Applied Investment Management (AIM) Program

AIM Class of 2017 Equity Fund Reports
Spring 2016

Date: Friday, April 8th | ***Time:*** *2:45 – 4:30* p.m. | ***Location: AIM Research Room 488***

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Derek Grifka	BAE Systems ADR	BAESY	International Industrials	2
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These student presentations are an important element of the applied learning experience in the AIM program. The students conduct fundamental equity research and present their recommendations in written and oral format – with the goal of adding their stock to the AIM Equity Fund. Your comments and advice add considerably to their educational experience and is greatly appreciated. Each student will spend about 5-7 minutes presenting their formal recommendation, which is then followed by about 8-10 minutes of Q & A.

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BAE Systems ADR (BAESY)

April 8, 2016

Derek Grifka International Industrials

BAE Systems (BAESY) is a world leader in electronic warfare that provides technologies in the aerospace and defense industries. BAESY has a U.K. headquartered air and maritime segment, U.S. headquartered intelligence and armaments segments, and other warfare segments based internationally in areas such as Saudi Arabia and Australia. BAESY recognizes revenues in the following segments: air, land, and naval warfare and commercial systems (74.1% of revenue), defense and commercial electronics (15.2%), and cyber security (10.7%). Its customer base generally consists of governments and its revenues are largely defense-related (92%), while BAESY is seeking to expand in the commercial sector (8% of revenues). The majority of BAESY's revenues comes from the U.S. (35.6%), the U.K. (22.4%), and Saudi Arabia (21.4%). The company was created on November 30, 1999 and is headquartered in London, U.K.

Price ($): (3/8/16)	28.62	Beta:	0.95	FY: Dec	2015	2016E	2017E	2018E
Price Target ($):	35.23	WACC	8.4%	Revenue (Mil)	25,606	25,811	26,120	26,382
52WK H-L ($):	32-26	M-Term Rev. Gr Rate Est:	1.1%	% Growth	0.79%	0.80%	1.20%	1.00%
Market Cap (mil):	22,693	M-Term EPS Gr Rate Est:	0.7%	Gross Margin	25.78%	25.81%	25.85%	25.89%
Float (mil):	787.4	Debt/Equity:	134.0%	Operating Margin	7.76%	7.71%	7.78%	7.86%
Short Interest (%):	0.00%	Debt/EBITDA (ttm):	2.35x	EPS (Cal)	$1.77	$1.96	$1.98	$1.99
Avg. Daily Vol (mil):	98,984	ROA:	4.6%	FCF/Share	$0.61	$3.21	$3.04	$2.81
Dividend ($):	1.17	ROE:	38.5%	P/E (Cal)	16.7	14.6	14.5	14.4
Yield (%):	4.10%	ROIC:	16.2%	EV/EBITDA	10.1	9.8	9.6	9.5

Recommendation

Defense is becoming an increasing priority in today's world, which bodes well for BAE Systems. The company's three largest customers (U.S., U.K, and Saudi Arabia) are 3 of the 4 countries with the largest defense budgets in the world with the U.S. leading the way. Defense spending in the U.S. is increasing after the Bipartisan Budget Act of 2015 was passed causing budget caps to be increased for FY 2016 and 2017 by $33 billion and $23 billion, respectively. In its Strategic Defense and Security Review, the U.K. has stated that it plans to spend $253 billion on defense over the next ten years, which includes some of BAESY's products, including a joint investment with France regarding unmanned combat air capability (drones). For its Saudi Arabian market, the area will continue to be a significant factor in regards to resuming its training aircraft contract. Although its Australian geographic segment is rather small (3.1% of total revenue) it is the company's fourth largest source of revenue, and the Australian government confirmed its commitment to increasing annual defense expenditures from $32.4 billion to $58.7 billion over the next decade. The company is able to enjoy a gross margin of 25.8%, compared to its peer average of just 18.4%. To further its capabilities and seek superior products, the firm has invested approximately 7% of its total revenues in customer and company-funded research and development programs. Beyond manufacturing, the company generated approximately 42% of its revenues from support and service activities. For the reasons mentioned, it is recommended that BAE Systems be added to the AIM Equity Fund with a price target of $35.23, representing a 23.1% upside.

Investment Thesis

- **Increased spending of defense in Europe and U.S.** Because of recent terrorist attacks, countries, especially in Europe, see a need to revamp security. Since the attack in France, the country (which consists of over 2% of revenue) has decided to increase counter-terrorism spending over the next four years by over $4.3 billion from its current budget of $35 billion. This should also send a ripple effect through the rest of Europe and to the U.S, which has proposed a 50% increase in spending towards counter-terrorism. In addition to terrorism worries, Europe and its allies are increasing concerns over Russian aggression. After 20 years of falling European defense budgets, fears of Russian aggression have caused an increase of 8.3% of defense spending this year, while the U.S. is proposing a deal to quadruple its 2017 budget for European defense from roughly $0.85 billion to $3.4 billion.

- **Cyber security increase.** BAESY's award-winning cyber security segment, which accounted for 10.7% of the total revenue in 2015, has increased from just 6.9% of its revenue in 2014. In 2015, the company saw an increase of revenues in cyber security of 56.1% YoY. This trend could continue as President Obama petitioned in his fiscal 2017 budget proposal for an increase of almost 35.7% in cyber security spending to $19 billion. BAESY recently secured a ten-year contract with the U.S. government related to intelligence and security that is expected to be valued over $1 billion, which could be a beginning step to advancing in this area. Additionally, in lieu of the terrorist attacks in Europe, the U.K. government has recently proposed an increase in cyber security protection by 18%.
- **Expansion in the commercial sector.** To further its reach in areas separate from defense, BAESY is hoping to expand its commercial sector, which saw revenue growth of 7% YoY. In late 2015, the company opened a $46 million state-of-the-art aviation technology manufacturing plant for commercial aircraft electronics in Fort Wayne, IN. After securing multi-year contracts and having strong performance in the commercial cyber security, the company sees a big opportunity to expand in this area, especially after recent security breaches of companies, such as Target Corp. and Sony Corp., and estimates this target market at $15 billion per year.

Valuation

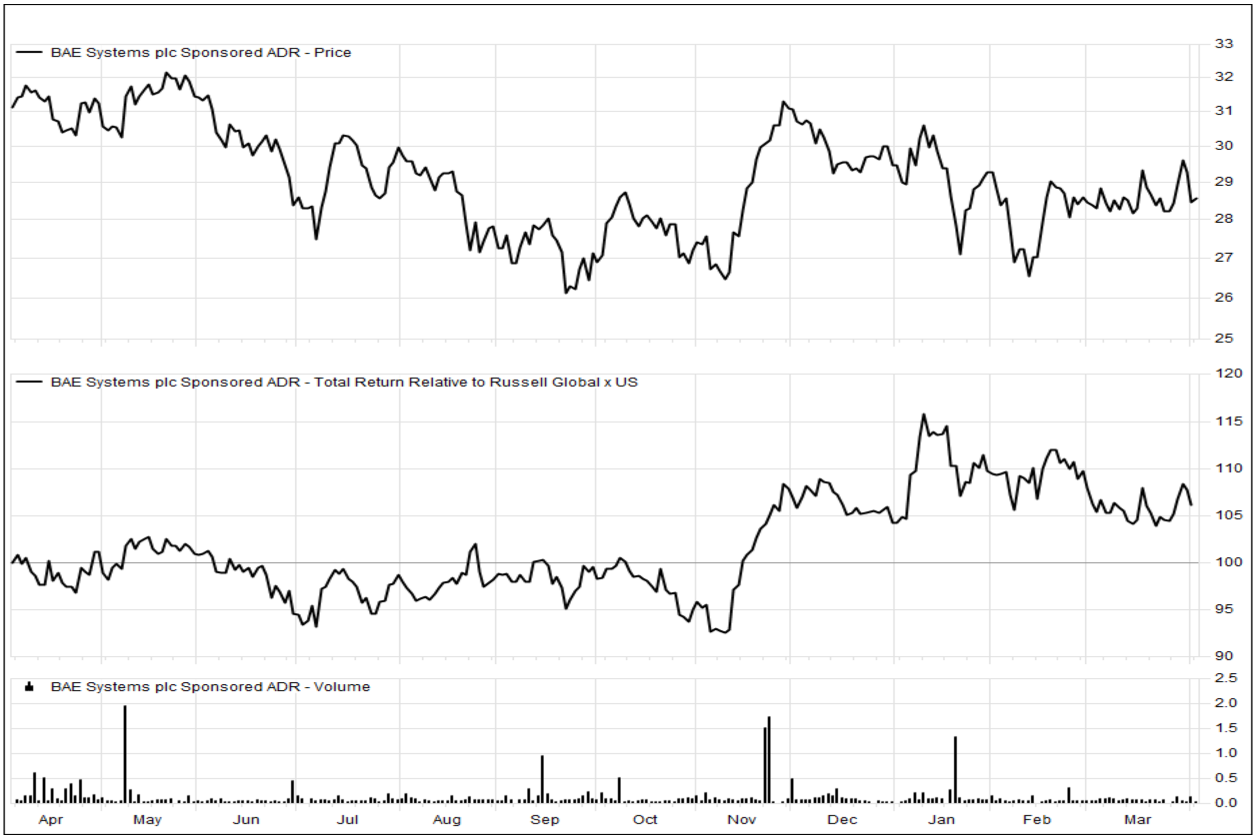
To reach an intrinsic value for BAESY, a five year DCF model was constructed. With a terminal growth rate of 2.0%, WACC of 8.40%, an intrinsic value of $37.36 was reached. The sensitivity analysis on the terminal growth rate and WACC ranged from $27.79-$59.09. Additionally, a P/E multiple valuation was conducted using an estimate EPS for 2016 of $1.96, a comparables average P/E of 20.42x, and BAE System's 4-year historical average P/E of 13.43x which resulted in a valuation of $33.09. By weighting the two valuation models 50/50, a price target of $35.23 was reached, which yields a 23.1% upside. BAE Systems pays a dividend semi-annually, representing an annualized dividend yield of 4.10%.

Risks

- **Possible European Dissolution.** The possibility of a "Brexit" from the European Union could have adverse effects on the British Pound (1 British Pound = 1.42 USD). This could also have a damaging effect on the Euro (1 Euro = 1.14 USD), which could affect its revenues in regards to its European customers.
- **Instability in the Middle East.** With the decrease in oil prices affecting Saudi Arabia, Saudi government is seeing the need to cut back on its astronomical defense spending (>10% of GDP). While the country tries to reduce its dependency on oil money, it has cut its defense spending 3.6%. Although regional tensions generally increase the need for defense, it could raise concerns for political instability and could magnify currency issues that Saudi Arabia is currently facing, which could reduce demand from the country.
- **Foreign Affairs.** Because government defense spending is largely reliant on government funds, any macroeconomic setbacks could affect the company's revenues directly.

Management

Ian King was appointed CEO of BAE Systems in 2008. Before joining the company, Mr. King was the Finance Director of Marconi Defense Systems for several years, then moved to Finance Director of Marconi Electronic Systems. In 1998, he became the first CEO of Alenia Marconi Systems. Jerry DeMuro is an executive director on the board of directors and CEO of one of BAESY's subsidiaries in the U.S. Mr. DeMuro has experience in the cyber security and intelligence sector, including serving as EVP and Corporate Vice President for Information Systems and Technology group at General Dynamics. Other notable executives in the company include Peter Lynas, Group Finance Director, and Tom Arseneault, COO.



Source: FactSet

Ownership

% of Shares Held by All Insider and 5% Owners:	0.70%
% of Shares Held by Institutional & Mutual Fund Owners:	91.90%

Source: FactSet

Top 5 Shareholders

Holder	Shares	% Out
Invesco Asset Management Ltd.	315,682,000	10.00
Templeton Investment Counsel LLC	155,783,000	4.90
Barclays Bank Plc (Private Banking)	126,020,000	4.00
Capital Research & Management Co. (World Investors)	116,244,000	3.70
Legal & General Investment Management Ltd.	95,649,000	3.00

Source: FactSet

Peer Analysis

Name	Ticker	Market Cap (mil)	Sales (mil)	D/E	P/E	Gross Margin
BAE Systems Plc ADR	BAESY	22,693	25,606	1.34	16.65	25.8%
General Dynamics Corp.	GD	41,179	31,469	0.32	15.13	19.5%
Northrop Grumman	NOC	36,245	23,526	1.16	19.28	24.0%
Thales	HO	18,221	14,063	0.38	28.27	23.1%
Finmeccanica	FNC	7,235	12,995	1.34	27.32	7.1%
Peer Averages		25,720	20,513	0.80	22.50	18.4%

**Removed For Relative Valuation Analysis*

Source: FactSet

Flamel Technologies SA (FLML)
April 8, 2016

Tyler Sucharzewski International Healthcare

Flamel Technologies SA (NASDAQ: FLML) is an international specialty pharmaceutical company that focuses on two business segments. The company's major source of revenue is their specialty products; however, they also are developing their drug delivery business. In 2012, Flamel acquired Éclat pharmaceuticals, essentially transforming their business into a specialty pharmaceutical player. Flamel has seen strong returns from their specialty products and continue to push new, innovative products through the pipeline for FDA approval. Flamel currently has one new product, codenamed Éclat #3, which is on track for 2016 release and they plan on releasing Éclat #4 in 2018. Flamel has also just acquired FSC Holdings, LLC, allowing the firm to diversify their revenue streams and continue to penetrate new markets. Flamel is headquartered in France and was founded in 1990.

Price ($): (4/1/16)	10.97
Price Target ($):	25.05
52WK H-L ($):	7.56 - 26.09
Market Cap (mil):	452.41
Float (mil):	38.61
Short Interest (%):	0.00%
Avg. Daily Vol (mil):	0.35
Dividend ($):	-
Yield (%):	-

Beta:	1.05
WACC	9.56%
M-Term Rev. Gr Rate Est:	19.7%
M-Term EPS Gr Rate Est:	81.7%
Debt/Equity:	1.82
Debt/EBITDA (ttm):	1.08
ROA:	21.9%
ROE:	104.8%
ROIC:	48.8%

FY: Dec	2015	2016E	2017E	2018E
Revenue (thousands)	173,209.00	130,468.37	156,229.50	261,205.29
% Growth	1072.31%	-24.68%	19.75%	67.19%
Gross Margin	85.98%	83.15%	84.04%	87.64%
Operating Margin	58.80%	24.84%	32.27%	57.76%
EPS (Cal)	$0.98	$0.23	$0.41	$2.19
FCF/Share	$1.82	$0.69	$0.99	$2.61
P/E (Cal)	11.2	48.3	26.6	5.0
EV/EBITDA	4.2	13.3	8.6	2.9

Recommendation

In the healthcare sector, the specialty pharmaceuticals industry is highly competitive. When products are not denied by the FDA during the testing phase, they often are driven out of the market quickly by substitutes or generics. Despite these risks, well run companies have the opportunity to reap impressive returns with new, innovative products. Flamel Technologies struggled for many years to define itself; however, their 2012 acquisition of Éclat pharmaceuticals transformed their business from a failing drug delivery company to a powerful player in the specialty pharmaceuticals business. After the acquisition, Michael Anderson, Éclat's CEO, was appointed as CEO of Flamel. Their first Éclat drug released was Bloxiverz, which was a resounding success. Released in the second half of 2014, Bloxiverz saw over $150 million in revenue in 2015, its first full year on the market. Flamel also released Vazculep in 2015, which contributed over $20 million to revenue the same year. Revenue from these two products increased over 1000% from 2014. While Bloxiverz and Vazculep had strong first year sales, much of these sales will likely decline over the next year due to competition from generics. To combat this, they have been pushing through a new sodium oxybate to combat narcolepsy, Éclat #3, which is expected to generate revenues of $18 million in 2016, $60 million in 2017, then $30 million in 2018. Éclat #4 is expected to release in 2018, which is estimated to gain similar market share as Éclat #3. In addition to specialty products, Flamel has acquired FSC Holdings, expanding the business into pediatrics. FSC is projected to bring in about $15 million in revenue each year and will allow Flamel to be less dependent on its specialty products. Additionally, Flamel has a drug delivery business and sells their license for the different delivery products to other pharmaceutical companies. While much of the pharmaceutical industry is currently undervalued due to market uncertainty, Flamel is one of the few companies that is able to boast strong earnings while still be undervalued. Due to the above factors, it is recommended that Flamel Technologies be added to the AIM Fund with a price target $25.05, representing a 128% upside.

Investment Thesis

- **Strong Specialty Product Sales.** Since the release of Bloxiverz and Vazculep, revenue has increased over 1000% YoY. Moving forward, Bloxiverz and Vazculep are expected to bring in about $60 million and $19 million in revenue a year respectively. With this new revenue, more products have been added to the pipeline, with Éclat #3 due for the market later this year. Flamel also has the opportunity to gain market exclusivity with Éclat #3 when released. These new products will generate stronger than expected revenues in the near term.

- **Acquisitions with Low Debt Financing.** The 2012 acquisition of Éclat Pharmaceuticals was a turning point for Flamel, transforming the company from a mediocre drug delivery business to a strong specialty product competitor. With the acquisition of FSC, new opportunities will be exploited in the pediatrics business. It should also be noted that these acquisitions were not financed with typical debt financing, but rather through unique royalty and stock warrant agreements. With these agreements, there are no traditional interest payments, putting less expense and debt repayment pressure on the company during slower years.
- **Expansion of Drug Delivery Business.** Specialty products currently drive almost all revenue for Flamel, but they continue to expand and innovate in its drug delivery business, with numerous licensing agreements coming in the future. As more cash is available for research and development, Flamel will be able to continue expanding this business and transform it into a larger driver of revenue.

Valuation

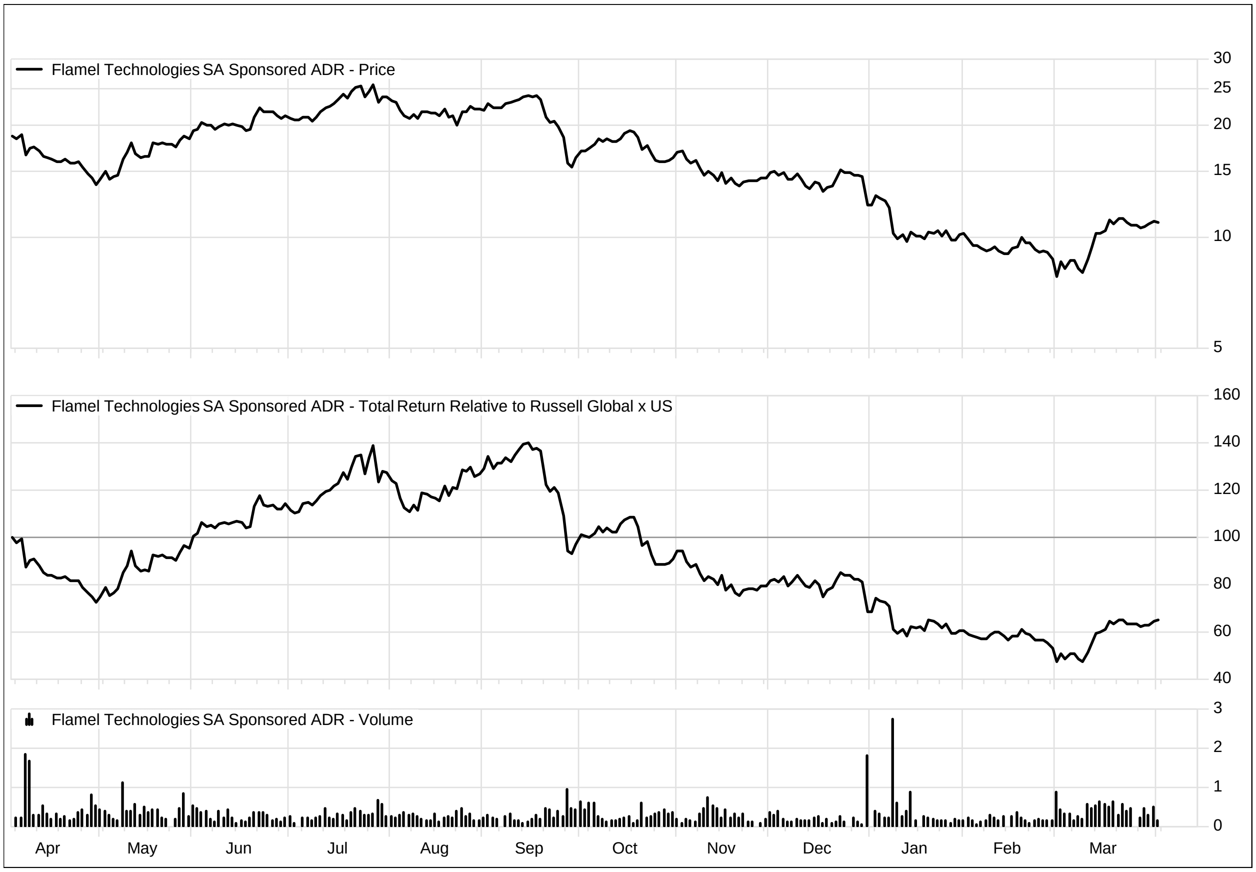
To reach an intrinsic value for FLML, a five year DCF model was constructed. Using a terminal growth rate of 2% and a WACC of 9.56%, an intrinsic value of $27.32 was reached. A ± 1% sensitivity analysis on the WACC and a ± $10,000 on 2016 EBIT ranged between $21.41 and $37.27. Additionally, a Price to Sales multiple valuation was conducted using 2015 Sales of $173.2MM and peer comparable multiple of 4.97x, resulting in a valuation of $19.75. By weighting the DCF valuation 70% and the Price to Sales 30%, an intrinsic value of $25.05 was reached. The company does not pay a dividend.

Risks

- **Competition from Generics.** Even though specialty products have the opportunity for large returns, often these returns are short lived as generics come to market that copy the product, but at a much lower price. It is for this reason that the revenue from Bloxiverz and Vazculep will be declining in the coming years. However, with future products there is the possibility of market exclusivity, which would delay this risk a few years.
- **Possible FDA Denial and Waiting Period.** Before coming to market, all of Flamel's products must be taken approved by the FDA. This process takes time, and often after months of waiting products will not be approved. This costs the company in research and development costs and in time. This is especially harmful to specialty pharmaceutical companies like Flamel
- **Uncertain Government Policies** There have been multiple presidential candidates talking about their healthcare plans this year, with everything mentioned from price ceilings to a full single payer system. Based on upcoming political decisions, Flamel could be negatively affected by policy changes.

Management

Michael S. Anderson was the CEO of Éclat pharmaceuticals before the 2012 acquisition. When Éclat was acquired by Flamel, Mr. Anderson assumed the position of CEO of Flamel. Before Éclat Mr. Anderson was president and CEO of KV Pharmaceuticals' generic business, and before that president and CEO of TherRx Corporation. Mr. Anderson recently increased his stake in the company. Mike Kanan is the CFO of Flamel Technologies. Mr. Kanan got his start at Deloitte & Touche, where he stayed for 11 years and then moved to multiple companies with leadership positions in finance.



Ownership

% of Shares Held by All Insider and 5% Owners:	1.76%
% of Shares Held by Institutional & Mutual Fund Owners:	75.63%

Source: ThompsonOne

Top 5 Shareholders

Holder	Shares	% Out
Broadfin Capital LLC	4,394,464	10.9
Janus Capital Management LLC	4,318,315	10.7
Deerfield Management Company LP	4,072,809	10.1
The Boston Company Asset Management, LLC	2,329,008	5.8
Deutsche Investment Management Americas, Inc.	1,695,265	4.2

Source: ThompsonOne

Peer Analysis

Name	Ticker	Market Cap (mil)	D/E	Sales (mil)	P/S	Net Margin
Flamel Technologies	FLML-US	452.41	1.82	172.2769	2.77	23.47%
Eagle Pharmaceuticals, Inc.	EGRX-US	635.92	0	66.2	10.29	3.88%
Alkermes PLC	ALKS-US	5,376.97	0.27	628.335	8.53	-36.15%
Supernus Pharmaceuticals, Inc.	SUPN-US	800.77	0.06	144.427	5.57	9.70%
BioDelivery Sciences International, Inc.	BDSI-US	178.05	0.91	48.231	3.64	-78.11%
Peer Averages		1,488.82	0.61	211.90	6.16	-15.44%

Source: Factset

Allianz Se (AZSEY)
April 8, 2016

Jaclyn Godwin — International Financial Services

Allianz SE (NYSE: AZSEY) is a global firm that offers insurance and asset management products to private and corporate clients. It operates within four major segments: Property and Casualty Insurance (53.4%), Life and Health Insurance (41.2%), Asset Management (5.2%), and Corporate and Other (0.2%). Within the Property and Casualty segment (P&C), insurance products include motor liability, liability, property, accident, credit, travel assistance, and marine, aviation, and transport. The Life and Health segment (L&H) offers endowments, annuities, terms, disabilities, investment-oriented products, private life insurance, group products, and pension products. Clients seeking asset management services may select from equity products, fixed income products, alternatives, and solutions. Allianz's asset management business, Allianz Asset Management, is composed of the Pacific Investment Management Company (PIMCO) and Allianz Global Investors (AllianzGI). AZSEY operates across the globe with major revenues flowing from Germany, Italy, United States, France, Taiwan, Switzerland, South Korea, and Spain. The company was founded in 1890 and is headquartered in Munich, Germany.

Price ($) (4/3/3016):	15.99	Beta:	0.94	FY: Dec	2014	2015	2016E	2017E
Price Target ($):	21.15	WACC:	5.41%	Revenue (mil)	127.91	115.10	119.13	123.89
52Wk H-L ($):	18.15 - 14.31	Loss Ratio:	73.56	% Growth	-2.82%	-10.01%	3.50%	4.00%
Market Cap (mil):	72,689	Expense ratio:	20.07	Operating Margin	7.56%	9.48%	12.27%	12.31%
Float (mil):	0.00	Combined ratio:	93.63	Net Margin	6.43%	6.34%	7.22%	7.27%
Short Interest (%):	0.00	ROA:	0.77%	EPS (Cal)	$1.80	$1.61	$1.90	$1.98
Avg. Daily Vol (mil):	0.27	ROE:	10.28%	P/E (Cal)	9.15	10.97	8.44	8.06
Dividend ($):	0.57	ROIC:	7.64%	BVPS	$16.18	$15.08	$15.61	$16.23
Yield (%):	3.22	LT Debt/ Total Equity:	32.72	P/B	1.02	1.17	1.02	0.98

Source: Factset

Recommendation

Insurer and asset manager Allianz faced a challenging macro-economic environment in 2015, comprised of crisis in Europe, unrelenting low interest rates, and a declining European currency. Despite negative growth rates stemming from dollar strength, AZSEY continued to grow organically primarily due to P&C success. Within this segment, Allianz saw positive volume impacts, with revenue growth increasing by 6.8% (€) and operating profit by 4.1% (€). The L&H business experienced difficulties due to a shift away from traditional life insurance products and a newfound emphasis on unit-linked and capital-efficient products. This segment experienced a -0.64% (€) decline in revenues while increasing its operating margin by 14.10% (€). Though, much of management's attention has recently been directed to the significant outflow of cash within the Asset Management segment, primarily due to its PIMCO subsidiary. Reaching a high of $293 billion in April 2013, PIMCO saw cash outflows of $150 billion in 2014, due to low returns and conflicting corporate strategy outlooks. Leading into 2016, abounding opportunities for success will likely materialize as the insurance industry enters an era of digitalization and shifting customer expectations. The P&C industry, in particular, expects industry advances due to the rise of the sharing economy. Positioned in a mounting German space, Allianz will also profit from high consumption with expected growth of 1.9% in 2016 and a strong property market that forecasts a rise in construction investment as a result of the influx of migrants and refugees. As regulation mandates and sharp competition disrupt established company profits, technological innovation remains at the heart of future insurance success. Due to AZSEY's emphasis on digitalization, it is recommended that Allianz be added to the AIM International Portfolio with a price target of $21.15, representing a 32.92% upside with the current stock price at $15.99. The firm offers a 3.2% dividend yield.

Investment Thesis

- **Developing the digital.** To capitalize on the changing digital landscape, AZSEY established alliances with Chinese web-services company Baidu and the digital-centric car-sharing company

Drivy. Developments with these related technologies provide access to big data that could drive firm growth through customer intelligence expansion and operational efficiency gains. It is the hope that these technologies will be merged with working capabilities, boosting productivity benefits by $1.11 billion as early as 2018. If digitalization and proper integration is successful, Allianz could potentially increase revenues and reduce operational costs.

- **Customers at its core.** To maintain growth in a saturated competitive environment, AZSEY identified customer concentration as a key driver of future success. By prioritizing touch points that are pertinent to the customer experience and incorporating customer feedback, AZSEY can improve upon customer acquisition and retention. If Allianz properly engages the inter-connectivity of its customer base the company could receive recommendations from loyal customers, boosting revenues. By 2018, the company intends to increase customer loyalty from the current 50% to 75%. With a larger customer base, these actions should have a positive impact on company sales.
- **Merger to magnify returns**. To enhance its asset management business and offset PIMCO losses, AllianzGI is set to acquire the London global fixed income firm Rogge Global Partners (RGP). This transaction will round out Allianz's fixed income capabilities, expand its geographic network, and develop its distribution competences, offering potential synergy opportunities. Together, the consolidated company will own a total of $512 billion in assets as of September 2015, of which $223 billion belong to the fixed income division. Expected synergies should have an accretionary impact on AZSEY's top and bottom line.

Valuation

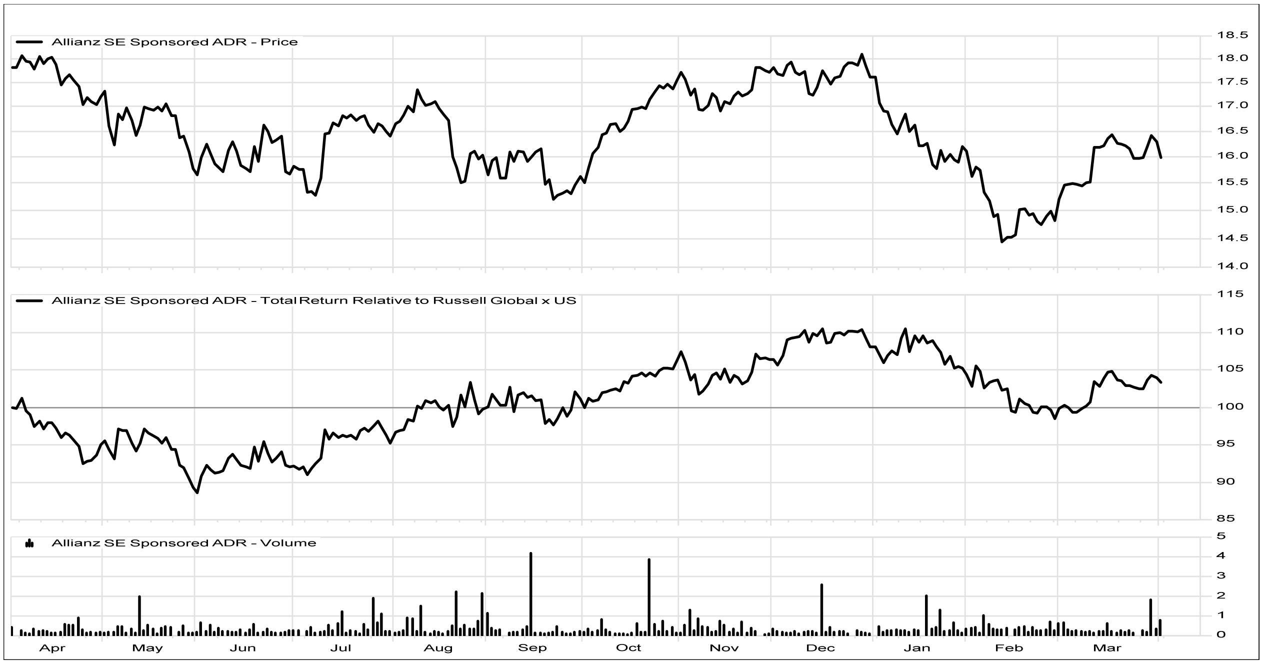
To determine the intrinsic value of AZSEY, a two-stage dividend discount model was constructed. Using an initial growth rate of 6.35%, a terminal growth rate of 2.50% and a WACC of 5.41%, an intrinsic value of $22.72 was reached. A sensitivity analysis of the terminal growth rate and the WACC produced prices ranging from $15.11 to $46.47. A P/B valuation was computed using a P/B multiple of 1.06x with a peer average of 1.10x. Due to the positive economic situation in Germany, the target price was adjusted with an additional 10% discount. A price of $18.79 was generated. Weighting the valuations 60/40, an intrinsic value of $21.15 was reached, providing a 32.92% upside.

Risks

- **An aging Europe.** With European fertility rates falling below 1.4 and life expectancy increasing from 75.34 to 77.84, life and health insurance companies will face demographic fluctuations in the coming years.
- **The war on terror.** Plagued with terrorist attacks in recent years, Europe remains a target for extremist group ISIS as the rebels continue to gain footing in the Middle East.
- **Regulation.** Insurance firms face additional capital requirements with the recent approval of Solvency II, placing a downward pressure on potential returns.
- **Interest-Rates.** Low interest rates, predicted to rise as late as 2020, will continue to prevent substantial premium growth for insurance companies.
- **PIMCO cash outflows.** Due to PIMCO cash outflows and negative return rates, Allianz saw a 2.1% decrease of its assets under management. In 2015, AZSEY experienced lessened, but continued outflows, negatively impacting its bottom line.

Management

The Allianz Board of Management consists of nine members with responsibilities across continents and business lines. Oliver Bâte was appointed as the CEO in May of 2015, replacing Michael Diekmann. Bâte joined the Allianz team in 2008 and has since served as the COO, CFO, and the Officer of Western and Southern European Insurance.



Ownership

% of Shares Held by All Insider Owners:	0.00%
% of Shares Held by Institutional & Mutual Fund Owners:	56.00%

Source: FactSet

Top 5 Shareholders

Holder	Shares	% Out
Dimensional Fund Advisors LP	4,844,679 ▲	10.60%
Schafer Cullen Capital Management, Inc.	3,674,787 ▲	8.00%
Scout Investments, Inc.	2,260,082 ▲	4.90%
Parametric Portfolio Associates LLC	1,889,192 ▼	4.10%
The Renaissance Group LLC	862,497 ▲	1.90%

Source: FactSet

Peer Analysis

Name	Ticker	Market Cap (mil)	Sales (mil)	Net Margin	P/B	Dividend Yield
Allianz SE	AZSEY-US	72,689	115,101	6.34%	1.06	3.22
Aegon N.V.	AGN-NL	14,595	28,644	2.26%	0.37	3.67
Assicurazioni Generali S.p.A.	G-IT	22,679	89,590	2.38%	0.89	4.26
AXA SA	CS-FR	56,008	113,580	4.33%	0.83	4.95
Prudential plc	PRU-GB	46,687	41,305	4.60%	2.45	2.48
Zurich Insurance Group AG	ZURN-CH	31,610	58,487	3.03%	1.01	6.58
Peer Averages		40,711	74,451	3.82%	1.10	4.19

Source: Factset

Carrizo Oil & Gas Inc. (CRZO)

April 8, 2016

Casey McClelland Domestic Energy

Carrizo Oil & Gas, Inc. (NASDAQ: CRZO) engages in exploration, development, and production of three major energy commodities; crude oil, NGL, and natural gas. Currently their revenue breakout is: crude oil 87.6%, natural gas liquid 3.6%, and 8.7% in natural gas. They have proven total reserves of 170.6 MMBoe with crude oil representing 109.6 MMBbl, natural gas liquid representing 20. MMBbl, and 244.9 Natural Gas Bcf. Their main areas of production are located in the Eagle Ford Shale in South Texas, the Marcellus Shale in Pennsylvania, the Niobrara Formation in Colorado and the Utica Shale in Eastern Ohio. The company was founded in 1993 by S.P Johnson and Steven A. Webster and is located in Houston, TX.

					FY: Dec	12/31/2015	12/31/2016	12/31/2017	12/31/2018
Price ($): 4/5/2016	$	29.10	Beta:	1.90					
Price Target ($):	$	37.37	WACC	10.87%	Revenue (Mil)	623.5	523.7	532.5	608.4
52WK H-L ($):		56.77 - 16.1	M-Term Rev. Gr Rate Est:	3.7%	% Growth	-39.6%	-16.0%	1.7%	14.3%
Market Cap (mil):		1,758	M-Term EBIT Gr Rate Est:	4.8%	Production Per Day Mboe	36.70	38.40	39.70	43.10
Float (mil):		54.7	Debt/Equity:	282.8	Adj. EBITDA Margin	73.0%	71.5%	72.3%	72.3%
Short Interest (%):		18.1	Debt/EBITDA (ttm):	5.13	Adj. EPS (Cal)	$1.07	$0.61	$0.57	$0.98
Avg. Daily Vol (mil):		2.9	ROA (%):	-46.24	FCF/Share	($3.75)	$0.42	($0.11)	($2.81)
Dividend ($):		0.00	ROE (%):	-149.65	EV/S(Cal)	6.6	7.2	6.0	5.3
Yield (%):		0.0	ROIC (%):	-55.74	EV/Adj. EBITDA	6.2	7.6	6.6	5.7

Recommendation

The past year in the energy sector has been turbulent to say the least. As oil prices have fallen, there have been major changes in the oil and gas landscape as rig counts have dropped 34% and net margins in the industry have dropped by 120%. Commodity prices have faced pressure as supply overflow from leading OPEC producers and the introduction of Iranian oil has flooded the market. WTI oil prices have dropped about 40% and natural gas prices have dropped nearly 35% during the past year. Companies in the Exploration and Production (E&P) sector have been some of the hardest hit in the energy industry. That's easy to understand as their profit base is almost wholly reliant on the price of the commodities they are extracting. Therefore when looking for an E&P company, it is necessary to find those that successfully operate and have access to low cost formations that offer lower break even points per barrel. The premier domestic shale basins are the Permian, Eagle Ford, and Bakken formations, which is where the majority of Carrizo's operations are located. More specifically, 84% of CRZO's proved reserves are located in the Eagle Ford. CRZO has been successful in developing wells in the region that are capable producing above breakeven costs despite the industry's significant headwinds. Carrizo's sound cost controls and premier acreage in the area have helped the company withstand the current downturn in the market and has the company positioned very well if commodity prices start to rise. Like many E&P companies, Carrizo has significant debt obligations. Though CRZO's obligations seem daunting, the earliest the debt will mature is 2020 and management has made it an objective to protect the balance sheet going forward. With the worst of the energy correction looking to be behind the market and the relative low cost of the drill sites in CRZO's portfolio, I recommend that CRZO be added to the AIM Equity fund with a price target $37.37 which represents 28.41% upside. CRZO does not pay a dividend.

Investment Thesis

- **Low Cost Eagle Ford Play.** The biggest play in CRZO's portfolio based on acreage and reserves is their Eagle Ford Shale property. Currently they hold 84,000 acres which have 144.0 MMboe proven reserves and have reported possible 258 MMboe potential reserves. This play going forward is the centerpiece of their plans with 88% of their capital expenditure spending going towards it in 2016. The reason that this play adds value to the firm going forward is the low costs associated with the wells in this area. Currently 80% of Carrizo's wells in the Eagle Ford operate at WTI breakeven costs below $40 per barrel. Therefore the company is focusing most of their efforts in to developing the wells in this area while the commodity prices remain volatile in the near term.

- **Delaware Basin.** Recently CRZO has begun to test on new sites in the Permian with their acreage being located in areas where other industry wells have seen good outputs in the past. Their latest well in the Basin (Avenger State 1H) was producing 240 Boepd (50% oil). In releasing the production of that well, CRZO recently reported that they are going to change the process used for drilling at that well to improve the yield. What makes the Basin attractive going forward is the low breakeven costs in the Basins well, with total averages on the Basin's wells revealing lower costs compared to their main Eagle Ford play. Going forward, the future development and expansion of acreage in the Basin could provide a new low cost opportunity for CRZO.
- **Financial Flexibility.** CRZO has positioned the balance sheet well to handle prolonged price volatility in commodities. Though the company has debt currently at 4.42 Net Debt/EBITDA on a twelve month trailing basis, that doesn't show the whole story. They have solid liquidity with a $685 million revolving credit facility that they have yet to withdraw on. Also the company has lowered their capital expenditures for the upcoming year by 45% and have positioned the company to be cash flow breakeven in the next year. Management is also actively looking to protect the balance sheet going forward. CRZO also have acreage plays that are purely natural gas which could be sold to supplement the debt if need be. Therefore the company will be more than capable for paying their developmental plans without the need of the credit facility or financing of more debt. Going forward the company will have the ability to further test and develop acreage due to the flexibility on their balance sheet.

Valuation

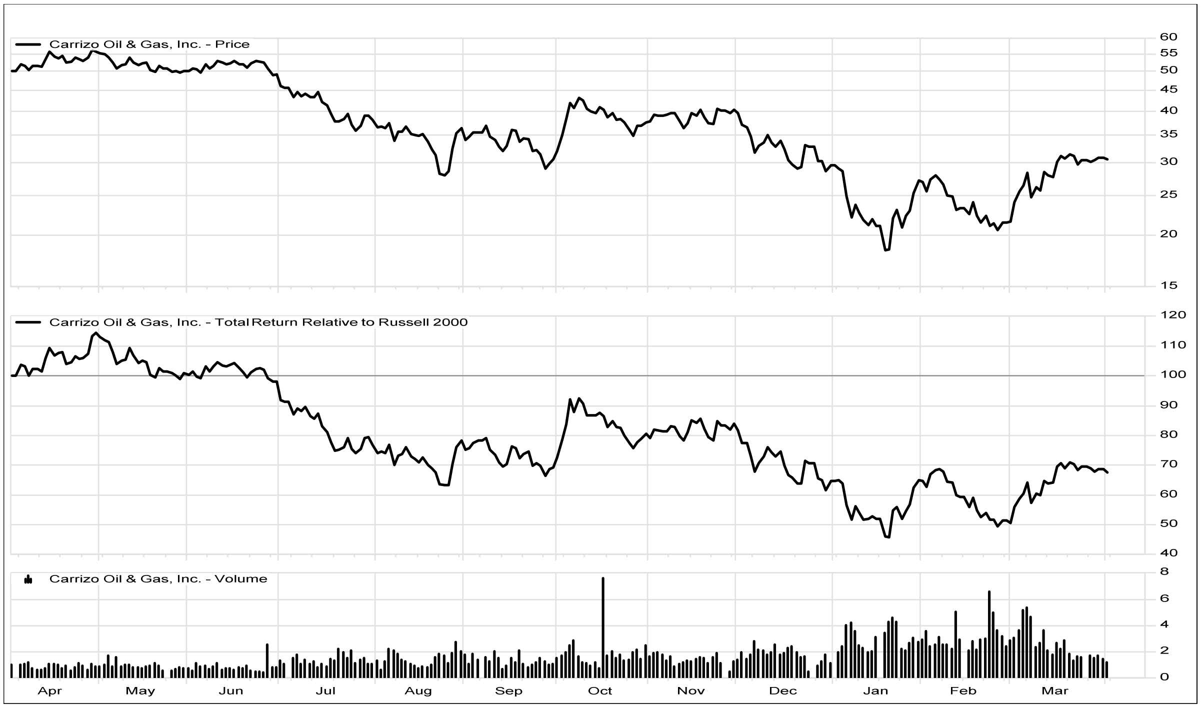
In order to reach an intrinsic value for CRZO, a ten year DCF model was constructed. Using a terminal growth rate of 2.8%, WACC of 10.87%, an intrinsic value of $36.42 was reached. A sensitivity analysis on the price per barrel of oil and WACC ranged from $29.31-$45.67. Additionally, a EV/Sales multiple valuation was conducted using historical 2015 GAAP sales of $429.20M, a comparables average EV/Sales of 7.41x, and CRZO's 5-year historical average EV/Sales which resulted in a valuation of $38.66. Finally, an EV/EBITDA multiple valuation was calculated. Using the a similar blended comparables and historical average of 14.09x and historical 2015 EBITDA of $244.99M, the multiple resulted in a valuation of $40.63. By weighting the three valuation models 60/20/20, a price target of $37.37 was reached, which yields a 28.41% upside.

Risks

- **Volatile Commodity Prices.** Since the company's true value come from the commodities it discovers and extracts, the volatility in the commodity pricing is correlated with the profitability of the company going forward.
- **Lower than Expected Proved Reserves.** Much of the value of the company is the proposed reserves in their current acreage. If they are not able to obtain all the reserves on the location or there are less than previously expected, this could be detrimental to the value of the company.
- **Unsuccessful Exploration.** Since the company's main assets are depleted each year through drilling, the company needs to acquire or find new prospects for drilling or leasing.
- **Government Regulations.** Being a company that is involved in both shale drilling as well as hydraulic fracturing, they could be under pressure from future environmental regulations.

Management

S.P. "Chip" Johnson was one of the co-founders of CRZO and has served as the President, CEO and a director since 1993. Brad Fisher has served as the VP and COO since 2005. Prior to that he served as VP of Operations and joined CRZO in 1998. David Pitts has served as VP and CFO since 2014. He had previously served as CRZO's VP and Chief Accounting Officer since 2010.



Source: FactSet

Ownership

% of Shares Held by All Insider Owners:	6.19%
% of Shares Held by Institutional & Mutual Fund Owners:	>90%

Source: FactSet

Top 5 Shareholders

Holder	Shares	% Out
BlackRock Fund Advisors	5,067,497 ▲	8.69
The Vanguard Group, Inc.	4,324,550 ▲	7.41
Frontier Capital Management Co. LLC	3,375,214 ▼	5.79
Lord, Abbett & Co. LLC	2,231,096 ▲	3.82
SSgA Funds Management, Inc.	2,182,358 ▲	3.74

Source: FactSet

Peer Analysis

Name	Ticker	Market Cap (mil)	Sales (mil)	EBITDA	Debt/ EBITDA	EV/Sales	EV/ EBITDA
Carrizo Oil & Gas, Inc.	CRZO	1,720.39	429.20	244.99	5.13	6.67	11.69
RSP Permian, Inc.	RSPP	2,836.31	283.99	181.18	3.86	12.31	19.30
Matador Resources Company	MTDR	1,755.01	278.34	137.00	2.86	7.48	15.20
SM Energy Company	SM	1,204.98	1,513.93	491.21	5.13	2.25	6.92
PDC Energy Inc	PDCE	2,678.00	391.68	201.24	3.20	8.00	15.57
Diamondback Energy, Inc.*	FANG	5,319.79	446.73	293.06	1.69	13.38	20.40
Peer Averages		2,118.58	616.99	252.65	3.76	7.51	14.25

**Removed For Relative Valuation Analysis*

Source: FactSet

Emergent BioSolutions Inc. (EBS)
April 8, 2016

Andrew Szyman — Domestic Healthcare

Emergent BioSolutions Inc. (NYSE: EBS) is a specialty biopharmaceutical company that focuses on the research, development, and manufacture of novel vaccines and related products. They supply various medical products through two business segments: biodefense (86.1% of revenues) and biosciences (13.9%). Emergent's biodefense segment concentrates on the treatment of chemical threats and emerging infectious diseases specifically chemical, biological, radiological, nuclear, and explosive. The biodefense segment's major products are vaccines and antibody therapies for use against the infectious disease: anthrax. The biosciences segment is focused on hematology/oncology. EBS was founded in May 1988 and is headquartered Gaithersburg, Maryland.

Price ($):	37.21	Beta:	1.01	FY: Dec	2015A	2016E	2017E	2018E
Price Target ($):	49.58	WACC	8.04%	Revenue (Mil)	522.79	598.85	676.05	754.06
52WK H-L ($):	40.49 - 27.68	M-Term Rev. Gr Rate Est:	12.99%	% Growth	54.08%	14.55%	12.89%	11.54%
Market Cap (mil):	1,482	M-Term EPS Gr Rate Est:	21.93%	Gross Margin	76.22%	74.96%	74.61%	74.18%
Float (mil):	32.6	Debt/Equity:	38.30%	Operating Margin	18.45%	23.96%	26.61%	26.18%
Short Interest (%):	10.1%	Debt/EBITDA (ttm):	1.92	EPS (Cal)	$1.41	$1.83	$2.31	$2.54
Avg. Daily Vol (mil):	0.45	ROA (%):	6.32%	FCF/Share	-$0.01	$0.31	$1.90	$2.31
Dividend ($):	0.00	ROE (%):	10.36%	P/E (Cal)	28.38	20.38	16.08	14.68
Yield (%):	0.0	ROIC (%):	7.32%	EV/EBITDA	13.89	7.66	6.19	5.55

Recommendation

As US government's healthcare spending has increased YoY with a five year CAGR of 20.58%, government healthcare agencies like the Center for Disease Control (CDC) have engaged in contracts with pharmaceutical companies to conduct research and provide products for the betterment of citizens. Emerging infectious diseases and the threat of chemical outbreaks have led to a growing demand from the US and foreign governments for new, effective treatments. EBS has positioned itself within a niche market by supplying the US government's appetite for vaccines. EBS's novel vaccine, BioThrax, has headlined revenues for the past five years with a total of nearly $1.25B. BioThrax has essentially monopolized the US anthrax market, as it is the only vaccine licensed by the FDA for general prophylaxis use and post-exposure prophylaxis of anthrax disease and has no comparable competitors. BioThrax sales were $246.7MM, $245.9MM, and $293.9MM for the year end in 2013, 2014 and 2015. Additionally, EBS has posted YoY revenue growth with a five year CAGR of 13.84% by providing top of the line biodefense products and receiving revenues through contract manufacturing and grants. Also, EBS's net income has grown at a five year CAGR of 22.26% and is expected to continue to grow by almost 40% in 2016. For years EBS has relied on organic growth from the sales of BioThrax to the US government, but recently they have been acquiring corporations and products in order to further diversify themselves while penetrating international markets. The most notable is the acquisition of the rights to an Austrian military grade auto-injector device being branded as Emergard. EBS won a development contract with the US department of defense to develop Emergard. Management believes the market for military grade auto-injectors could be $100-200MM. Management plans on acquiring more corporations and products with $312.8MM of cash on its balance sheet. With strong revenue growth, increasing net margins, a growing biodefense products portfolio, and a large sum of cash on its balance sheet it is recommended that EBS be added to the AIM Small Cap Fund with a target price of $49.58, representing an upside of 33%.

Investment Thesis

- **Aptevo Spinoff.** Management plans to spinoff the biosciences division by mid-2016 into a seperate corporation, Aptevo Theraputics. The spinoff has the potential to significantly increase margins going forward by reducing costs. In 2015, operating expenses from the biosciences division was $109.43MM representing 36.23% of total operating costs. Revenue from the biosciences segment in 2015 was $72.7MM representing 14% of total revenues. This elimination of costs and relatively small loss in revenues is estimated to increase operating margin 8% by 2017 leading to greater efficiently and bottom line growth. Also, the spinoff will allow management to concentrate on their much more profitable biodefense segment and focus on diversifying their biodefense product portfolio. Shareholders will be distributed Aptevo stock once the spinoff is successful, the AIM fund has the option to cash out of the stock or hold it. My reccomendation would be to immeduately sell the security due to the segments inability to generate positive earnings, lack of consistent revenues, and the natural risk linked to the segment.

- **New Contract with Center for Disease Control.** EBS is in the midst of a new contract with the Center for Disease Control for the continuation of production of anthrax vaccines to add to the US's stockpile. This will lead to further revenue growth. The current contract ends this year and management is confident a new contract will be completed by mid-2016. EBS's current contract was under a term of 5 years for the supply of 44.75MM doses of BioThrax, representing about $1.25B in revenues. Furthermore, EBS has a new variant of BioThrax, called NuThrax, positioned for phase 3 of clinical trials. NuThrax has the potential to elicit a more rapid onset of immune response using fewer doses than Biothrax, while still providing immunity to patients. Management believes the development of NuThrax will wipeout any possible future competition and can lead to more contracts with the US government.
- **Building 55 Pending Approval in US and Germany.** Management is currently awaiting approval from the FDA for their new facility expansion (Building 55) that can increase BioThrax production capacity from 8-9MM doses to 20-25MM doses annually. Management is optimistic that FDA approval should be reached by mid-2016 and the facility should be running by late 2016 or early 2017. The new facility will give EBS increased capacity for BioThrax doses to fulfill future global demands while also bringing an increase to both top and bottom-line growth. Moreover, management is pursuing Building 55's approval with German regulators, and expect to obtain approval by mid-2016. This will allow EBS to pursue contracts with EU nations thus expanding its BioThrax sales outside of the US. BioThrax is already approved in Germany. Management's goal is to have to 10% of total revenues be outside of US by 2020.

Valuation

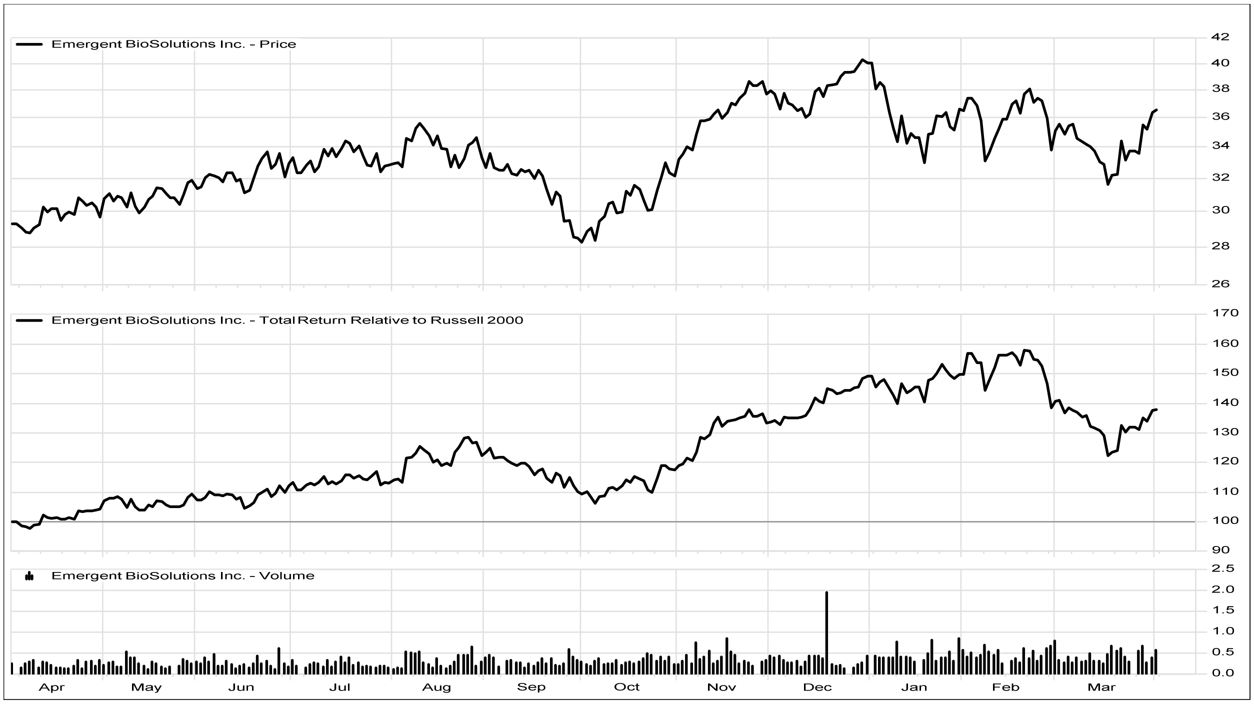
In order to reach an intrinsic value for EBS, a five year DCF model was constructed. Using a terminal growth rate of 2.25% and a WACC of 8.04%, an intrinsic value of $52.24 was reached. A sensitivity analysis of the terminal growth rate and WACC ranged from $41.87-$73.46. Additionally, a blended historical and peer P/E comparison was conducted using a multiple of 23.75x and an estimated 2016 EPS of $1.83, resulting in a price target of $43.36. Weighting these valuations 70/30, the final estimated intrinsic value of EBS is $49.58 which represents a 33.23% upside. EBS does not pay a dividend.

Risks

- **Dependence on US Government.** The majority of EBS's revenues result from contracts and grants with the US government. If the US were to halt their spending on infectious disease prevention, EBS's revenues can suffer.
- **Failure of Aptevo Spinoff.** EBS plans to secure its spinoff of their biosciences segment look promising, but the failure to do so would result in wasted time and capital over the previous quarters and will not allow EBS to focus purely on its much more prominent biodefense segment. Additionally, EBS would not be able to capitalize on increased efficiency.
- **FDA Approval Requirements.** EBS has several products in clinical testing that have the potential to bring new sources of revenue, but failure to pass clinical tests will result in the products never reaching the market.

Management

Abdun-Nabi has served as CEO since 2012, as President since 2007, and a board member since 2009. Robert G. Kramer is the CFO and has served since 2012. W. James Jackson, Ph.D., has served as the CSO since 2008. Fuad El-Hibri, is the founder and executive chairman of the board since its inception.



Source: FactSet

Ownership

% of Shares Held by All Insider Owners:	16.17%
% of Shares Held by Institutional & Mutual Fund Owners:	87.40%

Source: FactSet

Top 5 Shareholders

Holder	Shares		% Out
The Vanguard Group, Inc.	2,888,089	▲	7.42
BlackRock Fund Advisors	2,760,584	▲	7.09
Dimensional Fund Advisors LP	1,911,645	▲	4.91
Renaissance Technologies LLC	951,611	▼	2.44
Acadian Asset Management LLC	913,260	▲	2.35

Source: FactSet

Peer Analysis

Name	Ticker	Market Cap (mil)	Sales (mil)	EBITDA	Dividend Yield	Price/ Earnings
Emergent BioSolutions Inc.	EBS	1,482	523	131.774	0.00	28.38
Amgen Inc.	AMGN	116,318	21,336	10423.0	1.95	24.98
Biogen Inc.	BIIB	57,732	9,321	4172.3	0.00	16.50
Pfenex, Inc.	PFNX	245	10	-26.8	0.00	N/A
Pfizer Inc.	PFE	190,215	48,851	18453.0	3.47	27.01
PharmAthene, Inc.	PIP	133	11	-0.7	0.00	N/A
Peer Averages		91,127	19,879	8255.4	1.35	22.8

Source: FactSet

Methode Electronics, Inc. (MEI)
April 8, 2016

Nick Dykema — Domestic Technology

Methode Electronics (MEI) is a global manufacturer of component and subsystem devices used by original equipment manufacturers (OEMs) and testing facilities. The majority (64.1%) of sales occur domestically while foreign sales equate to: Malta (17.4%) China (12.8%), Other (5.7%). The company operates in four segments; Automotive (71.3%), Interface (18.3%), Power Products (9.7%), and Other (0.6%). Methode manufactures control switches and sensors for the Automotive industry and produces copper and fiber-optic solutions for the Interface segment. The majority of Methode's sales are to General Motors Corporation (44.8%) and Ford Motor Company (12.8%). The Automotive industry has become MEI's primary focus for sales growth, while the Interface segment has seen limited growth in the last few years. The company was founded in 1946 in Illinois before being reincorporated in Delaware in 1966. Methode has been trading publicly since 1982 and is headquartered in Chicago, IL.

Price ($):	27.55
Price Target ($):	36.54
52WK H-L ($):	49 - 22.67
Market Cap (mil):	1,031
Float (mil):	35.9
Short Interest (%):	3.1
Avg. Daily Vol (mil):	0.19
Dividend ($):	0.36
Yield (%):	1.3

Beta:	1.27
WACC	11.3%
M-Term Rev. Gr Rate Est:	9.2%
M-Term EPS Gr Rate Est:	10.2%
Debt/Equity (%):	5.4
Debt/EBITDA (ttm):	0.43
ROA (%):	14.76
ROE (%):	23.77
ROIC (%):	18.80

FY: April	05/03/2014	05/02/2015	04/30/2016	04/30/2017
Revenue (Mil)	772.8	881.1	969.2	1,085.5
% Growth	48.7	14.0	10.0	12.0
Gross Margin	20.0	24.7	25.0	25.0
EBITDA Margin	12.8	16.6	17.0	17.0
EPS (Cal)	$2.51	$2.57	$2.80	$3.10
FCF/Share	$1.14	$2.56	$2.43	$2.87
P/E (Cal)	11.6	17.0	10.5	9.6
EV/EBITDA	9.9	10.0	8.7	7.8

Recommendation

Electronic manufacturing services companies, such as MEI, operate in the OEM market, which is characterized as extremely competitive and constantly changing. Being able to stay current is essential to being successful in this industry. Looking into the future, the industry will continue to grow due to the needs of OEMs to stay current with new technology and reduce production costs. Recently, pricing concessions negatively affected sales in the automotive industry. Even though automotive sales have taken a hit in 2016, MEI's Q3 net sales ($823.6M) have remained unscathed due to the following: GM's increased demand for center consoles, increased hidden switch sales in Europe, and higher linear position and interior lighting product volumes in Asia. Over the last three years, Methode's gross margin improved from 17.28% to 24.66% while their operating margin increased from 4.52% in 2013 to last year's margin of 13.99%. MEI intends to keep their gross margins in the mid-20% range by reducing costs. The company's net income has increased significantly over the last three years – $8.38M in 2012 to $101.1M 2015. Management has successfully maintained low debt levels and a stellar (23.77) return on equity ratio relative to the industry average (12.30). Methode's excellent relationships with GM and Ford drive their most important business segment. This allows MEI to be at the forefront of any discussions about components of future projects. In addition, European and other foreign expansion could positively impact MEI's future sales. Due to a positive outlook of future sales in the automotive segment, it is recommended that Methode Electronics, Inc. be added to the AIM Small Cap Equity Fund with a price target of $36.54, representing a 32.63% upside. The company has paid a dividend each of the last ten years. In 2015, MEI paid a quarterly dividend of $0.09 – a 1.3% annual yield.

Investment Thesis

- **Future projects.** Over the last three years MEI's percentage of net sales to GM has increased significantly – 16.7% (2013), 36.4% (2014), and 44.8% (2015). MEI's percentage of net sales made up by Ford has decreased slightly (7.1%) over the last three years, but is not due to a decrease in volume. Given their relationship with GM and Ford, MEI is in position to be chosen for future GM and Ford projects. Strong relationships with these major automakers are critical when the bidding process begins for future models like Ford's F-Series. Management is already seeing opportunities arise with both companies for additional center console business. In addition, the Power Products segment of MEI has increased quote activity for projects 18-24 months from now. All of these future projects have the ability to increase MEI's volume of sales.

- **Increased penetration into Europe.** MEI plans to expand their sales globally and is targeting the European automotive market. MEI was awarded a power module assembly for electric power steering with Kongsberg Gruppen, and they currently sell to European automakers Volkswagen and Tesla. The company owns a 300,000 sq. ft. manufacturing facility in Malta, which is a member of the EU. This facility will provide MEI an easy way to manufacture and ship products to European customers while minimizing labor and shipping costs. In addition, MEI has been in serious acquisition conversations with potential target companies. MEI has been looking at domestic and foreign companies, and would ideally acquire a company with both entities. The company's expansion into foreign markets will result in increased net sales and additional future projects.
- **Added upside from Dabir Surfaces.** The demographic of the United States continues to become older as baby boomers (52-70) approach retirement. A problem that comes with aging are ulcers, and Dabir Surfaces, Inc. produces a therapeutic mattress for ulcers using MEI technology. MEI has realized the size of this market is greater than their initial $2B estimate. The largest number of pressure ulcer patients is in the hospital setting where over a million pressure ulcers have been reported. Assuming Dabir Surfaces passes their third round of clinicals, the next step for Dabir is adoption by more hospitals and assisted living centers. Increased adoption of Dabir Surfaces will result in increased demand for MEI's interface products which have seen stagnant sales growth.

Valuation

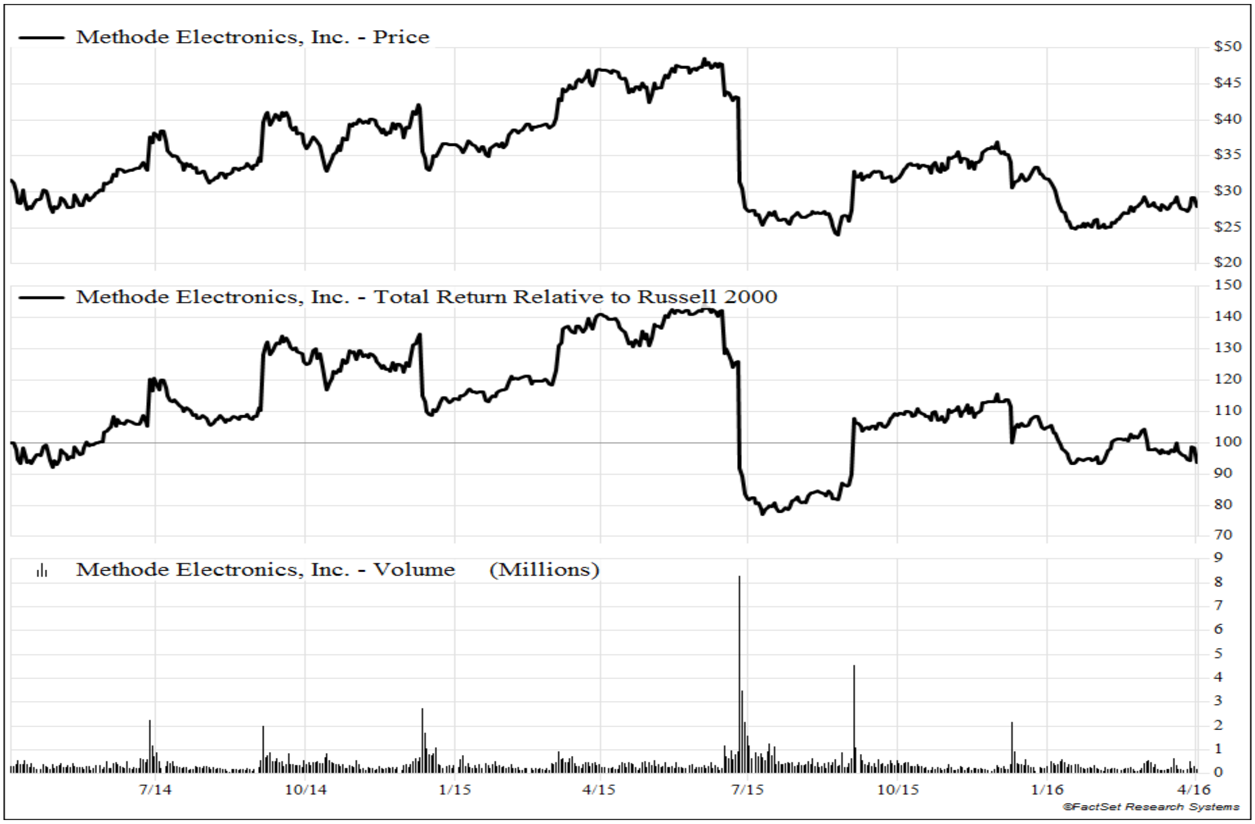
To find MEI's intrinsic value, a five year DCF model was constructed. A terminal growth rate of 1.5% and a WACC of 11.3% were used to find a price target of $33.21. A sensitivity analysis of the terminal growth rate and WACC ranged from $28.36 to $40.47. In addition, a price-to-earnings (P/E) multiple valuation was conducted using a peer comparable multiple of 22.3x, to value MEI at $55.41. By weighing the DCF model (85%) more heavily than the P/E multiple valution (15%), an intrinsic value of $36.54 was reached, representing a 32.63% upside.

Risks

- **Important customers.** The majority of MEI's sales is comprised of GM (44.8%) and Ford (12.8%). A slowdown in automobile production at either company could negatively impact MEI's future sales. Likewise, if GM or Ford began purchasing automotive supplies from different manufacturers, MEI's sales could be negatively impacted. MEI's ability to be chosen to provide center console technology for these customers' future automotive projects is vital to continued growth in the company's automotive segment.
- **Global risks.** MEI operates manufacturing facilities in various companies outside the U.S. In addition, a significant portion of the company's sales (35.9%) are foreign. International business is associated with potential risks such as: inflation, political change, trade restrictions, taxes, labor laws, and fluctuation between the USD and other currencies.
- **Cash located abroad.** 95% of MEI's cash is located outside of the U.S. If the company wants to bring the cash back to the U.S., it could negatively impact their state and federal taxes by creating a tax liability.

Management

Donald W. Duda has served as President of MEI Electronics since 2001 and CEO since 2004. Mr. Duda has ten years of experience as a General Manager with the Fiber Optics Products Division of Amphenol Corporation. Douglas A. Koman serves as the Vice President of Corporate Finance and has served as the CFO of MEI since 2004. Mr. Koman has over 30 years of experience in accounting and finance positions with Illinois Central Corporation, a holding company focused on freight railroads.



Peer Analysis

Name	Ticker	Market Cap (mil)	Sales (mil)	EBITDA	Dividend Yield	EV/ EBITDA
Methode Electronics, Inc.	MEI	1,031	824	127.7	0.83	10.56
Benchmark Electronics, Inc.	BHE	1,152	2,541	156.5	0.00	5.40
Kimball Electronics, Inc.	KE	327	816	53.8	0.00	6.65
Mercury Systems, Inc.	MRCY	730	243	40.0	0.00	11.57
Park Electrochemical Corp.	PKE	324	146	24.9	1.84	9.86
Plexus Corp.	PLXS	1,317	2,606	166.2	0.00	7.09
Peer Averages		633	936	68.8	0.46	8.4

**Removed For Relative Valuation Analysis*

Ownership

% of Shares Held by All Insider Owners:	5.77%
% of Shares Held by Institutional & Mutual Fund Owners:	>90%

Source: FactSet

Top 5 Shareholders

Holder	Shares	% Out
BlackRock Fund Advisors	3,341,160 ▲	8.77
The Vanguard Group, Inc.	2,824,402 ▲	7.41
Dimensional Fund Advisors LP	1,865,194 ▼	4.90
Kalmar Investments, Inc.	1,620,474 ▼	4.25
T. Rowe Price Associates, Inc.	1,456,090 ▼	3.82

Source: FactSet

Ensign Group, Inc. (ENSG)
April 8, 2016

John O'Connor — Domestic HealthCare

Ensign Group, Inc. (NASDAQ: ENSG) owns over 200 independent operating subsidiaries that offer a wide variety of skilled nursing and rehabilitative care services for both long-term residents and short-stay rehabilitation patients. The Ensign Group provides physical and speech therapies as well as home health and hospice services; among many other common assisted living services. The breakdown of subsidiaries for Ensign Group include 186 rehabilitative and healthcare facilities, 17 urgent care clinics, 14 hospice companies, and 18 home health agencies. These subsidiaries are located primarily throughout the Western and Southern United States, with 21 facilities most recently added in Wisconsin and South Carolina. ENSG was founded in 1999 and is headquartered in Mission Viejo, CA.

				FY: Dec	12/31/2015A	12/31/2016E	12/31/2017E	12/31/2018E
Price ($):	22.77	Beta:	0.96	Revenue (Mil)	1,342	1,597	1,880	2,162
Price Target ($):	28.31	WACC	8.41%	% Growth	30.60%	19.00%	17.75%	15.00%
52WK H-L ($):	27.04 - 17.6	M-Term Rev. Gr Rate Est:	15.6%	Gross Margin	11.7%	13.0%	13.9%	14.0%
Market Cap (mil):	1,167	M-Term EPS Gr Rate Est:	18.4%	EBITDAR Margin	15.4%	16.9%	17.0%	16.2%
Float (mil):	47.6	Debt/Equity:	23.3	EPS (Cal)	$1.06	$1.41	$1.58	$1.95
Short Interest (%):	5.3	Debt/EBITDA (ttm):	0.82	FCF/Share	($0.85)	$0.46	$0.62	$1.12
Avg. Daily Vol (mil):	0.2	ROA (%):	8.93	P/E (Cal)	21.4x	20.1x	17.9x	14.5x
Dividend ($):	0.16	ROE (%):	16.16	EV/EBITDAR	10.1x	4.5x	5.8x	5.2x
Yield (%):	0.7	ROIC (%):	12.99					

Recommendation

The Ensign Group has consistently proven their ability to grow through an established track record of successful acquisitions of both underperforming and performing healthcare operations. This is accomplished by targeting skilled nursing facilities (SNFs) of either 1 or 2 Star quality. Utilizing economies of scale and following a classic consolidation strategy, the acquired independent operations are subsequently transformed into local market leaders of 4 and 5 Star quality that provide high quality care for patients. To ensure acquisitions prove to be successful, ENSG utilizes a program they founded in 2006 titled "New Market CEO." This program is designed to evaluate a target market, develop a business plan, and relocate to the target market to find talent and connect with the local healthcare community and providers. The goal is then to acquire around 3-4 facilities in the market and ultimately improve their performance. In years where prices for acquisitions are high, management seeks to improve the integration and quality of operations acquired within the past one or two years. ENSG has grown their number of operations by about 14 each year for the past 10 years, with 60 operations most recently added in 2015. Sales have grown at a 6-year CAGR of 13% while EBITDAR has grown at 12% using the same metric. Not all of the growth is contingent upon acquisitions; ENSG is capable of generating organic growth by focusing on increasing patient occupancy, which represents the number of beds in a facility that are occupied by residents. In 2015, the average occupancy rate was 77.9%. Taking into consideration all of these factors, it is recommended that ENSG be added to the portfolio given its 24.13% upside.

Investment Thesis

- **Plans to Grow via Acquisitions** – Ensign had a record year for acquisitions in 2015; acquiring 25 skilled nursing facilities, 25 assisted living facilities, 7 home health and hospice agencies, and 3 urgent care centers. The cost of these acquisitions totaled about $111 Million. Management's strategy for acquiring these facilities focuses on their ability to acquire a 1 or 2 Star facility and turn it around into a 4 or 5 Star facility over the course of a 2-3 year period. In 2014, 63.6% of their facilities were 4 and 5 Star Quality Rated. In 2015 that number was 49.3% due to a change in the rating metrics made by the Center for Medicare & Medicaid Services (CMS). Regardless, these statistics are a testament to management's keen ability to turn their acquired facilities into winners. ENSG currently has $100 Million in increased credit and a strong balance sheet with $42 Million in cash and a Debt/Equity ratio of 23.32. After spending roughly $111 Million in

2015 on acquisitions, ENSG is poised to have another big year of acquisitions in a highly fragmented skilled nursing industry.

- **Plans to Grow Organically –** Of the 60 recently acquired operations, only about 20% of them are self-sufficient and have contributed to the bottom line. This presents Ensign with substantial organic growth opportunities as the remaining 80% of the newly acquired operations begin to contribute toward the end of 2016 and beyond. According to management, it typically takes 12-18 months for these new operations to contribute and ultimately improve margins by about 300bps.
- **Ability to Treat High Acuity Patients –** A common trend in the United States is the rapidly increasing healthcare costs. In an effort to combat these rising costs, federal and state governments alike have adopted measures designed to encourage more cost-effective methods of treating patients. Skilled nursing facilities are a favorite method due to their lower costs compared to traditional hospitals. Given Ensign's low cost structure and ability to care for high acuity patients, they differentiate themselves from a traditional SNF that focuses on being generalists. In turn, higher acuity patients typically result in higher reimbursement rates from Medicare. ENSG also places more emphasis on disease specific care as opposed to long term stay patients, and therefore they put themselves in a better position than their competitors to receive more downstream patients from hospitals looking to keep costs low.
- **Aging Baby-Boomers –** There are over 40 Million Americans currently aged 65 or older, and that number is poised to grow even more as the Baby Boomers continue to age. California is home to the nation's largest population aged 65+ with over 5 million residents; it is also home to 48 of ENSG's facilities. As the Baby Boomers continue to age and enter into Medicare coverage they will increasingly be placed into SNFs like Ensign's. SNFs are not the only option, as wealthier residents may be drawn to Ensign's 3 high-end HealthCare Resorts.

Valuation

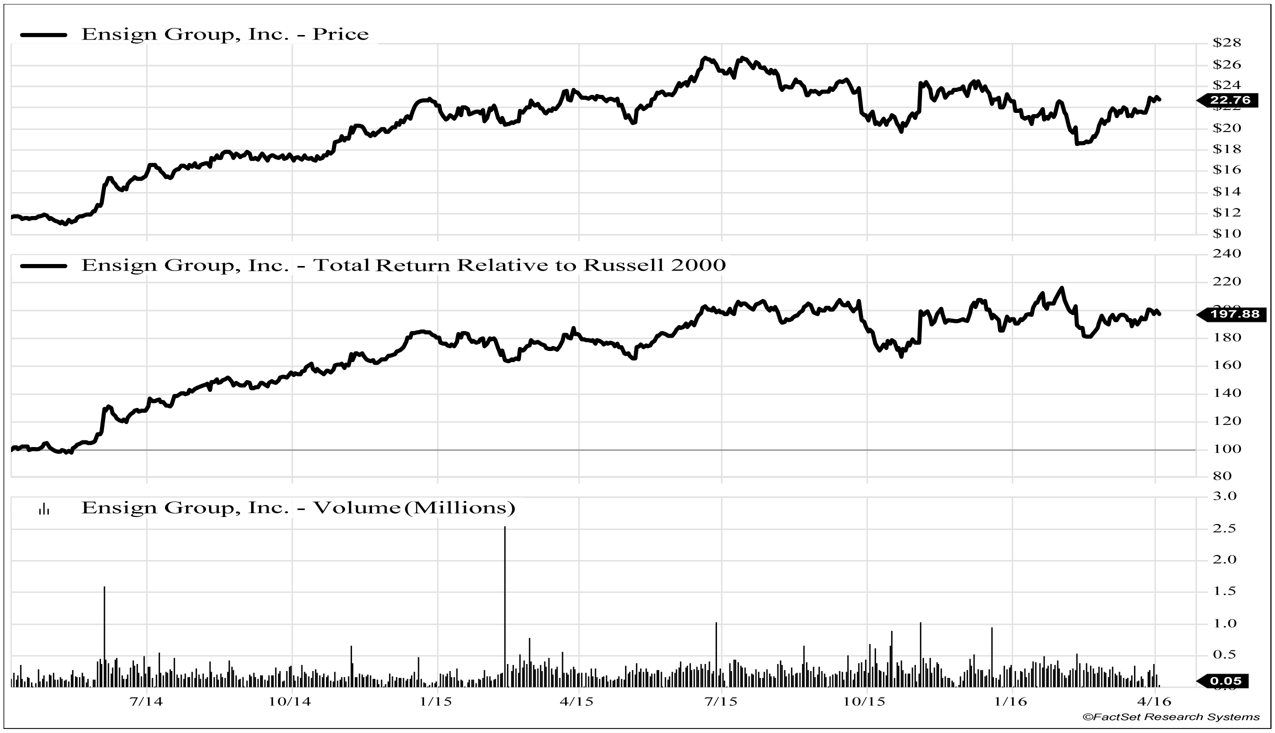
To reach an intrinsic value for ENSG, a five-year discounted cash flow model was constructed. Using a WACC of 8.41% and a terminal growth rate of 3% resulted in an intrinsic value of $26.94, yielding an upside of 18.1%. A sensitivty analysis of the terminal growth rate and WACC yielded a price range of $22.15-$35.36. In addition to using a five year DCF, an EV/EBITDAR model was utilized. Using a peer EV/EBITDAR multiple of 6.11, an intrinsic value of $31.51 was reached. The DCF model was weighted 70% while the EV/EBITDAR model was weighted 30%, and a final instrinsic value of $28.31 was reached. This represents a 24.13% upside on the current stock price of $22.81.

Risks

- **Regulatory Changes Affecting Reimbursement Rates** – Approximately 30% and 40% of Ensign's revenues come from the Medicare and Medicaid programs, respectively. Should these programs experience regulatory changes in the near future it can result in decreased reimbursement rates, ultimately proving to be detrimental to ENSG's efforts to grow margins.
- **Bundled Payment Models –** These bundled payment models require skilled nursing facilities (SNFs) to consolidate their billings for services provided to patients. This means that certain Ensign facilities must divide the Medicare payments with the hospital that discharged the patient and sent him/her to the SNF. As a result, hospitals may be discouraged to discharge patients to an SNF and lose out on their payment from the Medicare program. Moving forward if more hospitals and SNFs are required to adopt this model then it may have a negative impact on ENSG's ability to significantly grow revenues.

Management

The president of ENSG since 1999 has been Christopher Christensen, who has also been operating as CEO since April of 2006. Before ENSG, Mr. Christensen was COO of Covenant Care, a company specializing in long-term care services. Suzanne Snapper is the CFO of ENSG and in 2007 while serving as the VP of Finance played a crucial role in taking the company public.



Ownership

% of Shares Held by All Insider Owners:	6.25%
% of Shares Held by Institutional & Mutual Fund Owners:	90.50%

Source: Bloomberg

Top 5 Shareholders

Holder	Shares	% Out
Wasatch Advisors, Inc.	5,150,413	10.15
BlackRock Fund Advisors	4,496,547	8.87
Fidelity Management & Research Co.	4,116,000	8.12
The Vanguard Group, Inc.	3,690,378	7.28
Dimensional Fund Advisors LP	1,744,084	3.44

Name	Ticker	Market Cap (mil)	Sales (mil)	EBITDAR	P/S	EV/Sales	EV/ EBITDAR
Ensign Group	ENSG	1,167.10	1,341.83	121.19	0.88	0.91	10.05
Brookdale Senior Living	BKD	5,896.50	1,439.00	1,077.87	0.60	1.86	8.55
Capital Senior Living	CSU	541.80	412.20	161.70	1.31	3.27	7.92
Kindred Healthcare	KND	1,050.00	7,054.91	990.10	0.15	0.60	4.26
Five Star Quality Care	FVE	6,506.80	5,576.00	239.62	0.08	0.13	0.75
Diversicare Healthcare	DVCR	627.60	1,097.30	43.69	0.14	0.28	2.52
Peer Averages		2,924.54	3,115.88	502.60	0.46	1.23	4.80

Source: FactSet