October 26, 2018

Palo Alto Networks (PANW)

Michael Grasso

Sector: Information Technology
Industry: Cyber Security

Company: Palo Alto Networks, Inc. is an American multinational cybersecurity company. Its core products includes advanced firewalls and cloud-based offerings that extend those firewalls to cover other aspects of security.

BUY AT $175

Current Price:	$187
Target Price:	$205
Market Cap:	17.723 B
Avg Volume:	1.3 M
ROE:	11.34%
ROIC:	-7.04%
WACC:	8.63%
Cash/Total Assets:	43.05%
Short Interest:	4.8%

Thesis:.

Palo Alto Networks is a global enterprise cyber security leader. Also, they are investing in research in other areas such as A.I. and future technology that could a great benefit to their company as well as society as a whole. They are growing and acquiring competition very rapidly as they gain a significant amount more of the market each year. Therefore, a limit buy order at $175 would be a safe investment due to buying at a price much lower than current valuations.

Catalysts:

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

- Short Term: Finalize acquisition of RedLock
- Mid Term: Gain a larger addressable market & restructure selling expenses
- Long Term: Explore other possible acquisitions

Palo Alto Networks: "We have pioneered the next generation of security through our innovative Security Operating Platform that empowers enterprises, service providers, and government entities to secure their organizations by safely enabling applications and data running in their networks, on their endpoints, and in the cloud, and by preventing breaches that stem from targeted cyberattacks."

Earnings & Industry Analysis

Palo Alto Networks is very unique in terms of earnings. The company generates very strong cash flows as can be seen by increasing revenue and gross profit every single year since the IPO occurred in 2012.

11) Adj Highlights | 12) GAAP Highlights | 13) Earnings | 14) Enterprise Value | 15) Multiples | 16) Per Share | 17) Stock Value

In Millions of USD	2008 Y	2009 Y	2010 Y	2011 Y	2012 Y	2013 Y	2014 Y	2015 Y	2016 Y	2017 Y	2018 Y	Current/LTM	2019 Y Est	2020 Y Est
12 Months Ending	07/31/2008	07/31/2009	07/31/2010	07/31/2011	07/31/2012	07/31/2013	07/31/2014	07/31/2015	07/31/2016	07/31/2017	07/31/2018	07/31/2018	07/31/2019	07/31/2020
Market Capitalization	–	–	–	–	3,877.1	3,504.7	6,429.9	15,756.2	11,845.5	12,057.9	18,557.1	17,569.0		
- Cash & Equivalents	–	–	18.8	40.5	322.6	419.6	772.5	789.0	1,285.6	1,375.0	3,403.4	3,403.4		
+ Preferred & Other	–	–	64.5	64.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
+ Total Debt	–	–	0.0	0.0	0.0	0.0	466.9	487.1	500.2	524.7	1,920.1	1,920.1		
Enterprise Value	–	–	–	–	3,554.4	3,085.1	6,124.3	15,454.3	11,060.1	11,207.6	17,073.8	16,085.7		
Revenue, Adj	3.1	13.4	48.8	118.6	255.1	396.1	598.2	928.1	1,378.5	1,761.6	2,273.1	2,273.1	2,776.1	3,288.6
Growth %, YoY	–	327.7	265.4	143.1	115.1	55.3	51.0	55.1	48.5	27.8	29.0	29.0	22.1	18.5
Gross Profit, Adj	0.3	7.1	33.1	86.3	184.6	286.4	438.6	688.8	1,020.8	1,297.3	1,640.1	1,640.1	2,129.5	2,544.6
Margin %	8.6	53.0	68.0	72.8	72.3	72.3	73.3	74.2	74.1	73.6	72.2	72.2	76.7	77.4
EBITDA, Adj	–	-17.9	-13.5	-6.0	10.0	-5.1	-27.7	-91.7	-102.2	-83.3	38.3	38.3	741.9	931.9
Margin %	–	-133.8	-27.7	-5.1	3.9	-1.3	-4.6	-9.9	-7.4	-4.7	1.7	1.7	26.7	28.3
Net Income, Adj	-16.2	-19.0	-17.2	-11.1	1.5	-26.9	-73.0	-190.4	-182.7	-185.9	-98.9	-99.1	507.2	639.4
Margin %	-518.5	-142.3	-35.3	-9.4	0.6	-6.8	-12.2	-20.5	-13.3	-10.6	-4.4	-4.4	18.3	19.4
EPS, Adj	-2.56	-2.01	-1.45	-0.78	0.08	-0.40	-0.98	-2.33	-2.10	-2.05	-1.08	-1.09	5.04	6.16
Growth %, YoY	–	21.5	27.7	46.2	–	–	-148.7	-136.9	10.0	2.2	47.4	47.1		22.1
Cash from Operations	–	-13.5	-2.7	32.1	77.4	114.5	88.4	350.3	658.6	868.5	1,037.0	1,037.0		
Capital Expenditures	–	-1.0	-1.7	-13.0	-14.6	-22.4	-36.1	-33.8	-72.5	-163.4	-112.0	-112.0	-131.3	-142.0
Free Cash Flow	–	-14.6	-4.4	19.1	62.8	92.1	52.3	316.5	586.1	705.1	925.0	925.0	1,085.6	1,259.3

The cyber security is projected to be valued at $170 billion dollars by the year 2022 according to marketwatch. Since the use of the internet and technology has been and will continue to drastically increase, this is a market that will not disappear and is showing no signs of stopping. The cybersecurity specialist's fourth-quarter results, released in September, crushed Wall Street estimates due to a rapidly increasing customer base that accelerated its top and bottom line growth. In fact, the company has strung together a series of impressive quarterly reports over the past year that have helped the stock rally more than 60%. Palo Alto's revenue growth is solid, as the customer base is expanding rapidly and clients are spending more money on its services. The high-margin subscription business now forms a bigger part of total revenue, and it has room to grow. This makes Palo Alto a good bet at the moment, as it trades at nearly 48 times forward earnings, which is much lower than the industry average price to earnings ratio of 114. Palo Alto believes that its addressable market will be worth $24 billion by 2020 as compared to $19 billion last year, so the company is doing the right thing by covering as much ground as possible. It controlled just 1.9% of the cybersecurity market at the end of fiscal 2012, but a series of four acquisitions over the next five years helped it boost that by 7.3% percent to 9.2% at the end of the 2017 fiscal year. The latest market share numbers aren't in yet, but it seems safe to say, based on its accelerated customer growth, that the company has gained. This industry is very cyclical which explains the price drop from around August of this year when the stock was priced close to $240 per share. Naturally, this cyclical drop in price should assist with bringing the price down to a more desirable range for investors before the price will naturally go back up. The competition of Palo Alto has followed the same trend in price decline recently. However, this company is one of the leaders which can be seen when comparing market capitalizations, total revenue and growth. The top competitors that are any threat at all are Symantec, Checkpoint Software and Proofpoint, Inc. However, Palo Alto is still larger in size.

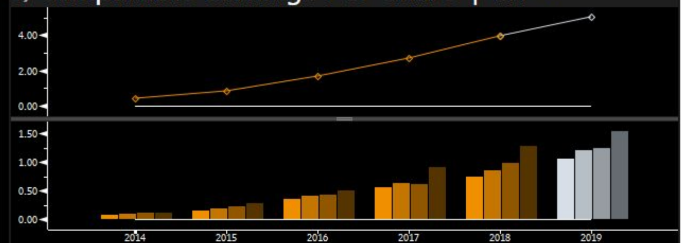
PANW US Equity | 98) Report | Page 4/5 Security Description: Equity

1) Profile | 2) Issue Info | 3) Ratios | 4) Revenue & EPS | 5) Industry Info

6) Comparable Revenue | EM »

(USD)	2014	2015	2016	2017	2018	2019
FY	598.2M	928.1M	1.4B	1.8B	2.3B	2.8B
Q1	128.2M	192.3M	297.2M	398.1M	505.5M	632.5M
Q2	141.1M	217.7M	334.7M	422.6M	542.4M	669.2M
Q3	150.7M	234.2M	345.8M	431.8M	567.1M	690.4M
Q4	178.2M	283.9M	400.8M	509.1M	658.1M	782.7M

7) Comparable Earnings Per Share | EM »



(USD)	2014	2015	2016	2017	2018	2019
FY	.400	.860	1.67	2.71	3.99	5.04
Q1	.080	.150	.350	.550	.740	1.06
Q2	.100	.190	.400	.630	.860	1.20
Q3	.110	.230	.420	.610	.990	1.24
Q4	.110	.280	.500	.920	1.28	1.54

(Fiscal Period: Reported, Estimated)

8) Geo Seg | FA GEO »	2018 Rev	3Yr Gr
United States	1.4B	34.58%
EMEA	439.3M	34.96%
APAC	275.1M	35.74%
Other America	111.5M	34.73%

9) Prod Seg | FA PROD »	2018 Rev	3Yr Gr
Services	1.4B	47.65%
Product	871.5M	20.94%

Acquisitions and Capital Structure:

Palo Alto Networks first acquisition was announced in January of 2014 when they acquired Morta Security. Morta is a cyber security solutions company which had been operating in a form of stealth mode. The next acquisition took place in March of 2014 when the company took over Cyvera. Cyvera develops cyber defense products that prevent remote attacks on Microsoft-based servers and end-points. The increase in cash flows from the acquisition provided much needed cash for more acquisitions within the next few years. These two took place within such a short time span that the company obviously acquired debt from this. They did in fact pay off a large portion of this debt within the next few years. In May of 2015, CirroSecure was taken over. This set the scene for how large Palo Alto was becoming. Within the past two years, four more companies were acquired. LightCyber was bought out for $105 million in February of 2017. In 2018, Secdo and Evident.io were acquired for $100 million and $300 million respectively. The most current acquisition that is taking place in present time is of the company RedLock for $173 million. It is evident that the reason Palo Alto holds such a large portion of their cash is for buying out other companies since they do so very frequently. Now that the company can provide new services after its latest acquisitions, it should be able to improve cross-sales to its existing customers and further reduce the marketing outlay. As a result, Palo Alto's margin profile should get better. Debt wise, the company has convertible bonds outstanding which is important to note. Overall, the debt to enterprise value is very small judging on how large the enterprise value and market cap are comparatively.

Capital Structure Data View As Reported Details View Key Documents						
For the Fiscal Period Ending	12 months Jul-31-2016		12 months Jul-31-2017		12 months Jul-31-2018	
Currency	USD		USD		USD	
Units	Millions	% of Total	Millions	% of Total	Millions	% of Total
Total Debt	500.2	35.9%	524.7	40.9%	1,920.1	66.5%
Total Common Equity	894.9	64.1%	759.6	59.1%	966.4	33.5%
Total Capital	**1,395.1**	**100.0%**	**1,284.3**	**100.0%**	**2,886.5**	**100.0%**

Debt Summary Data View As Reported Details View Key Documents						
For the Fiscal Period Ending	12 months Jul-31-2016		12 months Jul-31-2017		12 months Jul-31-2018	
Currency	USD		USD		USD	
Units	Millions	% of Total	Millions	% of Total	Millions	% of Total
Total Senior Bonds and Notes	500.2	100.0%	524.7	100.0%	1,920.1	100.0%
Total Principal Due	**500.2**	**100.0%**	**524.7**	**100.0%**	**1,920.1**	**100.0%**
Total Debt Outstanding	**500.2**	**100.0%**	**524.7**	**100.0%**	**1,920.1**	**100.0%**
Additional Totals						
Total Cash & ST Investments	1,285.6	-	1,375.0	-	3,403.4	-
Net Debt	(785.4)	-	(850.3)	-	(1,483.3)	-
Total Senior Debt	500.2	100.0%	524.7	100.0%	1,920.1	100.0%
Total Convertible Debt	500.2	100.0%	524.7	100.0%	1,920.1	100.0%
Curr. Port. of LT Debt/Cap. Leases	-	-	-	-	550.4	28.7%
Long-Term Debt (Incl. Cap. Leases)	500.2	100.0%	524.7	100.0%	1,369.7	71.3%
Total Unsecured Debt	500.2	100.0%	524.7	100.0%	1,920.1	100.0%
Senior Unsecured Bonds and Notes	500.2	100.0%	524.7	100.0%	1,920.1	100.0%
Fixed Rate Debt	-	-	-	-	1,369.7	71.3%
Zero Coupon Debt	500.2	100.0%	524.7	100.0%	550.4	28.7%

Growth & Sensitivity

This company is seeing a period of very large growth with around 29% increase in revenue in the past year alone. With all of the acquisitions that this company has invested in, revenue will continue to grow at a steep rate. The gross profit margin appears as if it will stay stable around 75% or increase in the next few years coming. The earnings per share sits around 47.42% which is beneficial for stockholders of Palo Alto. They currently employ around 5400 workers which will continue to grow. This company is very sensitive to changes in revenue, operating costs and the discount rate. By far, the greatest change in the intrinsic value of the stock is caused by a change in the discount rate. This is followed by a revenue being second for having a great effect on the price of the stock. The third great effect on the stock's intrinsic value is the operating costs. This company could benefit from adjustments to operating as well as other costs like selling expenses. In previous years, selling expenses absorbed all of the net income causing the net income for a few consecutive years to go negative. However, the company used some of these expenses to help grow and increase their market influence which clearly has been successful as far as can be seen.

Ownership and Sales

Firstly, hedge funds hold around 15% of Palo Alto's public stock. Judging on how large the market cap is on this stock, that is a very significant amount for an investment. Also, banks holding about 3.3% of this stock is significant as well due to the nature of how banks need safe investments. For business segments, the majority of business is done in the United States which sits around 64%. That follows where the majority of the stockholders are geographically as well considering about 80% of investors are in the United States. This means that Palo Alto does not have a great amount of influence in other economies to help stabilize itself in the case of a recession in the United States. Palo Alto does a small amount of business in Canada as well which is less than 7%. Canadian investors hold a small portion of this stock as it can be seen around 4%. Increasing international sales would not only boost revenue, but would also help secure the company in other economies in the event of a recession because even though other countries like Canada and the U.K. have an influence on Palo Alto, it could be much greater. One thing to note would be the average open market buy price which is at $209. The reason behind this is because there's no reason that this stock couldn't see height in their price per share again, especially with new products and new growth that they've acquired.

Compare Current Stats Against 10/21/18

Institutional - Based on Current Filings

51) Institutional	10/21/18	Curr	Change
11) % of Shares Held	88.99	88.38	-0.61
12) % of Float Held	92.14	91.49	-0.65
13) # of Institutions	1,047	1,046	-0.10%
14) # of Buyers	336	333	-0.89%
15) # of Sellers	338	344	+1.78%
16) # of New Buyers	144	143	-0.69%
17) # of Selloffs	79	80	+1.27%
18) % Chg in Inst Positions	-0.10	-0.07	+0.03

Top Ownership Type (%)

52) Ownership Type	10/21/18	Curr	Change
21) Investment Advisor	70.43	70.32	-0.11
22) Hedge Fund Manager	15.03	15.07	+0.04
23) Pension Fund	4.05	4.05	0.00
24) Individual	3.70	3.70	0.00
25) Bank	3.27	3.23	-0.04
26) Government	1.31	1.31	0.00
27) Sovereign Wealth Fund	0.78	0.85	+0.07
28) Insurance Company	0.64	0.68	+0.04
29) Private Equity	0.37	0.37	0.00

Top Geographic Ownership (%)

53) Geographic	10/21/18	Curr	Change
31) UNITED STATES	79.68	79.74	+0.06
32) UNITED KINGDOM	4.01	4.02	+0.01
33) CANADA	3.79	3.80	+0.01
34) Unknown	3.70	3.70	0.00
35) JAPAN	2.11	2.11	0.00
36) SWITZERLAND	1.61	1.61	0.00
37) NORWAY	0.81	0.88	+0.07
38) LUXEMBOURG	0.87	0.87	0.00
39) FRANCE	0.70	0.69	-0.01

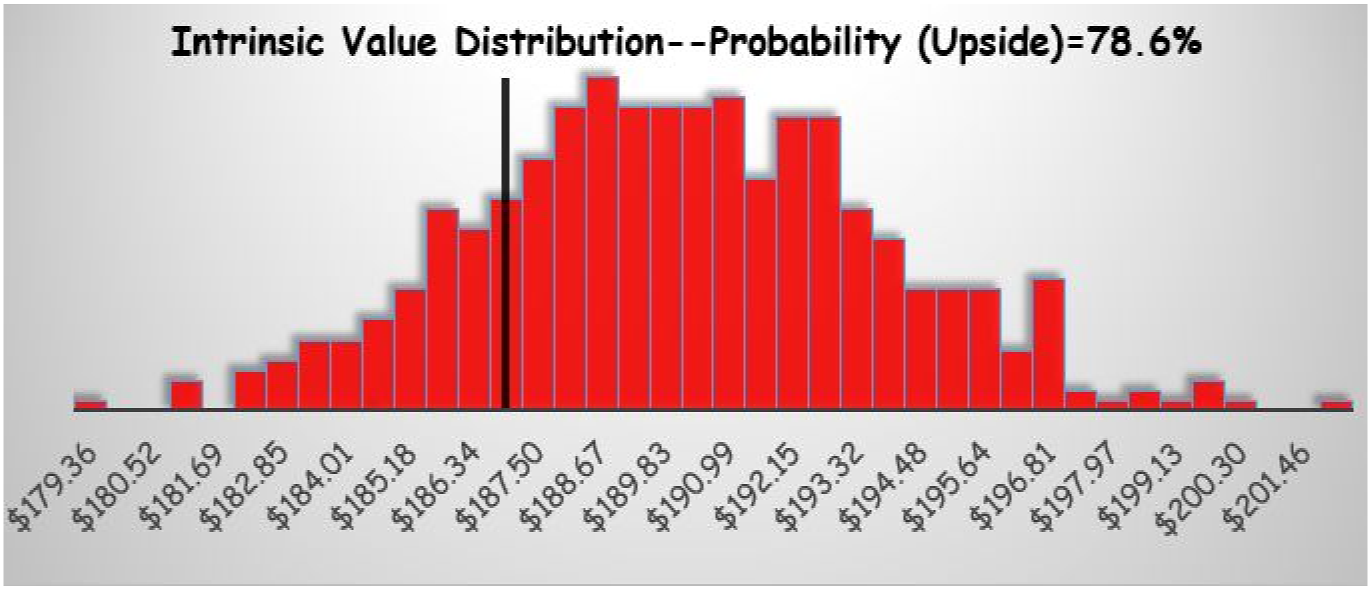
Insider - Based on Last 6 Months

54) Insider	10/21/18	Curr	Change
41) % of Shares Held	3.42	3.40	-0.02
42) % Chg Insider Positions	-0.92	-1.36	-0.44
43) # of Insiders	18	18	0.00%
44) # of Buyers Opn Mkt	1	1	0.00%
45) # of Sellers Opn Mkt	7	7	0.00%
46) # of Shrs Bought Opn Mkt	95,650	95,650	0.00%
47) # of Shrs Sold Opn Mkt	597,373	597,373	0.00%
48) Avg Opn Mkt Buy Price	209.15	209.15	0.00%
49) Avg Opn Mkt Sell Price	211.49	211.49	0.00%

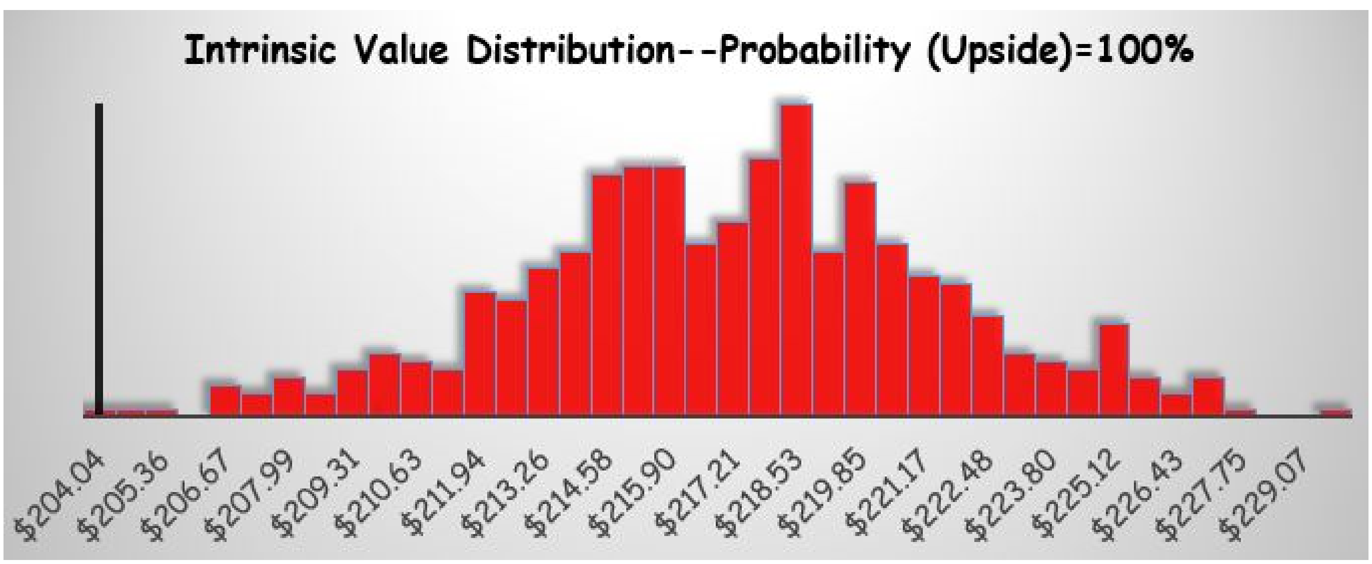
Projections:

For the most realistic case, the probability of having an upside is around 79% for the intrinsic value of the stock. Also, revenue grows at an average of 8% per year until the continuing period where it converges on 2.5%. There were no adjustments to the projected values to build the most practical model. The pro forma values this stock around $205 for a target price, which is being very conservative due to the nature of this company as well as the potential that they hold in this growing industry. For the bullish case, the probability for having an upside is 100%. This change is caused solely from a 2% increase in projected revenue for the next 8 years, which goes to show how sensitive this valuation is to a change in revenue. The bear case has a probability of 0%. This is caused by a 2% decrease in revenue for the 8 years. The reason that 8 years was used is to simulate a slight recession in the active market or more pressure from competitors. It is important to note that with a recession possible, a slight drop in revenue growth is very possible. However, since Palo Alto is growing at such a strong rate just like their margins, it is unlikely in my opinion.

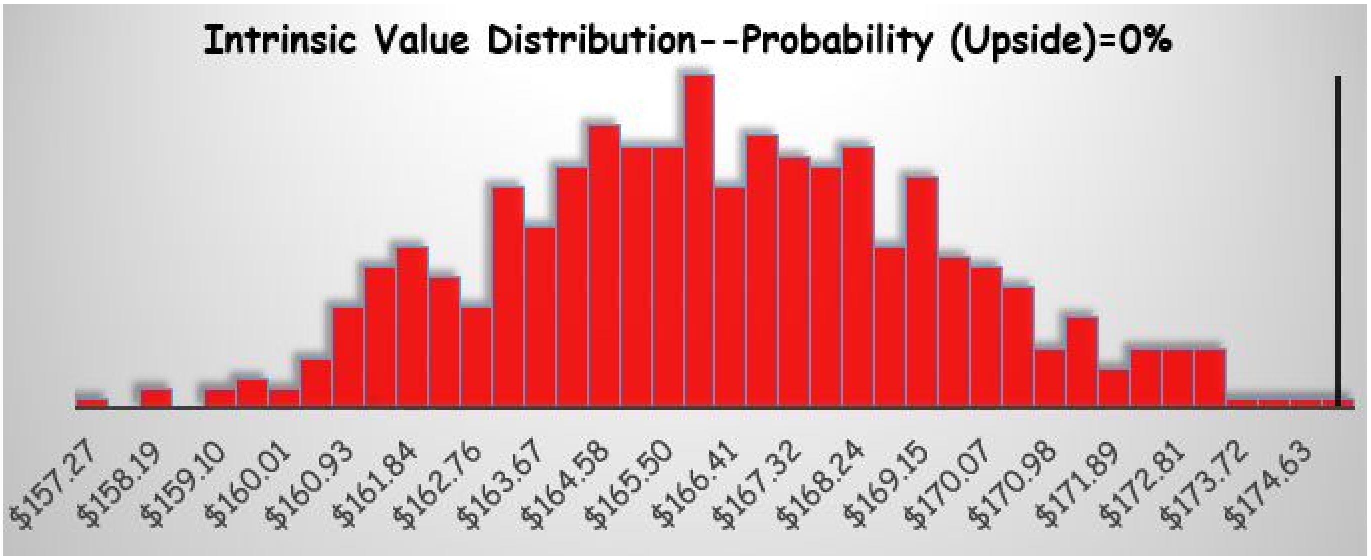
Realistic Case



Bull Case



Bear Case



Conclusion:

The common analyst target price estimate on sites like Capital IQ, bloomberg and market watch hover around $235 - $250 which is far greater than the valuation completed with the pro forma. Overall, this company generates increasingly stronger cash flows funding multiple acquisitions. This has assisted Palo Alto in becoming an industry leader. As they invest in other potential fields, this could not only generate a huge amount of revenue but research and discover new products in fields like A.I. and machine learning which could drastically change society for more than just one niche of consumer. This could completely reshape the way many different business operate as we know it. This is the cause behind negative income in previous years, due to investments like these. As they continue to acquire other companies, their influence on this specific market will only continue to grow along with their product line. The diversification of their portfolio is another benefit to all of the acquisitions. The only reason for the recent decline in price is due to cyclical factors as well as the unsure attitudes of investors when they heard about the acquisition with RedLock. Now that it is on track to be successful, it shouldn't be too long before the market changes directions and the stock rises in price again.

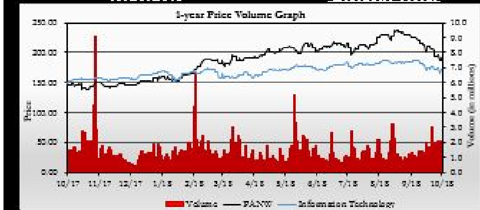
Palo Alto Networks, Inc. (PANW)

CENTER FOR GLOBAL FINANCIAL STUDIES

NEUTRAL

Analysis by Michael Grasso	**Current Price:**	$186.96	**Intrinsic Value**	$189.33
10/26/2018	**Divident Yield:**	0.0%	**Target Price**	$203.52

Target 1 year Return: 8.85%
Probability of Price Increase: 79.



Description

Palo Alto Networks, Inc. provides security platform solutions worldwide.

General Information

Sector	Information Technology
Industry	Communications Equipment
Last Guidance	May 8, 2018
Next earnings date	November 21, 2018

Market Assumptions

Estimated Equity Risk Premium	5.00%
Effective Tax rate	22%

Market Data

Market Capitalization	$17,978.28
Daily volume (mil)	0.74
Shares outstanding (mil)	94.31
Diluted shares outstanding (mil)	91.70
% shares held by institutions	83%
% shares held by investments Managers	60%
% shares held by hedge funds	15%
% shares held by insiders	3.14%
Short interest	4.80%
Days to cover short interest	3.43
52 week high	$239.50
52-week low	$135.85
Volatility	36.71%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
7/31/2017	4.61%	-47.52%
10/31/2017	3.42%	-54.81%
1/31/2018	3.34%	-52.33%
4/30/2018	3.92%	-52.47%
7/31/2018	4.10%	-45.02%
Mean	3.88%	-50.43%
Standard error	1.0%	2.1%

Market and Credit Scores

- Recommendation (STARS) Value--3
- Recommendation (STARS) Description--Hold
- Quality Ranking Value--NR
- Quality Ranking Description--Not Ranked
- Short Score--1
- Market Signal Probability of Default % (Non-Ratings)--0.67%
- CreditModel Score (Non-Ratings)--b+

Industry and Segment Information

LTM Revenues by Geographic Segme	LTM Revenues by Business Segments
United States--64%	Security Software & Services--100%
Other Americas--5%	--
Europe, The Middle East, and Africa (EMEA)--19%	--
Asia Pacific and Japan (APAC)--12%	--
--	--

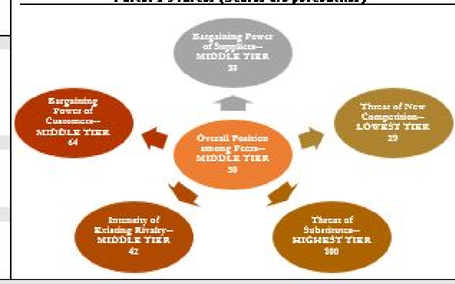
Peers

F5 Networks, Inc.	Ciena Corporation
Arista Networks, Inc.	Juniper Networks, Inc.
Symantec Corporation	Finisar Corporation
Check Point Software Technologies Ltd.	NetScout Systems, Inc.
NETGEAR, Inc.	CommScope Holding Company, Inc.

Management	Position	Total Compensation Growth	Stock Price Growth During Tenure
Arora, Nikesh	CEO & Chairman		
Anderson, Mark	President	-100% per annum over 4y	21.67% per annum over 4y
Bonanno, Kathleen	CFO & Executive VP		
Bonvanie, René	Executive VP & Chief Marketing Officer	48.47% per annum over 6y	-0.25% per annum over 6y
Klarich, Lee	Executive VP & Chief Product Officer		
Zuk, Nir	Co-Founder, CTO & Director	23.26% per annum over 5y	14.99% per annum over 5y

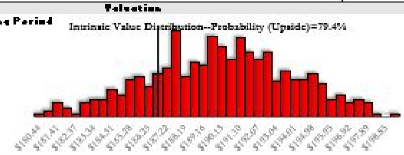
Profitability	PANW (LTM)	PANW Historical	Peers' Median (LTM)
Return on Capital (GAAP)	112.7%	19.25%	5.13%
Operating Margin	24%	17.46%	23.72%
Revenue/Capital (GAAP)	4.74	1.10	0.22
ROE (GAAP)			17.3%
Net margin			17.6%
Revenue/Book Value (GAAP)		#VALUE!	0.98
Invested Funds	**PANW (LTM)**	**PANW Historical**	**Peers' Median (LTM)**
Cash/Capital	86.1%	89.1%	32.9%
NWC/Capital	-30.8%	29.6%	-4.2%
Operating Assets/Capital	30.3%	-26.2%	41.3%
Goodwill/Capital	14.3%	10.3%	17.7%
Capital Structure	**PANW (LTM)**	**PANW Historical**	**Peers' Median (LTM)**
Total Debt/Market Capitalization	0.57	0.35	0.21
Cost of Debt	2.4%	4.9%	5.0%
CGFS Rating (F-score, Z-score, and default Probabilit	B		
WACC	9.4%	10.3%	9.7%

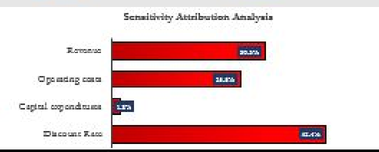
Porter's 5 forces (Scores are percentiles)



Valuation

Forecast Assumptions	Explicit Period (9 years)	Continuing Period
Revenue Growth CAGR	8%	2.5%
Average Operating Margin	28%	28%
Average Net Margin	28%	27%
Growth in Capital CAGR	13%	3%
Growth in Claims CAGR	0%	3%
Average Return on Capital	17%	8%
Average Return on Equity	21%	9%
Average Cost of Capital	10%	10%
Average Cost of Equity	11%	11%





October, 25 2018

Abiomed: (ABMD)

Eric Munn

Sector: Medical Device
Industry: Healthcare
Current Price:
Target Price:

Description: Abiomed is essentially a monopoly addressing a highly under penetrated market opportunity with a critical unmet need. This unmet need is the ability to ensure blood flow to critical organs during high-risk procedures on the heart.

BUY/HOLD/SELL

- Current Price: $330.35
- Target Price: $397.76
- Market Cap: 15B
- EBITDA: 28.4
- WACC: 8.125
- Short Interest Ratio: 1.44
- Zero Debt

Purple: Edward Life Sciences
Green: ICU Medical Corp

Thesis:

The recent drop in price does not reflect the value of ABMD and is an opportunity to buy. Abiomed has significant opportunity for growth within its current 5B market of 210,000 patients and no direct competition. They have a new indication going through the FDA approval process that could lead to 200,000 new patients and runaway growth.

Catalysts:

- Short Term(within the year): Market penetration within current indications
- Mid to long Term(1-4 years): STEMI Indication continues approval process

Earnings Performance:

Abiomed's marginal EBITDA had a 31% YoY increase from 2017-2018. They are having a massive increase in revenue, which is allowing them to spend more on growing the company, while maintaining this level of EBITDA. They will continue with this trend as their products gain more market exposure.

In Millions of USD 12 Months Ending	2011 Y 03/31/2011	2012 Y 03/31/2012	2013 Y 03/31/2013	2014 Y 03/31/2014	2015 Y 03/31/2015	2016 Y 03/31/2016	2017 Y 03/31/2017	2018 Y 03/31/2018	Current/LTM 06/30/2018
Market Capitalization	547.9	871.5	720.7	1,039.4	2,958.8	4,038.5	5,467.9	12,912.8	14,825.2
- Cash & Equivalents	60.3	77.2	88.1	118.3	146.0	213.1	277.1	399.8	367.4
+ Preferred & Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Total Debt	0.0	0.0	0.0	0.0	0.0	0.0	16.3	0.0	0.0
Enterprise Value	487.6	794.2	632.6	921.1	2,812.9	3,825.5	5,207.1	12,513.0	14,457.8
Revenue, Adj	101.2	126.4	158.1	183.6	230.3	329.5	445.3	593.7	641.3
Growth %, YoY	18.0	24.9	25.1	16.1	25.4	43.1	35.1	33.3	35.1
Gross Profit, Adj	79.2	101.9	126.5	146.3	190.4	279.1	374.7	495.2	533.7
Margin %	78.3	80.6	80.0	79.7	82.7	84.7	84.1	83.4	83.2
EBITDA, Adj	-7.2	5.9	22.4	17.1	32.5	68.4	96.3	168.1	182.3
Margin %	-7.2	4.6	14.1	9.3	14.1	20.8	21.6	28.3	28.4
Net Income, Adj	-12.1	0.8	17.0	11.4	27.9	38.1	55.2	90.2	142.9
Margin %	-11.9	0.7	10.8	6.2	12.1	11.6	12.4	15.2	22.3
EPS, Adj	-0.33	0.02	0.42	0.28	0.65	0.85	1.24	1.97	3.10
Growth %, YoY	48.2	—	1,828.4	-33.9	134.2	31.1	45.8	59.0	76.1
Cash from Operations	1.6	3.6	26.4	23.5	43.3	76.8	115.1	192.5	202.9
Capital Expenditures	-1.8	-1.7	-2.8	-2.8	-5.2	-15.6	-50.4	-55.9	-61.2
Free Cash Flow	-0.2	1.9	23.6	20.7	38.1	61.2	64.7	136.7	141.7

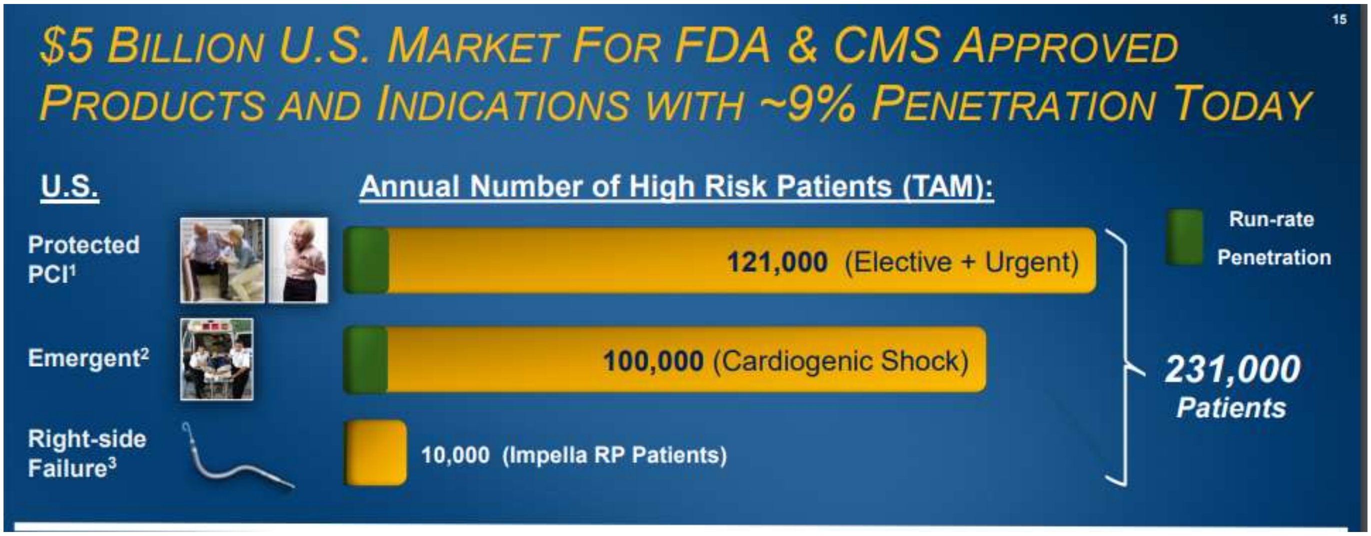
Medical Device Industry Outlook:

The medical device sector has outperformed the healthcare industry. The Centers for Medicare & Medicaid Services National Health Expenditures projects steady growth in Hospital Care at around 5.6 percent, which is up from 4.6 percent over 2016 and 2017. The baby boomer population is getting to the age where they will need more and more healthcare. Heart care is currently #1 in The 2016 American Heart association report predicted heart care expenditures to jump from $555B in 2016 to $1.1T by 2035. Major growth is inevitable for Abiomed if they can keep up with the rising demand.

Competition and Market Penetration:

A major plus for investors is the lack of competition Abiomed faces. Impella heart pumps are currently the only FDA PMA approved minimally invasive hemodynamic support devices for high risk PCI or cardiogenic shock. When questioned regarding market entrants, the CEO suggested that any similar device is at least 4 to 6 years out.

The current FDA approved products and their approved indications have a 5 billion dollar annual U.S. market based on number of high-risk patients. Now, what is so exciting about this company's potential for organic growth is its lack of market penetration. Of the 210k potential patients who stand to benefit from treatment from Impella, only 9-10% with the products.



Business Model:

Their business model is set for success. A sales representative convinces the decision makers at a hospital to use the Impella Device. Once they are on board, the hospital orders a few. If the surgeons give positive reviews, they make a reorder.

Something that jumped out was that in the total surgeries where Impella is used, 70% have an Abiomed employee in the operating room. This philosophy induces a relationship between Abiomed and the surgeon and helps to mitigate the risk of improper usage.

The Impella device has proven to lower length of hospital stay and overall hospital stay by reducing complications. Hospitals and surgeons have a goal to save patients' lives, but money runs the world. Reducing costs and saving lives is Abiomed's value proposition.

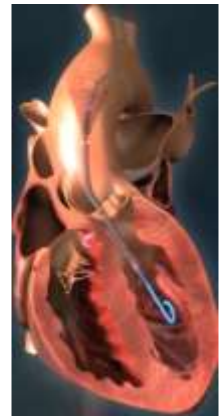
Training and Marginal Increase in Sales Force:

A major focus in the most recent earnings call was the training of physicians and internal sales force. In Q1 nearly half of the employees came to the commercial kickoff meeting. A combined 750 physicians were educated on product usage either through onsite training or at the heart recovery institutes in Danvers, Massachusetts and Aachen, Germany.

They added fifty-two employees to the company over Q1. Historically Abiomed had 5 to 10 additional distribution employees per quarter. Q1 had 14 hires, which is a 40% increase over the previous quarter. Sales force is the driving force behind growing the hospitals, surgeons, and patients. Management is strategically using the cash flow to increase value.

SIENAcollege BJORKLUND FUND

Current Indications and Related Products:



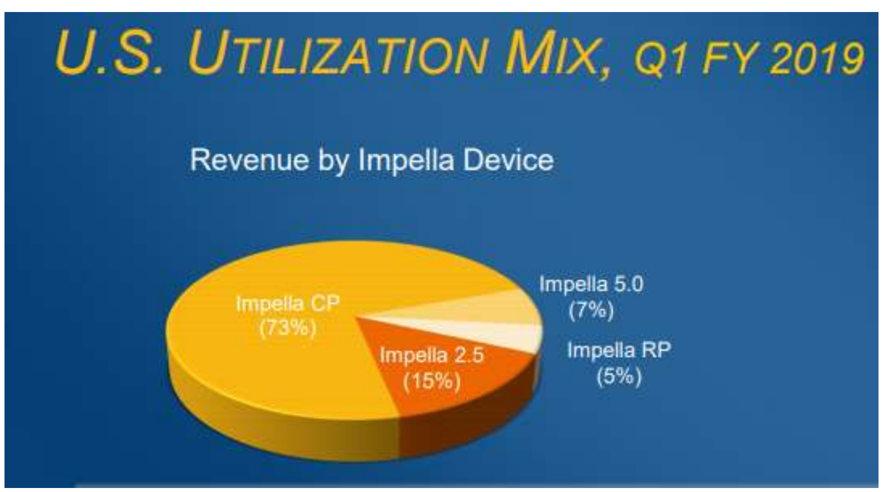
System Explained:
Physicians use Impella devices by inserting a catheter (tube) through an artery or vein, navigating and entering the heart, and artificially pumping blood to essential organs.

Indications:

- Advanced Heart Failure**: late stage weakening of the heart over time that often leads to death. Coronary artery disease and heart failure as a result is the #1 cause of death in the United States.**

1. Impella 2.5 and Impella CP devices are approved to treat certain advanced heart failure patients undergoing elective and urgent percutaneous coronary interventions (PCI) such as stenting or balloon angioplasty, to re-open blocked coronary arteries.
2. Protected PCI is the use of a device like Impella to provide extra blood flow, while a heart blockage is opened with a stent or angioplasty.

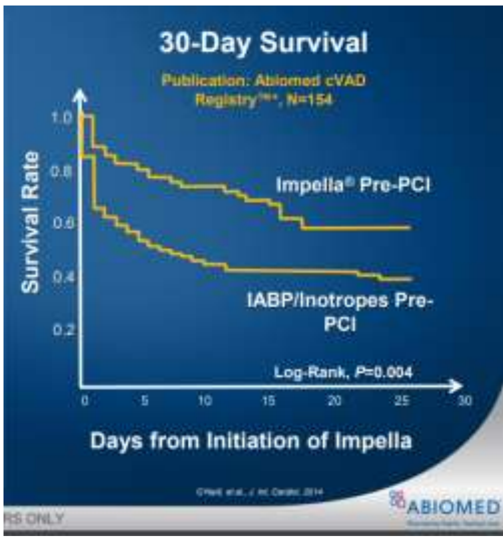
- Cardiogenic Shock: **extremely low blood flow from the heart. The heart cannot pump enough blood to essential organs. It happens most often after a severe heart attack. It is the #1 Cardiac Mortality Risk.**
    1. The Impella 2.5®, Impella CP®, Impella CP® with SmartAssist, Impella 5.0® and Impella LD® are FDA-approved heart pumps used to treat heart attack or cardiomyopathy patients in cardiogenic shock, and have the unique ability to enable native heart recovery, allowing patients to return home with their own heart.
    2. According to a 2015 to 2018 study done on 11,566 U.S. Patients with acute myocardial infarction cardiogenic shock, which is a severe heart attack with cardiogenic shock, the survival rate increased by 24% since Impella's FDA approval on the Cardiogenic Shock indication. The historical survival rate was at around 50%. Patients and physicians have benefited to a major extent.
- Right Heart Failure
    1. Abiomed's right-side heart pump, the Impella RP® device, is FDA approved to treat patients experiencing acute right heart failure or decompensation following left ventricular assist device implantation, myocardial infarction, heart transplant, or open-heart surgery.

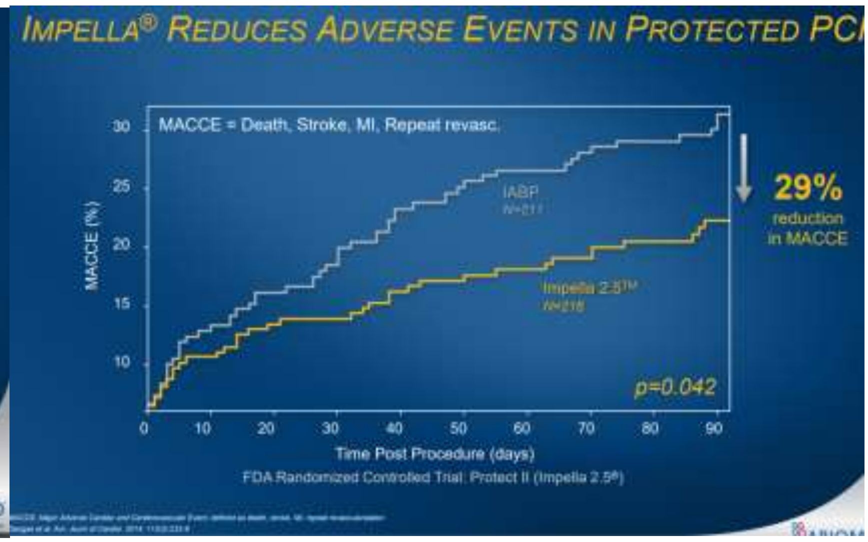


Market Share Increase:
In the first quarter of fiscal 2019, Impella adoption in the Protected PCI and cardiogenic shock grew 24% and 37%, respectively.

Utilization of Devices:
88% of the revenue comes from the Imella CP and Impella 2.5. The primary use of these devices is in cardiogenic shock and Protected PCI procedures. The figures below show the survival increases in these procedures.

The figure on the left depicts the increase in survival rate versus the older technology for cardiogenic shock.
The figure on the right depicts the increase in survival rate versus older technology for Protected PCI.





Higher Investment in R&D

R&D jumped 26% in Q1 from the previous year. They are focusing on utilizing their revenue to invest in products in the pipeline. The earnings call specifically mentioned the clinical costs for an entirely new indication. The overall R&D expense has continued to grow YoY. Fiscal 2018 had an increase of $8.9 million, or 13%, to $75.3 million from $66.4 million for fiscal 2017.

Abiomed's future cash flows rely on the success rate of their research and development. More successful indications and products available on the market, brings more value to the investors.

Current Product Pipeline:

Impella 5.5: 2018 CE marked. 30-day, ambulatory, wean-able, forward-fl ow unloading heart device with peak flows of more than 6 liters per minute

Impella ECP: blood flow of greater than three liters per minute

Impella BTR: micro heart pump with integrated motors and sensors

---

Pre-Clinical Study & New Indication:

On February 14, 2018 the Impella 2.5 and Impella CP heart pumps were given extended FDA approval beyond their previous scope. The price reflected the additional possible revenue. The price below reflects the jump.

STEMI Indication:

<u>STEMI Explained:</u>

STEMI is a type of major heart attack. Abiomed hopes to provide an Impella system that reduces the possibility of heart failure in situations where cardiogenic shock does not occur. The basic idea is to prevent heart failure for patients who have severe heart attacks.

The just completed a feasibility trial, which is test in a small number of patients. The results of the trial will be unveiled on November 1, 2018 at the American Heart Association. Abiomed was tight lipped on the approval for RCT (random clinical trials), but they seem optimistic, because they often mention it in their releases and presentations.

Investor Presentation Information on STEMI:

- FDA approval of feasibility study to evaluate Impella CP® use patients with ST segment elevation myocardial infarction (STEMI), without cardiogenic shock.
- Hypothesis: Unloading may have impact on infarct size related to reperfusion injury in STEMI patients.

- STEMI patient represents a potenti.al new patient indication (200k / year) that may benefit from Impella unloading the left ventricle.

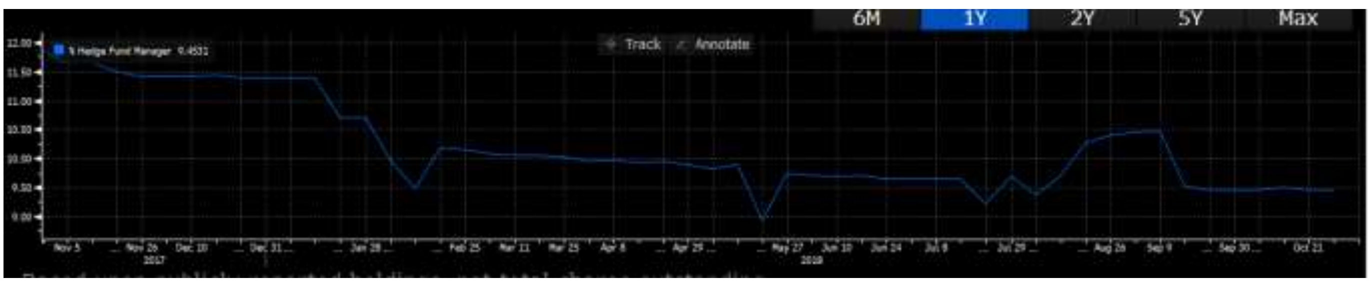
What does this mean?

The current patient population for Impella devices is 210,000 patients. If approval for STEMI patients happens, Abiomed will have access to 200,000 new patients. The potential market doubling will create runaway growth for Abiomed.

They have shown proven profitability in their other indications. It is important to note that as great of technologies purpose, the bottom line is that physicians need to adopt it. Their increased use of the impella system gives cause for belief in this study and belief in adoption.

Ownership:

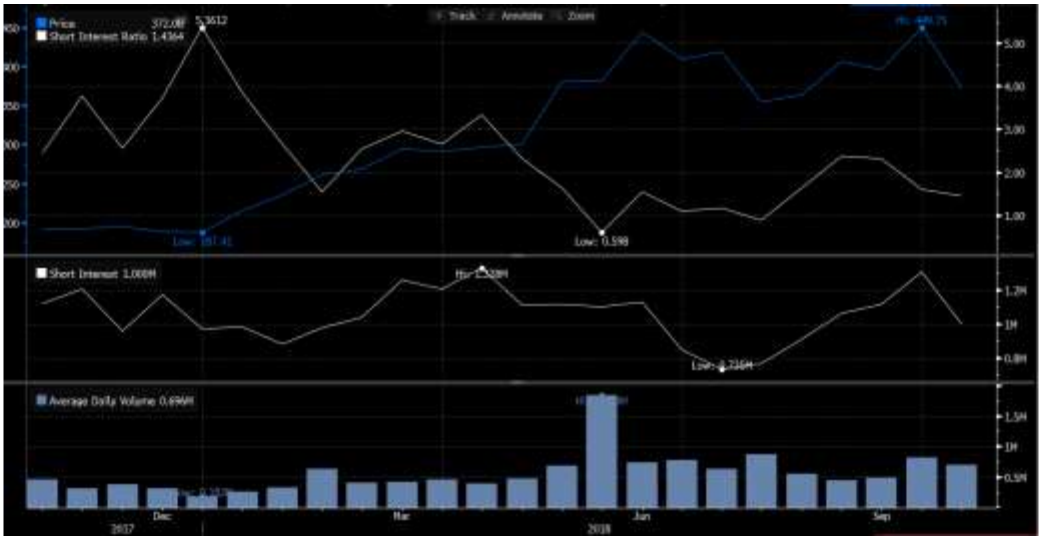
Ownership Type	10/21/18	Curr	Change
11) Investment Advisor	76.58	76.53	-0.05
12) Hedge Fund Manager	9.46	9.46	0.00



% of Hedge fund managers have fluctuated during this year, but the last two months have been consistent. This means that

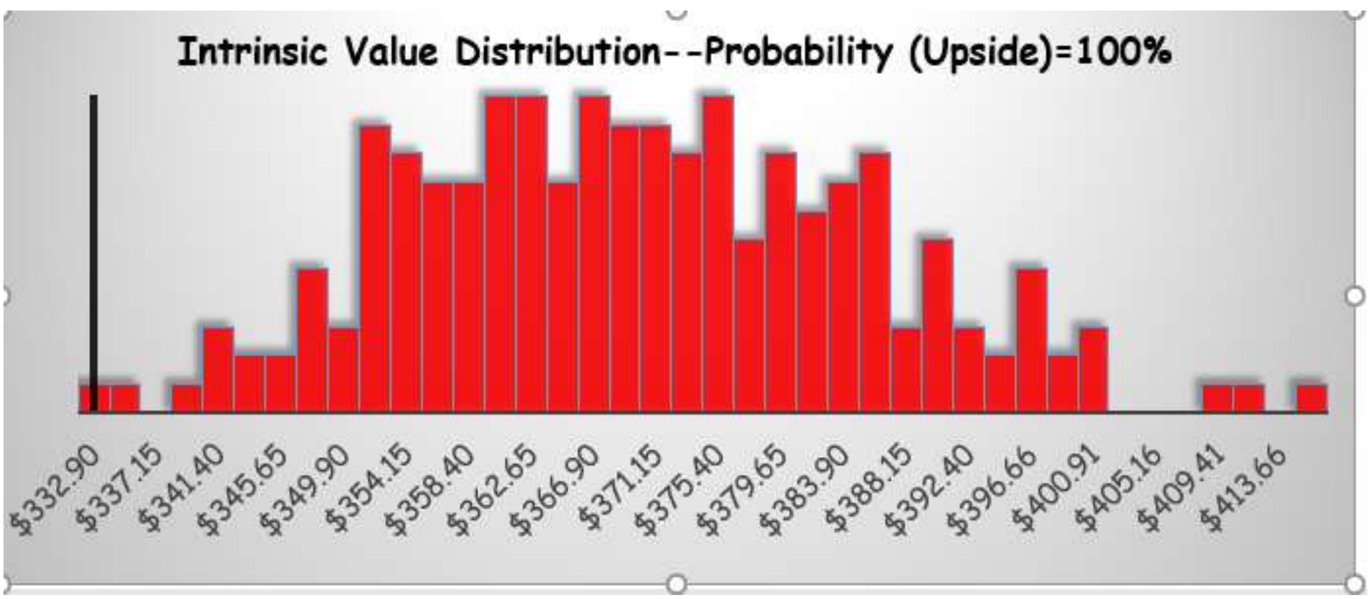
Short Interest:

The short interest ratio has trended downward, reflecting positivity on the stock, and/or a possible profit take on their shorts.

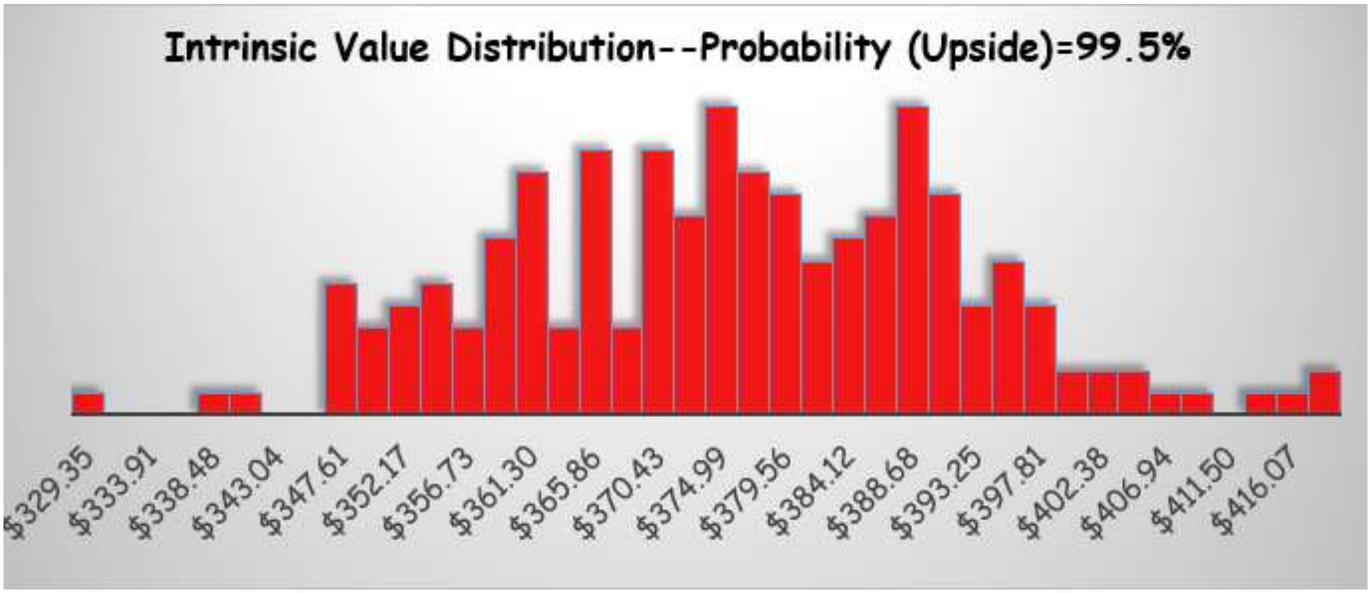


Sensitivity Analysis:

Base Case: Median Analyst Estimates. Intrinsic value at $369.35 and target at $397.76

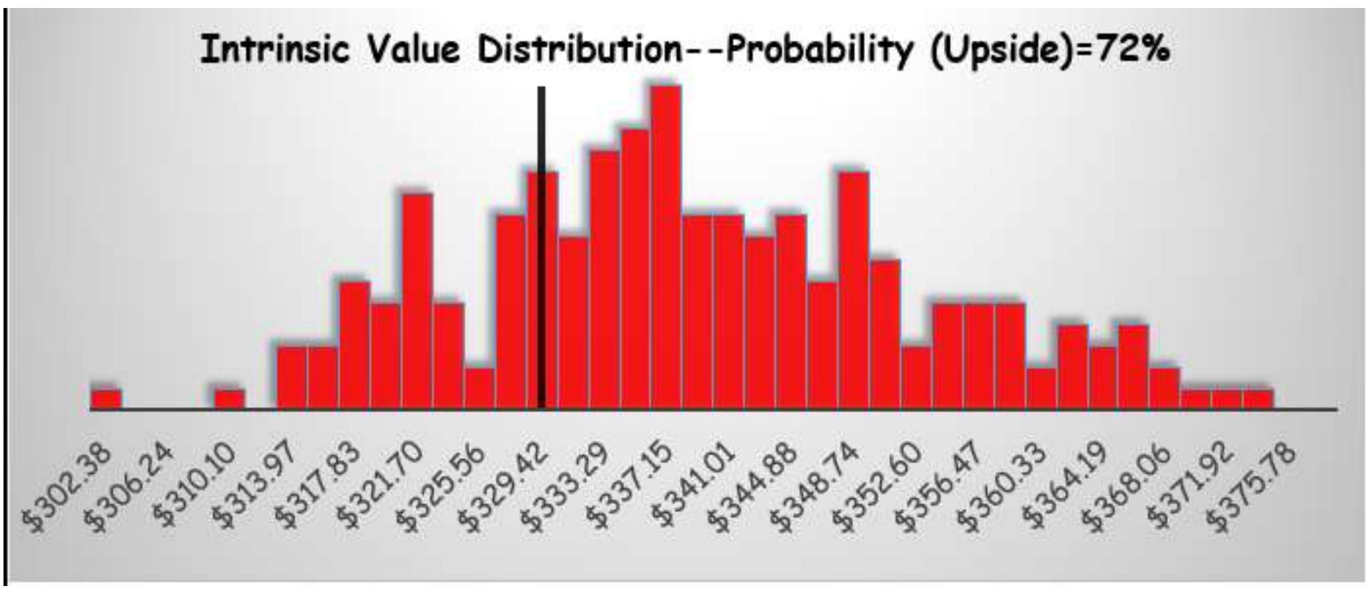


Bullish Case: 1% increase in revenues for 2022 and 2023, STEMI FDA approval happens early. Intrinsic value at $375.47 and target at $403.99



Bearish Case:

STEMI fails and slows growth by 2% for 2022-2028. Intrinsic value at $337.61 and target at $363.44.



Conclusion:

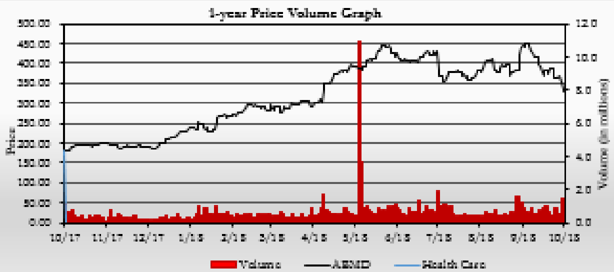
Abiomed is in position for runaway growth with their business model. They have no current completion, and any comparable device is 4-6 years out at the earliest. They are strategically growing their ability to utilize their remarkable Impella devices with new indications. Their opportunity to double the patients they can reach with the STEMI indication is cause to buy into this company at the current price.

SIENA college   BJORKLUND FUND

ABIOMED, Inc. (ABMD) — CENTER FOR GLOBAL FINANCIAL STUDIES — BULLISH

Analysis by Al Capone	Current Price:	$330.35	Intrinsic Value	$46.21	Target 1 year Return: 20.23%
10/26/2018	Divident Yield:	0.0%	Target Price	$397.17	Probability of Price Increase: 0%

1-year Price Volume Graph



Description

ABIOMED, Inc. engages in the research, development, and sale of medical devices to assist or replace the pumping function of the failing heart.

General Information	
Sector	Health Care
Industry	Health Care Equipment and Supplies
Last Guidance	July 26, 2018
Next earnings date	November 1, 2018
Market Assumptions	
Estimated Equity Risk Premium	5.13%
Effective Tax rate	21%

Market Data	
Market Capitalization	$14,825.17
Daily volume (mil)	0.75
Shares outstanding (mil)	44.88
Diluted shares outstanding (mil)	45.99
% shares held by institutions	91%
% shares held by investments Managers	74%
% shares held by hedge funds	11%
% shares held by insiders	2.15%
Short interest	2.23%
Days to cover short interest	1.55
52 week high	$459.75
52-week low	$177.40
Volatility	40.91%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
6/30/2017	1.24%	8.24%
9/30/2017	1.24%	7.95%
12/31/2017	0.01%	14.17%
3/31/2018	6.43%	7.05%
6/30/2018	3.25%	-2.62%
Mean	2.43%	6.96%
Standard error	20.2%	29.0%

Market and Credit Scores

- Recommendation (STARS) Value--3
- Recommendation (STARS) Description--Hold
- Quality Ranking Value--B-
- Quality Ranking Description--Lower
- Short Score--0
- Market Signal Probability of Default % (Non-Ratings)--0.05%
- CreditModel Score (Non-Ratings)--N/A

Industry and Segment Information

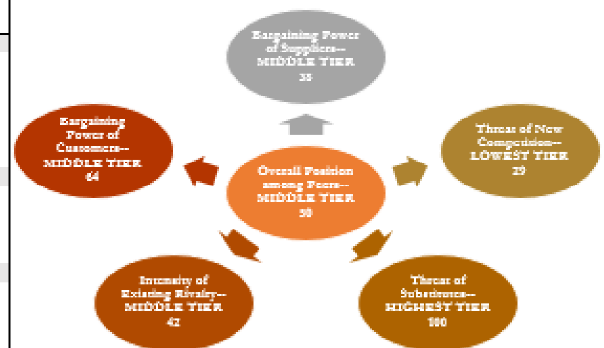
LTM Revenues by Geographic Segme	LTM Revenues by Business Segments
United States--89%	Research, Development and Sale of Medical Devi
International--11%	--
--	--
--	--
--	--

Peers

Edwards Lifesciences Corporation	AtriCure, Inc.
Insulet Corporation	Penumbra, Inc.
DexCom, Inc.	CONMED Corporation
Boston Scientific Corporation	Merit Medical Systems, Inc.
Cardiovascular Systems, Inc.	MicroPort Scientific Corporation

Management	Position	Total Compensation Growth	Stock Price Growth During Tenure
Minogue, Michael	Chairman, CEO & President	18.24% per annum over 6y	9.85% per annum over 6y
Weber, David	Chief Operating Officer	9.66% per annum over 6y	9.85% per annum over 6y
Howley, Michael	VP & GM of Global Sales	9.47% per annum over 6y	9.85% per annum over 6y
Bolt, William	Senior Vice President of Global Quality, Regula	8.68% per annum over 6y	9.85% per annum over 6y
McLeod, Ian	VP & Corporate Controller		40.57% per annum over 1y
Trapp, Todd	CFO & VP		

Porter's 5 forces (Scores are percentiles)

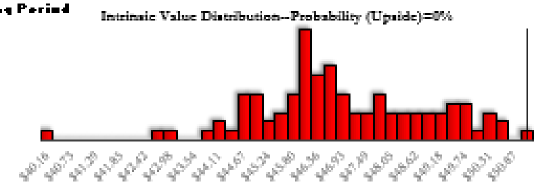


Profitability	ABMD (LTM)	ABMD Historical	Peers' Median (LTM)
Return on Capital (GAAP)			
Operating Margin	82%	36.18%	69.14%
Revenue/Capital (GAAP)	#VALUE!	#VALUE!	#VALUE!
ROE (GAAP)			
Net margin			
Revenue/Book Value (GAAP)		#VALUE!	#VALUE!
Invested Funds	**ABMD (LTM)**	**ABMD Historical**	**Peers' Median (LTM)**
Cash/Capital			
NWC/Capital			
Operating Assets/Capital			
Goodwill/Capital			
Capital Structure	**ABMD (LTM)**	**ABMD Historical**	**Peers' Median (LTM)**
Total Debt/Market Capitalization			
Cost of Debt			5.3%
CGFS Rating (F-score, Z-score, and default Probabilit;	AA		
WACC	41.6%		10.1%

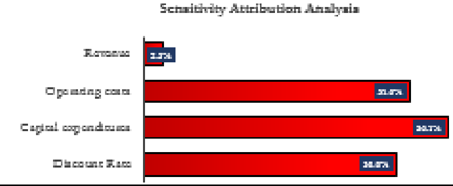
Valuation

Forecast Assumptions	Explicit Period (13 years)	Continuing Period
Revenue Growth CAGR	18%	2.5%
Average Operating Margin	30%	29%
Average Net Margin	29%	25%
Growth in Capital CAGR	20%	3%
Growth in Claims CAGR	#DIV/0!	3%
Average Return on Capital	20%	11%
Average Return on Equity	20%	11%
Average Cost of Capital	8%	8%
Average Cost of Equity	8%	8%

Intrinsic Value Distribution--Probability (Upside)=0%



Sensitivity Attribution Analysis



October 25, 2018

Funko, Inc. (FNKO)

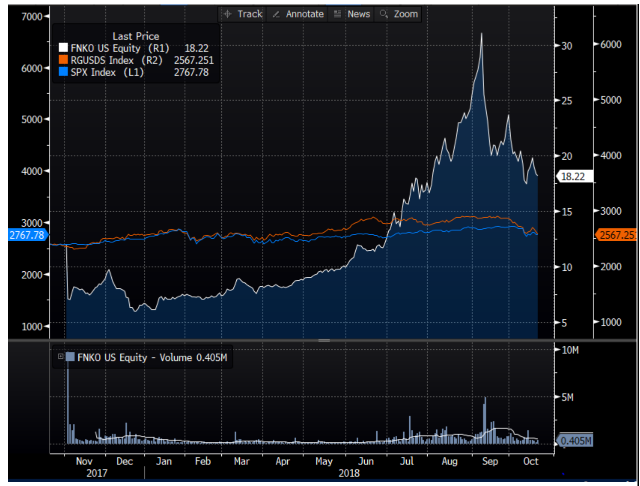
Samantha St.Germain

Sector: Consumer Discretionary
Industry: Toys and Games
Current Price: $18.84
Target Price: $23.87

Company Description: Funko, Inc. is a Pop Culture based consumer discretionary firm, creating and distributing licensed products with the belief that everyone is a fan some something. Funko currently holds over 130 licenses to produce Figures, Bags and Accessories, Plush products, Apparel, Homewares, and Consumables.

BUY

Current Price:	$18.84
Target Price:	$23.87
Market Cap:	910.4M
Revenue Growth LTM:	29.5%
Gross Profit Margin FY'17:	38.5%
Gross Profit Margin LTM:	39%
EBITA Margin:	16%
ROIC:	2.14
ROIC/WACC:	.75
Growth in Sales/Property:	5%



Thesis: Funko, Inc. is well positioned for growth over the next several years. Not only have they historically seen growth in revenue and improving margins, but they are actively working to expand their market, from geographically to their mix for products and properties. These expansions not only add value for the consumer but also to the investor.

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

- Working Closely with Distributors as Pop Culture Experts to create products that drive sales and traffic, increasing shelf space and improving location
- Video and new original content will diversify revenue streams and decrease overall royalty payments, reducing costs and improving EBITA margins
- Expansion of International Market with acquisition of Underground Toys Limited
- Strong growth in current properties and a growing portfolio of popular brands

Earnings Performance:

	Three Months Ended June 30, 2018	Three Months Ended June 30, 2017	Six Months Ended June 30, 2018	Six Months Ended June 30, 2017
	(amounts in thousands)			
Net income (loss)	$ 871	$ (4,538)	$ 3,108	$ (10,165)
Interest expense, net	5,584	7,692	11,480	14,677
Income tax expense	70	1,024	530	1,024
Depreciation and amortization	9,650	7,588	18,951	14,322
EBITDA	$ 16,175	$ 11,766	$ 34,069	$ 19,858
Adjustments:				
Monitoring fees (2)	—	501	—	981
Equity-based compensation (3)	1,171	2,973	2,143	3,745
Earnout fair market value adjustment (4)	—	—	—	8
Inventory step-up (5)	—	1,129	—	2,630
Acquisition transaction costs and other expenses (6)	—	1,541	28	4,175
Foreign currency transaction (gain) loss (7)	2,602	(119)	1,160	(113)
Adjusted EBITDA	$ 19,948	$ 17,791	$ 37,400	$ 31,284

For Q2FY18, FNKO increased net sales to $138.7 million. Sales of their most popular figurine products, which accounts for approximately 83% of revenue, increased from $87,649 in Q2FY17 to $114,499, a 30.6% increase. Sales in other categories saw as 41.7% increase in revenue, bringing the total revenue increase to 32.4% YOY for Q2. Gross margin also increased by 1.2%, bringing it to 38.2%. SG&A costs increased 33% due to business growth linked to the acquisition of Underground Toys, Loungefly, and Funko Animation studios. SG&A is also impacted by royalty payments which range from 10%-15% based on the property. As different properties have different royalty payments, the mix of products sold impacts the overall cost of royalties as compared to sales. CEO Brian Mariotti characterized the results as "The strong top-line momentum we experienced to start the year carried into the second quarter." This momentum will be paramount as Funko actively grows their portfolio and business opportunities with retailers and new markets. For the second quarter, number of active properties increased 26%. Sales per active property increased 5%.

	Three Months Ended June 30, 2018	Three Months Ended June 30, 2017	Period Over Period Change Dollar	Period Over Period Change Percentage
Net sales by geography:				
United States	$ 97,108	$ 73,142	$ 23,966	32.8%
Foreign	41,615	31,604	10,011	31.7%
Total net sales	$ 138,723	$ 104,746	$ 33,977	32.4%

	Three Months Ended June 30, 2018	Three Months Ended June 30, 2017	Period Over Period Change Dollar	Period Over Period Change Percentage
Net sales by product:				
Figures	$ 114,499	$ 87,649	$ 26,850	30.6%
Other	24,224	17,097	7,127	41.7%
Total net sales	$ 138,723	$ 104,746	$ 33,977	32.4%

Relationship with Retailers:

Funko has a retail presence in over 25,000 stores worldwide, including Hot Topic, Target, Game Stop, Amazon, and more. Many retailers expanded shelf space for Funko products, helping US sales increase 33%. Retailers are moving Funko beyond the toy department, giving Funko not only more shelf space and visibility, but also a product placement advantage.

Adding Funko to the Entertainment department of stores such as Target and Walmart separates Funko's figures and other products from toys and makes them seem more collectable. This move fits with the average age of Funko's consumer, which is 35 years old. Of Funko's consumer base, 36% are considered 'Collectors', making the move to the entertainment department more natural. The migration has seen success at Target over the past few years and is currently being implemented at Walmart. Some products which are considered more appropriate for the toy department, such as the Five Nights at Freddy's products based on the popular video game, will remain in the toy department.

Funko's reputation as pop culture experts allow them the ability to work directly will retailers to create products to serve their particular needs. Offering exclusive products for certain retail outlets not only drives sales to the retailer, but also drive engagement and recognition for the Funko brand as store will prominently display and advertise exclusive products, driving sales for both entities.

In FY2017, no retailer made up of 10% of Funko's sales. Sales through third party ecommerce sites have increased 75% for the year as of Q2FY18. Funko is not largely dependent on any one retailer, giving them superior bargaining power to competitors. Funko is also looking on increasing it's direct to consumer sales, which will improve margins and decrease dependence on retailers.

Original Content and Video:

Funko Animation Studio is an integral component of their sales growth plan. Funko has found that preorders will increase about 3x if there is a video linked to the new product, with social media engagement increasing by 5x. In 2017, Funko's video shorts had 40 million views, growing to over 90 million so far for 2018. Q2FY18 had 54 million views alone.

With Funko Animation Studio, Funko has the opportunity to create it's own original content, similar to Lego's popular Ninjago series. Wetmore Forest is Funko's first attempt into its own, original creations not based on licensed products. Currently there is a short teaser trailer as well as a desktop game, along with a product line of the inhabitance of the Wetmore Forest, including Pop! Figurines, stuffed animals, and digital collectables.

TOP COLLECTIBLE TOYS – H1 2017

Based on Total Actions (reactions, comments, shares, retweets, likes and dislikes) Sources:

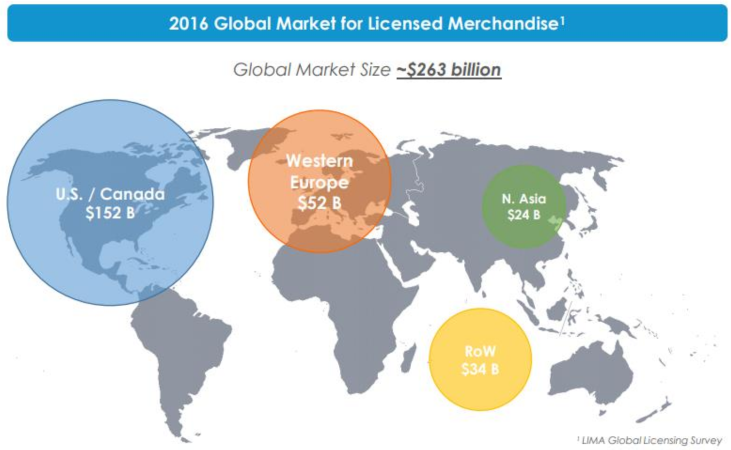
RANK	PROPERTY/BRAND	ACTIONS	CONTENT	AUDIENCE	VIDEO ACTIONS	VIDEOS	VIDEO VIEWS
1	Funko	11.5M	4K	1.2M	438K	213	4.4M
2	SIDESHOW COLLECTIBLES.COM	917K	2K	568K	317K	117	1M
3	GOOD SMILE COMPANY	799K	952	194K	13K	6	0
4	Hot Toys	611K	221	642K	60K	13	0
5	kidrobot	520K	1K	373K	11K	17	41K

Top collectible toy brands 2017 according to Shareablee. Data retrieved 7/3/17. IMAGE VIA SHAREABLEE.

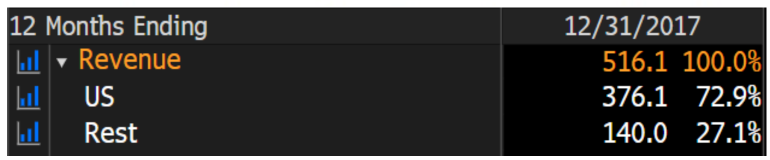
Original content will give Funko additional sources of revenue from the media directly, as well as the option to keep exclusive rights to the licenses for any products. This will also increase margins, as there will not be royalties, which make up an average of 15% of revenue. Royalties as a percent of sales often fluctuate from year to year based on the mix of properties sold for the year. As discussed earlier, Funko is seeing success with it's current animated shorts.

SIENAcollege BJORKLUNDFUND

International Expansion:



in 2016, international sales accounted for only **20%** of Funko's total sales

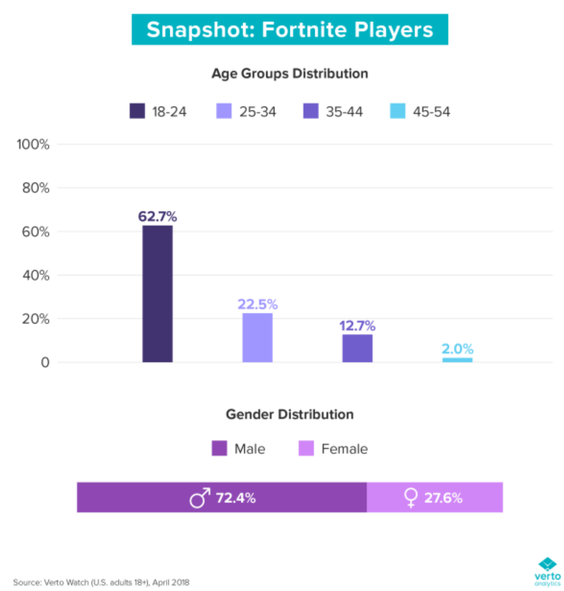


12 Months Ending	12/31/2017	
Revenue	516.1	100.0%
US	376.1	72.9%
Rest	140.0	27.1%

Funko is focusing expanding sales outside of the United States. In Q2FY18, international sales increased 32%. There has been a 93% increase in European sales alone. Underground Toys was been Funko's European distributor for the two years prior to the acquisition. Underground Toys originates and manufactures toys and other entertainment products. Managing Director of EMEA for Funko Andy Oddie said, "Funko and Underground Toys Limited are a natural fit given our shared commitment to high-quality, stylized pop culture products and we see great opportunities to create compelling cross-category pop culture offerings by leveraging our combined skills and experience."

In 2016, international sales accounted for 20% of revenue. In 2017 that number increased to 27.1% of revenue. This growth compaired with the accisition of Underground Toys represents Funko's commitment to international growth and expansion. Funko is also working on its ecommerce distribution, which will improve access to Funko products. Direct to consumer sales, including those directly from internet sale (excluding third-party online retailers) accounted for 6% of sales in 2017, but Funko has stated that they intend to grow their direct to consumer sales in the future. This will increase margins and allow geographic regions that previously have not had retail access to Funko products. And as we will talk about next, the addition of properties with global appeal will also help build an international audience.

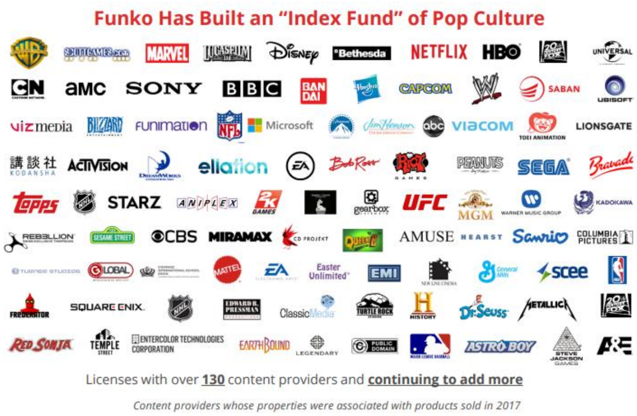
Growth in New and Existing Properties (Mention turn around and low development costs):



FNKO's success is based on their ability to identify popular franchises and obtain the rights to create strong product lines that fit both the demands of the consumer and the needs of the property. In July 2018, Funko announced two major properties being added to its catalogue that will help to boost short/midterm sales and long-term sales, respectively.

The first property Funko is adding is Epic Game's Fortnight. One of the biggest games of the year, Fortnite saw 78.3 million gamers play in August 2018, with over 60% under the age of 24. While Hasbro also holds the rights to create Fortnite products, Hasbro's main products seem to be their Official Nerf Fortnite themed blasters and the Monopoly: Fortnite Edition game.

Funko's products will be featured in their iconic Pop! Figures, 5 Star figures, Pint Size Heroes, Vinyl, keychains, and POP! Apparel product lines.



The second major property added to Funko's catalogue was Pokémon. Funko and Pokémon launched their first Pikachu figure in July exclusively at Target. Vice President of marketing at The Pokémon Company International stated, "Pokémon is always looking for the best ways to deliver its popular characters to its fans and the timing is perfect to team up with Funko." Currently, Funko's sales consist of 45% Evergreen products. Evergreen title are those that are not directly linked to new releases, such as Harry Potter, Classic Disney, and more. While Funko does rely on the strength of pop culture events from year to year, including theatrical (21% of sales) and television releases (18% of sales), the mix of evergreen titles as almost half of sales helps mitigate the risk of weak pop culture title releases. Title like Pokémon also hold international appeal, helping reach audiences and grow sales beyond the United States. 2018 will only see limited distribution of the Pokémon property, with increased rollout in 2019. Both new licenses will be in production by Q3FY18 and Fortnite will be in full production by Q4.

In Q2FY18, Funko increased its number of active properties 26% to 510 properties. Not only did the number of active properties increase, but so did the sales within current properties. Active properties saw and average net sales increase of 5% in Q2, showing that sales are increasing

Conclusion:

Funko is taking active steps to aggressively expand its business. Funko's strong relationship with retailers affords them more shelf space as well as unique position in respects to similar products. Funko also has plans to improve it's ecommerce and direct-to-consumer sales, not only increasing revenue but improving margins as well. With video driving sales and new, original content expanding revenue opportunities, Funko has only just tapped into the power of the media industry and has more to explore, leading to higher sales and improved margins. Opportunities in new markets and properties gives Funko the chance to expand their business and increase sales. Overall, Funko's value lies in both its expansion ability and its opportunity to increase margins.

SIENAcollege

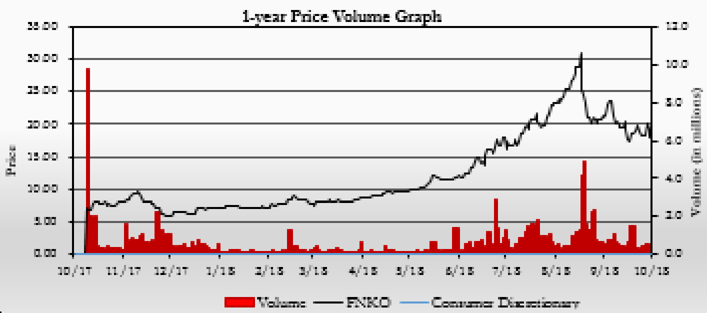
BJORKLUND FUND

Funko, Inc. (FNKO)

CENTER FOR GLOBAL FINANCIAL STUDIES

BULLISH

Analysis by Sam St.Germain	Current Price:	$18.86	Intrinsic Value	$21.13	Target 1 year Return: 24.02%
10/25/2018	Divident Yield:	0.0%	Target Price	$23.39	Probability of Price Increase: 98%



Description

Funko, Inc., a pop culture consumer products company, designs, sources, and distributes licensed pop culture products in the United States, China, Vietnam, and the United Kingdom.

General Information

Sector	Consumer Discretionary
Industry	Distributors
Last Guidance	May 8, 2018
Next earnings date	November 8, 2018

Market Assumptions

Estimated Equity Risk Premium	6.81%
Effective Tax rate	25%

Market Data

Market Capitalization	$425.92
Daily volume (mil)	0.24
Shares outstanding (mil)	23.54
Diluted shares outstanding (mil)	23.37
% shares held by institutions	22%
% shares held by investments Managers	11%
% shares held by hedge funds	7%
% shares held by insiders	0.26%
Short interest	7.75%
Days to cover short interest	1.97
52 week high	$31.12
52-week low	$5.81
Volatility	0.00%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
6/30/2017	N/A	N/A
9/30/2017	0.15%	N/A
12/31/2017	15.41%	1.64%
3/31/2018	10.85%	10.30%
6/30/2018	12.21%	21.30%
Mean	**9.66%**	**11.08%**
Standard error	1.0%	#VALUE!

Market and Credit Scores

Recommendation (STARS) Value--0
Recommendation (STARS) Description--0
Quality Ranking Value--NR
Quality Ranking Description--Not Ranked
Short Score--2
Market Signal Probability of Default % (Non-Ratings)--5.34%
CreditModel Score (Non-Ratings)--b

Industry and Segment Information

LTM Revenues by Geographic Segme	LTM Revenues by Business Segments
United States--73%	Games & Toys--100%
Foreign--27%	--
--	--
--	--
--	--

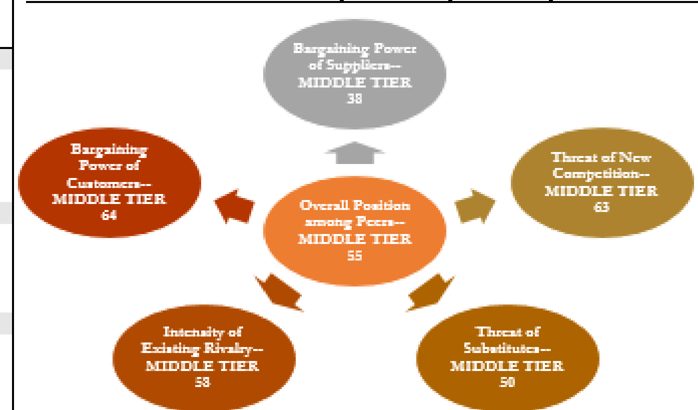
Peers

Mattel, Inc.	--
Hasbro, Inc.	--
--	--
--	--
--	--

Management	Position	Total Compensations Growtl	Stock Price Growth During Tenure
Mariotti, Brian	CEO & Director	6.24% per annum over 4y	
Perlmutter, Andrew	President		
Nickel, Russell	Chief Financial Officer	8.52% per annum over 4y	
Daw, Tracy	Senior VP, General Counsel & Secretary	14.24% per annum over 4y	
Piha, Jessica	Director of Public Relations		
Hartney, Molly	Chief Marketing Officer & Senior VP of E-com		

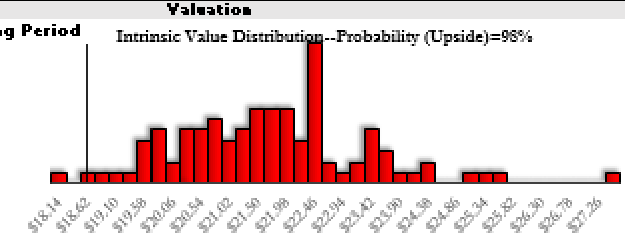
Profitability	FNKO (LTM)	FNKO Historical	Peers' Median (LTM)
Return on Capital (GAAP)	9.0%	0.00%	1.38%
Operating Margin	8%	11.86%	3.24%
Revenue/Capital (GAAP)	1.11	0.00	0.43
ROE (GAAP)	13.0%	7.5%	10.3%
Net margin	2.4%	3.7%	5.4%
Revenue/Book Value (GAAP)	5.449297228	2.02	1.91
Invested Funds	**FNKO (LTM)**	**FNKO Historical**	**Peers' Median (LTM)**
Cash/Capital	1.8%	-1.3%	24.4%
NWC/Capital	45.1%	-262.3%	13.8%
Operating Assets/Capital	13.0%	353.4%	46.7%
Goodwill/Capital	40.1%	10.2%	15.1%
Capital Structure	**FNKO (LTM)**	**FNKO Historical**	**Peers' Median (LTM)**
Total Debt/Market Capitalization	0.97	0.24	0.61
Cost of Debt	9.3%	5.0%	5.0%
CGFS Rating (F-score, Z-score, and default Probabili	A		
WACC	12.3%	11.8%	10.2%

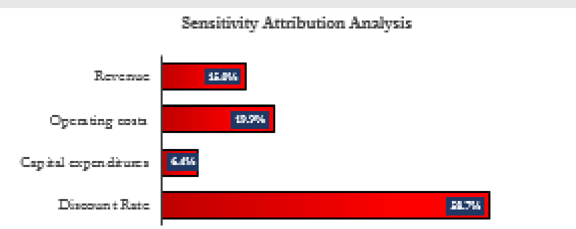
Porter's 5 forces (Scores are percentiles)



Valuation

Forecast Assumptions	Explicit Period (15 years)	Continuing Period
Revenue Growth CAGR	9%	5.0%
Average Operating Margin	11%	10%
Average Net Margin	5%	4%
Growth in Capital CAGR	7%	5%
Growth in Claims CAGR	0%	5%
Average Return on Capital	9%	8%
Average Return on Equity	14%	9%
Average Cost of Capital	10%	11%
Average Cost of Equity	12%	12%





October 28, 2018

Company Name:
Altra Industrial Motion Corp (AIMC)

Marko Stojanovic

Sector: Machinery Components
Industry: Industrial Machinery
Current Price:$31.56
Target Price:$42-45$

Altra Industrial Motion Corp is a leading producer and marketer of a wide range of mechanical power transmission products- brakes, clutches, couplings and others. Most of their products are used on industrial machinery such as fail-safe brakes for elevators and forklifts, gearboxes on conveyors, heavy-duty brakes on mining equipment, clutches for beverage capping equipment, etc. Altra is the parent company of several power transmission industry brands, including Ameridrives, Boston Gear, Warner Electric, TB Wood's, Stieber Clutch, Twiflex, Matrix International and Wichita Clutch. The company was found in 2004, and it's headquarters are in Braintree, Massachusetts.

BUY

Current Price:	$31.56
Target Price:	$42.25
Market Cap:	2B
ROIC/WACC:	.93 (Comp.: .61)
WACC:	9.4% (Comp.:10.6%)

Total Debt: $256.5M
TD/TE= .61
Last dividend: $0.17 (Quarter)

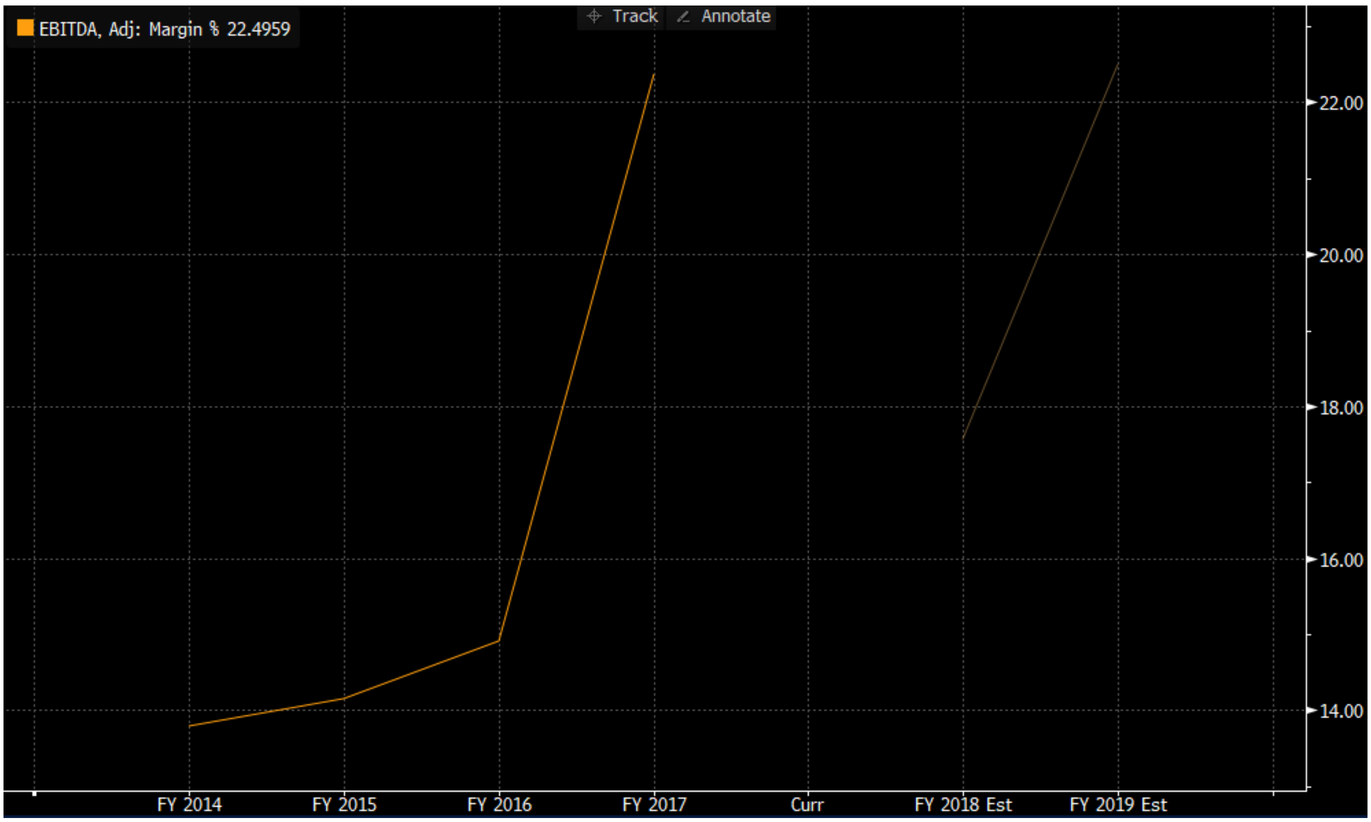
Thesis: Altra Industrial Motion Corp has shown ability to keep steady sales and manage the tariff cost that are big concern in the industry. Their earning performances have been outperforming estimates. The revenue is growing; the industry is stabilizing, which implies that this is undervalued company. Drop in price is following the overall economy.

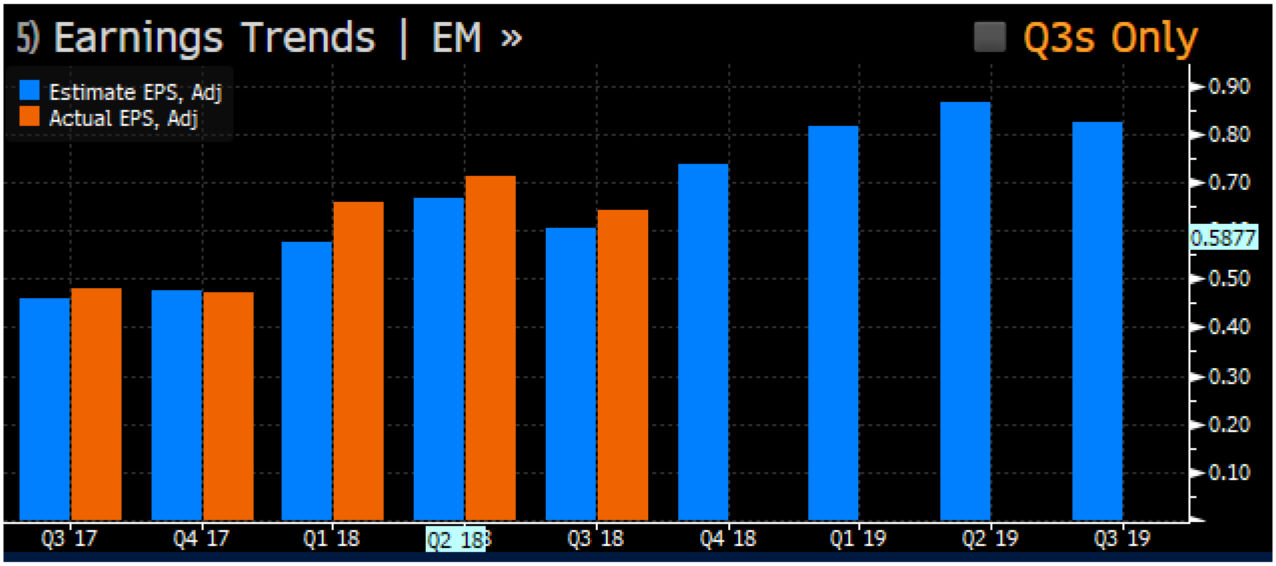
Catalysts:

- **Short Term**: De-lever and strength the balance sheet
- **Mid Term**: Accelerate topline growth
- **Long Term**: Deliver $50M to A&S
  (Automation & Specialty Platform) Integration

Earnings Performance:

Altra Industrial Motion had decline in the revenue growth in 2015 and 2016, however in 2017 they showed 23.7% growth in revenue. Market reacted positively on this and price of stock went up from $30 to approximately $40. Their overall success came from acquisition of Stromag and completion of seventh and eight facility that was in their plan for the year. The company has beat estimates in last 8 earnings reports. The last earning report came on October 25th and they reported EPS of $0.64 and Revenue of $2.78M. They beat estimate for EPS by $0.04 and Revenue by $2.78M. Looking into the forecast for the future earnings, it shows the decline in 2020 but increase in 2019. This forecast is also very biased towards the overall economic situation with China-USA tariff discussion. The EBITDA margin has been growing drastically in last 4 years. In 2014 it was 13.8% and it grew to 22.4% in 2017. It is estimated to drop to 17.6%, but get back to 22.5% in 2019. The Overall we can see that Altra has outperformed the estimates and ability to increase their EBITDA margins by almost 10% in 4 years.

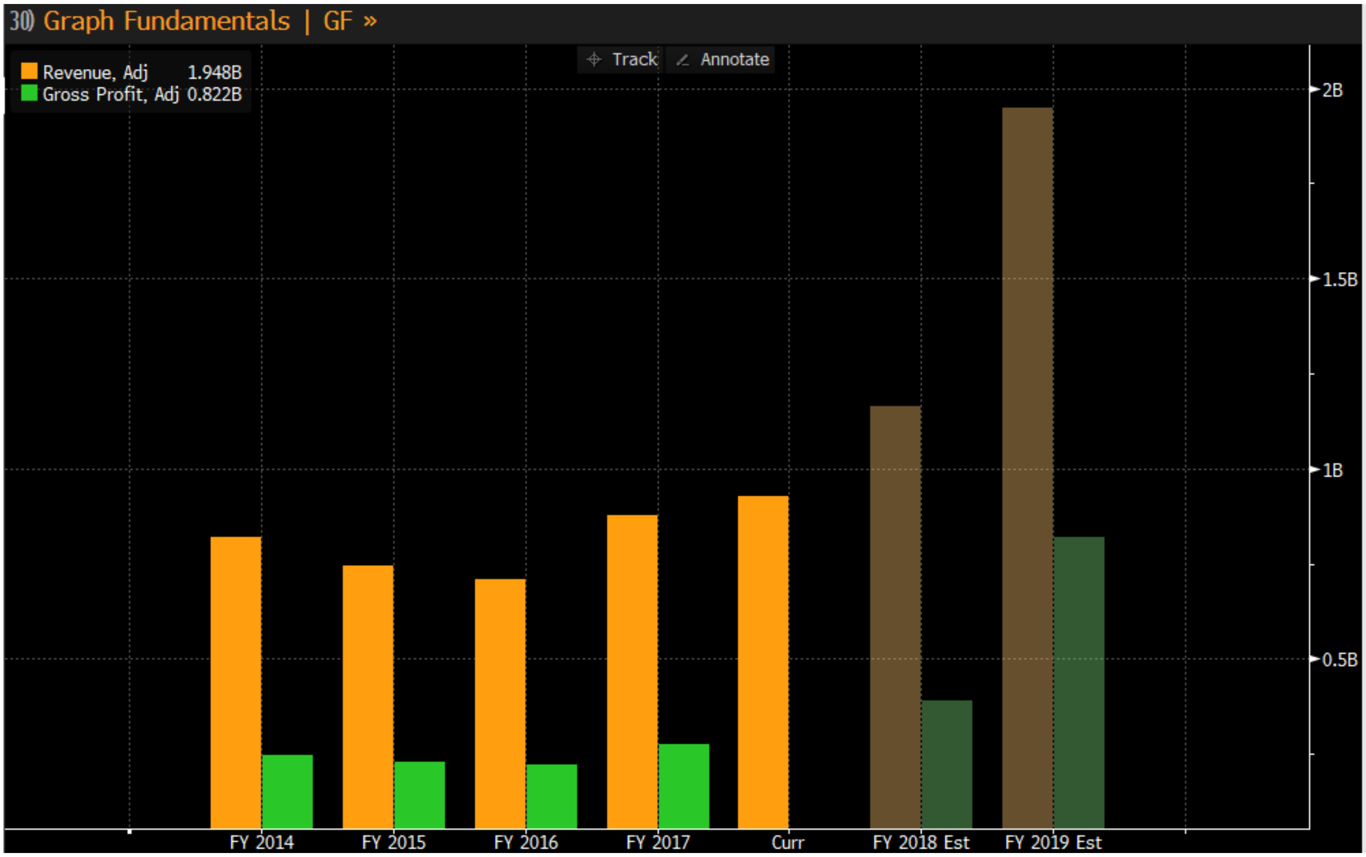




Revenue, Adj	819.8	746.7	708.9	876.7	929.5	1,163.8	1,948.5
Growth %, YoY	13.5	-8.9	-5.1	23.7	12.5	32.7	67.4
Gross Profit, Adj	248.9	228.5	222.1	275.8		390.6	821.6
Margin %	30.4	30.6	31.3	31.5		33.6	42.2
EBITDA, Adj	113.0	105.6	105.7	196.2		204.3	438.3
Margin %	13.8	14.1	14.9	22.4		17.6	22.5
Net Income, Adj	44.6	43.5	45.8	103.6	72.7	102.3	175.3
Margin %	5.4	5.8	6.5	11.8	7.8	8.8	9.0
EPS, Adj	1.63	1.67	1.77	3.57	2.49	2.89	3.46
Growth %, YoY	2.6	2.5	5.9	101.4	19.0	-18.9	19.5

Tariff issues:

The costs are rising due to the tariff that president Trump has proposed on the China's imports. Due to the last tariff propose, Altra Industrial announced in the earning call that direct cost of tariffs are in the range of $6-$10M for legacy Altra businesses and in the same magnitude for other business. Even with this cost, Altra has still improve their sales and their gross margin is improving as well. They also protected themselves by various swaps in currency. In the last earning calls, they also mention that they are working very hard to protect themselves from additional cost that could come after the next meeting between Trump and Xi on November 31 and December 1st. As of now, the reports are stating that trade war is off the table for the meeting, however tariffs are set to rise to 25% and it is very likely that there will be some kind of discussion at the meeting. If we look at the Revenue and Gross Margins, we can see that Tariff has very small influences on Altra Industry, while taking away the Tariffs could benefit them drastically.



Ownership:

The ownership of Altra is very interesting, if we consider that in last month their average volume of shares per day was about 5 million shares per day, while before August this year it was on average 150K. The head fund position grew from 7.05% to 13.58% since September 28.Headge fund Millennium Management LLC purchased 2.47M shares on 9/28 and took long position right before price dropped .Millennium has $65.7B under management and is invested in 3890 securities. It shows that they believe in Altra company. Even though this is the main reason for hedge fund position to grow, the chart shows that hedge fund position has been on incline in one year.

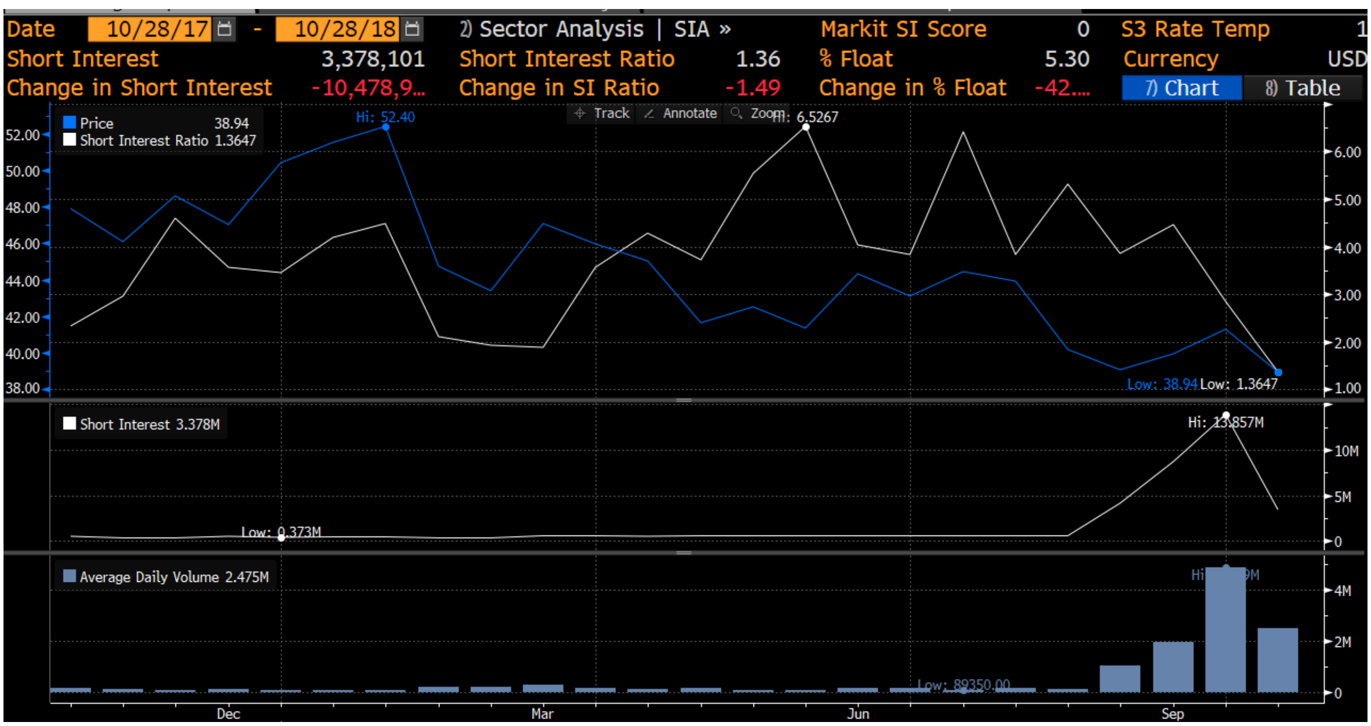
Looking in overall one-year ownership, we can see that Investment Advisors has drop by 3.85% and everything else is almost same. It shows that there is trust in this company from very smart people that take high risk in investments.

	Ownership Type	10/22/17	Curr	Change
11)	Investment Advisor	82.85	79.02	-3.83
12)	Hedge Fund Manager	9.33	13.58	+4.25
13)	Pension Fund	3.12	3.63	+0.51
14)	Individual	2.29	1.98	-0.31
15)	Bank	0.97	0.81	-0.16
16)	Insurance Company	0.98	0.75	-0.23
17)	Government	0.22	0.14	-0.08
18)	Brokerage	0.13	0.03	-0.10
19)	Unclassified	0.02	0.03	+0.01
20)	Other	0	0.03	+0.03
21)	Holding Company	0.02	0.02	0.00

6M 1Y 2Y 5Y Max

Short Interest:

Short interest has very interesting graph. If we follow the price and Interest Ratio, we can see that first drop of the price cause increase of the Short Interest Ratio. This is period between May and September. However, looking at interest ration from September we can see that it has drop down to 1.36 and this could signal that short seller are going to take profit on this and turn it into long position. It signals that people are starting to take long position and believe in the stock price going up in near future. This is good signal that price will go up from now.

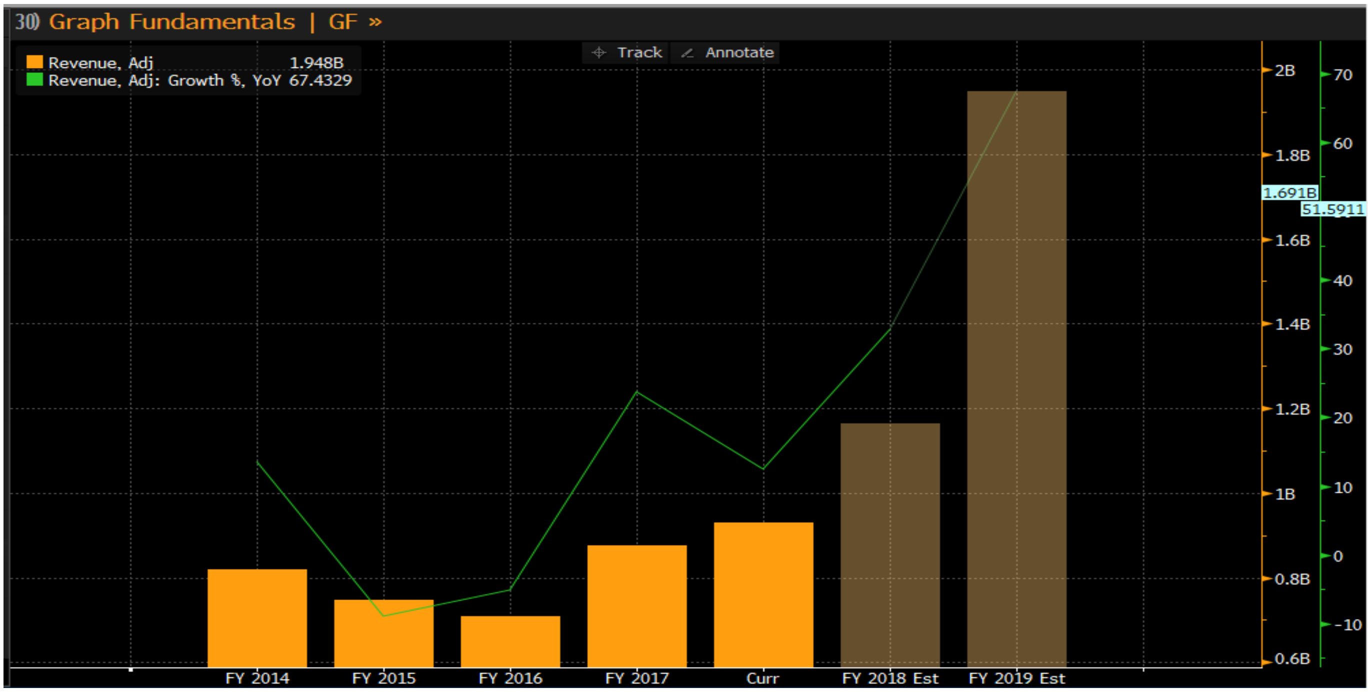


Potentials:

Looking at their financials, we can see growth in almost every aspect of the business. They have beat estimates in last 8 earning calls. They showed the ability to deal with new Tariffs. The meeting between Trump and Xi could potentially help Altra if Trump administration decides to back off from increase on the tariffs. However, even if tariff stays same, we can see that Altra is able to minimize the cost of it. Looking at growth revenue projection for next two years are 32.7% and 67.4%. Their dividends have been growing on average 6.25% with dividend yield of 2.15%. They are planning to use almost all cash to pay off debt and that's their first priority, this would allow them to take different approaches in future investments.

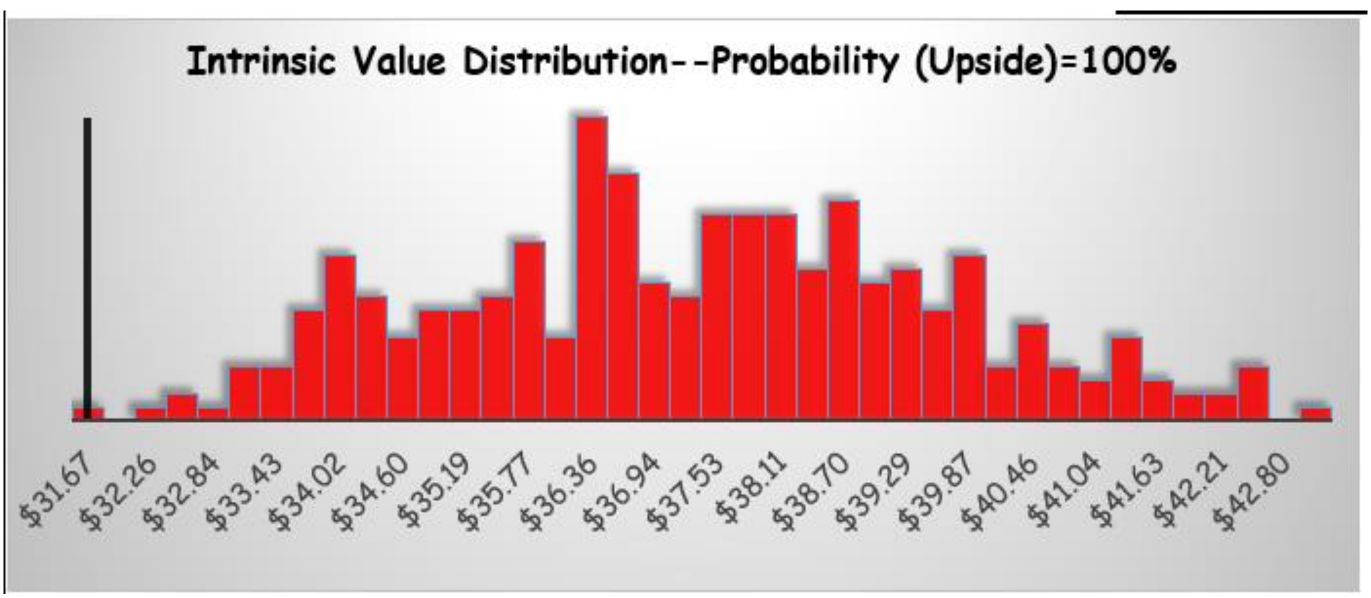
In Millions of USD except Per Share	2014 Y		2015 Y		2016 Y		2017 Y	
12 Months Ending	12/31/2014		12/31/2015		12/31/2016		12/31/2017	
Revenue	819.8	100.0%	746.7	100.0%	708.9	100.0%	876.7	100.0%
Couplings Clutches & Brakes	396.1	47.9%	342.3	45.4%	305.4	42.7%	441.9	49.9%
Electromagnetic Clutches & Bra...	218.6	26.4%	219.7	29.1%	217.9	30.5%	251.5	28.4%
Gearing	212.6	25.7%	192.3	25.5%	192.0	26.8%	191.8	21.7%
Intersegment Elimination	-7.5		-7.6		-6.4		-8.4	
Revenue Including Intersegmen...	827.3	100.0%	754.2	100.0%	715.3	100.0%	885.2	100.0%
Couplings Clutches & Brakes	396.1	47.9%	342.3	45.4%	305.4	42.7%	441.9	49.9%
Electromagnetic Clutches & Bra...	218.6	26.4%	219.7	29.1%	217.9	30.5%	251.5	28.4%
Gearing	212.6	25.7%	192.3	25.5%	192.0	26.8%	191.8	21.7%
Percentage of Revenue	–		–		–		–	
Couplings Clutches & Brakes	47.90		45.40		–		–	
Electromagnetic Clutches & Bra...	26.40		29.10		–		–	
Gearing	25.70		25.50		–		–	
Operating Income	75.1	100.0%	64.2	100.0%	47.5	100.0%	81.0	100.0%
Couplings Clutches & Brakes	49.3	52.4%	38.8	47.6%	20.9	29.9%	47.2	48.6%
Electromagnetic Clutches & Bra...	22.0	23.4%	21.6	26.6%	26.4	37.7%	27.8	28.6%
Gearing	22.7	24.1%	21.1	25.9%	22.7	32.4%	22.2	22.9%
Loss on partial settlement of p...	–		–		–		-1.7	
Restructuring	-1.8		-7.2		-9.8		-4.1	
Corporate	-17.1		-10.1		-12.7		-10.4	

In Millions of USD except Per Share	2014 Y		2015 Y		2016 Y		2017 Y	
12 Months Ending	12/31/2014		12/31/2015		12/31/2016		12/31/2017	
Operating Income	75.1	100.0%	64.2	100.0%	47.5	100.0%	81.0	100.0%
Couplings Clutches & Brakes	49.3	52.4%	38.8	47.6%	20.9	29.9%	47.2	48.6%
Electromagnetic Clutches & Bra...	22.0	23.4%	21.6	26.6%	26.4	37.7%	27.8	28.6%
Gearing	22.7	24.1%	21.1	25.9%	22.7	32.4%	22.2	22.9%
Loss on partial settlement of p...	–		–		–		-1.7	
Restructuring	-1.8		-7.2		-9.8		-4.1	
Corporate	-17.1		-10.1		-12.7		-10.4	
Operating Margin	–		–		–		–	
Couplings Clutches & Brakes	52.40		47.60		–		–	
Electromagnetic Clutches & Bra...	23.40		26.60		–		–	
Gearing	24.20		25.80		–		–	
Restructuring Charges	1.8	100.0%	7.2	100.0%	9.8	100.0%	3.5	100.0%
Couplings Clutches & Brakes	0.4	26.7%	2.5	35.1%	7.3	82.3%	1.8	62.2%
Gearing	0.6	36.3%	3.1	42.7%	0.3	3.2%	1.1	36.2%
Corporate	0.1		0.0		1.0		0.5	
Electromagnetic Clutches & Bra...	0.6	37.0%	1.6	22.2%	1.3	14.5%	0.1	1.7%
Property/Plant/Equipment	156.4	100.0%	145.4	100.0%	177.0	100.0%	191.9	100.0%
Gearing	156.4	100.0%	145.4	100.0%	177.0	100.0%	191.9	100.0%
Goodwill	102.1	100.0%	97.3	100.0%	188.8	100.0%	206.0	100.0%
Couplings Clutches & Brakes	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]



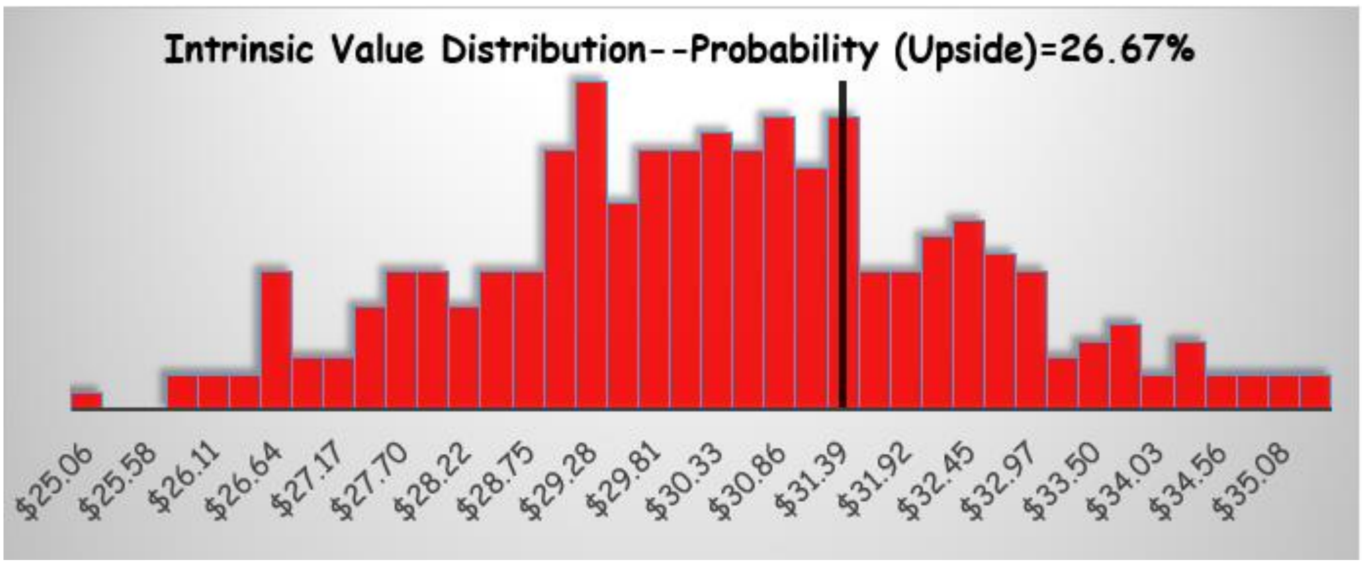
Normal Case:

Using very conservative approach and giving them lower revenue growth than analyst are projecting and decrease in the future EBITDA margin it gives me target price of $42.25. The target price for Analyst is $50. This is in situation that they continue with their production and sales at the rate that they announced.



Bear Case:

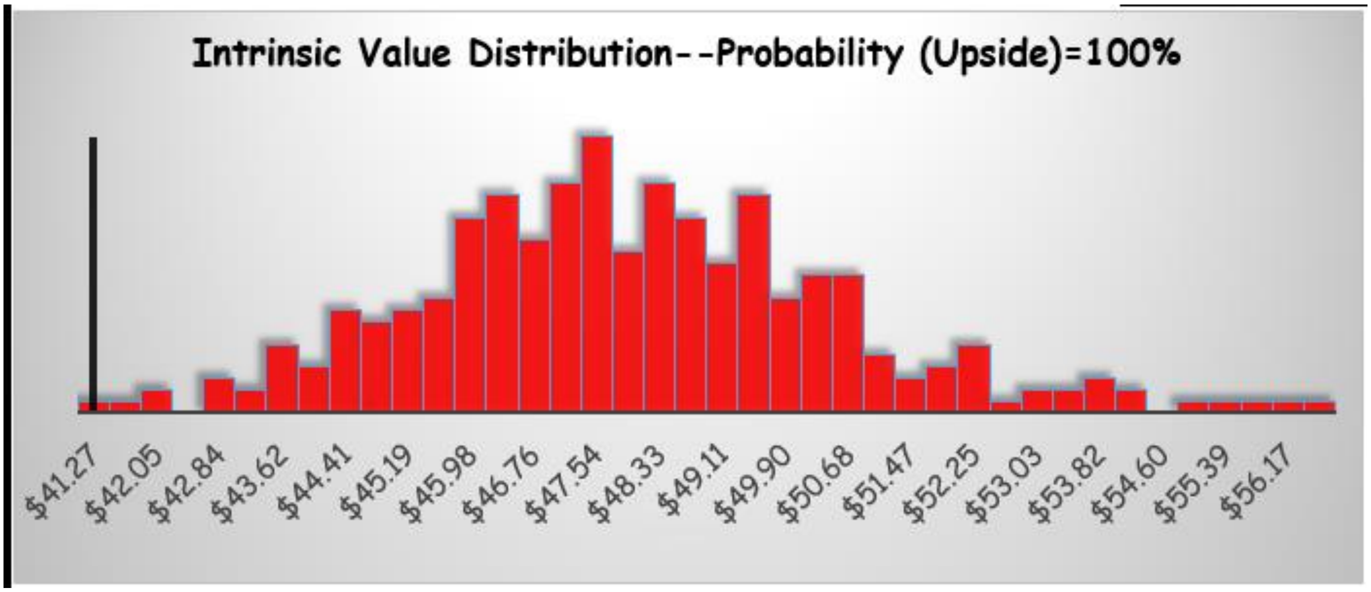
In the situation that overall economy goes bad and their revenue sales drop down by lets assume 3% in next 4 years I am still having positive outlook of Target price $34.82 with higher probability that stock will go around 30$. I do not believe in this scenario due to economy being very stable and the only risk for them as of now could be more Tariffs which I also do not believe will happen in the near future.



Bullish Case:

Taking the consideration that their revenue will grow in next two years by 30% and 60%, including that into cash flows I get target price of $53.24. This is situation that everything goes perfectly and nothing goes wrong. This is very realistic situation, however nothing can be said before Trump and Xi meeting in November.

Revenue, Adj	819.8	746.7	708.9	876.7	929.5	1,163.8	1,948.5
Growth %, YoY	13.5	-8.9	-5.1	23.7	12.5	32.7	67.4
Gross Profit, Adj	248.9	228.5	222.1	275.8		390.6	821.6
Margin %	30.4	30.6	31.3	31.5		33.6	42.2
EBITDA, Adj	113.0	105.6	105.7	196.2		204.3	438.3
Margin %	13.8	14.1	14.9	22.4		17.6	22.5
Net Income, Adj	44.6	43.5	45.8	103.6	72.7	102.3	175.3
Margin %	5.4	5.8	6.5	11.8	7.8	8.8	9.0
EPS, Adj	1.63	1.67	1.77	3.57	2.49	2.89	3.46
Growth %, YoY	2.6	2.5	5.9	101.4	19.0	-18.9	19.5



Conclusion:

I believe that current price is not reflecting real value of the company and the reason is that Industry overall had dropped and the discussion about tariffs are still on going. If tariff situation gets stable, I believe more investors are going to be interested in this industry and the company will be valued at the right price after all. Altra has increased their EBITDA margin, increase their revenue growth and is projected to keep increasing both.

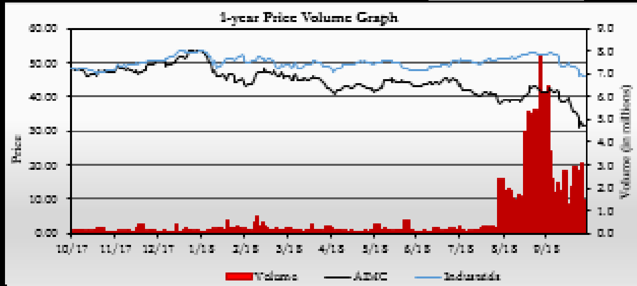
SIENA college | BJORKLUND FUND

Altra Industrial Motion Corp. (AIMC)

CENTER FOR GLOBAL FINANCIAL STUDIES

BULLISH

Analysis by Marko Stojanovic	Current Price:	$31.56	Intrinsic Value	$35.55	Target 1 year Return: 36.02%
10/28/2018	Divident Yield:	2.2%	Target Price	$42.25	Probability of Price Increase: 98



Description

Altra Industrial Motion Corp. designs, produces, and markets mechanical power transmission components worldwide.

General Information

Sector	Industrials
Industry	Machinery
Last Guidance	May 8, 2018
Next earnings date	February 18, 2019

Market Assumptions

Estimated Equity Risk Premium	7.07%
Effective Tax rate	23%

Market Data

Market Capitalization	$2,031.29
Daily volume (mil)	1.41
Shares outstanding (mil)	64.36
Diluted shares outstanding (mil)	29.20
% shares held by institutions	59%
% shares held by investments Managers	39%
% shares held by hedge funds	6%
% shares held by insiders	1.24%
Short interest	5.25%
Days to cover short interest	1.71
52 week high	$53.70
52-week low	$30.94
Volatility	28.28%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
9/30/2017	2.14%	6.45%
12/31/2017	3.99%	-4.39%
3/31/2018	4.76%	-15.35%
6/30/2018	0.21%	-1.23%
9/30/2018	1.15%	-13.71%
Mean	2.45%	-5.64%
Standard error	1.0%	4.8%

Market and Credit Scores

Recommendation (STARS) Value--0
Recommendation (STARS) Description--0
Quality Ranking Value--B
Quality Ranking Description--Below Average
Short Score--0
Market Signal Probability of Default % (Non-Ratings)--1.83%
CreditModel Score (Non-Ratings)--bb+

Industry and Segment Information

LTM Revenues by Geographic Segments	LTM Revenues by Business Segments
North America (Primarily U.S.)--50%	Couplings, Clutches & Brakes--50%
Europe--39%	Electromagnetic Clutches & Brakes--29%
Asia and Other--11%	Gearing--22%
--	Eliminations---1%
--	--

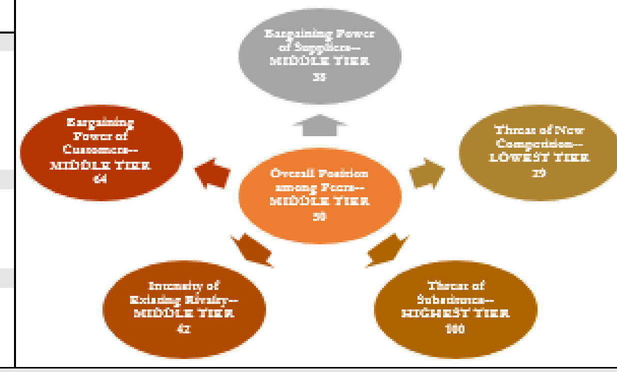
Peers

Actuant Corporation	The Timken Company
CIRCOR International, Inc.	Watts Water Technologies, Inc.
Regal Beloit Corporation	Flowserve Corporation
Colfax Corporation	--
Rexnord Corporation	Infore Environment Technology Group Co., Ltd.

Management	Positions	Total Compensations Growth	Stock Price Growth During Tenure
Christenson, Carl	Chairman & CEO	11.01% per annum over 5y	8.99% per annum over 5y
Storch, Christian	VP & CFO	11.91% per annum over 5y	8.99% per annum over 5y
Deegan, Glenn	VP of Legal & Human Resources, General Couns	15.92% per annum over 5y	8.99% per annum over 5y
Schuele, Craig	Vice President of Marketing & Business Develo	13% per annum over 5y	8.99% per annum over 5y
Ferris, Gerald	Vice President of Global Sales	13.21% per annum over 5y	8.99% per annum over 5y
Patriacca, Todd	Chief Accounting Officer, VP of Finance, Corpo		

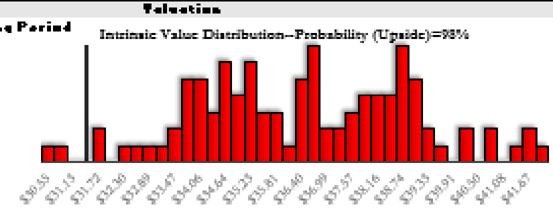
Profitability	AIMC (LTM)	AIMC Historical	Peers' Median (LTM)
Return on Capital (GAAP)	8.0%	8.03%	6.17%
Operating Margin	8%	7.36%	6.74%
Revenue/Capital (GAAP)	1.01	1.09	0.91
ROE (GAAP)	14.8%	13.0%	11.0%
Net margin	6.9%	5.6%	7.2%
Revenue/Book Value (GAAP)	2.155371845	2.33	1.53
Invested Funds	**AIMC (LTM)**	**AIMC Historical**	**Peers' Median (LTM)**
Cash/Capital	6.8%	8.5%	8.7%
NWC/Capital	20.5%	25.6%	15.6%
Operating Assets/Capital	46.7%	48.3%	34.8%
Goodwill/Capital	26.0%	16.0%	37.5%
Capital Structure	**AIMC (LTM)**	**AIMC Historical**	**Peers' Median (LTM)**
Total Debt/Market Capitalization	0.38	0.46	0.45
Cost of Debt	2.8%	4.3%	4.3%
CGFS Rating (F-score, Z-score, and default Probability)	BB		
WACC	6.6%	9.4%	9.2%

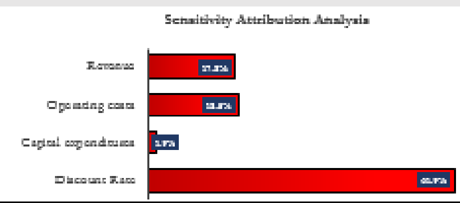
Porter's 5 forces (Scores are percentiles)



Valuation

Forecast Assumptions	Explicit Period (12 years)	Continuing Period
Revenue Growth CAGR	16%	2.5%
Average Operating Margin	13%	10%
Average Net Margin	10%	8%
Growth in Capital CAGR	12%	2%
Growth in Claims CAGR	0%	2%
Average Return on Capital	14%	14%
Average Return on Equity	17%	15%
Average Cost of Capital	8%	10%
Average Cost of Equity	12%	12%





SIENA college

BJORKLUND FUND