Stepan Company (SCL: NYSE)

Financial analysis by: Guillaume Valentin

Company profile as of 02/14/2015

Market price: $41.21
Industry: Chemicals
Market Cap: $875.45 million
52-week: $36.34 - $66.51
Beta: 0.19

Source	Traget price	Recommendation
Bloomberg	$55.00	BUY
Capital IQ	$55.00	BUY
Siena	$67.58	BUY
Yahoo Finance	$55.00	BUY

Thesis:

- Leader in the Enhanced Oil Recovery (EOR) technology
- Commitment to innovation
- Growth and global expansion in Surfactants and Polymers segments
- Sustainable advantage
- Healthy Balance Sheet

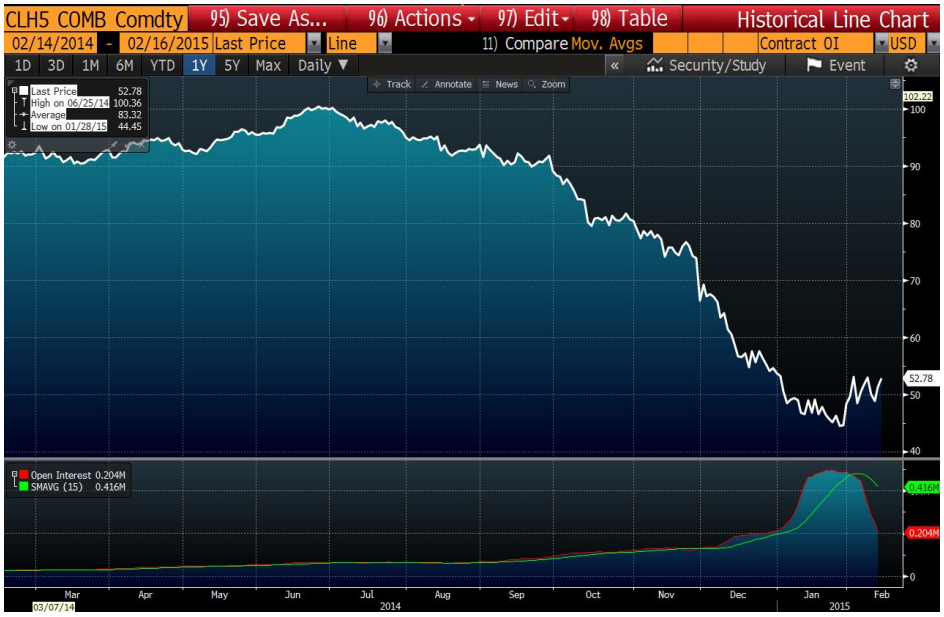
Company overview:

Stepan Company produces and sells specialty and intermediate chemicals to manufacturers in various industries worldwide. The company is divided in three business segments: surfactants, polymers and specialty products. A surfactant is a surface active agent that changes a liquid's surface tension. They are the basic cleaning agent in consumer and industrial cleaning products such as detergents and shampoos and body washes. The polymer product group includes products that are used for thermal insulation in the construction

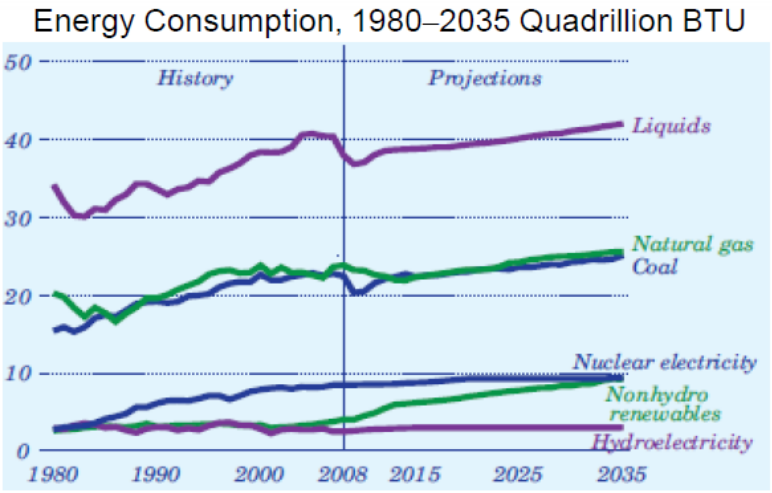
industry and polyester resins that are used in coatings, adhesives and sealants. Stepan also produces specialty products that include flavors and emulsifiers used in the food and pharmaceutical industry. Sales in this segment account for 4% of the total sales of the company. Although Stepan Company is classified with other specialty chemical companies within the material sector, it is unique in the industry and "does not have a competitor or competitors to precisely match its businesses because its products have a specific focus."[1]

Leader in the Enhanced Oil Recovery (EOR) technology:

Enhanced Oil Recovery (EOR) is the implementation of various techniques for increasing the amount of crude oil that can be extracted from an oilfield. The sales in EOR delivered a $5 million increase in operating income improvement in 2014. In September 2008, Stepan and Nalco announced a Joint Venture. In 2008 Nalco bought Tiorco, the global leader in enhanced oil recovery solutions. Since 2008 their technology helped to produce more than 100 million barrels of incremental oil in North American reservoirs alone. Nalco's goal is also to improve recovery in reservoirs throughout the world. To keep up with constant uprising demand in oil, oil producers faces the challenge of producing more oil from their own reservoirs.



The chart above show the crude oil prices from March 2014 to February 2015. Due to a recent huge decrease in oil prices, oil producers tend to have significantly lower margin and are making less profit. This will become a major issue in the foreseeable future. Above is the chart of crude oil prices from March 2014 to present. The oil price dropped 47.48 percent over the past 7 months. If oil priced stays at current levels, oil producers will need to produce more oil in order to remain profitable. Either they manage to increase the output of current reservoirs or they try to find new reservoirs.



[1] http://phx.corporate-ir.net/phoenix.zhtml?c=118345&p=irol-homeProfile&t=&id=&

In the same time, demand for natural gas and oil continues to grow despite alternate energy sources as states in the graph above.[2] In this sense, the majority of oil companies are focusing on maximizing the recovery factor (RF) from their existing oilfields because it is rather uncommon and hard to find new reservoirs. This is where Stepan comes into play. Oil producer will be more and more interested in their technology since it will be critical for the future of their business. Currently, there are four types of oil extraction methods: Primary production typically recovers about 15% of oil originally in place in oilfields.[3] Waterflooding (or secondary recovery) recovers and additional 20% of oil. This technique is already widely used by oil producers .Waterflooding consists of injecting water to increase the reservoir pressure to its initial level so that the oil output increases. However, the effectiveness of this technique decreases over time, which leaves about 65% of oil leftover. The Enhanced Oil Recovery technique (tertiary recovery) targets to extract an additional 20% of oil. Currently, about 10% of the U.S. daily oil production comes from tertiary recovery. Considering the substantial incremental of oil produced in each oilfield, this technique is promising to a bright future. Stepan is specialized in this area thanks to the joint venture with Nalco. In order to boost recovery rates, Tiorco acts as an intermediary that gathers all the necessary products and resources to achieve this goal instead of oil companies trying to solve this problem on their own. Over 30 years ago Tiorco was the first company to recognize this issue. Their field of expertise includes reservoirs engineering, field equipment, chemical formulation and project management. They make sure to use the appropriate tools to fit the specificity of each oil producer and oil reservoir. Tiorco provide oil companies a single resource for their EOR needs so that they can take a full advantage of their oilfields. Stepan Company provides specialty chemicals for use in Enhanced Oil Recovery applications. Tiorco has a competitive advantage in industry thanks to its huge amount of knowledge and experience in this field. Enhanced Oil Recovery is expected to deliver between $3 and $5 million of operating income improvement during the next fiscal year. With Stepan Company, a significant percentage of oilfields have the potential to be more productive.

Commitment to innovation:

Stephan's innovation initiatives are guided by their Corporate Vision: "Innovative Chemical Solutions for a cleaner, healthier, more energy-efficient world."[4] In June 2013, the Company purchased the North American polyester resins business of Bayer MaterialScience LLC. The purchase included a 21,000-ton production facility in Columbus, Georgia, and a modern research and development laboratory for customer technical support and new product development.[5] This acquisition provides a significant line extension to Stepan's core business. It also increased the operating income of Stepan by $9 million in 2014. Additionally the company exclusively paid this acquisition by cash, which means that it does not believe that tis stock vas cheap and undervalued at that time ($52.25/share, which is higher than the current price). Stepan Company increases its research and development spending each year in order to continuously develop new products and remain competitive in the industry. The company targets to spend at least 2.5% of its revenues in R&D. The company spent $104 million of capital expenditures in 2014. They expect to spend an additional $20 million to $40 million in 2015 with investments in China, Brazil and Poland. The increase will also be attributable to "higher personnel, outside contract service and consulting expenses required to pursue the company's growth and innovation opportunities" Approximately 40% of Stepan's R&D expenses are deployed to support to strategic programs: Novel Feedstocks and Enhanced Oil Recovery (EOR). These two programs will be detailed in the next sections of this report.

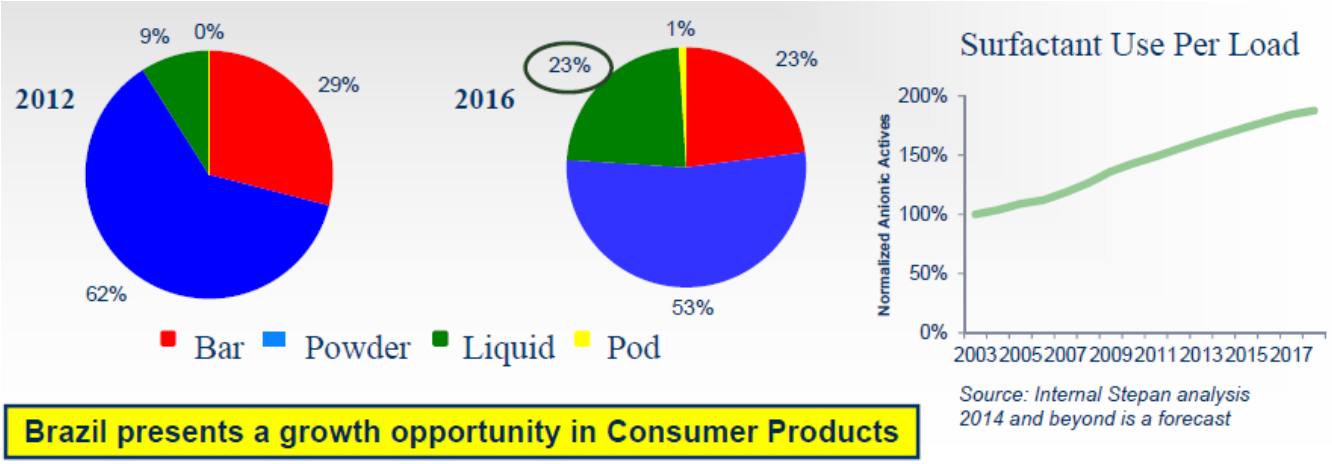
Growth and global expansion in Surfactants and Polymers segments:

Stepan Company is divided in three business segments: surfactants, polymers and specialty products. Net sales in surfactants and polymers increased from Q32013 to Q32014. Specialty Products sales volume increased 5% versus prior year due to higher food and flavoring products volume. This segment accounts for about 5% of the company's net income.

Surfactants:

Surfactants are the basic cleaning agent in consumer and industrial cleaning products such as detergents and shampoos and body washes. Surfactants accounts for about 70% of the company's total revenues. Surfactants net sales declined 2% from FY2013 to FY2014. This was attributable to foreign currency translation loss, severe winter and exceptionally higher freights and maintenance costs. However, in the fourth quarter of 2013, the company approved a plan to consolidate a portion of its North American surfactants manufacturing operations in order to reduce future costs and optimize asset utilization. This would increase the short-term profitability of the surfactants division. Stepan Company also continuously develops proprietary processing technology and to meet the rapid changing needs of customers.

[2] http://www.cacd.ca/files/pdf/AGMPresentations/Frank%20Pacholec_Corporate%20Sustainability.pdf
[3] http://www.nalco.com/applications/enhanced-oil-recovery.htm
[4] http://www.stepan.com/Why-Stepan/Innovation.aspx
[5] http://media.corporate-ir.net/media_files/IROL/11/118345/2013Form10-K.pdf



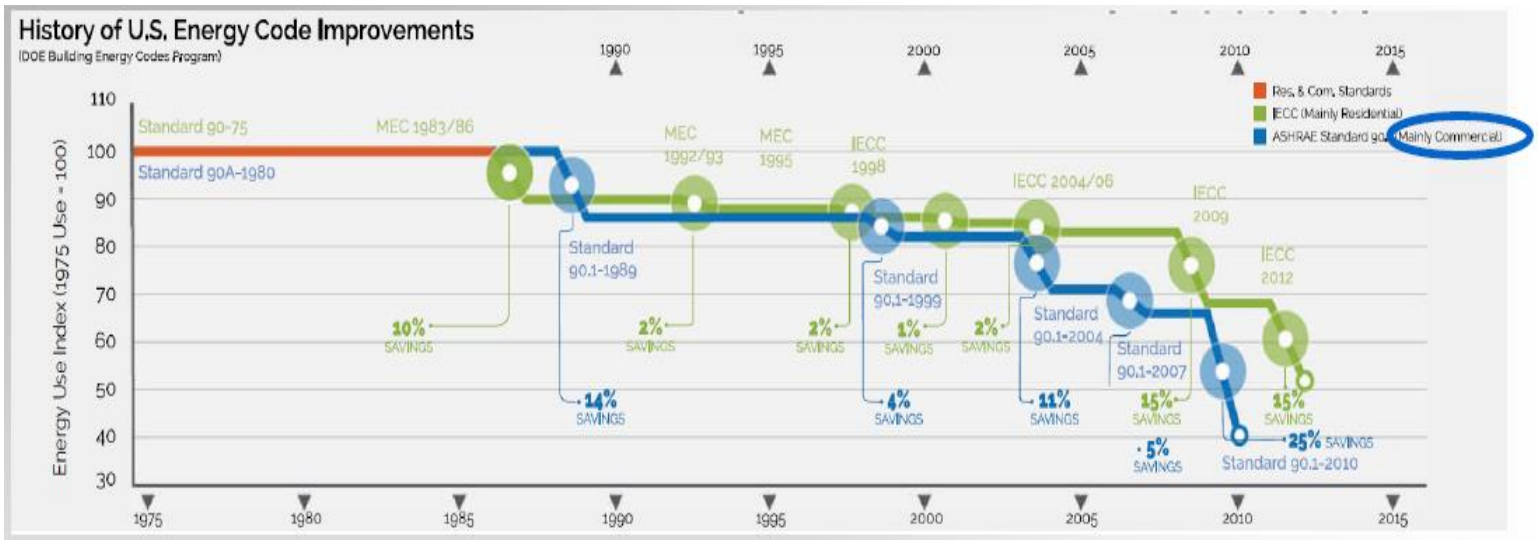
In July 2014, Stepan announced an agreement to acquire a sulfonation production facility in Brazil. This acquisition has recently received anti-trust approval. Brazil, which is the fifth largest country in terms of numbers of inhabitants, has an increasing proportion of middle class people. This would ultimately drive up the usage of liquid laundry products. Liquid laundry products are the ones that that contain the highest proportion of surfactants (compared to powder). As presented on the chart above, by 2016, the market share of liquid laundry products is expected to increase by 12%, which would increase the demand for surfactants. In Brazil, the surfactants use per laundry load is expected to almost double by the end of 2017.

Additionally, Stepan is interested in Brazil because of the opportunity to grow in agriculture. Stepan Company has developed what they call "Novel Feedstock program". The objective of this program is the identification of raw material used in the manufacturing process of chemical products that are produced from non-traditional sources, such as corn and cane. This process is called green conversion process and is illustrated in the picture below. By doing so, Stepan is trying to take advantage of the biotechnology revolution. Stepan has specifically chosen Brazil because it has the moist farmable land in the world and is therefore able to produce far more food than its population needs. The development of these two programs has made Brazil a strategic priority for Stepan in the upcoming year.

Green Conversion Process

Polymers:

The polymer product group includes products that are used for thermal insulation in the construction industry and polyester resins that are used in coatings, adhesives and sealants. Polymers accounts for about 25% of the company's total revenues. Polymers net sales in FY2014 increased 14% over net sales for FY2013 thanks to an 8% increase in organic sales volume, higher average selling price and foreign currency translation gain. This led to a 41% increase in the polymers operating income. The recent acquisition of BMS North American polyester resins accounted for most of the net sales increase in the last fiscal year. It is expected to continue to generate an increase in sales in the future. Because of their broad range of properties, polymers play an essential and role in everyday life. Stepan's comprehensive line of polyester polyols provides for example excellent building insulation. Stepan Company is the global leader in the production and sale of polyester Polyols. The polyester Polyols are frequently used in the construction industry because they have excellent insulation properties. Specifically, Polyol volume sales grew 21% versus prior year as higher energy efficiency standards are adopted. Stepan has been heavily investing in the Chinese market. The Chinese government is currently mandating greater energy efficiency throughout economy and more use of insulation. Therefore, China is a key to Stepan's recent strategy. In Q4 2013, Stepan announced that it would build a Polyol plant is China. The company announced that it signed an EPC (engineering, procurement and construction) contract in order to build the plant. It is expected to be operational by 2016. The company believes that China will be soon the largest Polyol market in the world.



Similarly, the Polyol market in housing insulation is also growing in the United States. The graph above represents the "Energy Use Index (EUI)" from 1975 to 2015. The EUI is expressed as energy per square foot per year (with a 100 value basis in 1975 in this case). Each time the index decreased, it means that the U.S. government has required establishment of new minimum design and construction requirements for energy efficiency. Stepan's unique chemistry leads to the development of superior insulating and fire resistant materials, which are critical requirements in the construction industry, especially in the near future.

In order for Stepan Company to pursue its growth ambition, it has several manufacturing plants all around the world that are able to respond to local and global increase in demand. So that it can meet its global growth expectations, Stepan has a surfactant manufacturing plant in Brazil and a Polyol manufacturing plant in China. This quote, by the CEO of Stepan Company summarizes the future expectations of the company: "There are many projects underway which we expect will reduce our costs and aggressively build our sales. We look forward to improving Surfactant volumes and product mix and continuing to build on the momentum within our Polymer group."[6] To reach this goal, Stepan is currently restructuring some part of its business. The company has agreed in January

[6] http://www.prnewswire.com/news-releases/stepan-reports-third-quarter-results-and-announces-forty-seventh-consecutive-year-of-dividend-increases-190584525.html

2015 to sell its specialty Polyurethane systems business.[7] This aimed to "redeploy resources to further improve growth and innovation in their line of polyols".

Sustainable advantage:

Stepan Company, a member of Responsible Care, is committed to reduce its environmental footprint. Responsible Care is a voluntary initiative developed autonomously by the chemical industry that sets standards for the improvement of health, safety and environmental performance. In 2010, Stepan has agreed on a joint venture with Elevance Renewable Sciences, Inc., the world's leader in transforming natural and renewable oils into high-performing specialty products and materials. Thanks to this partnership Stepan Company has launched in March 2014 a new surfactant called Steposol MET-10U. This product is a cleaning solution derived from natural oils and targets to replace solvents. This product is one of the first commercial products in the market that combines high performance, competitive price and green attributes.[8] The solvent industry is a $45 billion market, which means that chemicals companies have to invest in the "green business" in order to appeal to customers and differentiate themselves from each other's. Therefore, developing innovative products that meet environmental requirements and are still highly effective and affordable for customers gives a great competitive advantage to Stepan Company over its competitors. The company targets to be using 100% certified palm kernel oil and derivatives by 2020. This product is highly suitable for the manufacturing of cleaning agents for laundry purposes. Moreover, not only are the products of the company sustainable. Indeed, in 2013 the company managed to reduce its waste to below 4.1 pounds per 1,000 pounds produced, with a long-term target to 3.0 pounds. Reducing the environment footprint is a core value of the company. Even Stepan's Illinois warehouse was designed utilizing the latest industrial building efficiency systems. It includes a roof insulation containing a similar Stepan polyol that it sold to its customers because the company is a totally confident about the quality and the efficiency of its own products. Sustainability at Stepan Company is noteworthy because most of the chemicals companies tend to have a bad reputation concerning environmental conservation.

Healthy Balance Sheet:

The last point of my argument is that Stepan Company has a healthy balance sheet. The company has a 29.8% debt to equity ratio. This ratio has been rather steady over the past few years. I acknowledge that the company is not debt free, but it has plenty of cash on hand. As of December 31, 2013, the company had $133 million in cash. This represented 15% of its market capitalization, which is very high. It could have been able to repay a large portion of its outstanding debt, but by not doing so the company targets the optimal capital structure that offers the ideal debt to equity ratio in order to minimize is WACC. The company has a 7.90% WACC, which is rather low and therefore confirms this theory. The low WACC discounts less the free cash flows, which leads to higher net present values of new projects. All of this leads to a 4.16 Altman Z score. Stepan manages efficiently manages its levels of debt. As it did in the past, Stepan Company can use its cash on hand for horizontal acquisitions purposes, which would reinforce the competitive advantage it has over its competitors.

Best/worst case scenario:

Regarding Stepan Company's stock price, there a three outcomes that can occur:

I am being conservative if the company is unable to pursue its growth operations in the case the Brazilian and Chinese markets turned out to be less promising than expected. Also, the company's net income could be negatively impacted by further foreign currency translation loss or higher freights and maintenance costs. In this case the stock price could decrease to the $38-$41 levels. I evaluate to probability of this scenario to be 15%.

I am being neutral if the company does not maintain a real competitive advantage over its competitors. This would mean that Stepan still invest in Research and Development but does not produce a products that stands out from the others. In this case the stock price would remain in the $41-$44 levels. I evaluate to probability of this scenario to be 25%

I am being bullish if the company successfully performs its international expansion and maintains a strategic competitive advantage over its competitors. If customers keep an interest in the technology of Stepan Company and the sustainability in their products, the company will remain a leader in this industry. In this case the stock price would increase to the $67.58 1-year target price computed by the prroforma on presented on the next page. I evaluate to probability of this scenario to be 60%.

2015 expectations:

[7] http://www.conferencecalltranscripts.org/summary/?id=1394894

[8] http://www.biofuelsdigest.com/bdigest/2014/03/24/the-birth-of-an-affordable-sustainable-more-powerful-gunk-getter/

	Potential Improvements		Potential Headwinds	
	Net Income	EPS *	Net Income	EPS *
Surf Vol/Mix Items			($6MM) **	($0.25)
Non-Recurring Maintenance and Shutdown costs	+$6MM	+$0.25		
Overall Efficiency Program	+$8MM	+$0.30		
Savings on 2013 Restructuring	+$2MM	+$0.10		
Savings on 2014 Restructuring	+$1MM	+$0.05		
Sale of Polyurethane Systems Business	+$2MM	+$0.10		
Weather	+$2MM	+$0.10		
Special Bad Debt Charges	+$2MM	+$0.10		

Additional $17 million or $0.75 EPS prior to growth and other initiatives

The table above, taken from the Q42014 earnings presentation of the company, summarizes the expectation Stepan has for 2015. The company is expected to increases its total net income by $17 million compared to 2014 thanks to several efficiently and restructuring improvements. Most of this gain in only the result of overall business improvements that should lead to an increase in net income. Concerning the Surfactants Volume decrease, these are known items that will occur in the first two quarters of 2015 (no sales in the biodiesel segments yet and expected lower commodity consumer product sales in North America in Q12015 and Q2015.). Finally, the income growth in the polymers segment and the functional surfactants volumes should both increase in 2015. The company is also expected to benefit from falling raw material prices. Therefore, with these expectations and the thesis points I presented, I initiate a buy recommendation on Stepan Company at a current stock price of $41.21. The company's stock price is near its 52-week low, which makes a good point of entry for a buy opportunity.

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Stepan Company	SCL	Analyst	Current Price	Intrinsic Value	Target Value	Divident Yield	Target Return	
		GUILLAUME VALENTIN	$41.23	$60.11	$67.58	2%	65.64%	BULLISH

General Info

Sector	Materials
Industry	Chemicals
Last Guidance	Apr-29-2014
Next earnings date	2/18/2015

Market Data

Enterprise value	$1,095.21
Market Capitalization	$222.94
Daily volume	0.18
Shares outstanding	22.25
Diluted shares outstanding	22.93
% shares held by institutions	46.52%
% shares held by insiders	13.69%
Short interest	0.94%
Days to cover short interest	2.35
52 week high	$66.51
52-week low	$36.34
5y Beta	0.93
6-month volatility	24.98%

Peers

Market Cap.
(Invalid Identifier)

Current Capital Structure

Total debt/market cap	24.21%
Cost of Borrowing	4.33%
Interest Coverage	838.10%
Altman Z	4.16
Debt Rating	BB
Levered Beta	1.21
WACC (based on market value weights)	7.90%

Past Earning Surprises

	Revenue	EBITDA	Norm. EPS
Last Quarter	-0.5%	0.0%	-24.4%
Last Quarter-1	0.8%	0.0%	2.3%
Last Quarter -2	-1.7%	0.0%	-34.9%
Last Quarter -3	2.4%	0.0%	-30.3%
Last Quarter -4	2.0%	0.0%	0.0%

Management

Professional	Title	Comp. FY2011	Comp. FY2012	Comp. FY2013
Stepan, F.	Chief Executive Officer, Presiden	$ -	$ -	$ -
Beamer, Scott	Chief Financial Officer, Principal .	$ -	$ -	$ -
Mason, Scott	Vice President of Supply Chain	$ -	$ -	$ -
Venegoni, John	Consultant	$ -	$ -	$ -
Servatius, Gregory	Vice President of Human Resou	$ -	$ -	$ -
Eaken, Matthew	Vice President and Corporate Co	$ -	$ -	$ -

Historical Performance

	SCL	Peers	Industry	All U.S. firms
Growth	11.0%		7.2%	6.0%
Retention Ratio	32.9%		49.0%	61.6%
ROIC	36.6%		25.1%	11.8%
EBITA Margin	4.6%	#DIV/0!	12.0%	13.7%
Revenues/Invested capital	241.2%		167.2%	202.3%
Excess Cash/Revenue	4.3%	#DIV/0!	12.8%	18.5%
Unlevered Beta	1.01		1.12	0.95
TEV/REV	0.5x		1.5x	2.4x
TEV/EBITDA	6.2x		9.5x	11.3x
TEV/EBITA	12.0x		13.0x	15.4x
TEV/UFCF	9.2x		28.0x	26.8x

Non GAAP Adjustments

Operating Leases Capitalization	100%	Straightline	10 years
R&D Exp. Capitalization	100%	Straightline	10 years
Expl./Drilling Exp. Capitalization	0%	N/A	N/A
SG&A Capitalization	0%	N/A	N/A

Proforma Assumptions

		Period	Rev. Growth	Adj. Op. Cost/Rev
Operating. Cash/Cash	25.0%	LTM	24%	90%
Unlevered Beta	1.00	LTM+1Y	29%	89%
Rev/Invested Capital	150.0%	LTM+2Y	3%	89%
Continuing Period Revenue Growth	3.0%	LTM+3Y	3%	89%
Long Term ROIC	17.3%	LTM+4Y	3%	89%
Invested Capital Growth	Equals to Maintenance	LTM+5Y	3%	89%
Justified TEV/REV	1.0x	LTM+6Y	3%	89%
Justified TEV/EBITDA	7.0x	LTM+7Y	3%	89%
Justified TEV/EBITA	13.0x	LTM+8Y	3%	89%
Justified TEV/UFCF	20.0x	LTM+9Y	3%	89%

Forecasted Profitability

	Revenue	NOPLAT	Invested capital	UFCF
LTM	$1,947.31	$51.31	$1,031.61	$2.42
LTM+1Y	$2,512.33	$104.05	$1,088.79	$62.14
LTM+2Y	$2,592.58	$113.71	$1,127.11	$75.38
LTM+3Y	$2,668.12	$120.38	$1,169.42	$78.08
LTM+4Y	$2,749.22	$126.13	$1,213.70	$81.85
LTM+5Y	$2,834.15	$131.22	$1,269.07	$75.86
LTM+6Y	$2,920.95	$136.27	$1,319.96	$85.38
LTM+7Y	$3,009.83	$141.38	$1,368.52	$92.82
LTM+8Y	$3,100.95	$146.64	$1,417.69	$97.46
LTM+9Y	$3,194.42	$151.89	$1,474.15	$95.43

Valuation

	ROIC	WACC	EVA	Enterprise Value	Total Debt	Other claims	Equity	Adjusted Price
LTM	5.2%	7.9%	$1.36	$1,549.62	$265.16	-$8.52	$1,292.98	$61.07
LTM+1Y	9.8%	8.1%	$18.27	$1,654.45	$265.16	-$76.12	$1,465.41	$68.33
LTM+2Y	10.4%	8.2%	$24.80	$1,720.46	$265.16	-$143.37	$1,598.66	$73.99
LTM+3Y	10.7%	8.3%	$27.21	$1,778.72	$265.16	-$210.91	$1,724.47	$79.75
LTM+4Y	10.8%	8.4%	$28.29	$1,840.53	$265.16	-$280.87	$1,856.23	$85.65
LTM+5Y	10.8%	8.5%	$28.55	$1,907.56	$265.16	-$344.45	$1,986.85	$92.08
LTM+6Y	10.7%	8.6%	$27.39	$1,983.75	$265.16	-$417.16	$2,135.75	$98.64
LTM+7Y	10.7%	8.7%	$26.57	$2,060.37	$265.16	-$497.16	$2,292.37	$105.76
LTM+8Y	10.7%	8.8%	$26.17	$2,137.21	$265.16	-$581.80	$2,453.86	$113.03
LTM+9Y	10.7%	8.9%	$25.73	$2,216.51	$265.16	-$664.95	$2,616.30	$117.59

Monte Carlo Simulation Assumptions

	Base	Stdev	Min	Max	Distribution
Revenue Variation	0	10%	N/A	N/A	Normal
Op. Costs Variation	0	10%	N/A	N/A	Normal
Market Risk Premium	6%	N/A	5%	7%	Triangular
Long term Growth	3%	N/A	3%	11%	Triangular
Terminal Value	0	0.1	N/A	N/A	Normal

Monte Carlo Simulation Results

	Intrinsic Value	1y-Target
Mean est.	$61.07	$68.33
σ(ε)	$0.32	$0.25
3 σ(ε) adjusted price	$60.11	$67.58
Current Price	$41.23	
Analysts' median est.		$55.00