

The Restructuring of Specialty Chemicals, Inc.¹

I. Introduction

During late March 2016, Regina L. Turner sat in a West Virginia office overlooking the Ohio River, contemplating seemingly insurmountable challenges. Turner had recently been appointed chief executive officer (CEO) of Specialty Chemicals, Inc (SCI), a market leader in the production of lubricant and fuel additives, to aid in the company's turnaround. Over the last several years, falling oil prices, a surging dollar and headwinds from slowing international demand – particularly in China – had dampened the cash-flow generating power of SCI. By the end of 2015, earnings before interest, taxes, depreciation, and amortization (EBITDA) had fallen to \$495 million from \$840 million in 2013 (**Exhibit 1**) and cash holdings had dwindled over the last year by more than \$73 million (**Exhibit 2**). But it was three immediate challenges that troubled Turner the most.

First, SCI carried a relatively large debt load, resulting from a 2006 leveraged buyout (LBO) that was financed with nearly \$4 billion of debt. While a December 2012 recapitalization refinanced a good portion of the debt, \$1.1 billion of unsecured bonds from the LBO were set to mature at the end of September 2016 (**Exhibit 3**). Second, as a hedge against future volatility in petroleum input costs, in June 2015, the company entered into swap contracts to purchase oil at a price significantly higher than the current spot rate. As competitive pressures in the cheap-oil environment pushed the price of petroleum additives down, the costs of the swaps squeezed SCI's profit margins. Third, looking forward, SCI faced two near-term operational challenges:

¹ The case was prepared by Michael Friedman (Chapman and Cutler, LLP), Larry G. Halperin (Chapman and Cutler, LLP), Randel Lewis (University of Denver), and David C. Smith (University of Virginia). This setting is fictional and should be used only for discussion purposes in a pedagogical setting.

(1) SCI's European manufacturing facilities required substantial upgrades to meet new EU environmental standards, and (2) one of SCI's largest U.S. operating facilities required a shutdown to address immediate safety and efficiency concerns. The two operational challenges would require significant capital outlays in 2016 and reduce production during the upgrade process.

These issues weighed heavily on Turner, an experienced petroleum engineer and industry executive, hired by the SCI board to reverse the downward performance at the company. Turner's experience included a recent successful turnaround of a bankrupt specialty chemicals company. Her January 2016 appointment to the CEO position had the blessing of SCI's creditors, who were eager to work with a credible SCI management team. Turner held a firm belief that the company could be successful going forward, but this would require the stakeholders in SCI to work through the current challenges that threatened the company's survival.

II. History of SCI

Specialty Chemicals Inc. was founded by the brothers Francis and Thomas MacPherson as the Little Kanawha Refining Company in Parkersburg, West Virginia in 1879 to refine carbon oil produced in West Virginia's booming oil sands fields.² The MacPherson brothers were originally salt miners, but discovered that the oil coming up through their salt brine wells on the Little Kanawha River had high value in its own right. When the MacPhersons started the Little Kanawha Refining Company, Parkersburg was establishing itself as a growing marketplace in

² The first discoveries of oil in West Virginia date back to the early 1800s. Substantial oil and natural gas reserves were uncovered around the area of "Burning Springs" on the Little Kanawha River, named for the naturally venting gas in the area that could be ignited with a torch. The drilling and use of oil as an industrial product in West Virginia – in lamps and as lubricant – predates by several decades the 1859 construction of the "first" oil rig in Titusville, Pennsylvania. See *Where it All Began*, by D.L. McKain and B. L. Allen, D.L. McKain Publisher, 1999.

the nascent U.S. oil industry.³ The city's location was ideal for a refinery, as the refined products could be then transported by barge on the Ohio River, or by rail, to other cities throughout the east. By the end of the 1880s the Little Kanawha Refining Company was also manufacturing chemicals, primarily ammonia, from the byproducts of the refining process.

The Little Kanawha Refining Company expanded its refinery business through the first part of the twentieth century, reaching a production level of 1,000 barrels per day by 1916 and 2,000 barrels by 1925. By the 1930s, the company owned and operated a half-dozen refineries throughout West Virginia, Kentucky, and Ohio, and hundreds of oil wells, an extensive pipeline network, and river terminals and barges for transporting oil on the Ohio River to eastern markets. In 1932, the company acquired an Ohio firm specializing in using graphite and chlorine to increase the performance of oil as a lubricant at high temperatures. The company also continued to manufacture ammonia-related nitrogen and nitrate products by converting natural gas into hydrogen in a process known as "Steam Reforming."

During the 1950s and 1960s, the Little Kanawha Refining Company continued to ramp up its refinery and chemicals businesses, primarily through acquisitions.⁴ In the 1960s, the company also expanded internationally, opening lubricant additive manufacturing plants in France, Belgium, and Germany. In 1968, the company changed its name to Kanawha Oil, Inc. By 1970, Kanawha Oil was generating over \$800 million in annual sales, with holdings that included 12 refineries and four ammonia plants worldwide, 6,500 miles of crude and natural gas pipeline, and hundreds of river barges. With the shift in consumer attention towards fuel

³ See, e.g., "History of WV Mineral Industries – Oil and Gas" West Virginia Geological and Economic Survey, July 16, 2004, <http://www.wvgs.wvnet.edu/www/geology/geoldvog.htm>.

⁴ Acquisitions included the Acme Oil Company (1951), Motor City Tankers (1953), Huntington Oil Company (1953), Standard Ammonia Company (1956), and the American Refining Company (1961).

economy in the early 1970s, the company researched additives that improved vehicle efficiency, and quickly introduced products such as a high-grade diesel and multi-grade gear oil additives.

In 1981, the company sold its ammonia production facilities to M.W. Kellogg & Company, but expanded its oil production capabilities through the 1983 acquisitions of Midland Oil Company and Williston Petroleum, Co. In 1983, Kanawha Oil went public, trading on the New York Stock Exchange under the symbol, KNW. At the time of the company's IPO, a MacPherson family trust still owned a majority of the company's shares. As a public company, Kanawha Oil concentrated on innovations in the production of petroleum additives, including for motor and gear oils, hydraulic fluids, industrial lubricants, and metalworking oils. The company also embarked on further acquisitions, including ARCO's additives business (1991), the gasoline additives producer Henrico Company (1993), and the oil and fuel additives business from Germany-based Siemens Corporation.

To refocus its branding as a global specialist in the petroleum additives business, the company took on the current name, Specialty Chemicals, Inc. (SCI), in 1998. By 2004, SCI was the market leader in the production of petroleum additives, generating company-wide annual sales of \$5.3 billion, with production facilities in North America, Europe, and Asia.

III. The 2006 LBO and 2012 Recapitalization

In February 2006, the private equity firm, MapleRock Partners, approached the SCI board with an offer to take SCI private through a leveraged buyout (LBO). According to contemporaneous analyst reports, MapleRock viewed the lubricant and lubricant additives market as an attractive – if not necessarily sexy – long term play. The market had grown steadily at a rate of approximately 10% per year over the previous decade, and recent consolidation suggested that companies would have room to compete more on price rather than volume. As

one analyst remarked, “There are high quality oligopolies in the chemical land that tend to grow up. The lube additives industry is one that really started to shine.”⁵ MapleRock believed SCI to be particularly well-positioned to take advantage of market growth, given its global presence and strong downstream access to petroleum inputs.

MapleRock bid \$5.9 billion for 100% of the equity on a debt free basis, representing an 8.5x multiple on SCI’s 2005 EBITDA of \$694 million. The SCI board accepted the offer; the transaction was completed on September 30, 2006. MapleRock financed the purchase primarily through borrowings against the assets of the firm, including a \$3.05 billion senior secured credit facility and \$1.1 billion in 10-year, 11.75% unsecured notes. MapleRock put in \$2.0 billion as its equity contribution. The original senior secured facility was comprised of a \$1.8 billion 1st-lien term loan, a \$1.0 billion 2nd-lien term loan, and a \$250 million revolving line of credit.

In December 2012, SCI refinanced its credit facility with new debt commitments totaling \$3.8 billion, including a \$1.8 billion 1st-lien secured term loan facility (maturing January 2019), \$500 million revolving credit facility (maturing January 2018), and \$1.5 billion in 2nd lien 10% secured notes (due January 2020). The new debt paid off in full the existing secured debt and provided SCI with cash to make a \$500 million dividend payment to its MapleRock owners.⁶ The first lien term loan and revolver both charged a floating rate of interest equal to the London Interbank Offer Rate (LIBOR) plus a 3.5% spread, with a floor on the LIBOR rate of 1%, implying that the floating rate could not fall below 4.5%. Additionally, the first lien loan agreement contained a financial covenant that required the company to maintain a ratio of total first-lien debt to LTM (last twelve months) EBITDA of 6.0x. The covenant would apply only if

⁵ Michael Sison, KeyBanc Capital Markets, as quoted in “Warren Buffett’s Lubrizol Advantage,” *Forbes*, March 15 2011.

⁶ As of December 2015, MapleRock investors had received a total of \$1.8B in dividends since the 2006 buyout.

the availability under the revolving credit facility fell below 25% of the total committed amount under the revolver.⁷

While there was no penalty for repaying principal early on the first-lien loans, the debt agreement accompanying the second lien notes included certain protections against early repayment of the second-lien debt. The agreement required that any repayment of second lien principal prior to December 2016 (the start of the “redemption period”) be accompanied with a “make whole” premium, equal to the discounted value of all remaining coupon payments, discounted at the current 10-year Treasury bond rate plus 0.5%.

Exhibit 3 presents a current snapshot of the SCI capital structure in a “capitalization table”. Note that the 2012 recapitalization replaced all senior secured debt from the LBO, but left in place the \$1.1 billion in 11.75% unsecured notes, due September 2016.

IV. Petroleum Additives Industry

a. Specialty Chemicals

Specialty chemicals can be a single chemical or a formulations of several chemicals, produced to affect the performance or processing of another product.⁸ They are differentiated from “commodity chemicals” by their use and function; specialty chemicals target a use whereas commodity chemicals are produced for application to a variety of products. To succeed, a company in the specialty chemicals sector requires substantial knowledge input and innovation.⁹

⁷ Availability under the revolver is defined to be the total amount committed (e.g., \$500 million), less: (a) the amount drawn under the facility plus (b) the amount of outstanding letters of credit. As of December 2015, SCI had drawn \$219.2 million on the facility and had \$125 million of letters outstanding (see **Exhibit 3**).

⁸ “Overview of the Specialty Chemicals Industry”, IHS Specialty Chemicals Update Program, July 2015, available at <https://www.ihs.com/products/specialty-chemicals-industry-scup.html>.

⁹ “Overview of the Specialty Chemicals Industry”, IHS Specialty Chemicals Update Program, July 2015, available at <https://www.ihs.com/products/specialty-chemicals-industry-scup.html>.

Exhibit 4, Panel A provides a breakdown of the different segments of the specialty chemicals industry. As of 2014, the five largest segments – specialty polymers, construction chemicals, industrial and institutional (I&I) cleaners, electronic chemicals, and surfactants – represented 37% of total sales in the market. As a producer of lubricant and fuel additives, SCI operates in a relatively small, but often profitable segment of the specialty chemicals market.

b. Petroleum Additives

Lubricant oil additives improve the effectiveness of lubricants and other fluids used in the operation of machinery and engines. Today, the largest uses for lubricant additives are in automotive crankcase oils, hydraulic fluids, and gear oils, but lubricant oil additives are also common in industrial lubricants and oils for the metalworking machinery.¹⁰ The major functional categories of lubricant oil additives include dispersants, detergents, oxidation inhibitors, antiwear agents, extreme-pressure additives, and viscosity index improvers.¹¹ **Exhibit 4, Panel B** presents a breakdown by region of world consumption of lubricant oil additives.

Like lubricant additives, fuel additives enhance the performance of engines and machinery, but through fuel sources, such as gasoline and diesel, rather than via a lubricant oil. Gasoline additives work to improve a fuel's octane rating, reduce the buildup of corrosive deposits, or act as a lubricant. Gasoline additives improve the compression ratio of the fuel, i.e., the compression that the fuel can withstand before igniting, which improves the power and performance of the fuel. The major functional categories of gasoline additives are metal deactivators, corrosion inhibitors, oxygenates and antioxidants. Diesel additives meet some of

¹⁰ "Lubricating Oil Additives," HIS Specialty Chemicals Update Program, December 2015, available at <https://www.ihs.com/products/chemical-lubricating-oil-scup.html>.

¹¹ "Lubricating Oil Additives," HIS Specialty Chemicals Update Program, December 2015, available at <https://www.ihs.com/products/chemical-lubricating-oil-scup.html>.

the same functional needs as gasoline additives – including inhibiting corrosion and improving lubricity – but also work to overcome properties specific to diesel fuel. For instance, additives are common for lowering the “pour point” (the temperature at which diesel fuel flows easily) and improving the flow of diesel in cold temperatures, and for improving the conductivity of diesel.¹²

c. Economics of Petroleum Additives

Petroleum additive companies face exposure to the ups and downs of oil markets. This reliance occurs first on the cost side because the production of additives depends on direct crude oil, petrochemicals (such as olefins) derived from oil, and petroleum feedstocks, such as naphtha and gas oil, to process the oil into component petrochemicals.¹³ The additives companies are also reliant on oil prices on the revenue side because oil prices influence demand for the base oil products that include the additives. A decline in oil prices is typically a net positive for additive companies because of the lower costs of production and potential increased demand for base oil products. Even during periods of higher oil prices, petroleum additive companies often can pass on price increases without affecting the demand for the end product.¹⁴

The pricing power of petroleum additive companies is aided by the industry being relatively concentrated. SCI and four other multinational companies comprise 85-90% of the lubricant oil additive market. The other companies are Chevron Oronite Company LLC (owned by Chevron Corp.), Afton Chemical Corporation (a subsidiary of NewMarket Corporation), The

¹² “Diesel Fuel Additives: Use and Efficacy for Alaska’s Diesel Generators,” by C. Kemp, F. Williams, G. Holdmann, and D. Witmer, Report for Alaska Energy Authority, May 2013. Available at http://www.uaf.edu/files/acep/Diesel-Fuel-Additives-Phase-One_FinalReport_2013.pdf.

¹³ “Petroleum Liquid Feedstocks - Naphtha and Gas Oil,” HIS Chemical Economics Handbook, June 2013, available at <https://www.ihs.com/products/petroleum-liquid-feedstocks-chemical-economics-handbook.html>.

¹⁴ For instance, one oil equity analyst remarked that lubricant additive “customers are the guys who make motor oil, so when prices go up for them, they raise it for me and you. Since people purchasing motor oil use a couple quarts of the product every few months and not gallons of this stuff every day, they generally don’t notice price increases.” See “Warren Buffett’s Lubrizol Advantage,” *Fortune*, March 15, 2011.

Lubrizol Corporation (owned by Berkshire Hathaway), and Infineum (a joint venture of ExxonMobil and Shell).¹⁵

Long-term prospects for the petroleum additives industry are boosted by continued government and regulatory pressure, and increased consumer awareness, to produce more fuel efficient and cleaner burning automobiles. Oil and fuel additives help engines to burn cleaner.¹⁶

Yet, the recent global economic slowdown has presented challenges to the petroleum additives sector. While input costs have declined significantly with the steep drop in oil prices, global demand for oil and fuel additives has also dropped off. Lower global demand has translated into stronger price competition among the top five petroleum additive producers. For instance, single additive prices dropped by 15-20% during 2015, compared to 2014 prices.¹⁷ Moreover, a consistently strong dollar has depressed profitability for the U.S.-based companies.

V. Current Challenges for SCI

a. Hiring a New CEO

As indicated by **Exhibit 1**, the current economic slowdown has affected SCI's recent performance. Sales declined from \$7.1 billion in 2013 to \$6.5 billion in 2015, while EBITDA during the same period dropped from \$890 million to \$495 million. Meanwhile, cash on the balance sheet (**Exhibit 2**) has shrunk from \$339 million in 2014 to \$265 million in 2015.

To stem the company's poor operating performance, the SCI board – backed by the MapleRock owners -- notified SCI's long-standing CEO, Thomas Shapiro, in March 2015 that

¹⁵“Lubricating Oil Additives,” HIS Specialty Chemicals Update Program, December 2015, available at <https://www.ihs.com/products/chemical-lubricating-oil-scup.html>.

¹⁶ “Warren Buffett’s Lubrizol Advantage,” *Fortune*, March 15, 2011.

¹⁷ “Lubricating Oil Additives,” HIS Specialty Chemicals Update Program, December 2015, available at <https://www.ihs.com/products/chemical-lubricating-oil-scup.html>.

SCI would look for a new leader to steer the company forward. An interim CEO replaced Shapiro to allow the SCI board time to complete a search for a permanent replacement. The board's goal was to find a leader with experience turning around a financially troubled industrial company, who also embodied a desire to innovate and inspire the company forward.

The board found their match in Regina Turner, who started as SCI's new CEO on January 30, 2016. Turner received her undergraduate degree in petroleum engineering from West Virginia University and her MBA from the University of Texas at Austin. Following her MBA, Turner worked for the next 27 years at Chevron Oronite, eventually leading efforts as a division vice president to develop Oronite's Heavy Duty Engine Oil (HDEO) technology. Recently, Turner was hired as Chief Restructuring Officer (CRO) of Delilah Resources, an independent oil and gas exploration and production company that filed for bankruptcy in early 2015. Turner completed her stay at Delilah after successfully shepherding the company through a "prepackaged" bankruptcy that completed November 2015. Now 55, Turner was the first woman and the first African American appointed to an executive position at SCI, much less CEO.

Turner soon realized that before developing a viable long-term strategy, three immediate financial and operating challenges put the mere survival of SCI at risk.

b. Challenge #1: High Leverage and Pending Bond Maturity

As shown in **Exhibit 2**, SCI carried a relatively large debt load because of its 2006 LBO. Based on its 2015 EBITDA, SCI was leveraged 9.3 times EBITDA, an excessive amount even by the standards of the buyout industry, and could cover its annual interest payments only 1.4 times (without accounting for other required cash outlays, such as capital expenditures). Most pressing, \$1.1 billion of unsecured bonds from the LBO were set to mature at the end of

September 2016. Since the end of 2015, the market for high-yield bonds had deteriorated significantly, increasing the cost of raising high-yield debt (**Exhibit 5**) and jeopardizing the ability for the company to refinance the bonds before they matured.

c. Challenge #2: Above-Market Oil Costs

As a hedge against future volatility in petroleum input costs, the company in June 2015 entered into swap contracts to purchase oil at an average price of \$68 per barrel through December 2016. Meanwhile, as of mid-March 2016, West Texas crude oil was trading at a price just below \$40 per barrel. The oil hedges covered roughly 50% of SCI's current oil purchases and, Turner estimated, raised operating costs by 20%, assuming a \$40 per barrel market price for oil. As competitive pressure tied to cheap oil pushed the price of petroleum additives down, SCI's oil hedges were now putting significant strain on the company's profit margins.

d. Challenge #3: Near-Term Operational Hurdles

Over the near-term, SCI faced two significant operational hurdles. During February 2016, SCI learned that European Union (EU) authorities would impose new guidelines for renewable energy use and greenhouse gas emissions. Its European manufacturing facilities, accounting for roughly 20% of SCI's total production, required substantial upgrades in 2016 to meet the new EU standards. These upgrades were estimated to require \$250 million in capital outlays during 2016 and reduce EBITDA by \$100 million while the plants were idled.

Meantime, Turner had determined that one of SCI's largest U.S. operating facilities, located in Port Arthur, Texas, required substantial maintenance upgrades that had been deferred under her predecessor. The delay in the maintenance not only reduced the efficiency of the Port Arthur facility, it raised significant safety concerns for workers in the facility. Turner deemed the

upgrades essential for 2016. Her team estimated that the upgrades would require one-time capital expenditures of \$500 million and would reduce EBITDA by \$65 million during the six-month period that the plant was offline. Her team also estimated that once the upgrades were in place, SCI would begin to realize additional annual cost savings equivalent to 0.5%-1.5% of total revenue.

VI. Looking Forward

Turner now wanted to act expediently. Meeting current interest and coupon payments was difficult enough, finding \$1.1 billion to retire the outstanding notes seemed an impossibility. What were her options in the face of the pending maturity? Meanwhile, how would the combination of the continued oil hedges and near-term operational hurdles impact the company's cash flows and value to capital providers? Turner knew any decision she made would affect SCI in ways that the 137-year old company had never experienced before.

Exhibit 1: Specialty Chemicals, Inc. Income Statement

CONSOLIDATED STATEMENTS OF OPERATIONS (USD \$)

12 Months Ended

In Millions, except Per Share data

	Dec. 31, 2015	Dec. 31, 2014	Dec. 31, 2013
Revenues	\$ 6,508.5	\$ 7,212.4	\$ 7,088.6
Cost of sales	5,467.1	6,015.1	5,799.5
Gross profit	1,041.4	1,197.3	1,289.1
Selling and administrative expenses	663.9	656.3	602.6
Research, testing and development expenses	143.2	129.8	120.4
Restructuring and impairment charges	25.1	57.7	58.3
Other income - net	(2.2)	6.5	(3.8)
Operating income	211.4	346.9	511.6
Interest income			
Interest expense	365.7	366.1	358.9
Income before income taxes	(154.3)	(19.3)	152.7
Provision for income taxes	(38.6)	(4.8)	38.2
Net income (loss)	\$ (115.8)	\$ (14.4)	\$ 114.5
CAPEX	\$ (273.4)	\$ (306.6)	\$ (261.1)
D&A	260.3	291.6	273.7
EBITDA	\$ 494.6	\$ 702.8	\$ 839.8

Exhibit 2: Specialty Chemicals, Inc. Balance Sheet

CONSOLIDATED BALANCE SHEETS (USD \$)	12 Months Ended	
	In Millions	Dec. 31, 2015
ASSETS		
Cash and cash equivalents	\$ 265.0	\$ 338.5
Receivables	936.0	1,003.8
Inventories	1,138.3	1,133.4
Deferred income taxes	34.9	34.5
Other current assets	156.2	144.2
Total current assets	<u>2,530.3</u>	<u>2,654.5</u>
Property and equipment - at cost	6,836.6	6,563.3
Less accumulated depreciation	(3,038.1)	(2,777.8)
Property and equipment - net	3,798.5	3,785.5
Goodwill	68.6	85.3
Intangible assets - net	78.1	86.5
Other assets	302.4	298.8
TOTAL	<u>\$ 6,778.0</u>	<u>\$ 6,910.6</u>
LIABILITIES AND TOTAL EQUITY		
Current portion of long-term debt	\$ 9.0	\$ 9.0
Accounts payable	684.7	694.6
Accrued expenses and other current liabilities	415.4	472.6
Total current liabilities	<u>1,109.1</u>	<u>1,176.2</u>
Long-term debt	4,574.2	4,583.2
Noncurrent liabilities	585.8	562.6
Deferred income taxes	130.2	129.8
Total liabilities	\$ 6,399.2	\$ 6,451.8
Common Shares + Paid-in-Capital	1,090.0	1,054.3
Retained earnings	(711.3)	(595.5)
Total equity	<u>378.7</u>	<u>458.8</u>
TOTAL	<u>\$ 6,778.0</u>	<u>\$ 6,910.6</u>

Exhibit 3: Specialty Chemicals, Inc. Capitalization Table

Borrower: Specialized Chemicals, Inc (SCI)

Pro-forma Capital Structure

Financials as of: 12/31/2015
 Today's date: 3/15/2016
 LIBOR (3 month) 0.63%
 10 Yr Treasury 2.47%
 LTM EBITDA \$494.6

Secured Debt	Secured?	Gtys?	Maturity	Issue Amt.	Out Amt.	Leverage ratio	Market price	Market Value	Coupon/ LIBOR Spread*	Annual Interest Expense	Interest cov. ratio
Revolving Credit Facility	Y		1/1/2018	\$500.0	\$219.2		-		L+ 3.50% *	\$9.86	
1st Lien Term Loan B	Y		1/1/2019	1,800.0	1,764.0	4.0x	-		L+ 3.50% *	\$79.38	5.5x
2nd Lien Notes	Y		1/1/2020	1,500.0	1,500.0		92	\$1,380.0	10.00%	\$150.0	
Total Secured Debt				\$3,800.0	\$3,483.2	7.0x				\$239.2	2.1x
Unsecured Debt											
Senior 11.50% Notes	N		9/30/2016	1,100.0	1,100.0		70	\$770.0 **	11.50%	\$126.5	
Total Unsecured Debt				1,100.0							
Total Debt				\$ 4,900.0	\$ 4,583.2	9.3x				\$365.7	1.4x
Less: Cash					(265.0)						
Net Debt					4,318.2	8.7x					

Liquidity

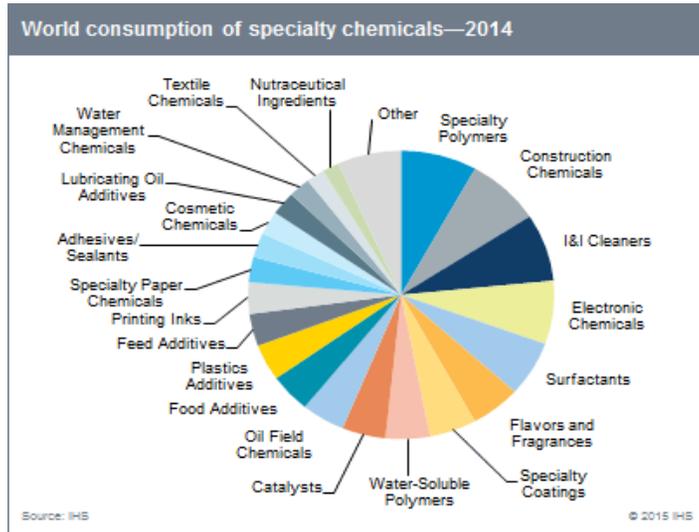
Total Revolver	\$500.0
Less: Funds Drawn	(219.2)
Less: Outstanding LCs	(125.0)
Availability	\$ 155.8

Cash on Hand	265.0
Current Liquidty	\$420.8

*ABL and 1st Lien TL have a LIBOR floor of 1%
 **Price range over period 2/29-3/14/16= 65%-70%

Exhibit 4: Lubricating Oil Additives within the Specialty Chemicals Industry

Panel A



Panel B

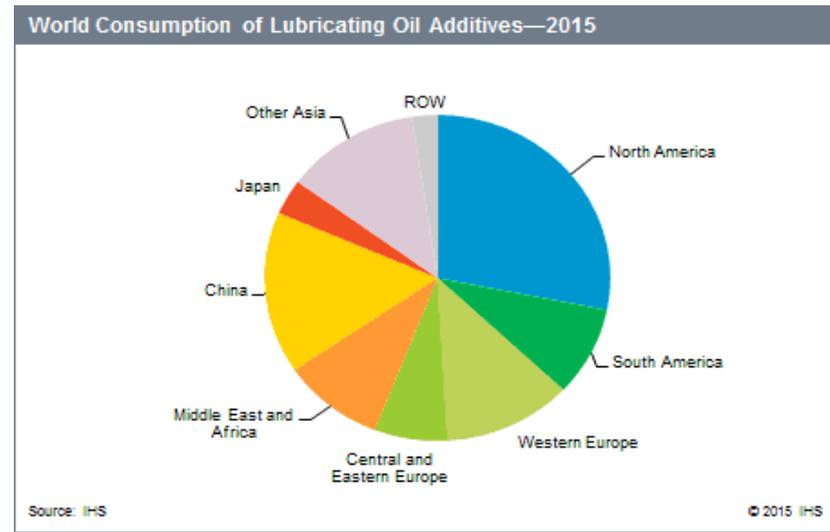


Exhibit 5: Average Effective High-Yield Bond Yields, June 15, 2011 -- March 15, 2016

