

23 January 2014 | 57 pages

High Yield | Diversified Chemicals
North America

HY Chemicals 4Q13 Preview/2014 Outlook

Seeking Outperformance in a Rising Rate Environment

- Rating Change
- High Yield

■ **2014 Outlook** — Chemical sector demand is expected to improve on the back of improved global economic growth; however slower growth in China and Emerging Market economies remains a concern.

■ **2013 Issuance Recap**

■ **Industry Maturity Profile and Chart**

■ **Recommendation Overview** — We discuss the recommendations highlighted in the HY 2014 Outlook published on January 10, 2014 and review 2013 performance.

■ **Issue Recommendations** — In this publication we:

- **Downgrade** CHMT 5.75% Sr Nts due 2021 to **Neutral** from Buy.
- **Upgrade** HXN 8.875% 1.5 Lien Nts due 2018 to **Buy** from Neutral.

■ **Earnings Estimates & Calendar**

■ **Individual Company Recaps & Snapshots**

■ **Relative Value Sheet**

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See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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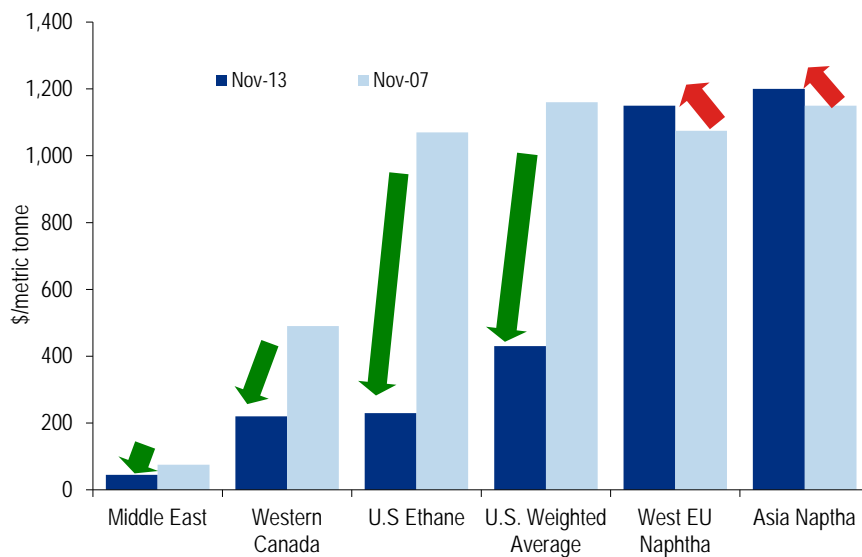
2014 Outlook

- **Demand to Improve:** Citi economists forecast global GDP will grow 3.3% & 3.4% in 2014 and 2015 respectively vs. 2.5% in 2013. Global GDP growth has fallen for 3 consecutive years since breaking 4% in 2010. Chemical revenue has historically grown at a multiple of GDP (closer to 1.0x in developed markets & 2.0x in developing markets).
- **China Something to Watch:** China is the largest and fastest growing consumer for the global chemicals industry. Per IHS China grew from about ¼ of global chemical demand in 2007 to over 1/3rd in 2011. The Chinese economy, despite generating slower growth in recent years, is still expected to outpace the global economy. Given its size and expected growth any additional unexpected weakness in China would be a major negative for the chemical industry. Topline demand in the chemical industry has historically grown at a multiple of GDP, closer to 1.0x in developed economies and closer to 2.0x in developing economies. In their latest outlook Citi's economics team lowered GDP growth estimates post weaker than expected recent data. They now expect GDP growth to edge down from 7.7% in 2013 to about 7.3% in 2014 (the lowest since 1990) and 7.0% in 2015.
- **Supply Additions Key:** Chlor-alkali, epoxy and silicones producers have been negatively impacted by supply additions.
- **M&A:** We expect more M&A as companies seek to sell non-core assets while others act as consolidators (i.e. TROX).
- **IG Ratings Potential:** Multiple companies may attain IG ratings over the medium term (2015) (i.e. ASH, CE, NCX and ROC).
- **Issuance:** We expect 2014 chemical issuance to come in below the last 2 years' totals unless M&A surprises on the upside.
- **Product Specific Highlights:**
 - Titanium Dioxide (TiO₂): Expect a price recovery in 2014, following the rebound in volumes in 2H13 post inventory destocking.
 - Key players: HUN, ROC and TROX.
 - Epoxy Resins: Expect new capacity in Asia to weigh on major players (HUN & HXN, note epoxy is a larger % of HXN sales).
 - Chlor-Alkali: Impact of housing rebound, low cost natural gas, DOW closures may be enough to offset supply additions (AXLL & OLN).
 - Lithium: Secular growth story driven by increased use of lithium batteries in portable devices and hybrid vehicles (ROC).
 - Silicones: We expect recovery in earnings as the industry absorbs the supply added in 2011 (MOMENT).

Global Feedstock Trends

North America continues to be cost advantaged relative to Europe and Asia as a result of the shale gas revolution.

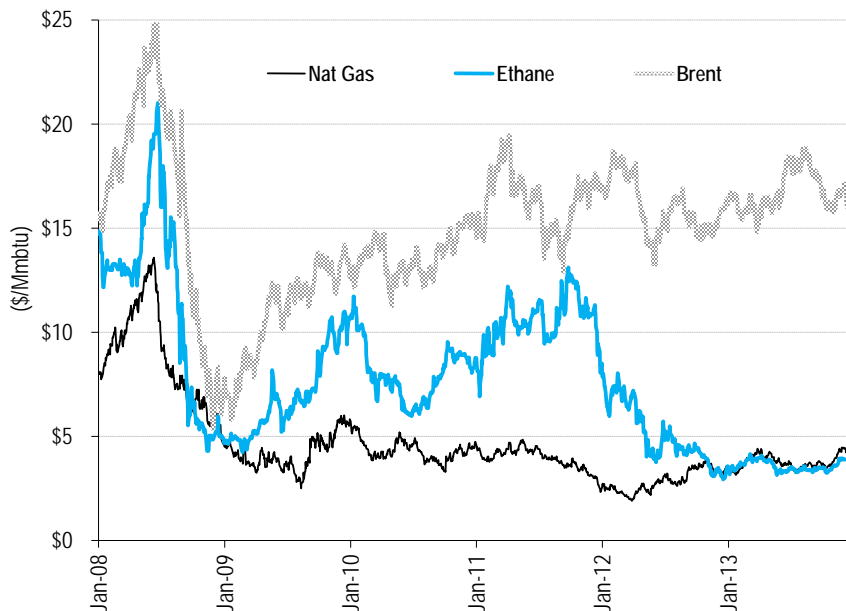
Figure 1. World Ethylene Cash Cost Comparison



Source: Citi Research and HIS.

Despite recent rally in natural gas (from \$2/MMBTU in Apr-12 to north of \$4 currently) the oil to natural gas ratio remains elevated (>20x) vs. historical average of 6-8x.

Figure 2. Natural Gas, Ethane and Brent (\$/MMBTU)



Source: Citi Research and Bloomberg.

Fundamental Outlook: The Good, The Bad and The Ugly

Below we categorize the fundamental outlook of key sectors which impact the high yield chemicals space and highlight the relevant producers and consumers (note this is not an exhaustive list of all chemicals or companies). **Green** shading indicates a positive outlook and alternatively **red** points to a sector facing challenges.

Figure 3. Fundamental Sector Outlooks

Fundamental Outlook	Sector	Producers	Consumers
Still Strong	N. American: Ammonia N. American: Ethylene N. American: Methanol	Rentech Nitrogen, CF DOW, LYB, NCX, WLK MEOH	DOW, HUN AXLL, CE, HUN, POL CE, DOW, HUN, HXN & MOMENT
Solid with Room for Improvement	Lubricant Additives Personal Care/Medical	ASH ASH, POLGA, TAMGCC	
Improving from Trough	Acetic Acid PVC Silicone Styrene Butadiene Rubber TiO2	CE AXLL, WLK MOMENT ASH & OMN DD, HUN/ROC, KRO, TROX	POL Coatings Companies
S-T Weakness	Butadiene		ASH
Down From Peak	Chlor Alkali AG & Fertilizers Benzene Propylene	AXLL, DOW, OLN AGU, MOS, POT, TAMGCC PDH	TiO2 Producers (Chloride process) DOW, HUN AXLL, DOW, HUN, HXN
At Trough & Still Struggling	EU Commodity Chemicals Brominated Flame Retardants Epoxies	BASF ALB, CHMT DOW, HUN & HXN	HUN (Base Epoxies)

Source: Citi Research and Company Filings.

Leading Indicators: US Economic Data Has Beat While Rest of World Less Impressive

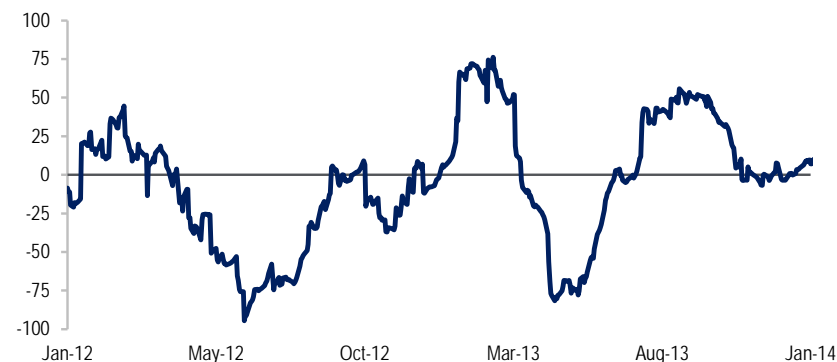
The **Citi Economic Surprise Indices** measure data surprises relative to market expectations. A positive reading indicates that data releases have been stronger than expected and a negative reading points to worse than expected data releases.

Figure 4. Citi Economic Surprise Index – US



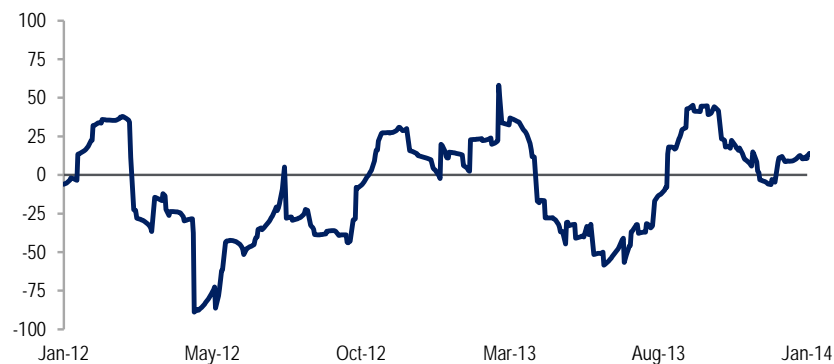
Source: Citi Research & Bloomberg.

Figure 5. Citi Economic Surprise Index – Europe



Source: Citi Research & Bloomberg.

Figure 6. Citi Economic Surprise Index – China



Source: Citi Research & Bloomberg.

Figure 7. Citi Economic Surprise Index – Emerging Markets

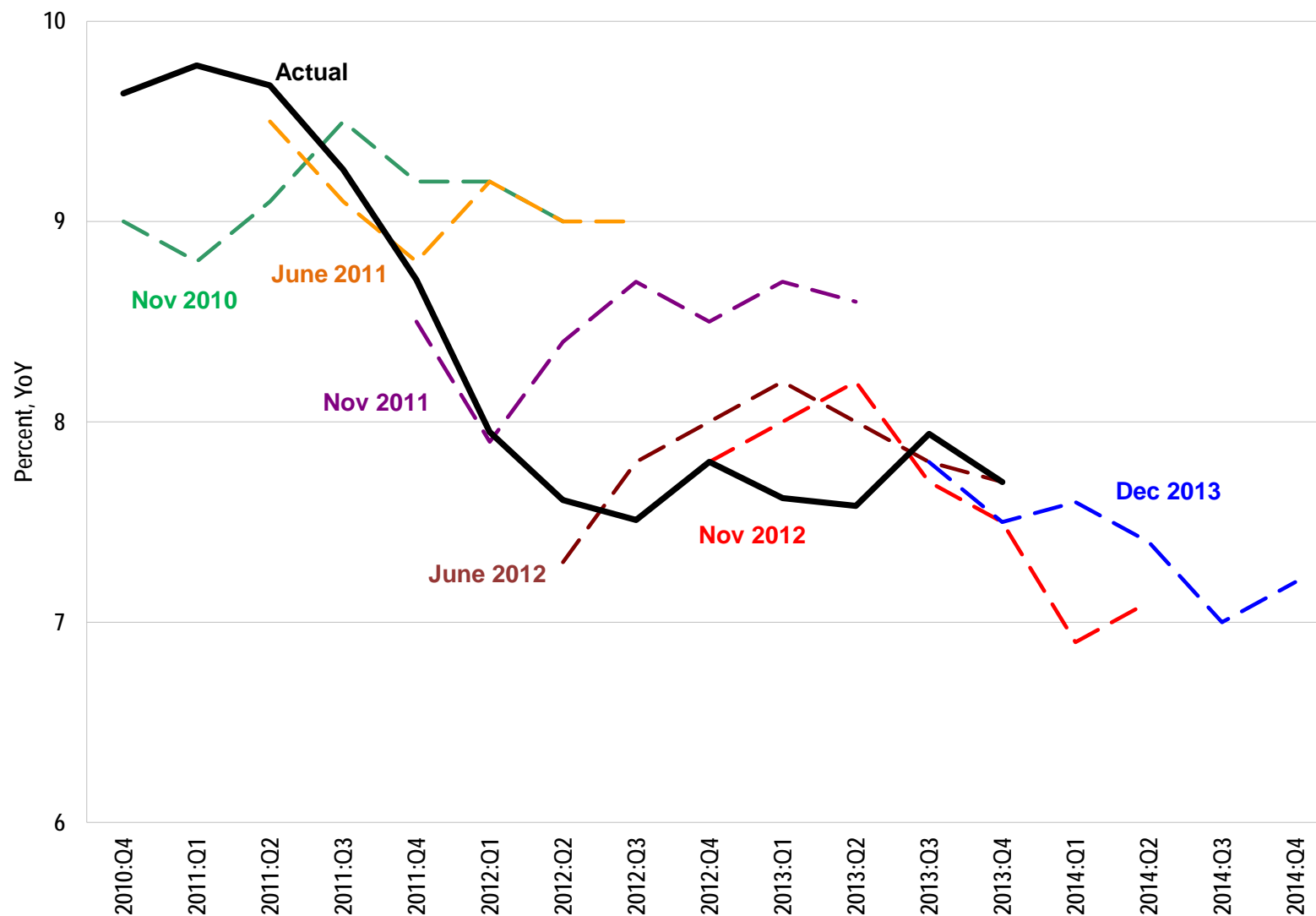


Source: Citi Research & Bloomberg.

China's Economy: *Has Growth Finally Stabilized?*

The below chart illustrates how Citi's forecast for GDP was revised downwards as reported GDP fell from near 10% in late 2010 to sub 8% in the latest quarter.

Figure 8. Chinese Real GDP Growth: Actual vs. Forecast (Citi)

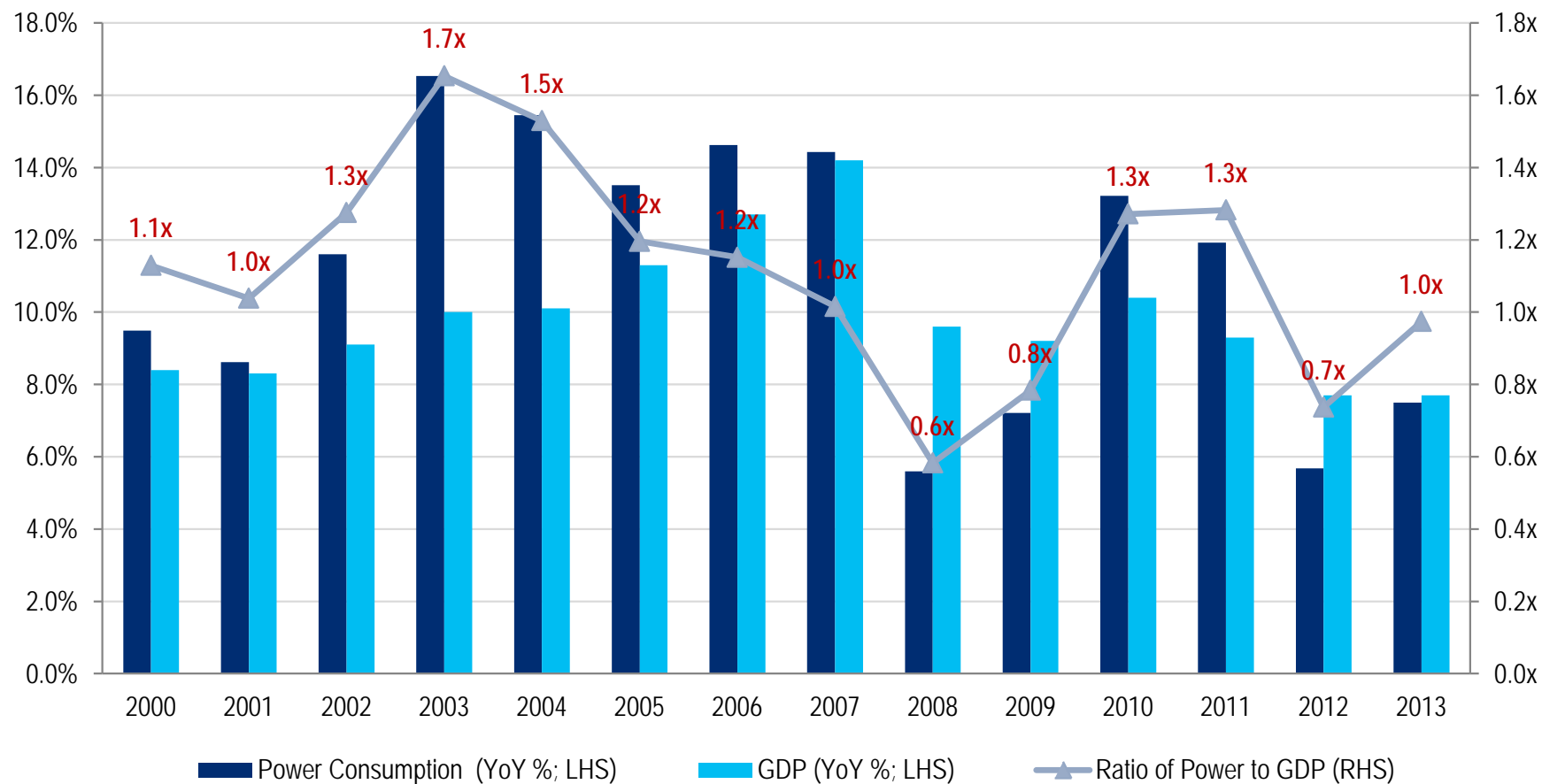


Source: Citi Research.

China's Economy: *Power Consumption a Key Leading Indicator*

China's GDP historically grew at a multiple of power consumption growth ranging from 1.0x to 1.7x (pre 2008). The China Electricity Council reports the consumption data on a monthly basis and this is a helpful leading indicator.

Figure 9. China Power Consumption (YoY% Change) vs. China Annual GDP Growth (YoY% Chg)

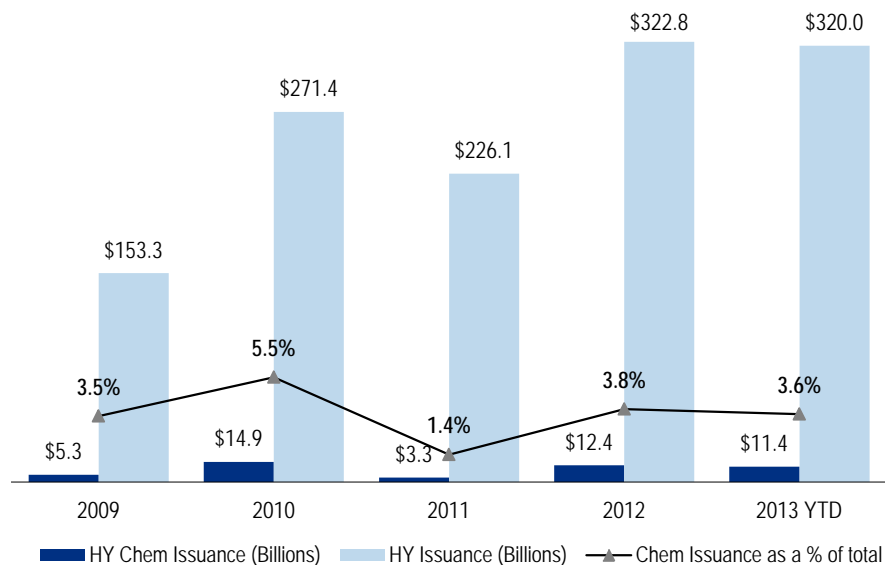


Source: Citi Research and China Electricity Council.

New Issuance

Pace for HY Chemical issuance slowed from busy 1Q13; finished ~\$1B shy of 2012 total.

Figure 10. USD YTD HY Chemical Bond Issuance (Billions)



Source: Citi Research and Company Filings.

Figure 11. High Yield Chemical USD Issuance 2013 YTD (mm)

Issue Date	Issuer	Seniority	Coupon	Maturity	Amount	Price	Yield	Spread	Ratings
12/13/2013	Abegnoa Finance	Sr. Unsecured	7.750%	2/1/2020	\$450	\$100.00	7.750%	T+555bp	B2/B
11/26/2013	Calumet Specialty Products	Sr. Unsecured	7.625%	1/15/2022	\$350	\$98.49	7.875%	T+560bp	B2/B
10/2/2013	SNF Floerger	Sr. Unsecured	6.000%	1/15/2022	\$250	\$100.00	6.000%	T+369bp	Ba3/BB+
9/18/2013	Pinnacle Operating	2nd Lien	9.000%	11/15/2020	\$300	\$100.00	9.000%	T+666bp	Caa1/CCC+
7/30/2013	Nova Chemicals	Sr. Unsecured	5.250%	8/1/2013	\$500	\$100.00	5.250%	na	Ba2/BB+
7/23/2013	Chemtura	Sr. Unsecured	5.750%	7/15/2021	\$450	\$100.00	5.250%	T+335bp	B1/BB-
5/14/2013	Ineos Group Holdings SA	Sr. Unsecured	6.125%	8/15/2018	\$678	\$100.00	6.125%	T+548bp	B-/Caa1
4/12/2013	Rentech Nitrogen Partners LP	2nd Lien	6.500%	4/15/2021	\$320	\$100.00	6.500%	T + 514bp	B1/B
3/28/2013	Petrologistics LP	Sr. Unsecured	6.250%	4/1/2020	\$365	\$100.00	6.250%	T + 507bp	B2/B
3/8/2013	Cornerstone Chemical	1st Lien	9.375%	3/15/2018	\$230	\$100.00	9.375%	na	B3/B-
2/28/2013	PolyOne Corp	Sr. Unsecured	5.250%	3/15/2023	\$600	\$100.00	5.250%	T + 323bp	Ba3/BB-
2/26/2013	Ashland Inc.	Sr. Unsecured	3.000%	3/15/2016	\$600	\$100.00	3.000%	T+ 260bp	Ba1/BB
2/26/2013	Ashland Inc.	Sr. Unsecured	3.875%	4/15/2018	\$700	\$100.00	3.875%	T + 304bp	Ba1/BB
2/26/2013	Ashland Inc.	Sr. Unsecured	4.750%	8/15/2022	\$650	\$100.00	4.750%	T + 290bp	Ba1/BB
2/26/2013	Ashland Inc.	Sr. Unsecured	6.875%	5/15/2043	\$350	\$100.00	6.875%	T+ 370bp	Ba1/BB
2/1/2013	US Coatings (fka Dupont Coatings)	Sr. Unsecured	7.375%	5/1/2021	\$750	\$100.00	7.375%	T + 589bp	Caa1/B-
2/1/2013	Axiall Corp (fka Georgia Gulf)	Sr. Unsecured	4.875%	5/15/2023	\$450	\$100.00	4.875%	T + 304bp	Ba3/BB
1/31/2013	Hexion US Finance Corp (aka Momentive Specialty)	1st Lien	6.625%	4/15/2020	\$1,100	\$100.75	6.450%	T + 565bp	B1/B-
1/30/2013	Eagle Spinco Inc (fka as PPG Commodity)	Sr. Unsecured	4.625%	2/15/2021	\$688	\$100.00	4.625%	T + 278bp	Ba3/BB
1/29/2013	Trinseo	1st Lien	8.750%	12/31/2019	\$1,325	\$100.00	8.750%	T + 773bp	B1/B+
1/22/2013	TPC Group Inc	1st Lien	8.750%	12/15/2020	\$100	\$101.00	8.528%	T + 751bp	B3/B
1/14/2013	Hexion US Finance Corp (aka Momentive Specialty)	1.5 Lien	8.875%	2/1/2018	\$200	na	na	na	B3/CCC+
Total					\$11,406				

Source: Citi Research and Company Filings.

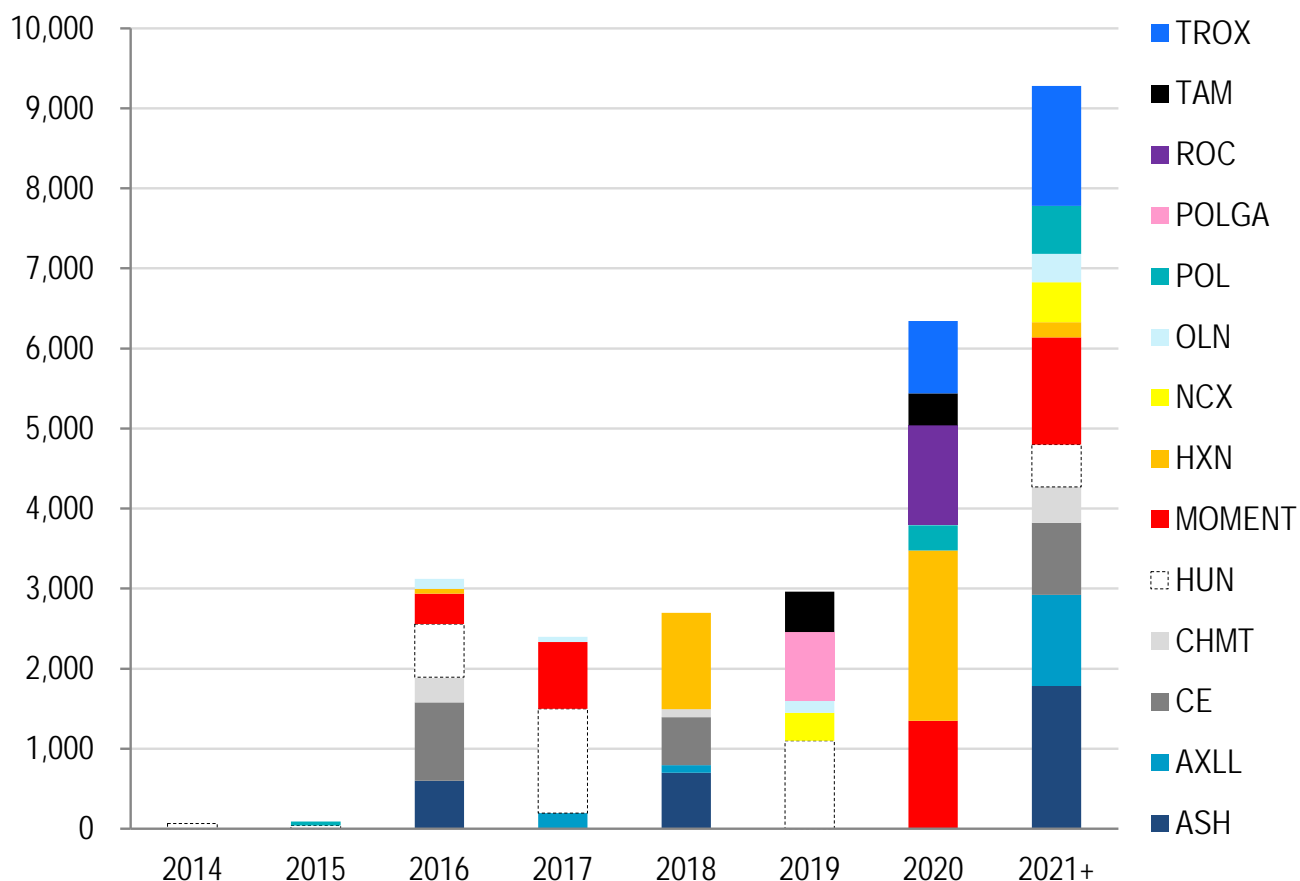
Maturity Profile

Figure 12. Maturity Profile Table for Coverage Universe (\$mm)

Name	Ticker	2014	2015	2016	2017	2018	2019	2020	2021+	Total
Ashland	ASH			600		700			1,782	3,082
Axiall	AXLL				195	95			1,138	1,428
Celanese	CE			976		600			900	2,476
Chemtura	CHMT			316		101			450	867
Huntsman	HUN	65	39	663	1,304		1,100		530	3,701
Momentive Perf.	MOMENT			380	832			1,350	1,340	3,902
Momentive Spec.	HXN			60		1,200		2,124	189	3,573
Nova Chemicals	NCX						350		500	850
Olin Corp.	OLN			125	64		150		353	692
PolyOne	POL		49					317	600	966
Polymer Group	POLGA						855			855
Rockwood	ROC							1,250		1,250
Taminco	TAM						505	400		905
Tronox	TROX							900	1,496	2,396
TOTAL		65	88	3,120	2,395	2,696	2,960	6,341	9,278	26,943
<i>Cumulative %</i>			<i>1%</i>	<i>12%</i>	<i>21%</i>	<i>31%</i>	<i>42%</i>	<i>65%</i>	<i>100%</i>	

Source: Citi Research and Company Filings.

Figure 13. Maturity Profile Chart for Coverage Universe (\$mm)



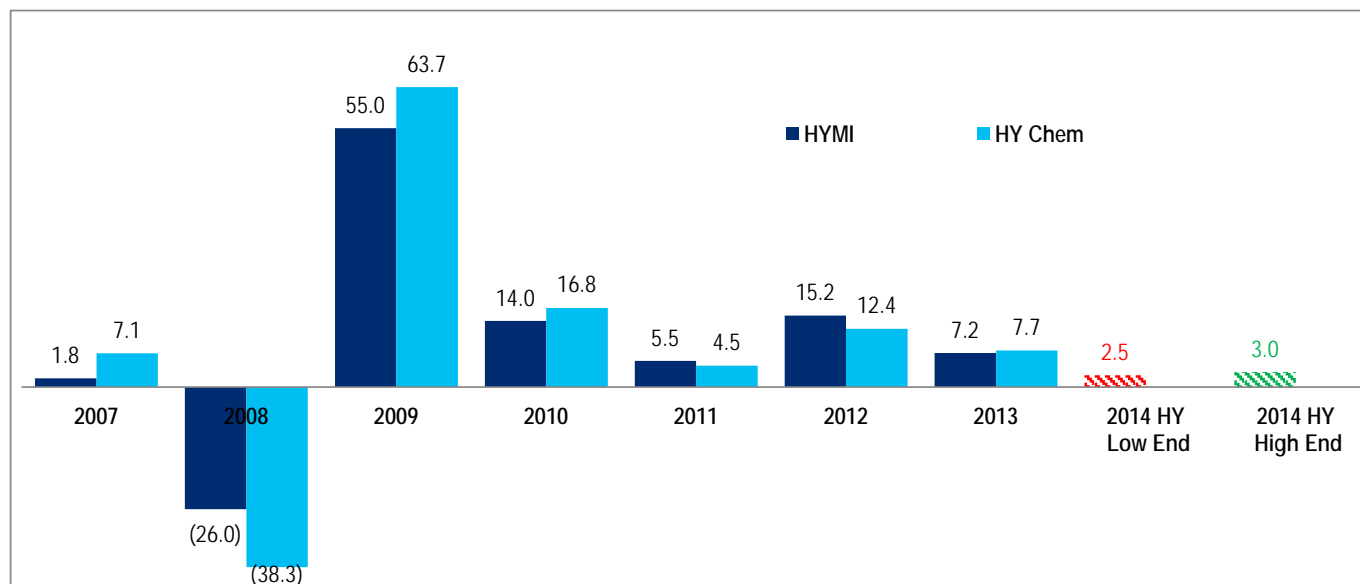
Source: Citi Research and Company Filings.

Recommendation Overview

Returns: We expect returns to be relatively in line with our HY strategists call for a 2.5% 2014 Total Return for the HYMI. Those looking to outperform will need to:

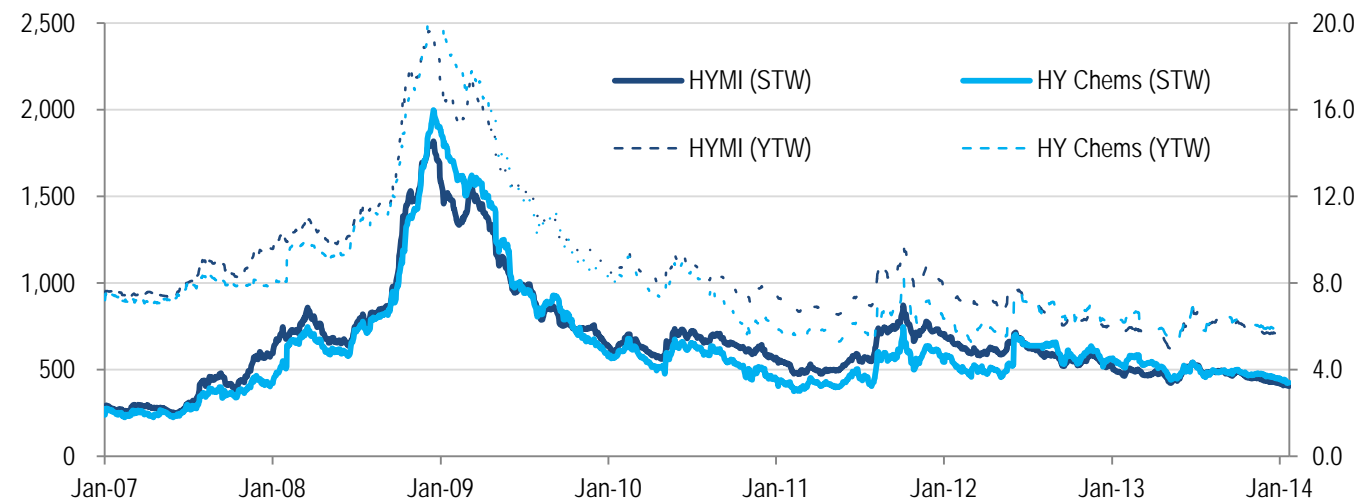
- **Reach for Yield CCC:** Momentive Performance Materials (MOMENT) is a yieldy CCC with an improving earnings outlook and the potential for near-term catalysts (exchange) that could cause the capital structure to rally further.
- **Pick Safe Cross-Over Candidates:** Nova Chemicals (NCX) is a solid cross-over candidate with strong fundamental outlook and a 'AA' rated parent.
- **Shorten Duration:** There are many bonds maturing inside of 2020 which offer attractive returns while avoiding duration risk.
- See [HY - 2014 Outlook and Recommendations](#) published on January 10th.

Figure 14. Annual Returns (%): Citi High Yield Market Index & Citi HY Chemicals Index



Source: Citi Research and Citi Velocity.

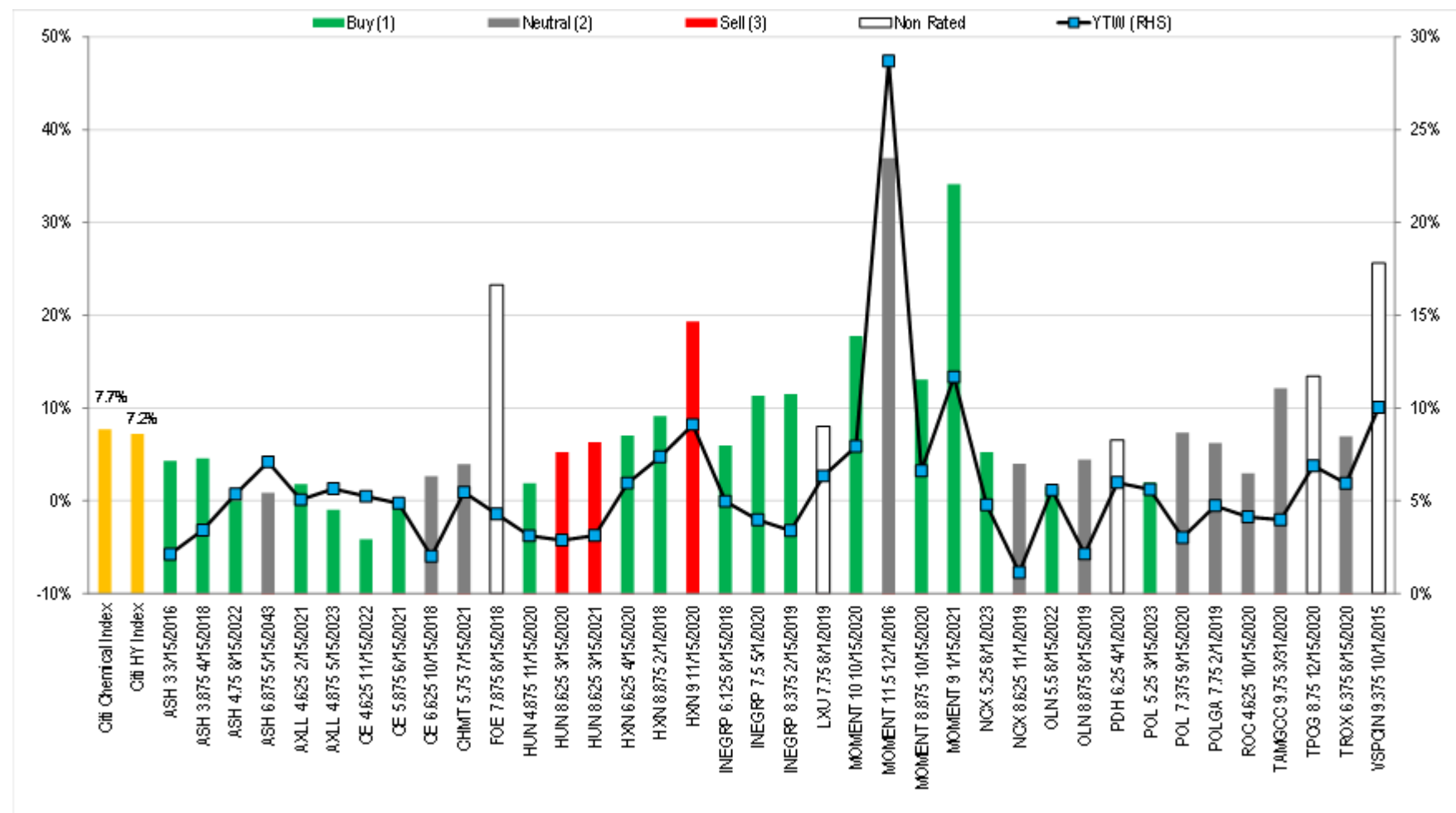
Figure 15. STW (LHS) & YTW (RHS): Citi High Yield Market Index & Citi HY Chemicals Index



Source: Citi Research and Citi Velocity.

2013 High Yield Chemicals Return Review

Figure 16. YTD Returns (% LHS) vs. Current YTW (%RHS)



Source: Citi Research and Company Filings.

Issuer Recommendation Overview

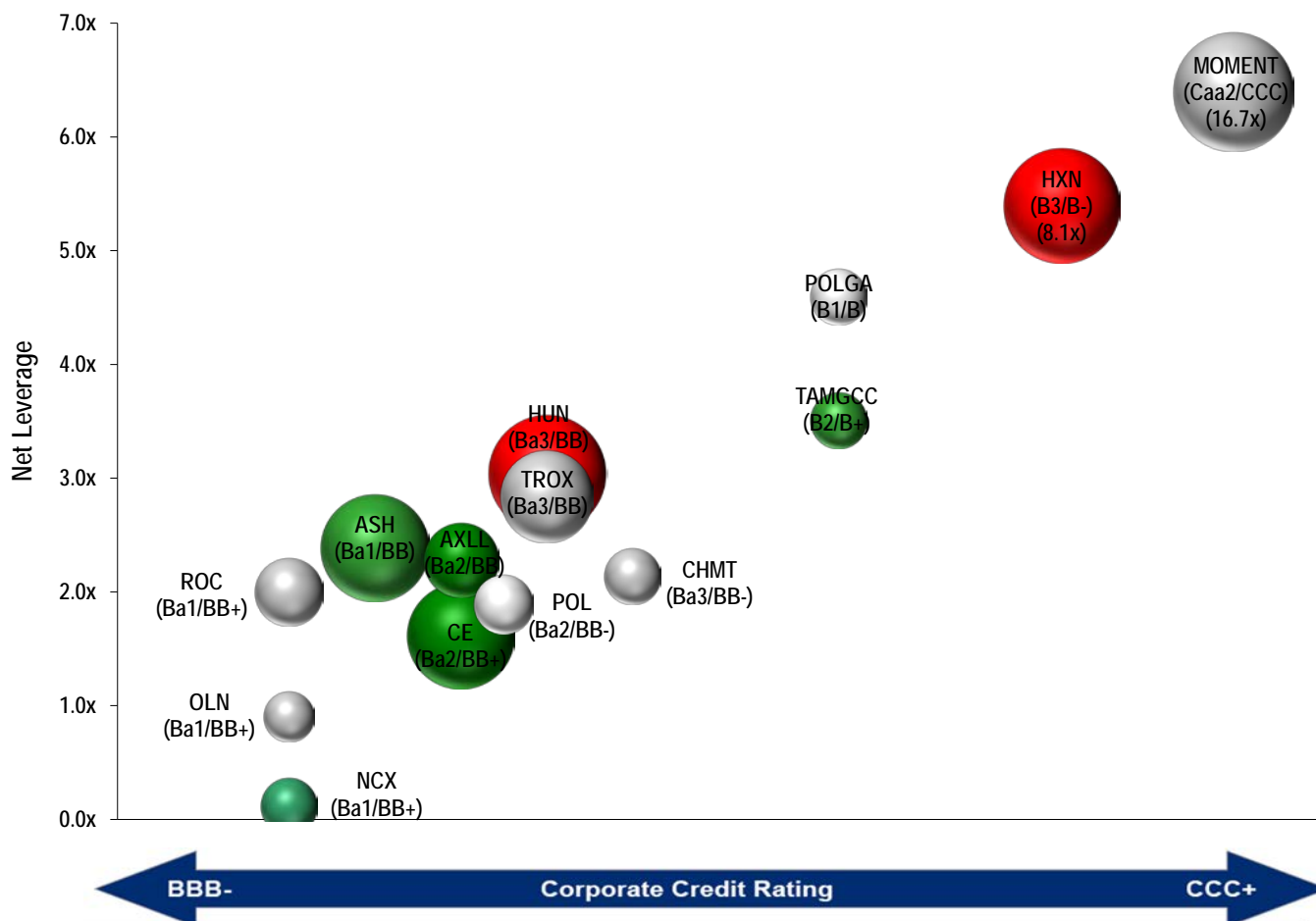
We currently cover 14 issuers with total debt outstanding of over \$40B.

We move to **Overweight** from **Marketweight** on Nova Chemicals (NCX) as we like the low leverage, AA rated parent and positive fundamentals.

We move to **Marketweight** from **Overweight** on Polymer Group (POLGA) post the recent acquisition as we see limited upside in the POLGA 2019s, which we rate Neutral, though noting they do sport an attractive coupon.

We move to **Marketweight** from **Overweight** on Taminco (TAM) as we see limited upside in the bonds and a lack of near-term positive catalysts post the successful IPO and repayment of the PIK toggle notes.

Figure 17. Issuer Ratings: Leverage vs. Corporate Credit Rating vs. Total Debt (Size of Bubble)



Source: Citi Research and Company Filings.

Issue Ratings Overview

We rate **35 individual** bond issues with a notional of ~\$20B.

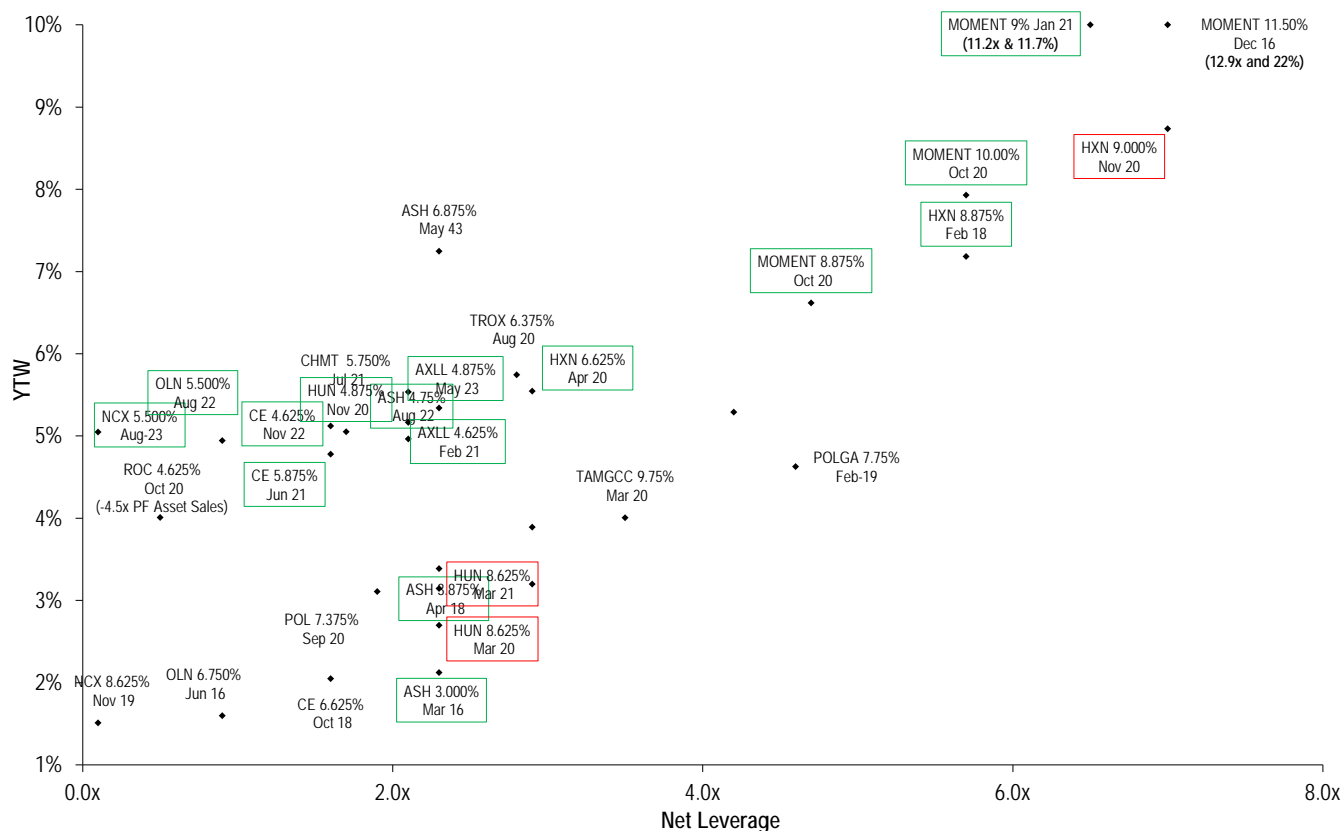
Since we published our 3Q13 earnings preview we've:

- Downgraded HXN 9.0% 2nd Lien Nts from Neutral to Sell.
- Downgraded TROX 6.375% Sr Nts from Buy to Neutral.

In this publication we:

- Downgrade CHMT 5.75% Sr Nts due 2021 to Neutral from Buy.
- Upgrade HXN 8.875% 1.5 Lien Nts due 2018 to Buy from Neutral.

Figure 18. Green = Buy, Red = Sell, No outline = Neutral



Source: Citi Research and Bloomberg.

4Q13 Earnings Estimates

Figure 19. 4Q13 Estimates (\$mm)

				Citi Estimates			Consensus Estimates								
		Rating		4Q13E	4Q13E	4Q13E	4Q13			# of	4Q13			# of	Mean
Ticker	Name	CFR/CCR	Outlook	Sales	EBITDA	Margin	Sales	Low	High	Ests	EBITDA	Low	High	Ests	Margin
ASH	Ashland (a.)	Ba1/BB	Stable/Stable	\$1,855	273	14.7%	\$1,867	1,835	1,891	7	\$262	179	291	4	14.0%
AXLL	Axiall	Ba2/BB	Stable/Stable	\$1,061	150	14.1%	\$1,106	1,028	1,150	8	\$150	143	157	7	13.6%
CE	Celanese	Ba2/BB+	Positive/Stable	\$1,524	307	20.2%	\$1,563	1,410	1,644	12	\$313	219	405	9	20.0%
CHMT	Chemtura	Ba3/BB-	Stable/Stable	\$542	60	11.1%	\$547	505	622	6	\$63	52	76	5	11.4%
HUN	Huntsman	Ba3/BB	Stable/Negative	\$2,714	292	10.8%	\$2,702	2,651	2,758	7	\$294	288	305	5	10.9%
NCX	Nova Chemicals	Ba1/BB+	Stable/Stable	\$1,163	225	19.3%	n/a	-	-	-	n/a	-	-	-	-
OLN	Olin Corp.	Ba1/BB+	Stable/Stable	\$555	86	15.5%	\$578	536	614	6	\$81	77	85	7	14.0%
POL	PolyOne	Ba2/BB	Stable/Stable	\$900	81	8.9%	\$894	869	920	5	\$78	75	80	3	8.8%
POLGA	Polymer Group	B1/B	Stable/Neg	\$372	36	9.6%	n/a	-	-	-	n/a	-	-	-	-
MOMENT	Momentive Perf.	Caa2/CCC	Negative/Negative	\$595	51	8.6%	n/a	-	-	-	n/a	-	-	-	-
HXN	Momentive Spec.	B3/B-	Stable/Stable	\$1,088	90	8.3%	n/a	-	-	-	n/a	-	-	-	-
ROC	Rockwood	Ba1/BB+	Stable/Positive	\$335	77	23.0%	\$342	314	352	7	\$74	67	87	5	21.5%
TAM	Taminco	B2/B+	Negative/Stable	\$285	63	22.1%	\$284	283	287	6	\$57	54	61	3	20.2%
TROX	Tronox	Ba3/BB	Stable/Stable	\$459	85	18.5%	\$450	397	483	6	\$88	68	106	6	19.6%

(a.) ASH reporting 1Q14 for the quarter ended 12/31/13. Consensus estimates = Bloomberg. n/a = Not available.

Source: Citi Research and Bloomberg.

2014 Earnings Estimates

Figure 20. 2014 Estimates (\$mm)

					Citi Estimates			Consensus Estimates								
			Rating		FY14E	FY14E	FY14E	FY14			# of	FY14			# of	Mean
	Ticker	Name	CFR/CCR	Outlook	Sales	EBITDA	Margin	Sales	Low	High	Ests	EBITDA	Low	High	Ests	Margin
ASH EQUITY	ASH	Ashland (a.)	Ba1/BB	Stable/Stable	\$7,990	1,268	15.9%	\$8,020	7,824	8,350	7	\$1,302	1,267	1,352	4	16.2%
AXLL EQUITY	AXLL	Axiall	Ba2/BB	Stable/Stable	\$4,884	722	14.8%	\$4,860	4,670	5,029	8	\$742	678	818	7	15.3%
CE EQUITY	CE	Celanese	Ba2/BB+	Positive/Stable	\$6,742	1,394	20.7%	\$6,793	6,636	6,978	12	\$1,449	1,143	1,517	9	21.3%
CHMT EQUITY	CHMT	Chemtura	Ba3/BB-	Stable/Stable	\$2,393	321	13.4%	\$2,310	1,868	2,410	6	\$336	305	356	5	14.5%
HUN EQUITY	HUN	Huntsman	Ba3/BB	Stable/Negative	\$11,613	1,432	12.3%	\$11,977	11,198	13,300	7	\$1,481	1,352	1,583	5	12.4%
NCX EQUITY	NCX	Nova Chemicals	Ba1/BB+	Stable/Stable	\$5,200	1,369	26.3%	n/a	-	-	-	n/a	-	-	-	-
OLN EQUITY	OLN	Olin Corp.	Ba1/BB+	Stable/Stable	\$2,488	460	18.5%	\$2,511	2,284	2,658	6	\$420	355	457	7	16.7%
POL EQUITY	POL	PolyOne	Ba2/BB	Stable/Stable	\$4,120	418	10.1%	\$4,158	4,006	4,528	5	\$437	405	476	3	10.5%
POLGA EQUITY	POLGA	Polymer Group	B1/B	Stable/Neg	\$1,595	182	11.4%	n/a	-	-	-	n/a	-	-	-	-
MOMENT EQUITY	MOMENT	Momentive Perf.	Caa2/CCC	Negative/Negative	\$2,510	299	11.9%	n/a	-	-	-	n/a	-	-	-	-
HXN EQUITY	HXN	Momentive Spec.	B3/B-	Stable/Stable	\$4,861	420	8.6%	n/a	-	-	-	n/a	-	-	-	-
ROC EQUITY	ROC	Rockwood	Ba1/BB+	Stable/Positive	\$1,450	351	24.2%	\$1,463	1,351	1,506	7	\$346	327	359	5	23.6%
TAM EQUITY	TAM	Taminco	B2/B+	Negative/Stable	\$1,270	276	21.8%	\$1,310	1,238	1,419	6	\$282	269	297	3	21.5%
TROX EQUITY	TROX	Tronox	Ba3/BB	Stable/Stable	\$2,110	437	20.7%	\$2,013	1,797	2,315	6	\$450	314	572	6	22.4%

(a.) ASH reporting 2014 for the year ended 9/30/14. Consensus estimates = Bloomberg. n/a = Not available.

Source: Citi Research and Bloomberg.

Chemical Earnings Calendar

Figure 21. Chemical Earnings Calendar (Note: Non-shaded lines = covered companies. 'Est.' = Estimated by Bloomberg)

Report Date	Time	Ticker	Company Name	Conf Call Time	Call / Pin	Re-Play / Pin
Thursday, January 23, 2014	Aft-mkt	CE	Celanese	1/24/2014 10:00:00 AM	877.448.3492 / 27677200	800.585.8367 / 27677200
Friday, January 31, 2014	NA	CVX	Chevron	1/31/2014 11:00:00 AM	866-219-5256 / 1630335	(888) 266-2081 / 1630335
Tuesday, January 28, 2014	Aft-mkt	ALB	Albermarle	1/29/2014 9:00:00 AM	888-713-4215 / 60369062	888-286-8010 / 59297765
Tuesday, January 28, 2014	Bef-mkt	DD	Du Pont	1/28/2014 9:00:00 AM	(847) 413-3238 / 36193179	(630) 652-3042 / 3619 3179#
Monday, January 27, 2014	Aft-mkt	OLN	Olin Corp	1/28/2014 10:00:00 AM	800-860-2442 /	877-344-7529 / 10039657
Thursday, January 30, 2014	Aft-mkt	NEU	Newmarket Corp	1/31/2014 10:00:00 AM	877-407-9210 /	877-660-6853 / 13574413
Monday, January 27, 2014	17:00	ASH	Ashland	1/28/2014 9:00:00 AM	/	/
Tuesday, January 28, 2014	Aft-mkt	POL	PolyOne	1/29/2014 8:00:00 AM	866-543-6403 / 66233243	888-286-8010 / 93793969
Wednesday, January 29, 2014	Bef-mkt	DOW	Dow Chemical Co	1/29/2014 9:00:00 AM	(719) 325-4784 /	(719) 457-0820 / 9359663
Monday, January 27, 2014	23:00	SHECY	Shin-Etsu	NA NA	/	/
Wednesday, January 29, 2014	NA	MEOH	Methanex	1/30/2014 12:00:00 PM	866 226 1793 /	800 408 3053 / 4459948
Thursday, January 30, 2014	Bef-mkt	ARG	Airgas	1/30/2014 10:00:00 AM	(888) 389-5987 /	(888) 203-1112 / 6835735
Wednesday, January 29, 2014	Aft-mkt	CBT	Cabot Corp	1/30/2014 2:00:00 PM	888-713-4209 / 95224182	888-286-8010 / 75484396
Thursday, January 30, 2014	Aft-mkt	CYT	Cytec Industries	1/31/2014 11:00:00 AM	888-894-3692 / 27106301	/
Thursday, January 30, 2014	06:00	POT	Potash	1/30/2014 1:00:00 PM	877-881-1303 /	604-638-9010 / 3712#
Thursday, January 30, 2014	16:30	EMN	Eastman Chemical	1/31/2014 11:00:00 AM	913-312-0944 / 1703055	888-203-1112 / 1703055
Friday, January 31, 2014	NA	LYB	LyondellBasell	NA NA	/	/
Thursday, February 06, 2014	01:00	AKZA	Akzo Nobel	2/6/2014 3:00:00 AM	517 345 9004 / AkzoNobel	203 3694709 / 2829
Thursday, February 06, 2014	Est.	NA	Petrologistics	NA NA	/	/
Wednesday, February 05, 2014	Aft-mkt	FMC	FMC Corp	2/6/2014 11:00:00 AM	(800) 230-1096 / 313302	(800) 475-6701 / 313302
Friday, February 07, 2014	Est.	NA	Taminco	NA NA	/	/
Tuesday, February 11, 2014	NA	MOS	The Mosaic	NA 12:05:00 AM	/	/
Wednesday, February 12, 2014	Est.	NA	Axiall	NA NA	/	/
Wednesday, February 12, 2014	Bef-mkt	VAL	Valspar	2/12/2014 11:00:00 AM	/	800-475-6701 / 316362
Wednesday, February 12, 2014	Est.	NA	Huntsman	NA NA	/	/
Thursday, February 13, 2014	Est.	NA	Momentive Performance	NA NA	/	/
Thursday, February 13, 2014	Est.	NA	Hexion	NA NA	/	/
Thursday, February 13, 2014	Bef-mkt	KOP	Koppers Holdings	2/13/2014 11:00:00 AM	800 762 8779 / 4663373	800 406 7325 / 4663373
Wednesday, February 19, 2014	Est.	NA	Westlake	NA NA	/	/
Wednesday, February 19, 2014	Est.	NA	CF Industries	NA NA	/	/
Wednesday, February 19, 2014	Est.	NA	Rockwood Specialties	NA NA	/	/
Wednesday, February 19, 2014	Est.	NA	BASF	NA NA	/	/
Thursday, February 20, 2014	Aft-mkt	AGU	Agrium	2/21/2014 9:30:00 AM	866-225-2055 /	800-408-3053 / 1874976
Thursday, February 20, 2014	Est.	NA	Tronox	NA NA	/	/
Monday, February 24, 2014	Aft-mkt	CHMT	Chemtura	2/25/2014 9:00:00 AM	(877) 494-3128 / 31090330	(855) 859-2056 / 31090330
Tuesday, February 25, 2014	NA	CRDA	Croda	NA NA	/	/
Wednesday, February 26, 2014	01:30	SOLB	Solvay	2/26/2014 3:30:00 AM	Self-Registrati /	/
Wednesday, February 26, 2014	Est.	NA	Ecolab	NA NA	/	/
Thursday, February 27, 2014	Est.	NA	Kraton	NA NA	/	/
Friday, February 28, 2014	NA	NCX	Nova Chemicals	NA NA	/	/
Tuesday, March 04, 2014	NA	AKE	Arkema	3/4/2014 NA	/	/
Wednesday, March 05, 2014	Est.	NA	Ferro	NA NA	/	/
Wednesday, March 12, 2014	Est.	NA	Kronos	NA NA	/	/
Tuesday, March 18, 2014	Est.	NA	Clariant	NA NA	/	/
Tuesday, March 18, 2014	11:00	WCH	Wacker Chemie	NA 4:00:00 PM	/	/
Wednesday, March 19, 2014	Est.	NA	Rentech Nitrogen Partners	NA NA	/	/
Thursday, March 20, 2014	NA	LXS	Lanxess	NA NA	/	/
TBD	NA	POLGA	Polymer Group	NA NA	/	/

Source: Citi Research and Bloomberg.

Individual Company Recaps & Snapshots

Ashland (ASH)

- **Event** — ASH is scheduled to release 1Q14 earnings for the quarter ended December 31, 2013 before the market opens on Monday, January 27th. Conference call on Tuesday January 28th @ 9:00am.

- **Company Guidance** — As of 4Q13 management guided:
 - **2014 FCF:** Sees generating between \$475-500mm of FCF vs. \$529mm in 2013.
 - **2014 CAPEX:** See ~\$275mm vs. \$314mm in 2013.
 - **2014 Pension:** See cash funding of \$45mm vs. \$128mm in 2013.
 - **2014 Effective Tax Rate:** Expect rate of 24-26% vs. 25% in 2013.
 - **Debt Reduction:** After paying down \$155mm in the quarter, ASH now has ~\$300mm of prepayable debt remaining. The next sizeable maturity is \$600mm in Mar-16.
 - **IG Ratings:** ASH expects to grow into IG ratings & 2x leverage target over time.
 - **Monthly Reports:** No longer providing monthly progress reports & don't intend to replace with earnings guidance.
 - **Restructuring:** ASH announced global restructuring program targeting to save \$150-200mm annually. The program will be implemented in 2014 and expect to be at full runrate savings within 12-15 months. Note that the savings include addressing \$75mm of stranded costs associated with the sale of Water Technologies.
 - **Ashland Specialty Ingredients**
 - **1Q14:** Expect topline to be flat QoQ, despite being a seasonally weak quarter.
 - **FY14:** Intermediates & Solvents expected to be a \$50-60mm headwind in 2014 vs. 2013 (was \$20mm headwind in 2013).

- **Upcoming Catalysts:** Expected to announce agreements to sell two assets (Water Technologies & Elastomers) in 1Q14.

- **Implications** — We maintain Overweight on ASH and Buy on the 3.00% Sr. Nts due 2016, the 3.875% Sr. Nts due 2018 and the 4.75% Sr. Nts due 2022. We believe management intends to attain IG ratings over time, though their lackluster 2013 results and 2014 guidance likely elongates that process.

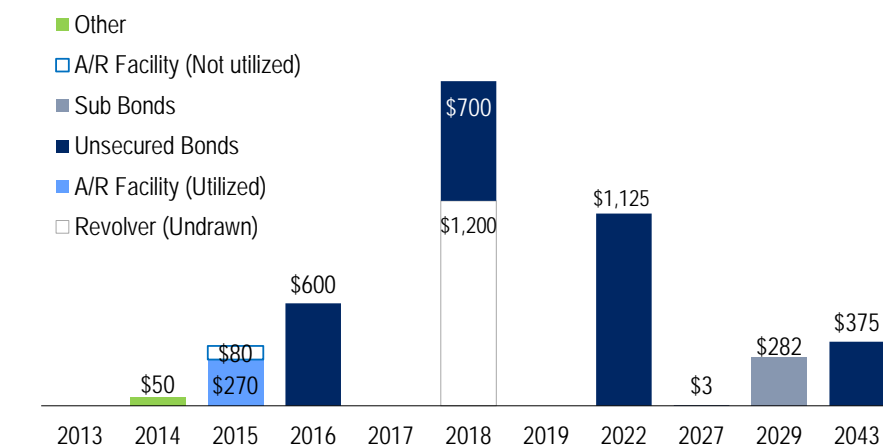
- **Latest HY Research**
 - [11/7/13: Ashland \(ASH\) 4Q13 Post Call Recap - Plan to Announce Asset Sales in 1Q14; Proceeds for Buybacks](#)

Figure 22. Ashland Capital Structure (mm) as of 9/30/13

		Gross 09/30/13 Leverage	Net Leverage	Bid			Rating
				Price	YTW		
LTM EBITDA	\$1,242						
Debt							
A/R Securitization (Aug 2015)	270						
Other International Loans/Secured Debt	44						
Total Secured Debt	\$314	0.3x	0.0x				
Unsecured Revolver (\$1.2B, L+175, Mar 2018)	0						
3.000% Sr. Nts due Mar 2016	600			\$101.88	2.06%	162	BUY
3.875% Sr. Nts due Apr 2018	700			\$101.88	3.38%	207	BUY
4.750% Sr. Nts due Aug 2022	1,125			\$96.25	5.30%	270	BUY
6.60% Hercules Notes due Aug 2027	3						
6.875% Sr. Nts due May 2043	375			\$97.00	7.12%	340	NEUTRAL
Other Debt	68						
Total Secured & Unsecured Debt	\$3,185	2.6x	2.3x				
6.500% Junior Sub Nts (\$350mm, Jun 2029)	131						
Total Debt	\$3,316	2.7x	2.4x				
U.S. Pension (underfunded) as of Sep-13	926						
OPEB as of Sep-13	217						
Environmental Reserves as of Sep-13	211						
Total Debt + Pension + OPEB + Env	\$4,670	3.8x	3.5x				
Liquidity							
Cash	346						
A/R Availability	80						
Unsecured Revoler (\$1.2B, L+175, Mar 2018)	1,119						
Total	\$1,545						

Source: Citi Research and Company Filings.

Figure 23. Ashland Maturity Profile (mm) as of 9/30/13



Source: Citi Research and Company Filings.

Axiall Corp. (AXLL)

- **Event** — AXLL is scheduled to release 4Q13 earnings for the quarter ended December 31, 2013 after the market closes circa February 12, 2014.

- **Company Guidance** — As of 3Q13 management guided:

- FY13 CAPEX: \$180 - 200mm (\$109mm YTD).
- FY13 Cash Taxes: \$130 - 140mm.

- **Recent Developments**

- **12/19/13:** AXLL announced the planned construction of a new Ethylene cracker in LA with a soon to be named partner, for \$3B total, of which \$1B would come from AXLL via cash on hand and new debt.

- **Implications** — Given the lack of details we believe it is safe to say that spending on the planned cracker won't begin for another 12 months at a minimum. We also believe AXLL will generate additional cash flow by the time CAPEX steps up which could be used to help fund the project and lower the amount of debt that needs to be raised. Additionally supplying ~50% of their annual ethylene requirements will eventually benefit EBITDA. Therefore we maintain our current ratings: Overweight on AXLL and Buy on the 4.875% senior notes due 2023 and 4.625% senior notes due 2021(Ba3/BB).

- **Latest High Yield Research**

- **12/23/13:** [Chemical News: Just in Time for XMAS - Implications for MOMENT, HUN, ROC, TROX, AXLL, NCX and CHMT](#)
- **12/03/13:** [M&A Monday - DOW's Plan to Carve-Out Commodity Chems & ROC's Talison JV](#)

- **Latest Equity Research**

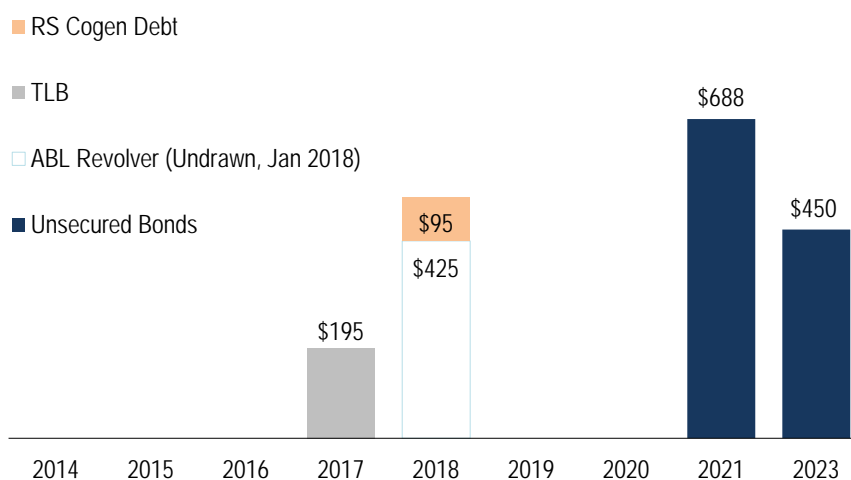
- **11/06/13:** [Axiall Corporation \(AXLL\) - Synergies Ahead of Schedule, but Caustic Outlook Uncertain](#)
- **11/05/13:** [Axiall Corporation \(AXLL\) - Decent 3Q as Building Products Pickup Offsets Weakness in Chlorovinyls; Synergies on Track;](#)
- **10/29/13:** [Axiall Corporation \(AXLL\) - Moving to the Sidelines; Upside Scenario Less Likely Near Term](#)

Figure 24. Axiall Capital Structure (mm) as of 9/30/13

	09/30/13	Gross Leverage	Net Leverage	Bid		Rating
				Price	YTW	
2013 Projected EBITDA	\$656					
Debt						
ABL Facility (\$500mm, Jan 2018)	-					
Term Loan B (L+250bp, Jan 2017)	195					
RS Cogen Debt (L+137.5bp, July 2018)	95					
Total Secured Debt	\$290	0.4x	0.3x			
4.625% Eagle Spinco Sr Nts due Feb 2021	688			\$98.00	4.96%	BUY
4.875% Sr Nts due May 2023	450			\$95.25	5.53%	BUY
Other Debt	0					
Total Debt	\$1,428	2.2x	2.1x			
Pension (underfunded) as of 12/31/12	150					
Total Debt + Pension	\$1,578	2.4x	2.3x			
Liquidity						
Cash	80					
ABL Availability (\$500mm, Jan 2018)	425					
Total	\$505					

Source: Citi Research and Company Filings.

Figure 25. Axiall Maturity Profile (mm) as of 9/30/13



Source: Citi Research and Company Filings.

Celanese Corp. (CE)

- **Event** — CE is scheduled to release 4Q13 earnings for the quarter ended December 31, 2013 after the market closes on Thursday, January 23rd; conference call scheduled for Friday, January 24th @ 10am: # 877.448.3492, PIN 277677200.

- **Company Guidance** — As of 3Q13 management guided:
 - **2013 CAPEX:** \$375-400mm
 - **2014 CAPEX:** \$400-500mm
 - **2014 EPS Growth:** 12-14% which is met by ~\$100mm in self-help measures.

- **Recent Developments**
 - **01/03/14:** CE received final approval to build a 1.3mm ton Methanol plant in Clearwater, Texas. CE is attempting to complete the plant before a supply contract expires in ~19 months. The plant would supply CE with 2/3^{rds} of its domestic methanol needs.

- **Implications** — We maintain Buy on the Senior Notes due 2021 and 2022 as we continue to believe that CE will crossover into Investment Grade over the medium term. We also highlight positive event risk: (1) CE could be an acquisition target for a higher rated international petrochemical company; (2) Potential for TCX technology to become a major earnings stream over the next 5 years.

- **Latest High Yield Research**
 - **12/02/13:** [Iran Nuclear Agreement & Chem Industry - Impacts & Read-throughs](#)
 - **11/26/13:** [Methanol & Acetic Acid Industry Thoughts Post Meeting with IHS - Breaking Not So Bad: Read-throughs for CE and HXN/MOMENT](#)
 - **10/21/13:** [Celanese Corp. \(CE\) 3Q13 Post-Call Recap - Solid Results on Cost & Internal Focus, Reiterate IG Goal](#)

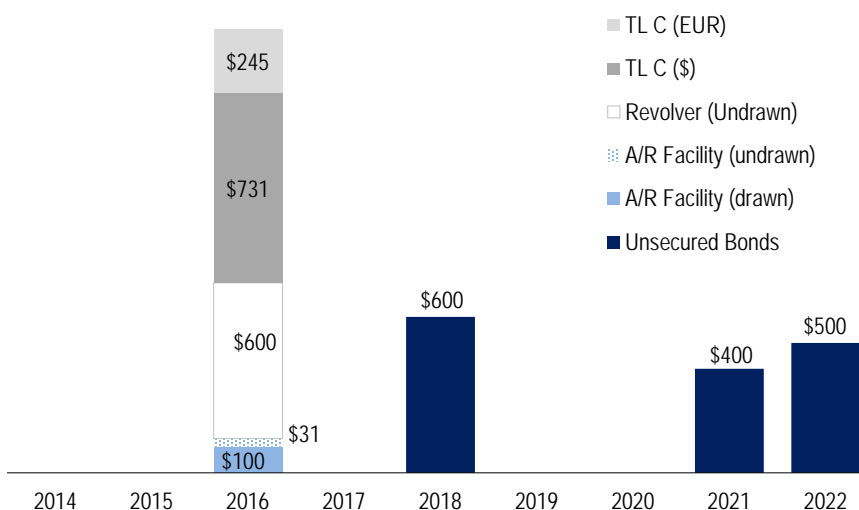
- **Latest Equity Research**
 - **12/12/13:** [Methanol Market Update - Near-term Tightness, but Moderation Likely in 2014](#)
 - **10/21/13:** [Celanese Corp \(CE\) - Cost Control Shines in an Overall Good Quarter; Ethanol Seems Delayed. Remain Neutral](#)

Figure 26. Celanese Capital Structure (mm) as of 9/30/13

	09/30/13	Gross Leverage	Net Leverage	Bid		Rating
				Price	YTW	
LTM EBITDA	\$1,306					
Debt						
\$600mm RCF (L+250bp, Oct 2015)	0					
A/R Facility (2016)	100					
\$228mm Credit-Linked RCF (L+150bp, Apr 2014)	0					
Term Loan C (L+200bp, Oct 2016)	731					
Term Loan C (E+200bp, Oct 2016, €176mm)	245					
Capital Leases	244					
Total Secured Debt	\$1,320	1.0x	0.2x			
6.625% Sr. Nts due Oct 2018	600			\$106.50	2.03%	NEUTRAL
5.875% Sr. Nts due Jun 2021	400			\$106.50	4.82%	BUY
4.625% Sr. Nts due Nov 2022	500			\$96.50	5.12%	BUY
Industrial Revenue Bonds	169					
Affiliate Borrowing	224					
Total Debt	\$3,213	2.5x	1.6x			
Pension (underfunded) as of 12/31/12	1,303					
OPEB (underfunded) as of 12/31/12	292					
Environmental (reserves) as of 12/31/12	99					
Total Debt + Pension + OPEB + Env	\$4,907	3.8x	2.9x			
Liquidity						
Cash	1,100					
RCF Availability	600					
A/R Availability (2016)	31					
Credit-linked Facility Availability	1					
Total	\$1,732					

Source: Citi Research and Company Filings.

Figure 27. Celanese Maturity Profile (mm) as of 9/30/13



Source: Citi Research and Company Filings.

Chemtura Corp. (CHMT)

- **Event** — CHMT is scheduled to release 4Q13 earnings for the quarter ended December 31, 2013 on Monday, February 24th after the market closes. Conference call @ 9:00 a.m. on Tuesday, February 25th: 877-494-3128, PIN 31090330.

- **Company Guidance** — As of 2013 Investor Day (Held December 5, 2013):
 - **4Q13:** Reiterated call for YoY EBIT growth & QoQ improvement for IEP.
 - **2014 Sales:** \$2.4-2.44B.
 - **2014 EBITDA:** \$328-344mm.
 - **2016:** Expect to get revenue for \$3.1B with margin approaching 20%.

- **Recent Developments**
 - **01/16/14:** CHMT filed suit to overturn CA fire safety regulation.
 - **01/02/14:** CHMT closed sale of Consumer Products Business (pool chemicals) to KIK Custom products for \$300mm (vs. announced price of \$315mm).
 - **12/05/13:** Management held 2013 investor day on December 5, 2013. We detailed guidance in note published on December 9th (see below link).

- **Upcoming Catalyst**— Management exploring sale of AgroSolutions segment; expect decision during FY14.

- **Credit Implications** — We downgrade the 5.75s of 2021 (B1/BB-) from Buy to Neutral as bonds are currently yielding ~5%, post rallying ~1.5 points YTD, making them less attractive relative to other BB/B chemical issues. In addition we are becoming more concerned that Bromine demand may not rebound in 2014 post Albemarle's 4Q13 earnings warning.

- **Latest HY Research**
 - **12/09/13:** [Chemtura Dec 2013 Investor Day Recap - Sees Improved Results Driven by Rebound in Bromine](#)
 - **11/11/13:** [Chemtura 3Q13 Call & Credit Conf Recaps - Tough Quarter & Mixed Outlook, Reiterate Buy](#)

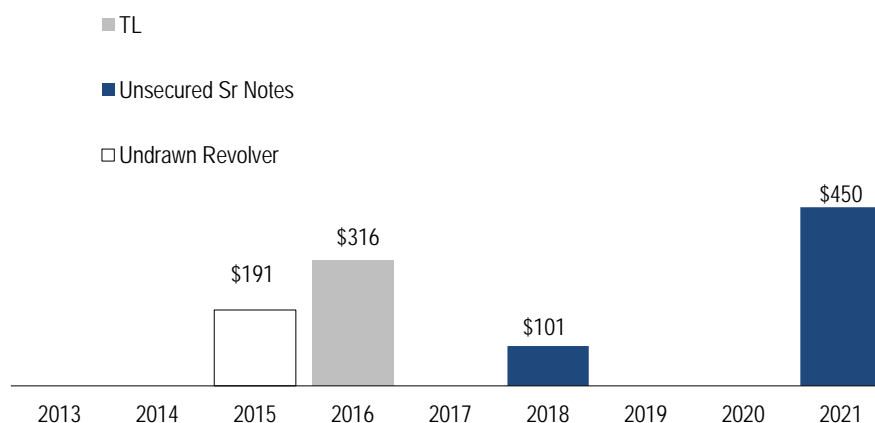
- **Latest Equity Research**
 - **12/20/13:** [Albemarle Corp \(ALB\) - Lowering Estimates on 4Q13 Preannouncement as Bromine Trends Remain Weak; Neutral](#)

Figure 28. Chemtura Capital Structure (mm) as of 9/30/13

	09/30/13	Gross Leverage	Net Leverage	Bid		Rating
				Price	YTW	
LTM EBITDA	\$273					
Debt						
\$275mm ABL (L+275 bp, Nov 2015)	0					
Term Loan (L+400 bp, Aug 2016)	316					
Total Secured Debt	\$316	1.2x	0.0x			
7.875% Sr. Nts due Sep 2018	101			\$107.88	1.13%	NEUTRAL
5.750% Sr. Nts due Jul 2021	450			\$102.50	5.22%	NEUTRAL
Other Debt	28					
Total Debt	\$895	3.3x	2.1x			
Liquidity						
Cash	311					
ABL Availability	191					
Total	\$502					

Source: Citi Research and Company Filings.

Figure 29. Chemtura Maturity Profile (mm) as of 9/30/13



Source: Citi Research and Company Filings.

Huntsman Corp. (HUN)

- **Event** — HUN has historically released 4Q13 earnings for the quarter ended December 31, 2013 in mid-February.

- **Company Guidance** — As of 3Q13 Earnings Call:
 - **4Q13 Earnings:** Expects typical seasonal slowdown that historically has led to a 25% sequential drop in EBITDA.
 - **CAPEX:** Reiterated 2013 guidance of \$450mm (\$295mm YTD). \$175-200mm of annual maintenance CAPEX in 2013/14 vs. normal rate of ~\$150mm.

- **Recent Developments**
 - **12/23/13:** HUN issued €300mm 5.125% Sr Nts due Apr-21. Proceeds to be used to repay part of Term Loan C and general corporate purposes.
 - **12/20/13:** Announced completion of the US Antitrust review of its acquisition of Rockwood's (ROC) TiO₂ and Performance Additives segments, clearing away a potential hurdle for a successful closing.

- **Upcoming Catalyst**— Plans to close acquisition of ROC assets in 1H14.

- **Credit Implications** — We maintain HUN at Underweight and reiterate sell ratings on the sub notes due 2020 and 2021 as a result of their limited upside. We maintain a buy on the senior notes due 2020 (B1/BB-) given the low amount of leverage (< 2.0x), low \$ price and attractive valuation (+50bp) relative to the Citi BB index.

- **Latest High Yield Research**
 - **12/23/13:** [Chemical News: Just in Time for XMAS - Implications for MOMENT, HUN, ROC, TROX, AXLL, NCX and CHMT](#)

- **Latest Equity Research**
 - **11/26/13:** [TiO₂ – Emerging from an Eclipse - Implications for Pigment Producers and Feedstock Suppliers](#)

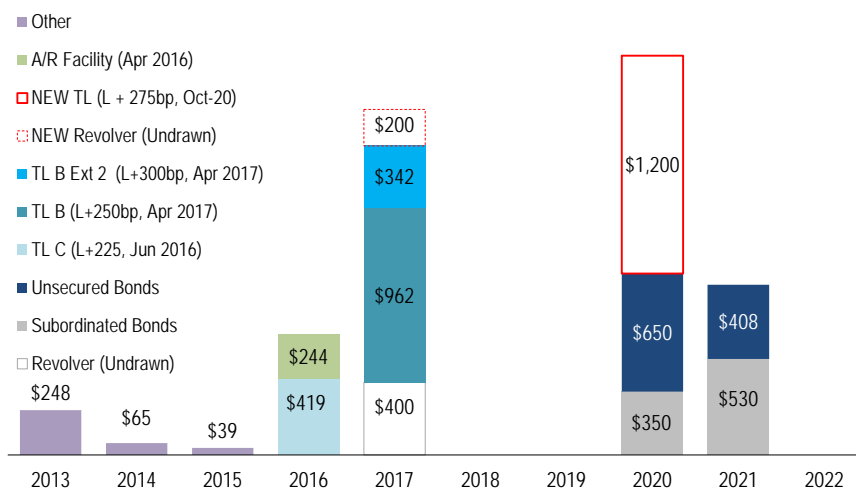
Figure 30. Huntsman Capital Structure (mm) as of 9/30/13

LTM EBITDA	\$1,145					
Debt						
Revolving Credit Facility (\$400mm, L+ 250bp, Mar 2017)	0					
A/R Securitization (L+150bp, Apr 2016)	244					
Term Loan C (L+225bp, Jun 2016)	419					
Term Loan B (L+250bp, Apr 2017)	962					
Term Loan B Ext 2 (L+300bp, Apr 2017)	342					
Extended TL B-1 due 2020 (\$1.2B) (a.)						
Variable Interest Entity	256					
Huntsman Polyurethanes Shanghai Loan (HPS Deb)	42					
Other Debt	89					
Total Secured Debt	\$2,354	2.1x	1.7x			
4.875% Sr. Nts due Nov 2020	650			\$99.00	5.05%	BUY
5.125% Sr. Nts due Apr 2021 (EUR300mm) issued 12/23/13 (a.)				101.75	4.84%	
Total Secured & Sr. Unsecured Debt	\$3,004	2.6x	2.3x			
8.625% Sr. Sub Nts due Mar 2020	350			\$110.8	2.69%	SELL
8.625% Sr. Sub Nts due Mar 2021	530			\$113.0	2.99%	SELL
Total Debt	\$3,884	3.4x	3.0x			
Liquidity						
Unrestricted Cash	397					
Revolver Availability (\$400mm)	382					
A/R Programs	217					
Total	\$996					

(a.) New \$1.2B TL and €300mm Sr Nts not reflected in debt or cash balance. TL proceeds to fund acquisition of ROC assets in 1H14. Proceeds of new bonds to be used to pay off part of TL C and general corporate purposes.

Source: Citi Research and Company Filings.

Figure 31. Huntsman Maturity Profile (mm) as of 9/30/13



Source: Citi Research and Company Filings.

Momentive Performance Materials Inc. (MOMENT)

- **Event** — MOMENT has historically released 4Q results and hosted conference call for the quarter ended December 31st in late February/early March.

- **Guidance** — As of 3Q13 Earnings Call:
 - **CAPEX:** Lower 2013 CAPEX Guidance: Guidance lowered to \$90mm from \$100mm (spent ~\$56mm YTD). Reiterated maintenance CAPEX of ~\$50-55mm. Most of the growth CAPEX is focused on Silicones segment.
 - **Working Capital:** Net Working Capital: Increased by \$63mm to meet customer demand and to mitigate work stoppage at a major US plant. There will be an inflow from working capital in 4Q13, but 4Q13 volumes will be higher than 4Q12 so the benefit may not be as significant. Expect to continue working off inventory in 4Q13. Also noted they plan to work off excess inventory built up ahead of labor negotiations which could benefit cash flow but be a drag on EBITDA.

- **Recent News**
 - **01/09/14:** Debtwire published a story, citing two unnamed sources, indicating Momentive Performance Materials engaged Wilkie Farr as legal counsel.
 - **12/20/13:** Debtwire published a story, citing three unnamed sources, indicating
 - Momentive Performance Materials had retained Moelis as an advisor
 - Momentive Performance Materials Holdings LLC was working with legal counsel Paul Weiss

- **Upcoming Catalyst** — Deadline for filing 2013 10K is March 31, 2014 (non-accelerated filer). Focus is on the potential for 'going concern' opinion.

- **Implications** — We maintain our Marketweight on the Issuer and Buy on the 1st, 1.5 and 2nd Lien Notes and Neutral on the Subordinated Notes. We believe most restructuring scenarios would be positive for the 1st and 1.5 lien Notes. We view the 2nd lien notes as the fulcrum security based on asset coverage and that Apollo owns ~40% of the issue. We forecast a rebound in silicone earnings over the next several years; however the Sub Notes trade above a reasonable recovery value.

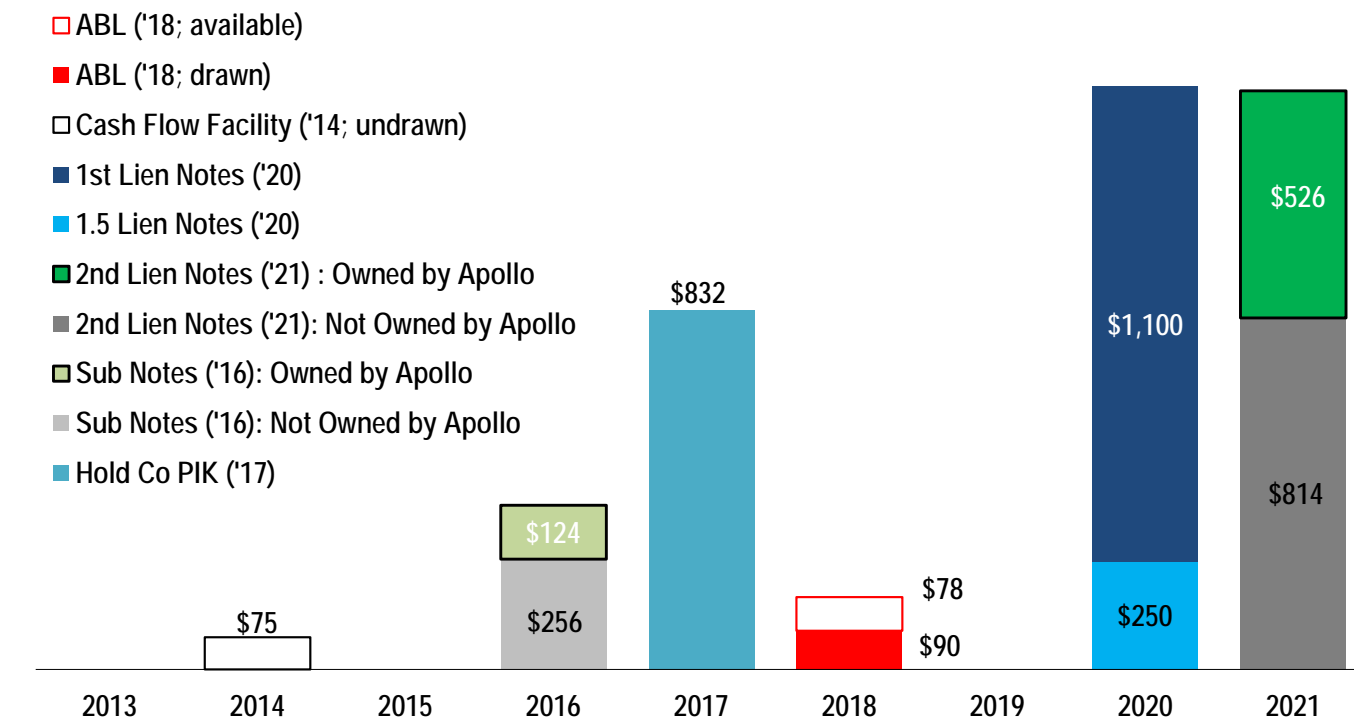
- **Latest Research**
 - **12/23/13:** [Chemical News: Just in Time for XMAS - Implications for MOMENT, HUN, ROC, TROX, AXLL, NCX and CHMT](#)
 - **11/13/13:** [HXN and MOMENT Post Call Recaps - Epoxy Under Pressure, Silicone Wants to Break Free of Supply](#)
 - **11/13/13:** [Results: MOMENT: First Look at 3Q13 - Inline Quarter, Liquidity Down;](#)

Figure 32. Momentive Performance Capital Structure (mm) as of 9/30/13

	09/30/13	Gross Leverage	Net Leverage	Bid		Rating
				Price	YTW	
LTM Adj. Segment EBITDA	\$236					
Debt						
ABL Facility (\$270mm, L+ 225bp, Apr 2018)	90					
8.875% 1st Lien Notes (\$1,100mm, Oct 2020)	1,100			\$108.88	6.65%	BUY
Total 1st Lien Debt	\$1,190	5.0x	4.7x			
10.00% 1.5 Lien Notes (Oct 2020)	250			\$108.00	7.93%	BUY
Total 1st & 1.5 Lien Debt	\$1,440	6.1x	5.7x			
ABOC Asset Loan due 2015	41					
India Bank Medium Term Loan 06/20/15	1					
Total Secured Debt	\$1,482	6.3x	5.9x			
9.0% 2nd Lien Nts (Jan 2021) (a.)	1,161			\$93.50	10.33%	BUY
9.5% 2nd Lien Nts (€133mm, Jan 2021)	179					
Total Debt Through 2nd Lien	\$2,822	12.0x	11.6x			
11.50% Sr. Sub. Notes (Dec 2016) (b.)	380			\$78.00	22.34%	NEUTRAL
Total Opco Debt	\$3,202	13.6x	13.2x			
GE Seller PIK Note (11% , Jun 2017)	832					
Total Holdco Debt	\$4,034	17.1x	16.7x			
U.S. Pension (underfunded) as of Dec-12	87					
Non U.S. Pension (underfunded) as of Dec-12	128					
OPEB (underfunded) as of Dec-12	91					
Total Holdco Debt	\$4,340	18.4x	18.0x			
Liquidity						
Unrestricted Cash (\$84mm in foreign jurisdictions)	92					
GE Cash Flow Revolver (Dec-14)	75					
Revolver Availability	112					
Covenant Limitation	(34)					
Total	\$245					

Source: Citi Research and Company Filings.

Figure 33. Momentive Performance Maturity Profile (mm) as of 9/30/13



Source: Citi Research and Company Filings.

Momentive Specialty Chemicals Inc. (HYN)

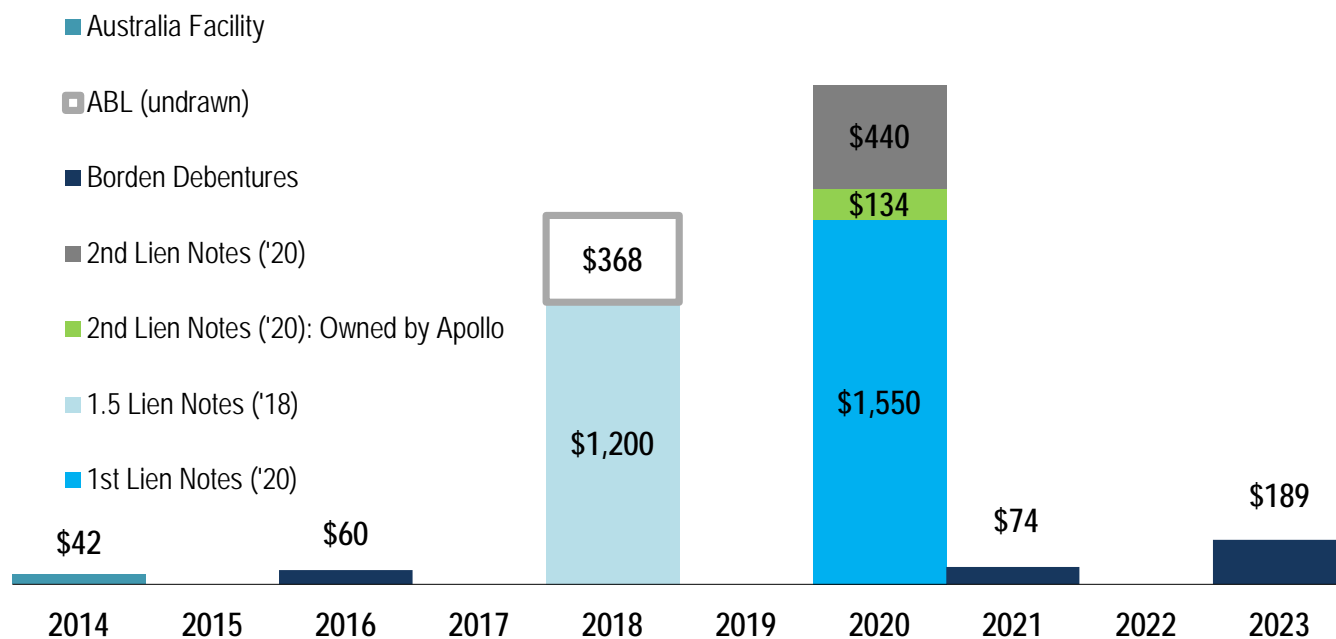
- **Event** — HYN has historically released 4Q results and hosted conference call for the quarter ended December 31st in late February/early March. Deadline for filing 2013 10K is March 31, 2014 (non-accelerated filer).
- **Company Guidance** — As of 3Q13 Earnings Call:
 - **CAPEX:** Management lowered 2013 CAPEX guidance slightly to \$145mm (prior \$150mm). Have spent \$96mm YTD.
 - **WCAP:** Expects WCAP to be a source of funds in 4Q13 in line with historical patterns.
- **Recent News**
 - **01/09/14:** HYN announced the acquisition of proppants manufacturing facility, located in Shreveport, LA from CRS Proppants LLC. Facility has annual capacity of ~450mm pounds and will continue to source Northern White frac sand from CRS going forward.
- **Implications** — We maintain our thesis that the epoxy resins business will be challenged by lack of barriers to entry and increased supply in China. We also highlight that HYN's Forest Products Resins segment faces headwinds as MDI makes inroads into applications historically dominated by Urea Formaldehyde Resins. We maintain our Sell on the 2nd Liens and Buy on the 1st Liens. We upgrade HYN 1.5 Lien Nts due 2018 as we believe they offer an attractive yield for a bond with net leverage of 5.7x and a short duration (bonds become callable in Feb-14 @ 104.438).
- **Latest Research**
 - **12/23/13:** [Chemical News: Just in Time for XMAS - Implications for MOMENT, HUN, ROC, TROX, AXLL, NCX and CHMT](#)
 - **11/13/13:** [HYN and MOMENT Post Call Recaps - Epoxy Under Pressure, Silicone Wants to Break Free of Supply](#)
 - **11/13/13:** [Results: HYN: First Look at 3Q13 Results - Sales & EBITDA Ahead of Estimates](#)

Figure 34. Momentive Specialty Capital Structure (mm) as of 9/30/13

	09/30/13	Gross Leverage	Net Leverage	Bid		Rating
				Price	YTW	
LTM Segment EBITDA	\$427					
Debt						
ABL Facility (\$400mm, L+ 225bp, Mar 2018)	0					
6.625% 1st Lien Notes due Apr 2020	1,550			\$104.00	5.54%	BUY
Total 1st Lien Debt	1,550	3.6x	2.9x			
8.875% 1.5 Lien Nts due Feb 2018	1,200			\$104.38	7.18%	BUY
Total 1.5 Lien Debt	2,750	6.4x	5.7x			
9.000% 2nd Lien Nts due Nov 2020	574			\$100.75	8.80%	SELL
Total 2nd Lien Debt	3,324	7.8x	7.0x			
Australia Facility (2014)	42					
Brazilian bank loans	63					
Capital Leases	10					
Other	21					
Total Secured Debt	3,460	8.1x	7.3x			
8.375% Borden Debentures due Apr 2016	60					
9.200% Borden Debentures due Mar 2021	74					
7.875% Borden Debentures due Feb 2023	189					
Total Opco Debt	3,783	8.9x	8.1x			
U.S. Pension (underfunded) as of Dec-12	84					
Non U.S. Pension (underfunded) as of Dec-12	206					
2013 Operating Lease Obligations	32					
Environmental CAPEX for 2013 as of Dec-12	21					
Total Debt	4,126	9.7x	8.9x			
Liquidity						
Unrestricted Cash	332					
ABL Availability	368					
Availability under credit facilities at International Subsidiaries	62					
Total	\$762					

Source: Citi Research and Company Filings.

Figure 35. Momentive Specialty Maturity Profile (mm) as of 9/30/13



Source: Citi Research and Company Filings.

Nova Chemicals Corp. (NCX)

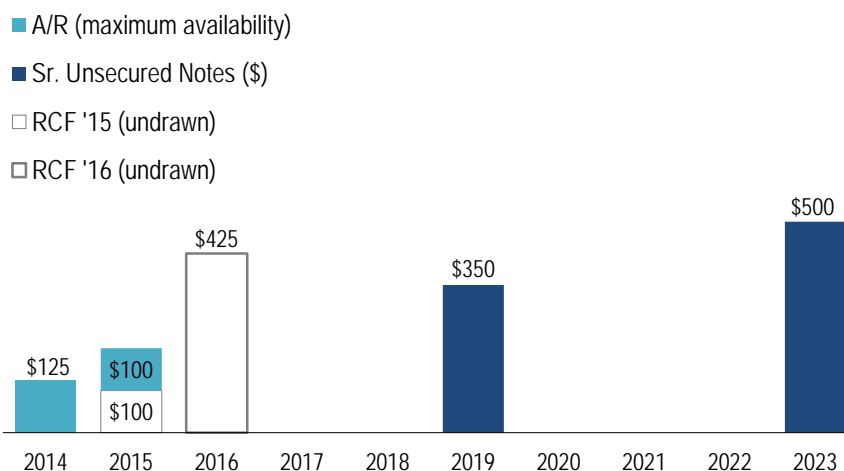
- **Event** — NCX has historically released 4Q results and hosted conference call for the quarter ended December 31st in early to mid-March.
- **Company Guidance** — As of 3Q13 Earnings Call:
 - **FY13 CAPEX:** Probably come in below previous guidance of \$700mm (\$364mm YTD).
 - **FY14 CAPEX:** ~\$1B if NCX moves ahead with AST2 (Advanced SCLAIRTECH™ technology).
- **Recent News**
 - **01/14/14:** NCX announced first petrochemicals use of Marcellus shale ethane.
 - **12/18/13:** NCX announced they are commencing Phase II of their Nova 2020 growth plan, focusing on \$300mm of expansions for the Corunna ethylene cracker by 20% and debottleneck of LDPE line & retrofit of HDPE line at Moore. In NCX continues to investigate options for second PE facility based on its AST technology.
- **Implications** — We maintain Buy on the newly issued 5.25% Sr. Nts due 2023 (Ba2/BB+) which yield ~5.0%, as NCX has credit metrics worthy of IG ratings, is owned by a AA rated entity and trades 100bps behind IG peers (LYB 4.00% of 23 (Baa2/BBB-) yield ~4.1%). Note investors should be aware of the potential for more issuance over the medium term to refinance debt (\$350mm Neutral rated notes which are set to mature in 2019 are callable in Nov-14) and fund NCX's 2020 CAPEX plans.
- **Latest Research**
 - **12/23/13:** [Chemical News: Just in Time for XMAS - Implications for MOMENT, HUN, ROC, TROX, AXLL, NCX and CHMT](#)
 - **11/01/13:** [Nova Chemicals \(NCX\) 3Q13 Post Call Recap - Challenging Quarter; Outlook Still Positive; Reiterate Buy on 2023](#)

Figure 36. Nova Chemicals Capital Structure (mm) as of 9/30/13

	PF 09/30/13	Gross Leverage	Net Leverage	Bid		Rating
				Price	YTW	
LTM Adj. EBITDA	\$1,215					
Debt						
Sr. Secured Revolver (\$425mm, Dec 2016)	0					NEUTRAL BUY
Unsecured Bilateral Credit Facility (\$100mm, Sep 2015)	0					
A/R (U.S. \$100mm, Jan-14); CAD, \$100mm, Feb-15)	0					
8.375% Sr. Nts due Nov 2016	0					
8.625% Sr. Nts due Nov 2019	350			\$109.50	1.64%	
5.250% Sr. Nts due Aug 2023	500			\$103.25	4.73%	
Other	27					
Total Debt	877	0.7x	0.1x			
Unfunded Defined Benefit Obligation (as of Dec-12)	131					
Environmental & Legal Provisions (as of Dec-12)	137					
Total Debt + Pension + Provisions	1,145	0.9x	0.3x			
Liquidity						
Cash	728					
Sr. Secured Revolver (\$425mm, Dec-16)	406					
Bilateral Credit Facility (\$100mm, Sep-15)	100					
Total	\$1,234					

Source: Citi Research and Company Filings.

Figure 37. Nova Chemicals Maturity Profile (mm) as of 9/30/13



Source: Citi Research and Company Filings.

Olin Corp. (OLN)

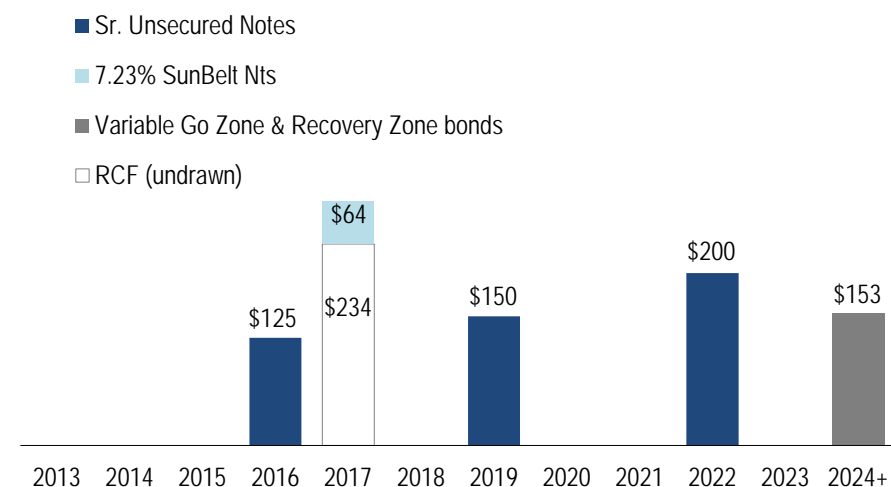
- **Event** — OLN is scheduled to release 4Q13 earnings for the quarter ended December 31, 2013 after the market closes on Monday January 27th. Call at 10am on Tuesday, January 28st: 800-860-2442.
- **Company Guidance** — As of 3Q13 Earnings Call:
 - Lowered FY13 EBITDA guidance to \$415-430mm from \$425-460mm (\$355mm YTD). Guided 4Q13 EPS of \$0.25-0.30.
- **Implications** — We maintain Marketweight on OLN (Ba1/BB+) and Buy on the OLN 5.5% notes due 2022 (Ba1/BB- POS). OLN has a history of maintaining a conservative balance sheet and DOW's announcement that they plan to close capacity has eased concerns about new chlorine supply additions in North America.
- **Latest High Yield Research**
 - **12/03/13:** [M&A Monday - DOW's Plan to Carve-Out Commodity Chems & ROC's Talison JV](#)
 - **10/29/13:** [Olin \(OLN\) 3Q13 Post Call Recap - Good Cash Flow Quarter; Lowers FY EBITDA Guidance](#)

Figure 38. Olin Capital Structure (mm) as of 9/30/13

	09/30/13	Gross Leverage	Net Leverage	Bid		Rating
				Price	YTW	
LTM Adj. EBITDA	\$455					
Debt						
Sr. Revolver (\$265mm, Apr-17)	0					NEUTRAL NEUTRAL BUY
6.750% Sr. Nts (\$125mm, Jun-16)	125			\$112.00	1.59%	
8.875% Sr. Nts (\$150mm, Aug-19)	150			\$108.00	2.19%	
5.500% Sr. Nts (\$200mm, Aug-22)	200			\$100.25	5.46%	
Ind Dvp & Environmental Obligations (2035)	3					
Variable Go Zone bonds (2024)	50					
Variable Recovery Zone bonds (2024-35)	103					
7.23% SunBelt Notes, due 2012-2017	64					
Other	0					
Total Debt	695	1.5x	0.9x			
Underfunded Pension (12/31/12)	158					
Environmental Reserve (12/31/12)	147					
Total Debt + Pension + Provisions	999	2.2x	1.6x			
Liquidity						
Unrestricted Cash	284					
Sr. Revolver (\$265mm, Apr-17)	234					
Total	\$518					

Source: Citi Research and Company Filings.

Figure 39. Olin Maturity Profile (mm) as of 9/30/13



Source: Citi Research and Company Filings.

Polymer Group (POLGA)

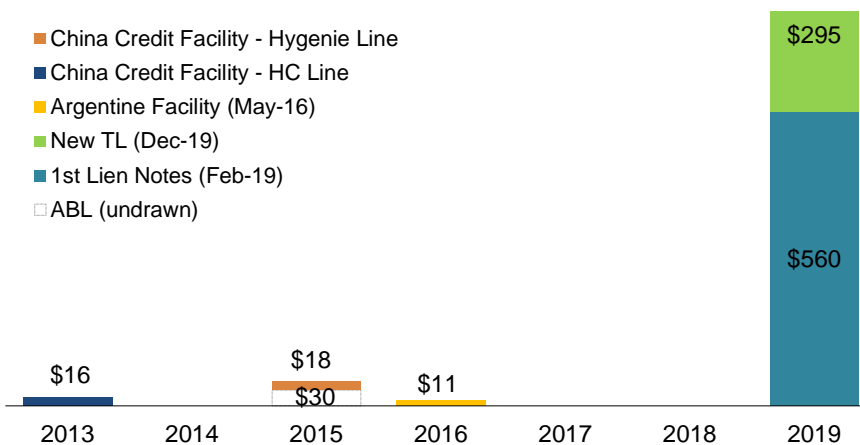
- **Event** — POLGA has historically reported 4Q results (quarter ended 12/31/13) in late February.
- **Recent News**
 - **11/15/13:** POLGA completed the acquisition of Fiberweb Plc, a global developer and manufacturer of specialty nonwoven products and materials for a variety of industrial end markets, for ~ \$288mm. Post the acquisition POLGA believes they are the world's largest manufacturer of nonwovens.
- **Implications** — We maintain our recommendation on the 1st Lien Sr Nts due 2019, which we changed to Neutral from Buy post 4Q12 earnings.
- **Latest Research**
 - **08/08/13:** [Polymer Group \(POLGA\) 2Q13 Post Call Recap - Renewed Focus on Margins & Growth](#)

Figure 40. Polymer Group Capital Structure (mm) as of 9/30/13

	09/30/13	Gross Leverage	Net Leverage	Bid Price	YTW	Rating
LTM PF EBITDA	\$173					
Debt						
ABL Facility Tr. 1 (L+375bp, \$42.5mm, Jan-15)	0					NEUTRAL
ABL Facility Tr. 2 (L+525bp, \$7.5mm, Jan-15)	0					
New TL due 2019 (L+425, 100bp floor)	295					
7.750% 1st Lien Nts due Feb 2019	560			\$106.75	4.62%	
Argentine Facility due May 2016	11					
China Credit Facility - HC Line (\$20mm, Nov-13)	16					
China Credit Facility - Hygenie Line (\$25mm, 2015)	18					
Capital Leases	0					
Total Debt	\$900	5.2x	4.6x			
US Pension (underfunded, as of Dec-12)	4					
Total Debt + Pension	\$904	5.2x	4.6x			
Liquidity						
Cash (PF new TL)	99					
ABL Facility (\$50mm, Jan-15)	30					
Total	\$129					

Source: Citi Research and Company Filings.

Figure 41. Polymer Group Maturity Profile (mm) as of 9/30/13



Source: Citi Research and Company Filings.

PolyOne Corp. (POL)

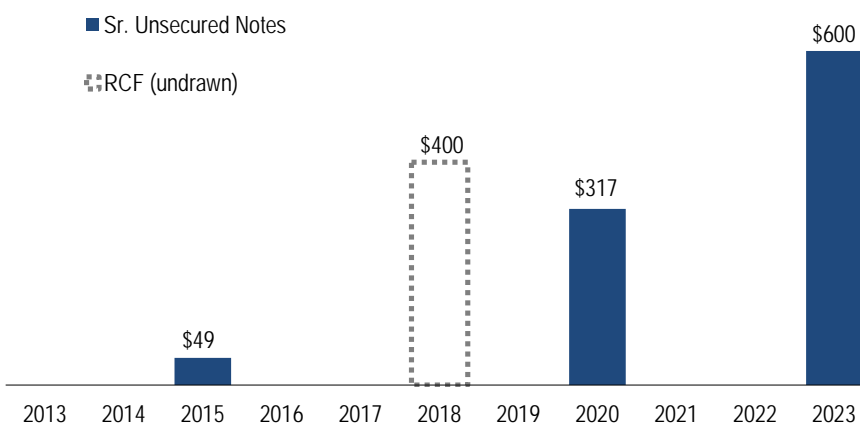
- **Event** — POL is scheduled to release 4Q13 earnings for the quarter ended December 31, 2013 on Tuesday, January 28th. Call at 8am on Wednesday, January 29th: 866-543-6403; pin 66233243.
- **Guidance** — As of 3Q13 Earnings Call:
 - Raised FY13 CAPEX guidance to \$80-85mm from previous range of \$70-75mm. Maintained 2015 targets of \$5B of revenue (\$2.9B in 2012) and adjusted EPS of \$2.50 (\$1.00 in 2012), driven by organic growth and mix improvement.
- **Implications** — We maintain Overweight issuer rating and Buy rating on the 2023s (Ba3/BB-). Note that management publicly stated they are targeting Investment Grade ratings by 2015 on the 1Q13 earnings call.
- **Latest Research**
 - **10/25/13:** [PolyOne Corp. \(POL\) 3Q13 Post Call Recap - Repurchasing Debt & Shares, Integration Smooth](#)

Figure 42. PolyOne Capital Structure (mm) as of 9/30/13

	PF 09/30/13	Gross Leverage	Net Leverage	Bid		Rating
				Price	YTW	
LTM Adj. EBITDA	\$351					
Debt						
Revolver (L+150bp, \$400mm, Mar-18)	0					NEUTRAL BUY
Geon Co 7.500% Nts Due Dec 15	49					
7.375% Sr. Nts due Sep 2020	317			\$110.25	3.10%	
5.250% Sr. Nts due Mar 2023	600			\$97.25	5.64%	
Other Debt	22					
Total Debt	988	2.8x	1.9x			
Underfunded Pension (12/31/12)	187					
OPEB (12/31/12)	19					
Environmental Reserves (12/31/12)	75					
Total Debt + Pension + Provisions	1,269	3.6x	2.7x			
Liquidity						
Cash	323					
Revolving Credit Availability	308					
Total	\$631					

Source: Citi Research and Company Filings.

Figure 43. PolyOne Maturity Profile (mm) as of 9/30/13



Source: Citi Research and Company Filings.

Rockwood Specialties Group, Inc. (ROC)

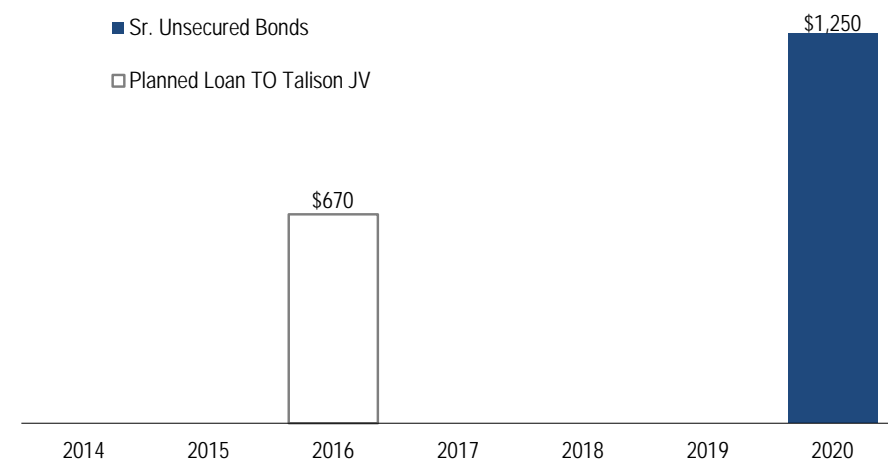
- **Event** — ROC has historically released 4Q results and hosted conference call for the quarter ended December 31st in mid-February.
- **Company Guidance** — As of 3Q13 Earnings Call:
 - **2014 CAPEX:** \$120-130mm
 - **2014 D&A:** \$95mm
 - **2014 Interest Expense:** \$63.5mm
- **Recent News**
 - **12/02/13:** ROC announced a plan to acquire 49% of Talison, a lithium producer based in Australia through a JV with Tianqi, a Chinese lithium producer.
 - **10/01/13:** ROC completed sale of Clay Additives business for \$635mm.
- **Upcoming Catalysts**
 - **1Q14:** Acquisition of Talison stake via JV with Tianqi expected to close.
 - **1H14:** Sale of TiO₂ and Pigments segment to Huntsman expected to close.
- **Credit Implications** — We moved to Neutral from Buy on ROC 2020s post the announcement of the Rockwood-Talison transaction which we believe muddies the water around a potential ROC upgrade and may make them a less appealing acquisition candidate.
- **Latest Research**
 - **12/03/13:** [M&A Monday - DOW's Plan to Carve-Out Commodity Chems & ROC's Talison JV](#)
 - **11/12/13:** [Rockwood \(ROC\) 3Q13 Post Call Recap - Solid Quarter; IG Pending on Ultimate Use of Cash Balance](#)

Figure 44. Rockwood Capital Structure (mm) as of 9/30/13

	09/30/13	Gross Leverage	Net Leverage	Bid		Rating
				Price	YTW	
LTM Adj. EBITDA (CORE)	\$349					
Debt						
Sr. Secured Revolver (L+275bp) (\$180mm, Feb-16)	0					
Term Loan A (L+225bp due Feb-17)	0					
Term Loan B (L+275bp, 100bp floor; due Feb-18)	0					
Capital Leases and other	37					
1st Lien Debt	37	0.1x	-4.7x			
4.625% Sr. Nts due Oct 2020	1,250			\$102.5	4.2%	NEUTRAL
Total Debt	1,287	3.7x	-1.1x			
U.S. Unfunded Pension (as of 12/31/12)	16					
Non-U.S. Unfunded Pension (as of 12/31/12)	571					
Environmental Liabilities (as of 12/31/12)	54					
Total Debt + Pension + Provisions	1,928	5.5x	0.7x			
Liquidity						
Unrestricted Cash at Quarter End	932					
Gross Proceeds of Clay Additives Sale (closed 10/1/13)	635					
- Taxes, fees, expenses & other adjustments	(20)					
Gross Proceeds of Sale of TiO2 & Additives to ROC (close in 1H 14)	1,325					
- Estimated pension, taxes, fees, expenses & other adjustments	(325)					
Equity investment in Talison JV (close in 1Q14)	(196)					
Loan to Talison JV (close in 1Q14)	(670)					
Total Proforma Cash Balance	\$1,681					

Source: Citi Research and Company Filings.

Figure 45. Rockwood Maturity Profile (mm) as of 9/30/13



Source: Citi Research and Company Filings.

Taminco (TAMGCC)

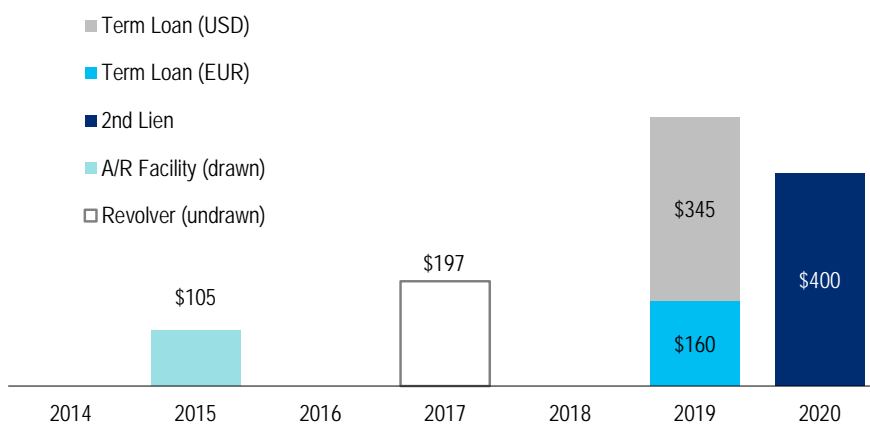
- **Event** — Taminco historically releases results for the quarter ended December 31, 2013 in early February.
- **Company Guidance** — As of 3Q13 Earnings Call:
 - **FY13**
 - Record year in volume, net sales and adjusted EBITDA.
 - CAPEX: \$65mm (shift \$10mm to FY14).
 - **4Q13**
 - **Volume:** Expect to generate moderate YoY growth in volume.
 - **Net Sales:** Expect to generate single digit YoY growth in sales.
 - **EBITDA:** Double digit YoY growth.
 - **2014 CAPEX:** \$63.5mm
- **Recent News**
 - **01/22/14:** S&P LCD reported that TAMGCC was seeking to issue new TL's and reprice existing in preparation for the acquisition of Kemira's Formic Acid business, which is expected to close in 1Q14.
 - **12/23/13:** Announced planned acquisition of the Formic Acid business of Kemira Oyj for a transaction value of approximately EUR140mm (\$190mm). Per the press release the business generates EBITDA of approximately EUR23mm (\$32mm) and has a manufacturing facility in Oulu Finland and 160 employees globally.
 - **12/11/13:** Announced pricing (\$20 per share) of secondary offering of common stock (10mm shares).
- **Credit Implications** — We move to **Marketweight** from **Overweight** on TAMGCC despite its solid results and strong fundamental outlook and reiterate our NEUTRAL rating on the 9.75% Senior Notes due 2020 (Caa1/B-) as we see limited upside in the bonds and a lack of near term positive catalysts post the successful IPO and repayment of the PIK toggle notes.

Figure 46. Taminco Capital Structure (mm) as of 9/30/13

	09/30/13	Leverage	Leverage	Price	YTW	Rating
LTM Adj. EBITDA	\$247					
Debt						
Sr. Secured Revolver (\$200mm, Feb-17)	0					
USD Term Loan (L+325bp, \$350mm, Feb-19)	345					
EUR Term Loan (E+350bp, €120mm, Feb-19)	160					
Capital Leases	7					
1st Lien Debt	512	2.1x	1.9x			
9.750% 2nd Lien Nts due Mar 2020	400			\$113.25	4.19%	NEUTRAL
Senior PIK Toggle Nts due 2017	0					
Total Debt	912	3.7x	3.5x			
Off B/S Non-Recourse A/R Facility (€150mm, Jul-15)	105					
Underfunded Pension (12/31/12)	9					
Environmental Spending for 2014	14					
Total Debt+ A/R Facility	1,040	4.2x	4.0x			
Liquidity						
Cash	45					
Sr. Secured Revolver (\$200mm, Feb-17)	197					
Total	\$242					

Source: Citi Research and Company Filings.

Figure 47. Taminco Maturity Profile (mm) as of 9/30/13



Source: Citi Research and Company Filings.

Tronox Ltd. (TROX)

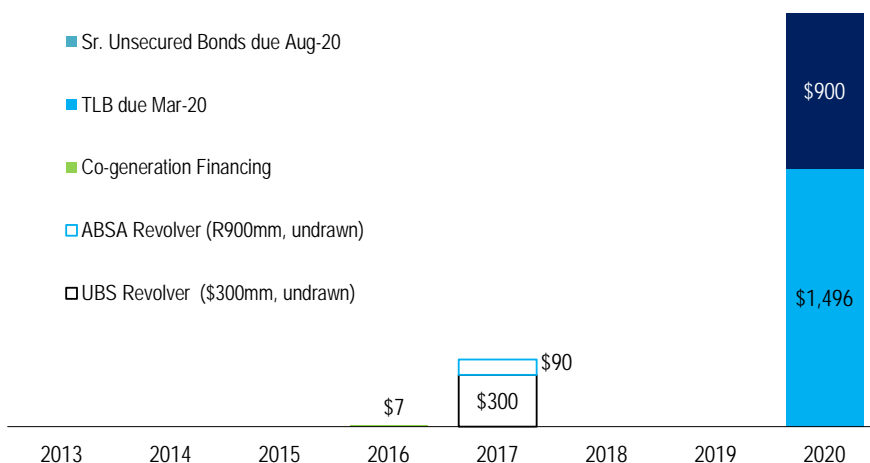
- **Event** — TROX has historically released 4Q results and hosted conference call in mid-February.
- **Company Guidance** — As of 3Q13 Earnings Call:
 - TROX management stated on their latest call that they would seek to repay term loan if no M&A opportunity seemed likely by its 1 year anniversary (~March 2014).
- **Implications** — We moved to Neutral from Buy on the 6.375% Senior Notes due 2020 (B2/BB-) post management confidently stating they would be able to find an M&A candidate on their 3Q13 earnings call and the bankruptcy court assigning a much higher settlement range to the case of Tronox Inc. vs. Anadarko.
- **Recent Developments**
 - **12/12/13:** Initial court ruling issued on the Tronox Inc. vs. Anadarko Petroleum Corp case was announced with larger than expected settlement range. See note below for details.
- **Latest High Yield Research**
 - **12/30/13:** [TiO2 News – TROX M&A Risk Up - KRO Becomes Potential Target with Passing of Harold Simmons](#)
 - **12/13/13:** [Tronox Ltd \(TROX\): Anadarko Ruling - Settlement Range Exceeds Consensus; Downgrade TROX 20s to Neutral from Buy;](#)

Figure 48. Tronox Capital Structure (mm) as of 9/30/13

	09/30/13	Gross Leverage	Net Leverage	Bid		Rating
				Price	YTW	
LTM Adj. EBITDA	\$337					
Debt						
UBS Revolver (L+175bp) (\$300mm, Jun-17)	0					
ABSA Revolver (J+350bp) (R900mm, Jun-17)	0					
Term Loan B (L+350bp) (\$1,500mm, Mar-20)	1,496					
Co-generation Unit Financing Arrangement (2016)	7					
Lease	12					
1st Lien Debt	1,515	4.5x	0.2x			
6.375% Sr. Nts due Aug-20	900			\$102.25	5.80%	NEUTRAL
Total Debt	2,415	7.2x	2.8x			
Underfunded Pension Status as of Sep-13	178					
Environmental Reserves as of Dec-12	31					
Total Debt + Pension + Provisions	2,624	7.8x	3.5x			
Liquidity						
Cash	1,457					
UBS Revolver Availability	0					
ABSA Revolver Availability	0					
Total	\$1,457					

Source: Citi Research and Company Filings.

Figure 49. Tronox Maturity Profile (mm) as of 9/30/13



Source: Citi Research and Company Filings.

Recent Publications of Note

Economics

- 01/23/14: [Global Economic Outlook and Strategy - January 2014](#)

High Yield

- 01/10/14: [HY - 2014 Outlook and Recommendations](#)

Equity

- 01/20/14: [Global Chemicals Cracker - Companies See Weak Year-End Demand; Prices Firm on Cost Push](#)
- 01/10/14: [European Chemicals Outlook 2014 - Selective in better supplied environment; Buy AKE, DSM, Linde; Sell LXS, EVK, Solvay](#)
- 01/07/14: [2014 Chemical & Ag Stock Outlook - The Run is Not Done....for Commodities](#)

Relative Value Sheet

Figure 50. Relative Value Comparisons

Coupon	Description	Rating	Maturity	Ratings	Amount	Current Prices				Next Call Data		YTD Total	Sales	EBITDA	EBITDA	Cash	Net	EV/EBITDA	Mkt Cap				
				(Moody's/S&P)	Outst.	Bid	YTW (%)	Z-SPRD	YTW Date	Date	Price	Return	LTM	LTM	Margin	Balance	Leverage						
ASHLAND INC (ASH) - Overweight																			LTM Date:	6/30/2013			
3.000%	Sr Nts	Buy (1)	3/15/2016	Ba1(S)/BB(S)	\$600	101.750	2.12%	157	2/15/2016	2/15/2016	100.00	0.17%	\$7,813	\$1,242	15.9%	\$346	2.2x	8.1x	\$7,518				
3.875%	Sr Nts	Buy (1)	4/15/2018	Ba1(S)/BB(S)	\$700	101.875	3.38%	197	3/15/2018	3/15/2018	100.00	0.84%					2.2x						
4.750%	Sr Nts	Buy (1)	8/15/2022	Ba1(S)/BB(S)	\$1,125	96.000	5.34%	269	8/15/2022	5/15/2022	100.00	1.34%					2.2x						
6.600%	Sr Nts		8/1/2027	Ba1(S)/BB(S)	\$3	105.125	6.04%	289	NC	NC	NC	0.85%					2.2x						
6.875%	Sr Nts	Neutral (2)	5/15/2043	Ba1(S)/BB(S)	\$373	96.250	7.18%	370	5/15/2043	2/15/2043	100.00	2.28%					2.2x						
6.875%	Sr Nts	Neutral (2)	5/15/2043	Ba1(S)/BB(S)	\$2	95.625	7.24%	375	5/15/2043	2/15/2043	100.00	0.95%					2.2x						
6.500%	Jr Sub Nts		6/30/2029	Ba2(S)/B+(S)	\$282	88.000	7.85%	464	NC	NC	NC	2.03%					2.4x						
8.380%	Sr Nts		4/1/2015	Ba1(S)/NR(S)	\$9	104.500	4.42%	410	NC	NC	NC	0.47%					2.2x						
9.350%	Sr Nts		1/24/2019	WR(S)/NR(S)	\$5	113.250	6.22%	455	NC	NC	NC	0.70%					2.2x						
ASH is a manufacturer of specialty chemicals and through its Valvoline brand, a marketer of premium-branded automotive and commercial lubricants.																							
AXIALL CORP (AXLL) - Overweight																			PF	LTM Date:	6/30/2013		
L+250	Eagle Spino TLB		1/28/2017	Ba1(S)/BBB-(S)	\$198	100.250	3.41%			1/28/2014	Applicable		\$4,316	\$656	15.2%	\$200	0.1x	5.6x	\$2,927				
4.625%	Sr Nts	Buy (1)	2/15/2021	Ba3(S)/BB(S)	\$688	98.000	4.96%	261	2/15/2021	2/15/2018	102.31	0.79%					1.9x						
4.875%	Sr Nts	Buy (1)	5/15/2023	Ba3(S)/BB(S)	\$450	95.250	5.53%	277	5/15/2023	5/15/2018	102.44	1.09%					1.9x						
AXLL is created from the combination of Georgia Gulf and the PPG commodity chemicals business in 2012. The company is an integrated chemicals & building products company; US nat gas benefit will make AXLL one of the low et cost chlor-alkali producers.																							
CELANESE US HOLDINGS LLC (CE) - Overweight																			Confi Req		6/30/2013		
L+275	USD Term Loan C-EXT		10/31/2016	Ba1(P)/BBB(S)	\$733	101.125	1.82%						\$6,395	\$1,306	20.4%	\$1,100	0.2x	7.4x	\$8,615				
6.625%	Sr Nts	Neutral (2)	10/15/2018	Ba2(P)/BB+(S)	\$600	106.500	2.05%	178	10/15/2014	10/15/2014	103.31	0.36%					1.3x						
5.875%	Sr Nts	Buy (1)	6/15/2021	Ba2(P)/BB+(S)	\$400	106.750	4.78%	238	6/15/2021	NC	NC	0.79%					1.3x						
4.625%	Sr Nts	Buy (1)	11/15/2022	Ba2(P)/BB+(S)	\$500	96.500	5.12%	242	11/15/2022	NC	NC	1.07%					1.3x						
CE is a medium sized diversified chemicals company producing acetyles, emulsions (VAM), acetate tow and engineered thermoplastics.																							
CHEMTURA CORP (CHMT) - Marketweight																			PF	LTM Date:	6/30/2013		
L+400	Term Loan B- EXT		8/27/2016	Ba1(S)/BB+(S)	\$318	100.625	3.25%						\$2,443	\$273	11.2%	\$311	0.0x	9.1x	\$2,468				
7.875%	Sr Nts	Neutral (2)	9/1/2018	B1(S)/BB-(S)	\$101	108.000	0.97%	71	9/1/2014	9/1/2014	103.94	0.31%					2.0x						
5.750%	Sr Nts	Neutral (2)	7/15/2021	B1(S)/BB-(S)	\$450	102.750	5.17%	329	7/15/2019	7/15/2016	104.31	1.69%					2.0x						
CHMT produces and supplies pool & spa products, niche agricultural products, petroleum additives, and urethane polymers w hich it sells into automotive, transportation, construction, packaging, agriculture, electronics and pool and spa end markets.																							
HUNTSMAN INTERNATIONAL L (HUN) - Underweight																			Not PF for acquisition of ROC assets			LTM Date:	6/30/2013
L+225	Term Loan C		6/30/2016	Ba2(S)/BB+(N)	\$419	100.000	2.49%						\$10,993	\$1,145	10.4%	\$397	1.7x	6.0x	\$5,374				
L+250	Term Loan B- EXT		4/19/2017	Ba2(S)/BB+(N)	\$650	100.000	3.25%										1.7x						
L+275	Term Loan B- EXT		4/19/2017	Ba2(S)/BB+(N)	\$342	100.000	3.75%										1.7x						
L+250	Term Loan B- NONEXT		4/19/2017	Ba2(S)/BB+(N)	\$225	100.000	2.74%										1.7x						
4.875%	Sr Nts	Buy (1)	11/15/2020	B1(S)/B+(N)	\$650	99.000	5.05%	277	11/15/2020	8/15/2020	100.00	0.80%					2.3x						
5.125%	Sr Nts		4/15/2021	B1(S)/B+(N)	\$300	101.750	4.84%	331	NC	NC		1.61%					2.3x						
8.625%	Sr Sub Nts	Sell (3)	3/15/2020	B2(S)/B+(N)	\$350	110.750	2.70%	239	3/15/2015	3/15/2015	104.31	0.68%					3.0x						
8.625%	Sr Sub Nts	Sell (3)	3/15/2021	B2(S)/B+(N)	\$530	112.750	3.15%	273	9/15/2015	9/15/2015	104.31	0.45%					3.0x						
HUN is a diversified chemicals company with roughly \$11.5B in LTM sales. HUN is made up of five main segments: Polyurethanes, Advanced Materials, Performance Products, Textile Effects and Pigments.																							

Source: Citi Research and Company Filings.

Figure 51. Relative Value Comparisons

				Ratings	Amount	Current Prices				Next Call Data		YTD Total	Sales	EBITDA	EBITDA	Cash	Net				
Coupon	Description	Rating	Maturity	(Moody's/S&P)	Outst.	Bid	YTW (%)	Z-SPRD	YTW Date	Date	Price	Return	LTM	LTM	Margin	Balance	Leverage	EV/EBITDA	Mkt Cap		
MOMENTIVE PERFORMANCE (MOMENT) - Marketweight																			LTM Date:	3/31/2013	
8.875%	1st Lien Nts	Buy (1)	10/15/2020	B3(N)/CCC+(N)	\$1,100	109.000	6.62%	504	10/15/2018	10/15/2015	106.66	3.32%	\$2,350	\$236	10.0%	\$92	4.3x	NA	NA		
10.000%	1.5 Lien Nts	Buy (1)	10/15/2020	Caa1(N)/CC(N)	\$250	108.000	7.93%	636	10/15/2018	10/15/2015	107.50	2.92%					5.3x				
9.500%	2nd Lien Nts		1/15/2021	Caa2(N)/NA(N)	\$133	88.125	12.07%	1067	1/15/2021	1/15/2016	104.75	6.20%					11.2x				
9.000%	2nd Lien Nts	Buy (1)	1/15/2021	Caa2(N)/CC(N)	\$635	92.750	10.49%	829	1/15/2021	1/15/2016	104.50	5.40%					11.2x				
9.000%	2nd Lien Nts	Buy (1)	1/15/2021	Caa2(N)/CC(N)	\$526	93.125	10.41%	821	1/15/2021	1/15/2016	104.50	6.42%					11.2x				
11.500%	Sr Sub Nts	Neutral (2)	12/1/2016	Caa3(N)/CC(N)	\$382	76.000	23.51%	2268	12/1/2016	2/24/2014	101.92	12.75%					13.2x				
11% PIK	GE Seller Note		6/1/2017		\$832												16.7x				
Momentive is one of the world's largest producers of silicones, silicone derivatives, quartz, and specialty ceramics.																					
MOMENTIVE SPECIALTY CHEM (HXN) - Underweight																			Confi Req	3/31/2013	
6.625%	1st Lien Nts	Buy (1)	4/15/2020	Ba3(S)/B-(S)	\$1,550	104.000	5.55%	413	4/15/2018	4/15/2015	104.97	1.84%	\$4,775	\$427	8.9%	\$332	2.9x	NA	NA		
8.875%	1.5 Lien Nts	Buy (1)	2/1/2018	B3(S)/CCC+(S)	\$1,200	104.375	7.18%	688	2/1/2015	2/24/2014	104.44	0.86%					5.7x				
9.000%	2nd Lien Nts	Sell (3)	11/15/2020	Caa1(S)/CCC+(S)	\$440	101.000	8.73%	713	11/15/2018	11/15/2015	104.50	1.65%					7.0x				
9.200%	Sr Nts		3/15/2021	Caa2(S)/CCC+(S)	\$74	97.375	9.71%	748	3/15/2021	NC	NC	1.59%					8.1x				
7.875%	Sr Nts		2/15/2023	Caa2(S)/CCC+(S)	\$188	88.875	9.75%	715	2/15/2023	NC	NC	3.43%					8.1x				
8.375%	Sr Nts		4/15/2016	Caa2(S)/CCC+(S)	\$59				4/15/2016	2/24/2014	100.00						8.1x				
Momentive Specialty Chemicals (MSC or HXN) is the world's largest producer of thermosetting resins, or thermosets, a critical ingredient in virtually all paints, coatings, glues and other adhesives produced for consumer or industrial uses.																					
NOVA CHEMICALS CORP (NCX) - Overweight																			PF	144A Life	6/30/2013
8.375%	Sr Nts	Neutral (2)	11/1/2016	WR(S)/BB+(S)	\$5	102.375	6.91%	646	11/1/2015	2/24/2014	104.19	0.48%	\$4,988	\$1,215	24.4%	\$728	0.1x	NA	NA		
8.625%	Sr Nts	Neutral (2)	11/1/2019	Ba2(S)/BB+(S)	\$350	109.625	1.51%	124	11/1/2014	11/1/2014	104.31	0.23%					0.1x				
5.250%	Sr Nts	Buy (1)	8/1/2023	Ba2(S)/BB+(S)	\$500	103.250	4.73%	229	8/1/2021	8/1/2018	102.63	0.54%					0.1x				
NCX, based in Calgary, Alberta, Canada is a leading producer of ethylene and polyethylene. NCX was purchased by International Petroleum Investment Company (IPIC, Aa3/AA) in July 2009.																					
OLIN CORP (OLN) - Marketweight																			LTM Date:	6/30/2013	
6.750%	Sr Nts	Neutral (2)	6/15/2016	Ba1(S)/BB+(S)	\$125	107.000	3.65%	299	6/15/2016	NC	NC	-0.56%	\$2,541	\$455	17.9%	\$284	0.9x	6.3x	\$2,229		
8.875%	Sr Nts	Neutral (2)	8/15/2019	Ba1(S)/BB+(S)	\$150	108.000	2.22%	197	8/15/2014	8/15/2014	104.44	0.48%					0.9x				
5.500%	Sr Nts	Buy (1)	8/15/2022	Ba1(S)/BB+(S)	\$200	100.500	5.43%	280	8/15/2022	NC	NC	1.33%					0.9x				
OLN is primarily a producer of chlor alkali (chlorine and caustic soda) and its derivatives (bleach), as well as a manufacturer of brand name small caliber ammunition ("Winchester").																					
POLYONE CORP (POL) - Overweight																			PF	LTM Date:	12/31/2012
7.500%	1st Lien Nts		12/15/2015	Baa2(S)/BBB-	\$49	108.527	2.82%	233	12/15/2015	NC	NC	0.04%	\$3,527	\$351	9.9%	\$323	-0.9x	9.3x	\$3,389		
7.375%	Sr Nts	Neutral (2)	9/15/2020	Ba3(S)/BB(S)	\$317	110.250	3.11%	269	9/15/2015	9/15/2015	103.69	0.28%					1.9x				
5.250%	Sr Nts	Buy (1)	3/15/2023	Ba3(S)/BB(S)	\$600	97.500	5.60%	287	3/15/2023	NC	NC	0.57%					1.9x				
POL is a global provider of specialized polymer materials, services, and solutions. It was formed in August 2000 through the merger of Geon Co. with M.A. Hanna Co.																					

Source: Citi Research and Company Filings.

Figure 52. Relative Value Comparisons

Coupon	Description	Rating	Maturity	Ratings (Moody's/S&P)	Amount Outst.	Current Prices			Next Call Data		YTD Total	Sales	EBITDA	EBITDA	Cash	Net	EV/EBITDA		Mkt Cap
						Bid	YTW (%)	Z-SPRD	YTW Date	Date	Price	Return	LTM	LTM	Margin	Balance	Leverage		
POLYMER GROUP INC (POLGA) - Marketweight																			
7.750%	1st Lien Nts	Neutral (2)	2/1/2019	B1(S)/B(N)	\$560	106.750	4.63%	433	2/1/2015	2/1/2015	103.88	0.54%	\$1,141	\$173	15.2%	\$99	4.4x	NA	3/31/2013
POLGA is one of the world's largest producers of nonwoven materials which has end uses in various disposable products (i.e. diapers, feminine hygiene products, wipes, surgical gowns & drapes and various industrial applications).																			NA
POLYPORE INTERNATIONAL I (PPO)																			LTM Date:
L + 250	1L Sr Sec		6/29/2017	Ba2(S)/BB-(S)	\$277.5	99.750	2.82%												
7.500%	Sr Nts		11/15/2017	B3(S)/BB-(S)	\$365.0	106.125	0.77%	53	2/24/2014	2/24/2014	105.63	1.01%							
Polypore manufactures polymer based membranes for separation and filtration.																			
ROCKWOOD SPECIALTIES GRO (ROC) - Marketweight																			6/30/2013
4.625%	Sr Nts	Neutral (2)	10/15/2020	Ba1(S)/BB+(P)	\$1,250	102.625	4.01%	237	10/15/2018	10/15/2015	103.47	0.51%	\$1,228	\$349	28.4%	\$932	-2.6x	16.2x	\$5,246
ROC is a global producer of a variety of specialty chemicals and advanced materials used for a number of industrial and commercial purposes.																			
TAMINCO GLOBAL CHEMICAL (TAMGCC) - Marketweight																			9/30/2012
9.750%	2nd Lien Nts	Neutral (2)	3/31/2020	Caa1(S)/B-(S)	\$400.0	113.500	4.00%	368	3/31/2015	3/31/2015	107.31	0.50%	\$1,181.3	\$247.0	20.9%	\$45.0	3.5x	9.0x	\$1,367
TAMGCC is the largest independent producer of alkylamines and alkylamine derivatives.																			
TPC Group Inc (TPGC)																			LTM Date:
8.750%	1st Lien Nts		12/15/2020	B3(S)/B(S)	\$755.0	107.750	6.85%	521	12/15/2018	12/15/2016	104.38	2.01%							
TPC Group provides chemicals to petroleum based companies, for rubber and fuel additives.																			
TRONOX PIGMENTS (TROX) - Marketweight																			3/31/2013
L+225	Term Loan A		3/19/2020	Ba2(S)/BBB-(S)	\$1,493	101.000	4.31%						\$1,968	\$337	17.1%	\$1,457	0.2x	5.3x	\$1,409
6.375%	Sr Nts	Neutral (2)	8/15/2020	B2(S)/BB-(S)	\$900	102.500	5.74%	419	8/15/2018	8/15/2015	104.78	1.35%					2.8x		
TROX is the only fully integrated global producer of TiO2 and mineral sands post its recent acquisition of Exaro Mineral Sands business.																			
TRINSEO OP / TRINSEO FN (TRINSE)																			LTM Date:
8.750%	Sr Secured Nts		2/1/2019	B2(S)/B(S)	\$1,325	104.500	7.27%	615	8/1/2017	8/1/2015	104.38	2.20%						NA	Private
Trinseo is a leading producer of styrenics and is the world's largest producer of styrene butadiene (SB) latex, the largest European producer of synthetic rubber (solution styrene butadiene rubber -- SSBR), the third largest global producer of polystyrene.																			
US COATINGS ACQUISITION INC (USCOAT)																			LTM Date:
L+350	TLB		2/1/2020	B1(S)/B+(S)	\$2,300	100.750	4.61%			2/1/2014								NA	Private
5.750%	Sr Secured Nts		2/1/2021	B1(S)/B+(S)	\$250	105.000	4.62%	352	2/1/2019	2/1/2016	104.31	0.99%							
7.375%	Sr Nts		5/1/2021	Caa1(S)/B-(S)	\$750	107.250	5.69%	398	2/4/2019	2/4/2016	105.53	1.11%							
EV/EBITDA multiple based on 2014 fiscal year consensus estimate.																			
Pricing Source: Citi, Bloomberg.																			
*AXLL PF reflects GGC & PPG Commodity Chemicals Combination; INEGRP PF reflects refi announced on 4/30/13; PolyOne PF reflects results of the Spartech Acquisition in FY12; NCX PF reflects debt refi announced on July 16th.																			

Source: Citi Research and Company Filings.

Appendix A-1

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The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

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Data current as of 31 Dec 2013	Rating		
	Buy	Hold	Sell
Citi Research US High Yield Issuer Coverage	31%	53%	16%
% of companies in each rating category that are investment banking clients	72%	63%	77%
Citi Research US High Yield Issue Coverage	23%	57%	20%
% of companies in each rating category that are investment banking clients	77%	77%	70%

Ashland Inc (ASH) — Issuer Portfolio Weighting and Issue Rating History
High Yield Credit Research

Analyst: James P Finnerty

Issuer		Issue			
Weighting	Date	Coupon	Description	Maturity	Rating
OW	23-Oct-12	4.750%	Sr Nts	15-Aug-22	Buy (1)
		3.000%	Sr Nts	15-Mar-16	Buy (1)
		6.875%	Sr Nts	15-May-43	Neutral (2)
		3.875%	Sr Nts	15-Apr-18	Buy (1)
		4.750%	Sr Nts	15-Aug-22	Buy (1)

Celanese Corp (CE) — Issuer Portfolio Weighting and Issue Rating History

High Yield Credit Research

Analyst: James P Finnerty

Issuer		Issue			
Weighting	Date	Coupon	Description	Maturity	Rating
OW	23-Oct-12	6.625%	Sr Unsec Nts	15-Oct-18	Neutral (2)
		5.875%	Sr Unsec Nts	15-Jun-21	Buy (1)
		4.625%	Sr Nts	15-Nov-22	Buy (1)

Chemtura Corp (CHMT) — Issuer Portfolio Weighting and Issue Rating History

High Yield Credit Research

Analyst: James P Finnerty

Issuer		Issue			
Weighting	Date	Coupon	Description	Maturity	Rating
OW	23-Oct-12	7.875%	Sr Unsec Nts	01-Sep-18	Buy (1)
MW	18-Oct-13				Neutral (2)
		5.750%	Sr Nts	15-Jul-21	Buy (1)

Axial Corporation (AXLL) — Issuer Portfolio Weighting and Issue Rating History

High Yield Credit Research

Analyst: James P Finnerty

Issuer		Issue			
Weighting	Date	Coupon	Description	Maturity	Rating
MW	23-Oct-12	9.000%	Sr Sec Nts	15-Jan-17	Neutral (2)
OW	28-Jan-13				NC
		4.625%	Sr Nts	15-Feb-21	Buy (1)

Huntsman Corp (HUN) — Issuer Portfolio Weighting and Issue Rating History

High Yield Credit Research

Analyst: James P Finnerty

Issuer		Issue			
Weighting	Date	Coupon	Description	Maturity	Rating
UW	23-Oct-12	5.500%	Sr Unsec Nts	30-Jun-16	Sell (3)
					NC
		8.625%	Sr Sub Nts	15-Mar-20	Sell (3)
		8.625%	Sr Unsec Nts	15-Mar-21	Sell (3)
		4.875%	Sr Nts	15-Nov-20	Buy (1)

NOVA Chemicals Corp (NCX) — Issuer Portfolio Weighting and Issue Rating History

High Yield Credit Research

Analyst: James P Finnerty

Issuer		Issue			
Weighting	Date	Coupon	Description	Maturity	Rating
MW	23-Oct-12	8.375%	Sr Nts	01-Nov-16	Neutral (2)
		8.625%	Sr Nts	01-Nov-19	Neutral (2)
		5.250%	Sr Nts	01-Aug-23	Buy (1)

Olin Corp (OLN) — Issuer Portfolio Weighting and Issue Rating History

High Yield Credit Research

Analyst: James P Finnerty

Issuer		Issue			
Weighting	Date	Coupon	Description	Maturity	Rating
MW	23-Oct-12	6.750%	Sr Nts	15-Jun-16	Neutral (2)
		8.875%	Sr Nts	15-Aug-19	Neutral (2)
		5.500%	Sr Nts	15-Aug-22	Buy (1)

PolyOne Corp (POL) — Issuer Portfolio Weighting and Issue Rating History

High Yield Credit Research

Analyst: James P Finnerty

Issuer		Issue			
Weighting	Date	Coupon	Description	Maturity	Rating
MW	23-Oct-12	7.375%	Sr Nts	15-Sep-20	Neutral (2)
OW	02-May-13	5.250%	Sr Nts	15-Mar-23	Neutral (2)
					Buy (1)

Polymer Group Inc (POLGA) — Issuer Portfolio Weighting and Issue Rating History

High Yield Credit Research

Analyst: James P Finnerty

Issuer		Issue			
Weighting	Date	Coupon	Description	Maturity	Rating
OW	23-Oct-12	7.750%	1st Lien Nts	01-Feb-19	Buy (1)
					Neutral (2)

Rockwood Specialties Group, Inc. (ROC) — Issuer Portfolio Weighting and Issue Rating History

High Yield Credit Research

Analyst: James P Finnerty

Issuer		Issue			
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Weighting	Date	Coupon	Description	Maturity	Rating	Date
OW	23-Oct-12	4.625%	Sr Nts	15-Oct-20	Buy (1)	23-Oct-12
MW	03-Dec-13				Neutral (2)	03-Dec-13

Tamino Global Chemical Corp (TAMGCC) — Issuer Portfolio Weighting and Issue Rating History

High Yield Credit Research

Analyst: James P Finnerty

Issuer

Weighting	Date	Coupon	Description	Maturity	Rating	Date
OW	23-Oct-12	9.750%	2nd Lien Nts	31-Mar-20	Buy (1)	23-Oct-12
					Neutral (2)	18-Oct-13

Tronox Ltd (TROX) — Issuer Portfolio Weighting and Issue Rating History

High Yield Credit Research

Analyst: James P Finnerty

Issuer

Weighting	Date	Coupon	Description	Maturity	Rating	Date
OW	23-Oct-12	6.375%	Sr Nts	15-Aug-20	Buy (1)	23-Oct-12
MW	13-Dec-13				Neutral (2)	13-Dec-13

Momentive Performance Materials Inc. (MOMENT) — Issuer Portfolio Weighting and Issue Rating History

High Yield Credit Research

Analyst: James P Finnerty

Issuer

Weighting	Date	Coupon	Description	Maturity	Rating	Date
MW	10-Jul-13	11.500%	Sr Sub Nts	01-Dec-16	Neutral (2)	10-Jul-13
		8.875%	1st Lien Nts	15-Oct-20	Buy (1)	10-Jul-13
		9.000%	2nd Lien Nts	15-Jan-21	Buy (1)	10-Jul-13
		10.000%	1.5 Lien Nts	15-Oct-20	Buy (1)	10-Jul-13

Momentive Specialty Chemicals Inc. (HXN) — Issuer Portfolio Weighting and Issue Rating History

High Yield Credit Research

Analyst: James P Finnerty

Issuer

Weighting	Date	Coupon	Description	Maturity	Rating	Date
MW	10-Jul-13	6.625%	1st Lien Nts	15-Apr-20	Buy (1)	10-Jul-13
UW	18-Oct-13	8.875%	1.5 Lien Nts	01-Feb-18	Neutral (2)	10-Jul-13
		9.000%	2nd Lien Nts	15-Nov-20	Buy (1)	10-Jul-13
					Neutral (2)	08-Oct-13
					Sell (3)	30-Oct-13

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