt  | 7.8%           |
| CGFS Rating (F-score, Z-score, and default Probability) | BBB            |
| WACC  | 10.2%          |

| Peers' Median (LTM) |  |
|---------------------|--|
| 0.42                |  |
| 3.6%                |  |
| 8.8%                |  |

| Forecast Assumptions      |     |
|---------------------------|-----|
| Revenue Growth CAGR       | 4%  |
| Average Operating Margin  | 12% |
| Average Net Margin        | 7%  |
| Growth in Capital CAGR    | 6%  |
| Growth in Claims CAGR     | -3% |
| Average Return on Capital | 7%  |
| Average Return on Equity  | 7%  |
| Average Cost of Capital   | 9%  |
| Average Cost of EquityKc  | 10% |



February 16, 2018

## Spirit Airlines, Inc.: (SAVE)

Theodore Wind

Sector: Industrials

Industry: Airlines

Current Price: \$39.64

Target Price: \$49.93

Spirit Airlines is an ultra-low cost airline with destinations in the United States, Canada, Mexico, Central and South America, and the Caribbean. Spirit is different from other major airlines because they allow the customer to choose exactly what they want to pay for in addition to the original ticket price. This includes baggage, seat preference, and food on-board the aircraft.



## BUY

|                |         |
|----------------|---------|
| Current Price: | \$39.64 |
| Target Price:  | \$49.93 |
| Market Cap:    | \$2.7B  |
| Beta:          | 1.15    |
| ROE:           | 26.5%   |
| Profit Margin: | 15.89%  |
| Ke:            | 11.30%  |
| ROIC:          | 14.88%  |
| WACC:          | 9.10%   |
| P/E:           | 11.72   |

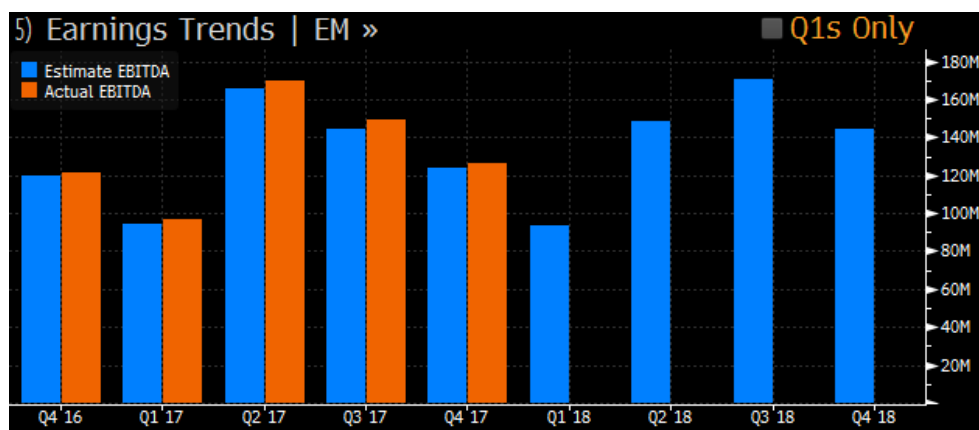
## Catalysts:

- Short Term (within the year): Quarters two and three are upcoming which are consistently their best quarters. As well as positive jobs report.
- Mid Term (1-2 years): Increasing number of airports serviced both domestically and internationally, as well as increasing size of their fleet.
- Long Term (3+): Increased consumer confidence in budget airlines along with millennials entering the workforce, who tend to be more price sensitive.

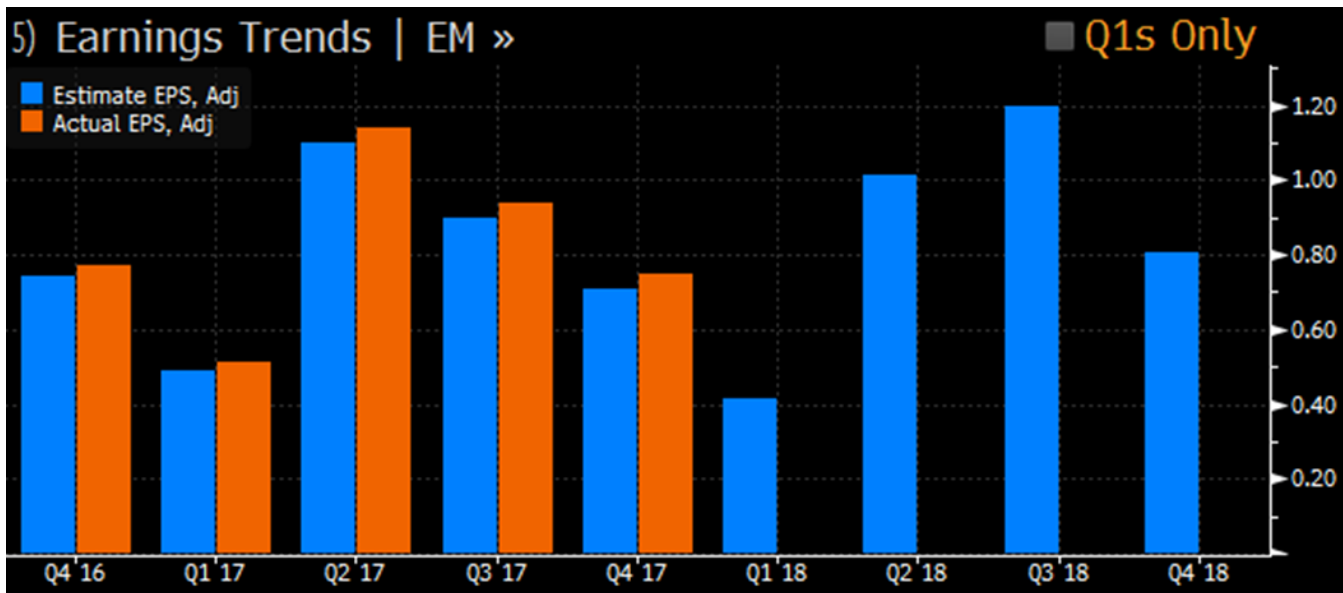
**Thesis:** Spirit Airlines is poised to become the leader in ultra-low cost airfare in North America due to their constant growth to different markets, as well as a growing demand for low-cost airfare. Spirit has outperformed analysts' revenue estimates three quarters in a row by an average of 0.2%. The airline industry is a seasonal industry, and that is no different for Spirit who sees their best quarters for revenue consistently being the second and third quarters each year. Therefore, now is the best time to buy Spirit as they are currently undervalued in the market because they are in the tail end of their slow period, and will draw more interest from investors as the airline industry picks up starting in quarter 2. Quarter 2 will have especially high revenues this year due to the early Easter holiday (April 1), as well as Spring Break revenue that falls mostly in quarter 2. Spirit Airlines growth strategy is to increase the size of their fleet, increase the number of destinations served, and increasing the size of the aircrafts as well as size of the aircrafts. Spirit Airlines is a currently a cheap stock that is backed by a solid company with both short and long-term growth potential.

## Earnings Performance:

According to their CFO Ted Christie, Spirit Airlines had a year over year cost per available seat mile (CASM) reduction of 4.4% that helped them to beat analysts' estimates of EBITDA. Another positive for Spirit was their ancillary revenue increased 3.8% year over year, which is more important to Spirit than other airlines because their ancillary revenue accounts for about half of their total revenue. Spirit also plans to roll out further enhancements in 2017 that will allow them to further leverage their technology, improve their ability to both price, and merchandise their non-ticket products. This includes a plan to revise their app and launch a 2.0 version that is easier for customers to use and understand. This will help Spirit to deliver higher ancillary revenue per passenger in 2018. Their revenue per available seat mile (RASM) did decrease 1.8%. However, their performance during the peak periods was better than originally forecasted. The chart below shows the earnings trends over the last five quarters compared to analysts' estimates for EBITDA as well as projections for the next four quarters. The most noticeable thing to observe in this graph is the fact that Spirit has been able to outperform analysts' estimates for EBITDA 5 out of the last 5 quarters. This graph also clearly shows the seasonality that Spirit experiences as we are currently in the midst of quarter one, which is projected to be their poorest performing quarter. The earnings per share chart is also shown below. This shows that analysts consistently underestimate the EPS for Spirit. Spirit being able to consistently outperform analysts' estimates makes me believe that they understand how to manage their costs appropriately. This can be seen in their reduction in CASM over a year that was not the best for Spirit. I believe they are also able to generate more revenue than estimated because of their business plan that unbundles everything and forces the customer to pay extra for items that other airlines would normally include in the ticket price. Ancillary revenue is key to the success of Spirit Airlines. I believe Spirit is a cheap stock currently with a history of outperforming analysts' estimates and generating returns to investors.





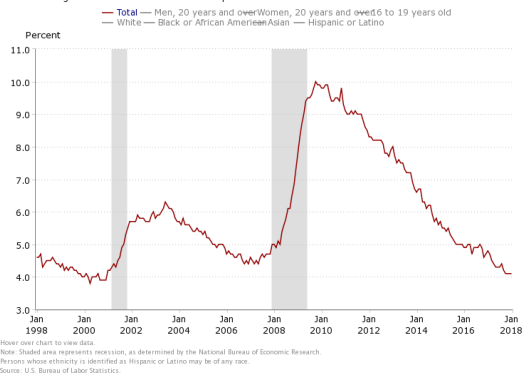


## United States Economy:

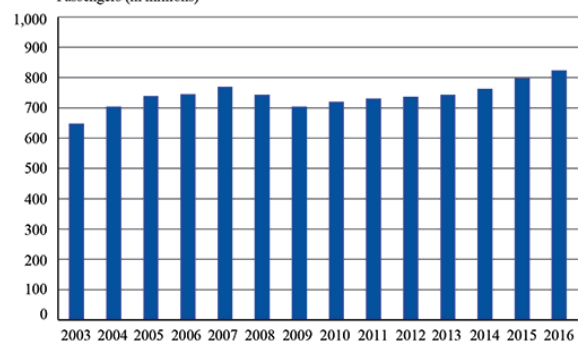
Another major reason why Spirit Airlines will be successful is the recent jobs and wages report done by the United States Bureau of Labor Statistics. This recent report has unemployment approaching all-time lows along with an increase in wages. The civilian unemployment rate is shown in the picture below on the left. This is especially exciting news to the travel industry because that means more people have the disposable income to spend on airfare. Historically, the lower the unemployment the better the Airline industry performs. Spirit is also in a unique position to be successful because they are an ultra-low cost provider, this means they are able to reach a larger customer base as they are significantly more affordable than their other competitors. Another trend, shown in the graph below on the right, is the trend in airline passengers per year provided by the Bureau of Transportation Statistics. As you can see, there is an upward trend since 2013, with no signs of slowing down especially if the economy continues to do as well as it has been doing in recent months. These two economic factors will result in Spirit Airlines increasing the amount of passengers serviced and the demand for flights. These statistics are especially important as they are trying to increase the number of airports that they service. Increasing the amount of passengers will help to offset the costs associated with the aggressive growth plan that Spirit has outlined in recent company filings.

Civilian unemployment rate, seasonally adjusted

Click and drag within the chart to zoom in on time periods



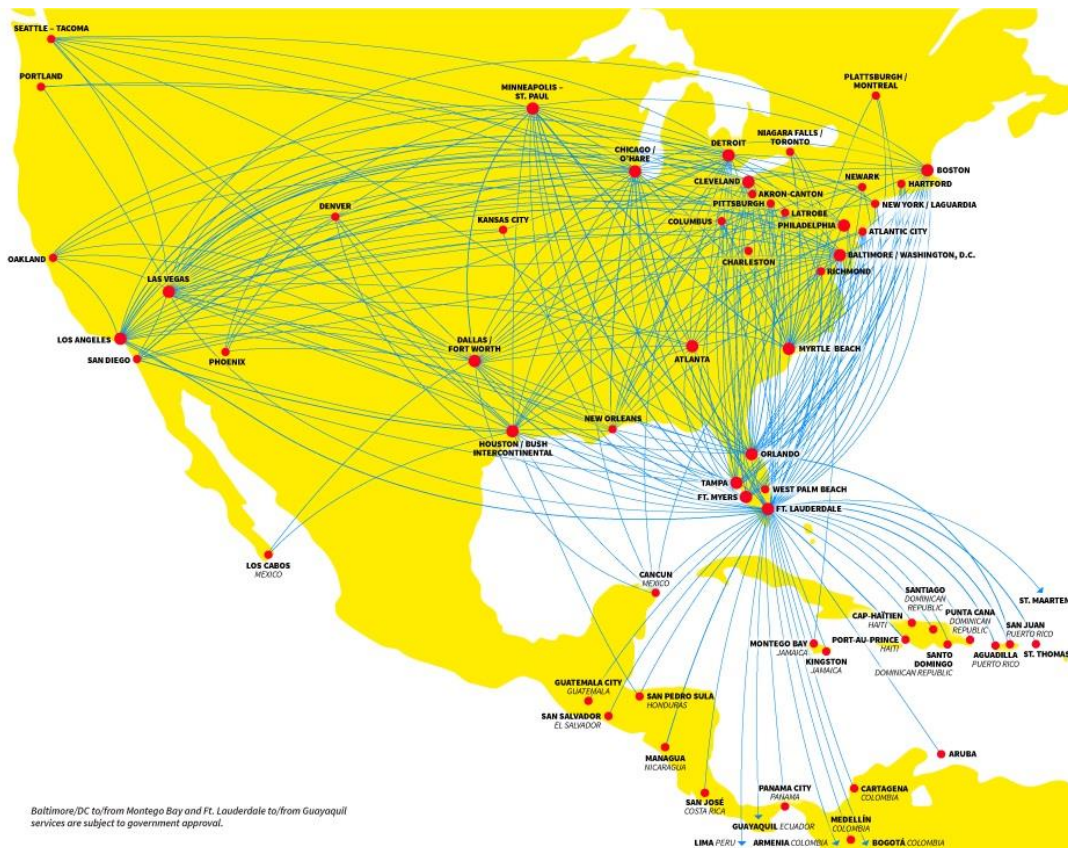
Passengers (in millions)



## Growth Strategy:

Spirit Airlines has a very aggressive growth strategy over the next couple of years. Barring any catastrophic events such as major airline terrorist attacks, which would scare travelers away, I believe they will be able to fully implement this growth strategy. Their growth strategy includes adding more airlines to their fleet, increasing the size of airlines in their fleet, increase frequency of flights, and increase the number of destinations to which they fly. As far as an increased fleet, Spirit currently has an order placed with Airbus for nine A320neo's and five A320ceo's scheduled for delivery in 2019. This increases the size of their fleet tremendously in one year, and this also allows them to also increase the frequency of flights.

Another way Spirit plans to grow over the next year is to increase the number of destinations that they serve. In 2018, Spirit plans to add service to two international destinations that include Guayaquil, Ecuador and Cap-Haïtien, Haiti. This is important for Spirit because it shows they are a willing to expand beyond the United States to extend their brand. Additionally, Spirit announced services to start to Richmond, Virginia and Columbus, Ohio. This is in addition to adding Pittsburgh, Pennsylvania and Hartford, Connecticut in 2017. In addition to new locations of service, Spirit also announced an additional 24 routes that will be newly serviced in 2018. Below is a map showing the destinations and routes that Spirit now flies including the destinations and routes they have announced for 2018.



This aggressive growth strategy both domestically and abroad is critical for Spirit Airlines future growth and success. They are committed to becoming a leader in the airline industry by providing low cost flights across the United States, Central America, and the Caribbean. This allows us to get in now while the stock is cheap and reap the profits as Spirit Airlines network continues to grow along with their popularity.

## Competitor Analysis:

| Name                       | Ticker  | Mkt Cap | Rev - 1 Yr Gr:Y | OPM:Y  | ROIC/WACC Ratio |
|----------------------------|---------|---------|-----------------|--------|-----------------|
| Median                     |         | 4.63B   | 8.06%           | 16.19% | 1.39            |
| 100) SPIRIT AIRLINES INC   | SAVE US | 2.73B   | 14.03%          | 15.32% | 1.63            |
| 101) ALLEGiant TRAVEL CO   | ALGT US | 2.70B   | 10.34%          | 17.45% | 1.21            |
| 102) JETBLUE AIRWAYS CORP  | JBLU US | 6.53B   | 5.78%           | 14.26% | -0.45           |
| 103) SOUTHWEST AIRLINES CO | LUV US  | 34.45B  | 3.65%           | 17.06% | 1.56            |

The above table shows how Spirit compares with the closest competitors. According to their most recent 10k filing they deem their biggest competitors to be Jet Blue Airways and Southwest Airlines based on route overlap. However, their closest competitor as far as an ultra-low cost airline with almost the same market cap is Allegiant Travel Corporation. They both have a very similar market cap of about 2.7 billion dollars. The first number I chose to look at was year over year revenue growth. I chose this metric because I believe that Spirit is a company in the growth phase, and the most important thing for them right now is gaining market share and popularity. Of the competitors I chose to look at they had the best year over year revenue growth at 14.03% compared to the competitor median of 8.06%. This is a positive because this means that their expansion to other destinations is paying off in terms of revenue, and justifies their continued expansion in 2018.

The next ratio I chose to look at was operating margin. When looking at this ratio Spirit was only able to outperform JetBlue at 15.32% for Spirit compared to 14.26% for Jet Blue. However, Allegiant and Southwest were able to maintain operating margins of about 17%. When diving into the income statement to understand why Spirit underperformed one major thing jumped out to me. Spirit paid approximately one hundred and fifty thousand dollars more for fuel in 2017 compared to 2016 and 2015. According to company filings this is because they get most of their fuel from the Gulf of Mexico, which was brutalized by hurricane Harvey in 2017. I believe this is contributing heavily to Spirit being undervalued at this time. While that region is often hit by hurricanes, few if any have ever been that severe in the region, so going forward I expect the amount paid for fuel to drop.

The third ratio I chose to compare was the ROIC/WACC ratio. This ratio tells investors whether or not the company is creating value. A number above one indicates that the company is creating value for investors, and a number below one indicates that the company is destroying value. According to the results Spirit Airlines is creating the most value for investors with a ROIC/WACC ratio of 1.63. The median of the competitors I chose was 1.39. Therefore, Spirit is definitely creating value for investors and further proves that they are currently undervalued in the market.

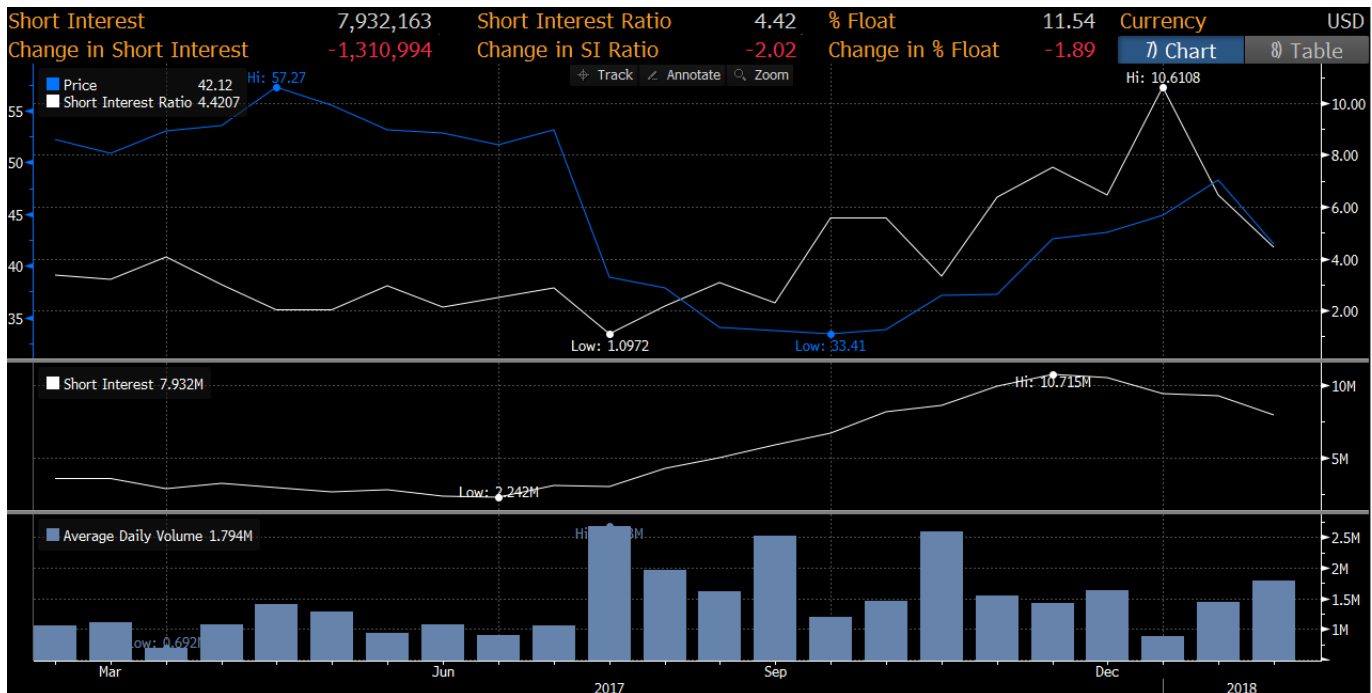
In summary when looking at Spirit's numbers compared to their competitors I believe that they are a solid company that is currently undervalued in the market. They are continuing to increase their revenue, and while that does not mean they are necessarily creating profits it is a positive sign for the company. I believe in the coming years their operating margin will improve because last year it was negatively impacted by one of the worst hurricanes in recent history. Finally, they are the best out their closest competitors at creating value for shareholders according to their ROIC/WACC ratio.

## Stock Ownership/Short Interest:

To the right we can look at who owns the stock. The top holders are investment advisors followed by hedge fund managers. Having hedge fund managers as the second highest ownership group is a positive sign because they are the most aggressive investors with the highest expectations for returns over the short term especially. This helps to prove my theory that the stock is currently undervalued. I understand that they only own about 6%, but they must believe that Spirit is undervalued and due to break out for exceptional returns.

| Top Ownership Type (%)    |          |       |        |   |
|---------------------------|----------|-------|--------|---|
| 54) Ownership Type        | 02/11/18 | Curr  | Change |   |
| 41) Investment Advisor    | 88.35    | 88.60 | +0.25  | ↗ |
| 42) Hedge Fund Manager    | 5.35     | 5.80  | +0.45  | ↗ |
| 43) Pension Fund          | 2.75     | 2.57  | -0.18  | ↘ |
| 44) Individual            | 0.75     | 0.67  | -0.08  | ↘ |
| 45) Insurance Company     | 0.70     | 0.62  | -0.08  | ↘ |
| 46) Bank                  | 0.82     | 0.59  | -0.23  | ↘ |
| 47) Corporation           | 0.45     | 0.40  | -0.05  | ↘ |
| 48) Brokerage             | 0.37     | 0.34  | -0.03  | ↘ |
| 49) Sovereign Wealth Fund | 0.29     | 0.25  | -0.04  | ↘ |

Below is the chart showing the change in short interest over the past year. It hit a low around July and then spiked all the way to almost 11 around January of this year. I believe this has to do with the seasonality of the airline industry as well as in July Spirit has problems with flight cancellations due to their pilot contracts. I believe this made investors believe the company was in trouble and the short position avalanched to its high. Spirit in January reached a tentative agreement with the pilot union for a five-year contract. I believe this news is why the short interest is now down to around four. This contract problem once again proves that Spirit had an outlier year in 2017 between Hurricane Harvey and the pilot dispute. Now is the time to take advantage of this mispricing because in 2018 and beyond Spirit is poised to take off.



## Conclusion:

In conclusion, I believe Spirit is currently undervalued in the market and it would be a perfect time to add more shares to our portfolio. They are undervalued because of a series of unfortunate events that happened in 2017 that are not likely to happen again. First, was the devastation caused by hurricane Harvey. This not only did an incredible amount of damage to communities, but also caused Spirit to pay more for oil as they get most of their oil from the Gulf of Mexico. The second event, and I believe the one that scared most investors the most, in 2017 was the pilot contract dispute. This caused almost 800 flight delays and cancellations costing Spirit an estimated \$45 million in revenue. Through my projections, I have their target price at \$49.93, I believe this a very achievable number because Spirit is a solid company with favorable industry comparisons. They are not completely dependent on tickets sold for revenue as almost half of their revenue is ancillary from items such as baggage and preferred seating, just to name a few. In addition, Spirit Airlines has an aggressive growth strategy not only increasing their fleet, but also increasing their number of destinations served. This growth strategy is for both domestic and international locations, which is a big deal for Spirit especially because they receive a lot of revenue from spring break vacations, which are often to the Caribbean and Mexico. Now is the time to buy Spirit before investors realize how undervalued the stock is with their peak quarters coming up in 2018. They are due to have a great quarter two between an early Easter and Spring Break. Spirit Airlines is going to break out in 2018 and I believe we need to get in now to take advantage of this mispricing before the opportunity is gone.



## Spirit Airlines, Inc. (save)

## CENTER FOR GLOBAL FINANCIAL STUDIES

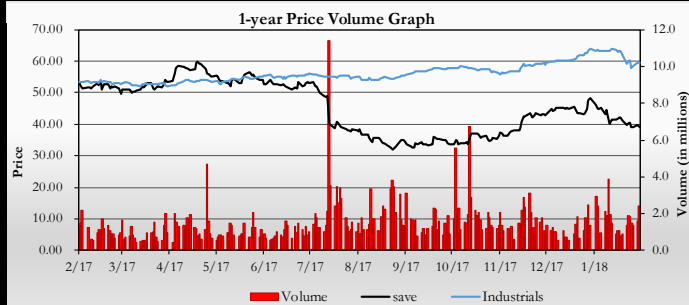
**BULLISH**

Analysis by Al Capone  
2/16/2018

Current Price: **\$39.64**  
Divident Yield: **0.0%**

Intrinsic Value **\$46.90**  
Target Price **\$49.55**

Target 1 year Return: 25%  
Probability of Price Increase: 99.6%

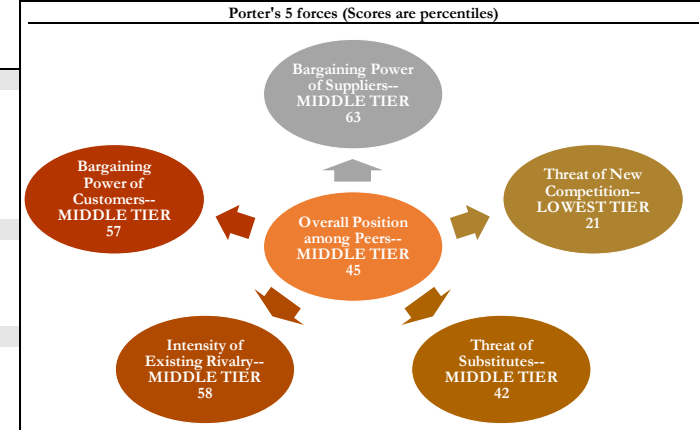


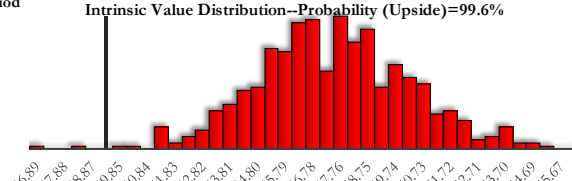
| Description   |                   |
|---|-------------------|
| Spirit Airlines, Inc. provides low-fare airline services. |                   |
| General Information                                       |                   |
| Sector  | Industrials       |
| Industry  | Airlines          |
| Last Guidance   | February 12, 2018 |
| Next earnings date  | February 21, 2018 |
| Market Assumptions  |                   |
| Estimated Equity Risk Premium                             | 5.50%             |
| Effective Tax rate  | 21%               |

| Market Data                           |            |
|---------------------------------------|------------|
| Market Capitalization                 | \$2,703.96 |
| Daily volume (mil)                    | 1.17       |
| Shares outstanding (mil)              | 68.21      |
| Diluted shares outstanding (mil)      | 69.38      |
| % shares held by institutions         | 109%       |
| % shares held by investments Managers | 91%        |
| % shares held by hedge funds          | 10%        |
| % shares held by insiders             | 0.52%      |
| Short interest                        | 11.63%     |
| Days to cover short interest          | 5.39       |
| 52 week high                          | \$60.28    |
| 52-week low                           | \$30.32    |
| Volatility                            | 38.30%     |

| Past Earning Surprises                                  |   |                            |
|---|---|----------------------------|
| Quarter ending  | Revenue   | EBITDA                     |
| 12/31/2016  | -0.03%  | -33.90%                    |
| 3/31/2017   | -0.04%  | -35.43%                    |
| 6/30/2017   | 0.23%   | -24.08%                    |
| 9/30/2017   | 0.24%   | -25.91%                    |
| 12/31/2017  | 0.13%   | -17.62%                    |
| Mean  | 0.11%   | -27.39%                    |
| Standard error  | 1.0%  | 3.5%                       |
| Management  |   | Total Compensations Growth |
| Fornaro, Robert   | CEO & Director                                  | 726.97% per annum over 2y  |
| Christie, Edward  | President, CFO & Director                       | -20.12% per annum over 4y  |
| Bendoraitis, John                                       | Chief Operating Officer and Senior Vice Preside | -15.64% per annum over 3y  |
| Wiggins, Rocky  | Chief Information Officer and Senior Vice Presi |                            |
| Canfield, Thomas  | Senior Vice President, General Counsel and Comp | 14.22% per annum over 5y   |
| McMenamy, Brian   | VP, Controller & Principal Accounting Officer   |                            |
| Profitability   |   | Peers' Median (LTM)        |
| Return on Capital (GAAP)                                | 16.4%   | 4.63%                      |
| Operating Margin  | 21%   | 4.38%                      |
| Revenue/Capital (GAAP)                                  | 0.76  | 1.06                       |
| ROE (GAAP)  | 24.0%   | 9.1%                       |
| Net margin  | 12.7%   | 2.9%                       |
| Revenue/Book Value (GAAP)                               | 1.90  | 3.13                       |
| Invested Funds  |   | Peers' Median (LTM)        |
| Cash/Capital  | 19.8%   | 16.1%                      |
| NWC/Capital   | -2.3%   | -20.7%                     |
| Operating Assets/Capital                                | 82.5%   | 96.9%                      |
| Goodwill/Capital  | 0.0%  | 7.7%                       |
| Capital Structure                                       |   | Peers' Median (LTM)        |
| Total Debt/Market Capitalization                        | 0.61  | 0.64                       |
| Cost of Debt  | 4.6%  | 4.3%                       |
| CGFS Rating (F-score, Z-score, and default Probability) | BB  |                            |
| WACC  | 6.9%  | 7.8%                       |

| Industry and Segment Information    |  |
|-------------------------------------|--|
| LTN Revenues by Geographic Segments | LTM Revenues by Business Segments                |
| United States--92%                  | Provides Air Transportation for Passengers--100% |
| Latin America--8%                   | --   |
| --                                  | --   |
| --                                  | --   |
| --                                  | --   |
| Peers                               |  |
| Hawaiian Holdings, Inc.             | Southwest Airlines Co.                           |
| JetBlue Airways Corporation         | American Airlines Group Inc.                     |
| Allegiant Travel Company            | JetBlue Airways Corporation                      |
| SkyWest, Inc.                       | United Continental Holdings, Inc.                |
| Alaska Air Group, Inc.              | Delta Air Lines, Inc.                            |



| Valuation  |                            |                   |
|--|----------------------------|-------------------|
| Forecast Assumptions   | Explicit Period (12 years) | Continuing Period |
| Revenue Growth CAGR  | 6%                         | 2%                |
| Average Operating Margin   | 24%                        | 27%               |
| Average Net Margin   | 11%                        | 11%               |
| Growth in Capital CAGR   | 9%                         | 2%                |
| Growth in Claims CAGR  | 5%                         | 2%                |
| Average Return on Capital  | 8%                         | 6%                |
| Average Return on Equity   | 12%                        | 6%                |
| Average Cost of Capital  | 7%                         | 8%                |
| Average Cost of EquityKe   | 10%                        | 10%               |
| Intrinsic Value Distribution--Probability (Upside)=99.6%                             |                            |                   |
|  |                            |                   |
| Sensitivity Attribution Analysis   |                            |                   |
| Revenue  | 16.1%                      |                   |
| Operating costs  | 48.6%                      |                   |
| Capital expenditures   | 35.3%                      |                   |
| Discount Rate  | 0.0%                       |                   |