UBS

High yield bonds

HY chemicals: Let's get cracking

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Thomas Rauh, CFA, Analyst, thomas.rauh@ubs.com

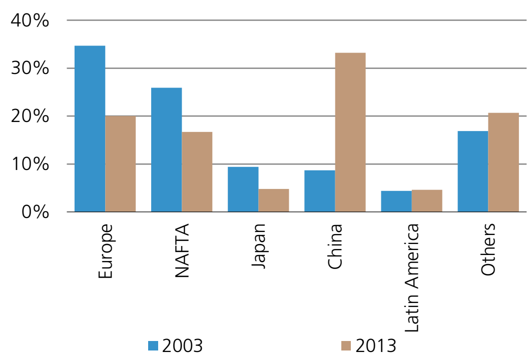
- High-yield chemical companies in our coverage universe performed strongly in 2015. Although revenues declined for most, lower raw material costs and overall cost improvements led to higher margins. Given our expectation of accelerating economic growth in Europe and continued low oil and gas prices, we expect this trend to continue albeit at a slower pace.
- We expect Huntsman's ratings to come under pressure while we maintain a stable credit outlook for Ineos and Perstorp. We expect Kerling to get upgraded within the next 12 months following the successful implementation of the Inovyn joint venture. Although we do not foresee much rating upside, we see value in several of Ineos's bonds, which yield 5–6% with a maturity of 3.5–4 years.
- Slower growth in Latin America and China remains our main concern, while we expect to see stronger growth in Europe and the US. The spiraling down of feedstock prices should translate to lower revenue figures as well, though earnings will likely suffer less. We also see increasing risk from debt-funded acquisitions.
- We provide an overview of the chemical industry and update our credit views on Huntsman, Ineos, Kerling and Perstorp. These companies are largely focused on the petrochemical segment, which is the main focus of this report.

Source: Fotolia

The chemical industry in numbers

The chemical sector comprises companies that usually convert a variety of raw materials (oil, natural gas, metals, and minerals) into industrial chemicals. It generated an estimated turnover of about EUR 3.2 trillion in 2013, employing about two million people in the EU and US alone. While these two regions historically have accounted for more than 50% of global sales, the regional dispersion has undergone some significant changes over the past 10 years or so. China is now the single largest chemical producer with a market share of about 33% (compared to 8.7% in 2003), while Europe's market share has dropped to 20% followed by North America with 17%. The chemical sector has a large variety of end-products (about 70,000 different ones) and a widely dispersed consumer base ranging from automotive, healthcare, and agriculture to food, textile, and construction companies. Despite the well-diversified customer base, chemical companies tend to be cyclical given that most products are commodity-like and capacity cannot be readily adjusted in response to changes in demand.

Fig. 1: Market share by geography



Source: CEFIC, UBS, as of 2013.

Segments within the industry

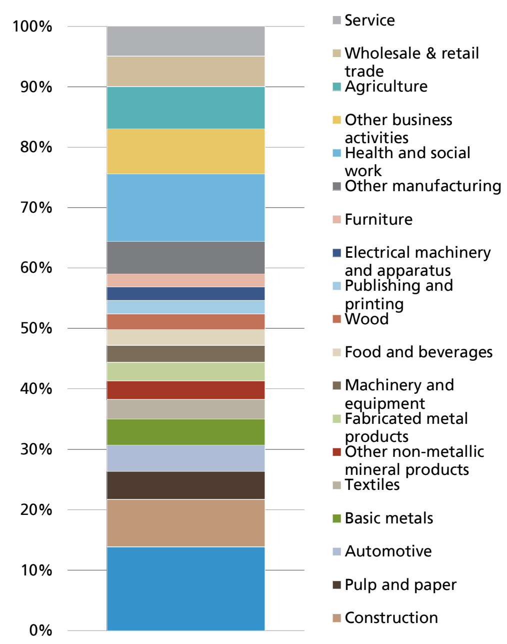
The chemical industry can be broadly split into three segments: base chemicals, specialty chemicals, and consumer chemicals. Base chemicals make up the largest segment, with about 60% of total sales. They can be further segregated into petrochemicals and their polymers and basic inorganic chemicals. These products are usually produced in very large quantities and mainly sold to the chemical industry itself or to other industries before becoming consumer products. Most companies within our coverage universe are active in the petrochemical and polymer segments, which will be the focus of this report.

Petrochemical companies are engaged in the manufacture of base chemicals by cracking long-chained carbon molecules into shorter-chain molecules. The raw materials that go into the cracking plants usually consist of naphtha (which refers to a broad variety of flammable liquid hydrocarbon mixtures) and other petroleum, natural gas, liquefied petroleum gas (LPG), and in recent years also coal and other biomass. The actual feedstock plays an important role for various petrochemical companies as it produces different proportions of base chemicals. Naphtha and gas oil produce more longer-chained molecules, while the percentage of ethylene and propylene is usually higher with the use of natural gas and LPG. The end-products from the cracking process can broadly be classified into two groups: olefins and aromatics. Olefins are hydrocarbons consisting of chains of carbon, with the shortest molecules (ethylene, propylene, and butadiene) being the major output products from the crackers. Aromatics contain carbon rings with benzene and toluene being the most prominent members of the family. These hydrocarbons then become the basis for many products used in our everyday life, ranging from plastics, synthetic rubbers, and resins to detergents and solvents.

Polymerization is the process of linking together short-chained base chemicals such as ethylene or propylene. In the presence of heat and a catalyst, these simple compounds (monomers) join together to form a product called polymer. While the chemical properties of these polymers usually do not change, the longer molecule structures often have a material impact on the physical properties such as hardness, melting temperature, and flexibility. Polymerization is mainly used to produce various kinds of plastics such as polyethylene, polyvinyl chloride (PVC), and higher-performance plastics like methyl di-isocyanate (MDI). Polymerization is also used to create various solvents (liquid used to dissolve or soften a solid substance), surfactants (which allow oil molecules to dissolve in water), and synthetic resins.

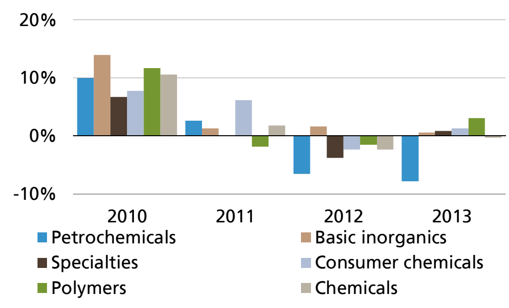
Inorganic chemicals comprise another important part of the industry and represent about 14% of total sales. They usually refer to all non-carbon-based compounds. There are a variety of products within this segment such as caustic soda (sodium hydroxide), chlorine, and hydrogen peroxide. Within our coverage, only Kerling and Huntsman have some minor operations within this segment through the production of caustic soda and titanium dioxide, respectively. Caustic soda is usually produced as a co-product in the manufacturing process of chlorine from rock salt. It is used in many areas such as pulp and paper production, water treatment, and other applications in the chemical industry such as the production of soaps and bleaches. Titanium dioxide is usually mined and used to enhance brightness and opacity in paints, coatings and other products.

Fig. 2: Indicative end consumer of European chemicals



Source: CEFIC, UBS, as of 2013.

Fig. 3: EU chemical production growth by sector

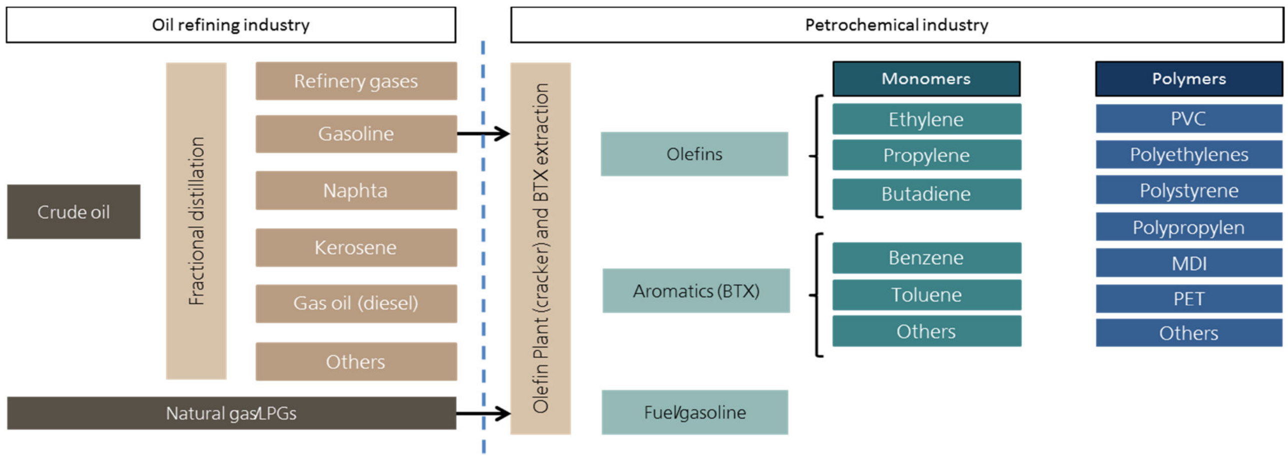


Source: CEFIC, UBS, as of 2013.

Specialty chemicals are not clearly defined, but usually refer to chemicals that are produced in smaller quantities. They comprise everything from paints and inks to crop protection, dyes, and pigments. Although individual volumes tend to be small, they still represent 27% of total sales in the EU.

Consumer chemicals are chemicals that are sold directly to the final consumer and not used as intermediates in other industries. These include soaps, detergents, perfumes, and cosmetics. The sector is the smallest within the chemical industry, making up about 12% of total sales.

Fig. 4: Petrochemical value chain



Source: UBS

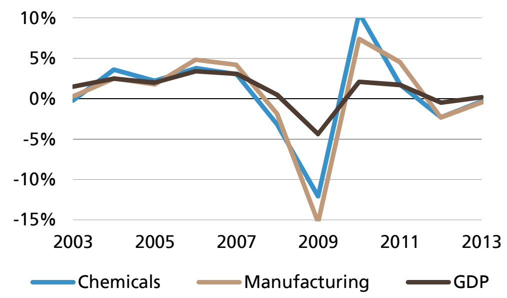
Economic drivers and costs

The industry is characterized by its strong cyclicality caused by significant shifts in demand and supply. When economies grow, demand for chemicals starts to increase which subsequently leads to new capacity being built. Given the relatively long lead times and sizable scale of operations involved, supply cannot easily be adjusted once demand fades. Therefore, large swings in chemical prices and company operating margins are relatively common. Historically, the industry has grown at a rate 1.25 times the GDP growth rate, although actual multiples vary among segments, with specialty chemicals usually having higher growth rates. Bulk-produced and low-grade chemicals in the ethylene and propylene cycles tend to grow at lower rates.

Most of the chemical industry is very much commoditized with little room for price differentiation. This is especially true for base chemicals like petrochemicals and their polymers. Technical barriers to entry and brand and patent protection are higher for special chemicals in the biotech and pharmaceutical industries, but are very low for the greater part of the sector. As chemicals are important to a variety of industries, indicators such as manufacturing purchasing managers' indices (PMIs), construction activity, and vehicle production can give a good indication of demand.

With very little pricing power, chemical companies depend on cost advantages and economies of scale for margins and profitability. Input costs play an especially crucial role as raw materials make up about 40–60% of total costs. As mentioned before, olefins and aromatics can be derived from natural gas, LPG, or naphtha, and the choice and availability

Fig. 5: Chemical sector cyclicality
Annual growth, in %



Source: CEFIC, UBS, as of 2013.

of feedstock significantly affect profitability. Ethylene production is of special importance as it is the base chemical for about 60% of all other organic derivatives. Ethylene derived from light ethane or propane gas is usually cheaper than that derived from naphtha. Thus, ethylene production costs vary across regions, with the Middle East and the US being cheaper than Europe or Asia, which have to rely more on naphtha. While the overall level of feedstock prices affects profitability in the short term, the competitive nature of the industry tends to adjust for these relatively quickly, passing on benefits to the customers.

After feedstock, labor is the second-largest expense and represents about 20% of total costs. The production of chemicals is also energy-intensive, with direct energy costs accounting for another 5–10% of the total. That said, cost structures vary within the industry as chemical companies have different operational and capital structures. In general, however, the industry is capital-intensive, demanding proportionally higher fixed costs.

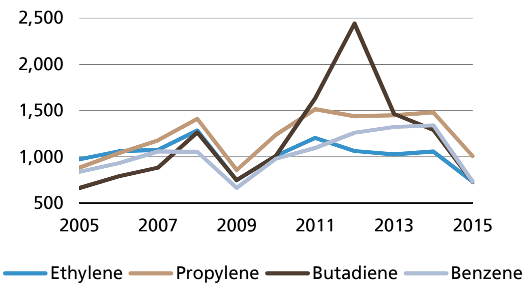
Performance and outlook

2015 was a relatively good year for the chemical companies in our coverage universe, despite several challenges. Lower prices and volumes were largely offset by a sharp drop in raw material costs. While olefins and aromatics prices declined between 30% and 40% during the year, it was mostly on the back of a 50% decline in feedstock prices. As a result, although revenues declined for most companies, cost improvements and lower raw material costs led to higher margins, which positively affected the credit metrics of the issuers in our coverage. On the downside, companies are increasingly struggling with muted demand especially in Europe, Latin America, and increasingly in China as well.

For 2016, we expect trading conditions to remain difficult in both the petrochemical and inorganic sectors. Most companies do not anticipate much improvement and see volumes growing by less than 1%, with prices likely falling further. For ethylene-related products, we are somewhat more optimistic as several outages in Europe have supported margins as inventories remain low. European chemicals also benefit from strong currency tailwinds, which further support margins. We see the main risk for the current year coming from a significant slowdown in China and further deterioration in LatAm. The spiraling down of feedstock prices should translate to lower revenue figures as well, though earnings will likely suffer less. We also see increasing risk from debt-funded acquisitions, which remain on the agenda of most companies as organic growth is difficult to achieve in this environment.

Fig. 6: Petrochemical prices

In USD per mt



Source: Bloomberg, UBS, as of 2015

Huntsman Corporation (HUN)

Strengths

- Significant scale and geographic diversity. The group has operations spread across more than 30 countries and holds market-leading positions in many of its key products.
- Large product portfolio across different regions and end-consumers contributes to the resilience of EBITDA margins.
- Access to lower-cost, natural-gas-based feedstock in the US.
- Ample liquidity and no near-term bond maturities.

Risks

- The group faces considerable operational risks related to maintaining a large number of chemical facilities and their logistics.
- Growth has historically been achieved through acquisitions, which could put pressure on the company's credit metrics.
- Profitability of the titanium dioxide (TiO_2) business is still very low, making a planned separation or sale difficult in our view.
- Relatively shareholder-friendly policy, in combination with low free cash flow, limits room for deleveraging in our view.

Fig. 7: Issuer profile

Sub-asset class	High Yield
Industry/Sector:	Material
Country:	United States
Moody's:	Ba3, stable
S&P:	BB-, stable
Fitch:	n.a.

CIO Credit risk flags

Senior unsecured

< 2 y	2-5 y	5-10 y	> 10 y

Issuer credit outlook Deteriorating

Source: Bloomberg, UBS, as of 12 January 2016

Latest results

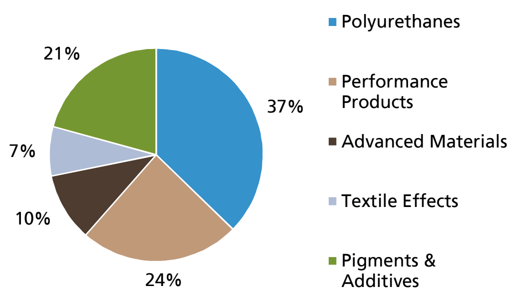
3Q15 results were relatively weak across segments. Limited demand growth in China, strong exports out of Asia, adverse foreign exchange effects due to the US dollar's appreciation, and an outage in one of the company's facilities all negatively affected performance. Revenues declined by 9% year-over-year as prices of polyurethane, performance products, and pigments fell by more than 10% while volumes were relatively mixed. EBITDA declined by 13% to USD 256m (9.7% margin), largely in line with revenues. Operating cash flows dropped by USD 154m to USD 206m, with free cash flows turning negative in a historically strong quarter. We expect further deterioration in the fourth quarter, which usually suffers from a seasonal slowdown.

Credit view

We maintain our deteriorating credit outlook given the weak profitability in the pigments and especially the TiO_2 segment (21% of revenues) as well as the weaker-than-expected results in the important polyurethanes division (37% of revenues). Low capacity utilization, weak demand, and growing exports from China will continue to put pressure on prices, in our view. In addition, Huntsman is adversely affected by the strong USD, and the low oil price reduces its US Gulf Coast cost advantage (from cheaper natural gas). Although we see some room for improvement especially through the company's planned restructuring program in the pigments and additives businesses (accumulated cost savings of USD 250m until 2016), we remain skeptical that it will be sufficient to maintain the company's current credit rating. Management intends to separate the pigments business, but given the negative EBITDA contribution we do not think a sale or IPO is feasible at this time..

Following the acquisition of Rockwood in October 2014, Huntsman's credit metrics have continued to deteriorate, with net leverage spiking at 5.3x as of 3Q15. While management still guides for a net leverage target of 2–2.5x, we view the target as unachievable in the near future given the limited cash generation. While management plans to improve cash flows

Fig. 8: Revenue by division



Source: UBS, company reports, as of 3Q 2015.

Company Description

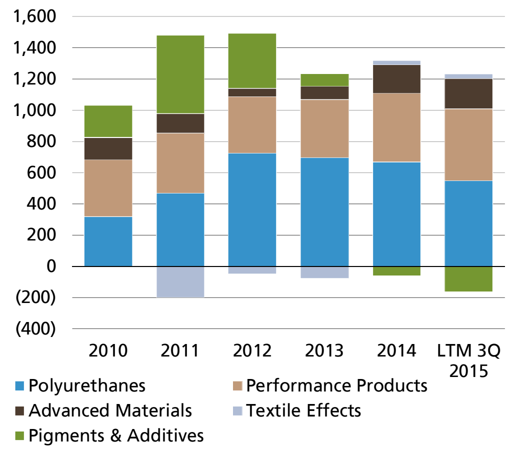
Huntsman Corporation is a diversified chemicals company with operations in 30 countries across six continents. Huntsman's business is organized into five segments: Polyurethanes, Performance Products, Advanced Materials, Pigments, and Textile Effects. The company has market-leading positions in products such as MDI, amines, epoxy-polymers, surfactants and titanium dioxide (TiO_2). The group is publicly listed and the Huntsman family is the largest shareholder.

by at least USD 350m in 2016 through capital expenditure reductions, restructuring, and lower maintenance spending, we remain skeptical of its ability to lower its leverage, which is currently above Moody's target (<4.5x) for a Ba3 rated company. Absent a meaningful recovery in TiO_2 prices and stronger demand for its polyurethanes, we therefore see a high chance for a downgrade of Huntsman over the next 12 months. In addition, the company recently announced a USD 150m share repurchase program.

Despite the drop in liquidity since the beginning of the year, we still view Huntsman's liquidity as adequate. As of 3Q15, the company had USD 433m in cash, a USD 625m undrawn revolving credit facility, and about USD 250m available under its securitization facilities. With a guided free cash flow of USD 350m and no significant debt maturities in 2016, we expect Huntsman to be able to meet all its liabilities in the near future. Its next bond maturity is 2020, which gives it ample time to address its current issues. However, we note that more than half of Huntsman's debt ranks senior to these bonds, reducing the recoverable amount in the case of a potential default. Both Moody’s and S&P therefore rate the group’s bonds lower than its corporate credit rating.

Fig. 9: EBITDA development by division

In USD million



Source: UBS, company reports, as of 3Q 2015.

Investment view

Despite the recent drop in Huntsman bond prices, we do not recommend adding exposure to the company. We expect the bonds to remain volatile and could see further pressure should our expected rating downgrade materialize. We would like to see some stabilization in the company's TiO_2 segment and some improvement of the credit metrics before we consider making an investment. We therefore maintain our fair value view on the company's liquid on the bonds.

Table 1: Company bonds

CIO view	Issuer	ISIN	Ccy	Cpn	Amt. Out. (M)	Maturity	Ratings (S&P / Fit. / Mdy)	Ind. Off. Pr.	YTM	YTW	ASW	Next call date	Next call px
fair	HUNTSMAN INTERNATIONAL L	US44701QAZ54	USD	4.875	650	15/11/2020	B / n.a. / B1	92.3	6.8%	6.8%	494	15/08/2020	100.0
fair	HUNTSMAN INTERNATIONAL L	XS1056202762	EUR	5.125	443	15/04/2021	B / n.a. / B1	91.5	7.1%	7.1%	636	15/01/2021	100.0
illiquid	HUNTSMAN INTERNATIONAL L	USU44657AR22	USD	5.125	400	15/11/2022	B / n.a. / B1	91.3	6.7%	6.7%	465	15/08/2022	100.0
fair	HUNTSMAN INTERNATIONAL L	XS1207638732	EUR	4.250	300	01/04/2025	B / n.a. / B1	80.4	7.2%	7.2%	552	01/01/2025	100.0

Source: Bloomberg, UBS, as of 12 January 2016

Table 2: Summary of financial information

USD, million	FY Dec 2010 12 months	FY Dec 2011 12 months	FY Dec 2012 12 months	FY Dec 2013 12 months	FY Dec 2014 12 months	LTM Sept 2015 12 months
Revenue	9,250	11,221	11,187	11,079	11,578	10,918
EBITDA	647	1,045	1,192	894	1,032	839
EBIT	410	606	845	510	633	457
Interest expense	203	204	209	187	208	221
Net income	32	254	373	149	345	82
Funds from operations (FFO)	697	700	930	741	854	636
Working capital	-755	-335	-156	-33	-94	168
Cash flow from operations (CFO)	-58	365	774	708	760	804
Capex	263	356	539	575	709	813
Disposal of businesses	-27	-26	-127	-104	-108	-109
Free cash flow	-321	9	235	133	51	-9
Dividends	-6	-8	-96	-120	-121	-122
Cash & short investments	966	554	387	520	860	433
Total debt	4,146	3,942	3,702	3,910	5,200	4,867
Net debt	3,180	3,388	3,315	3,390	4,340	4,434
EBITDA margin	7.0%	9.3%	10.7%	8.1%	8.9%	7.7%
EBIT margin	4.4%	5.4%	7.6%	4.6%	5.5%	4.2%
EBITDA/cash interest expense	3.2x	5.1x	5.7x	4.8x	5.0x	3.8x
Debt/EBITDA	6.4x	3.8x	3.1x	4.4x	5.0x	5.8x
Net debt/EBITDA	4.9x	3.2x	2.8x	3.8x	4.2x	5.3x
FFO/net debt	21.9%	20.7%	28.1%	21.9%	19.7%	14.3%
FCF/net debt	-10.1%	0.3%	7.1%	3.9%	1.2%	-0.2%

Source: UBS, company reports, as of 3Q 2015.

Ineos Group Holding S.A. (INEGRP)

Strengths

- Significant scale and geographic diversity. Ineos is one of the world's largest petrochemical companies with leading market positions in many of its key products.
- Significant degree of vertical integration reduces supply and input-cost volatility.
- US business and increasingly Europe benefit from access to cheaper natural gas feedstock.
- Well-diversified customer base among various different industries.

Risks

- Cyclical business with commodity-like products which give limited pricing power.
- Exposure to volatile commodity prices. The group's costs and pricing are highly related to oil and gas prices.
- High leverage, and management remains open to opportunistic acquisitions.
- Relatively complex corporate structure with several intercompany loan agreements and business transactions in the wider group, which decreases transparency.

Fig. 10: Issuer profile

Sub-asset class	High Yield
Industry/Sector:	Material
Country:	Switzerland
Moody's:	B3, stable
S&P:	B+, stable
Fitch:	n.a.

CIO Credit risk flags

Senior unsecured

< 2 y	2-5 y	5-10 y	> 10 y

Issuer credit outlook Stable

Source: UBS, Bloomberg, as of 12 January 2016.

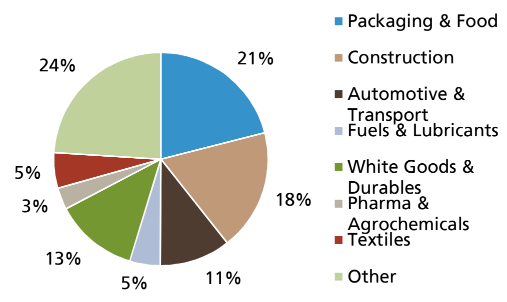
Latest results

Despite a significant 24% decline in revenues, Ineos greatly improved its profitability in 3Q15 as EBITDA increased by 14%. Revenues declined mainly on the back of lower oil prices which led to a subsequent decline in olefin prices both in Europe and the US. On the other hand, Ineos benefited from higher sales volumes and the appreciation of the USD. The North American business continues to benefit from the current feedstock advantage, while several outages by some European competitors limited supply and favorably affected prices. The improved profitability also led to significantly higher cash generation despite the company's acquisition of the remaining 50% interest in the Noretyl cracker for a gross consideration of EUR 200m. As a result, net debt declined by about EUR 176m with net leverage down 0.6x to 2.8x.

Credit view

We have a stable credit outlook on Ineos Group Holdings (IGH). The group benefits from its strong market position as one of the world's largest petrochemical companies, its vertical integration, and beneficial supply economics. Ineos's facilities tend to be of high value, operating at lower costs, and are closely integrated with supplying refineries or connected to olefin-derivatives units. This saves IGH substantial logistics costs and enables it to capture margins across the value chain. The company's capex on system upgrades and capacity improvements also gives it a distinct advantage. Its crackers, for example, can switch to some extent between naphtha and gas as a feedstock, enabling it to adjust to pricing imbalances. Moreover, the company has invested in infrastructure to buy cheaper gas from the US for its European operations, which gives it a distinct advantage over its competitors. The current low feedstock prices and relatively high olefin margins have also helped greatly in improving profitability. That said, we think this trend will eventually reverse especially in light of significant planned capacity additions both in the US and Asia over the medium term.

Fig. 11: Turnover by application



Source: UBS, company reports, as of 3Q 2015.

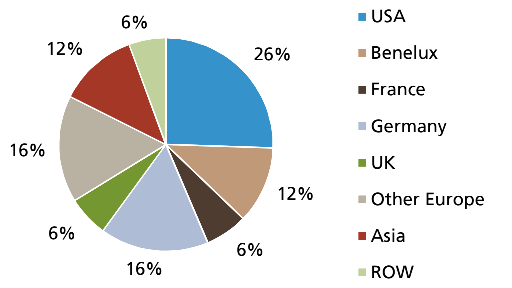
Company Description

Ineos Group is a large diversified petrochemical company engaged primarily in the olefins value chain (base chemicals and plastics) and holds leading positions in key market segments. Ineos operates three business divisions: Olefins and Polymers (O&P) Europe, O&P North America, and Chemical Intermediates. The group is controlled by James A. Ratcliffe (71%), Andrew Currie (14%), and John Reece (14%) through their shareholding in the issuer's ultimate parent company Ineos AG, which is incorporated in Switzerland.

Although gross leverage has declined to 3.7x from 4.1x at the beginning of the year on the back of higher EBITDA, we note that the company has been unable to significantly reduce net debt levels. We continue to view its current capital structure as highly leveraged. With EBITDA growth mostly driven by the US business (EBITDA margin of 36.8% in 3Q15), which currently benefits from the unusually low feedstock prices in combination with relatively high olefin spreads, we expect margins to contract again in the next 2–3 quarters. Free cash flow generation, which has historically been very low, significantly improved to about EUR 1.2bn as of the last 12 months (LTM) through 3Q15. We expect cash generation to remain stronger in the near future as Ineos continues to benefit from the aforementioned tailwinds.

We view the company's liquidity as adequate with about EUR 2.1bn in cash and cash equivalents and EUR 141m available under its EUR 1bn working capital facility. We expect the company to continue to generate positive free cash flow over the next 12 months. Ineos has no significant debt maturities in 2016 with the exception of its securitization facility, which we expect to be extended during the year.

Fig. 12: Turnover by geography



Source: UBS, company reports, as of FY 2014.

Investment view

Since the beginning of the year, most high-beta bonds have traded off markedly. While we do not see much rating upside for the company, we still consider its shorter-dated bonds to be attractive investments, especially following the recent drop in bond prices. We change our view on the EUR 6.5% 2018, USD 6.125% 2018, and EUR 5.75% 2019 bonds to attractive from fair. We continue to view the remaining bonds as fairly valued.

Table 3: Company bonds

CIO view	Issuer	ISIN	Ccy	Cpn	Amt. Out. (M)	Maturity	Ratings (S&P / Fit. / Mdy)	Ind. Off. Pr.	YTM	YTW	ASW	Next call date	Next call px
attractive	INEOS GROUP HOLDINGS SA	XS0928189777	EUR	6.500	500	15/08/2018	B- / n.a. / B3	101.4	5.9%	5.4%	548	11/02/2016	103.3
attractive	INEOS GROUP HOLDINGS SA	USL5078PAA59	USD	6.125	678	15/08/2018	B- / n.a. / B3	99.8	6.2%	6.2%	499	11/02/2016	103.1
attractive	INEOS GROUP HOLDINGS SA	XS0982710740	EUR	5.750	600	15/02/2019	B- / n.a. / B3	99.7	5.9%	5.9%	576	15/02/2016	102.9
fair	INEOS GROUP HOLDINGS SA	USL5078PAD98	USD	5.875	590	15/02/2019	B- / n.a. / B3	99.1	6.2%	6.2%	485	15/02/2016	102.9
fair	INEOS FINANCE PLC	XS1117296209	EUR	4.000	770	01/05/2023	BB- / n.a. / Ba3	93.9	5.0%	5.0%	420	01/05/2018	102.0

Source: Bloomberg, UBS, as of 12 January 2016

Table 4: Summary of financial information

EUR, million	FY Dec 2009 12 months	FY Dec 2010 12 months	FY Dec 2011 12 months	FY Dec 2012 12 months	FY Dec 2013 12 months	FY Dec 2014 12 months	LTM Sept 2015 12 months
Revenue	12,111	16,008	17,586	18,188	16,623	17,221	14,827
EBITDAR	1,693	2,155	2,037	1,704	1,852	2,222	2,564
EBITDA	1,062	1,645	1,714	1,417	1,504	1,870	2,212
EBIT	404	1,149	1,224	492	1,073	1,447	1,808
Interest expense	730	763	655	673	565	433	539
Net income	-659	-57	376	-287	-134	-37	643
Funds from operations (FFO)	449	770	1,028	601	600	1,042	1,408
Working capital	48	-478	-518	-144	-148	-54	230
Cash flow from operations (CFO)	497	292	509	457	452	988	1,638
Capex	268	344	396	462	544	425	421
Disposal of businesses	-32	415	664	0	0	122	201
Free cash flow	229	-53	113	-4	-92	564	1,217
Dividends paid	0	23	14	25	34	66	66
Cash & short investments	662	599	582	1,235	1,130	1,435	2,130
Adj. debt	12,994	11,604	9,437	10,005	10,306	10,832	11,380
Total debt	7,749	7,343	6,593	7,289	7,240	7,708	8,227
Net debt	7,087	6,744	6,011	6,054	6,110	6,273	6,097
EBITDA margin	8.8%	10.3%	9.7%	7.8%	9.0%	10.9%	14.9%
EBIT margin	3.3%	7.2%	7.0%	2.7%	6.5%	8.4%	12.2%
EBITDA/cash interest expense	1.5x	2.2x	2.6x	2.1x	2.7x	4.3x	4.1x
Adj. debt/EBITDAR	7.7x	5.4x	4.6x	5.9x	5.6x	4.9x	4.4x
Debt/EBITDA	7.3x	4.5x	3.8x	5.1x	4.8x	4.1x	3.7x
Net debt/EBITDA	6.7x	4.1x	3.5x	4.3x	4.1x	3.4x	2.8x
FFO/net debt	6.3%	11.4%	17.1%	9.9%	9.8%	16.6%	23.1%
FCF/net debt	3.2%	-0.8%	1.9%	-0.1%	-1.5%	9.0%	20.0%

Source: UBS, company reports, as of 3Q 2015.

Kerling (KERLIN)

Strengths

- Largest producer of PVC and caustic soda in Europe and third-largest worldwide.
- Competitive cost base through supply agreements with parent company Ineos.
- Expected synergies from the Inovyn joint venture with Solvay through streamlined product mix, improved production processes, and optimized raw material purchases.
- Joint venture with Solvay strongly improved credit metrics.

Risks

- Cyclical business with strong competitive pressure. Kerling's principal output products (PVC and caustic soda) are commodity chemicals and exhibit cyclical business dynamics.
- Planned future exit of Solvay will likely increase leverage significantly.
- Less diversified business model and stronger reliance on outside ethylene supply after the asset sales.
- Weak free cash generation owing to high debt servicing costs.

Fig. 13: Issuer profile

Sub-asset class	High Yield
Industry/Sector:	Material
Country:	United Kingdom
Moody's:	Caa1, watch +
S&P:	B-, positive
Fitch:	n.a.

CIO Credit risk flags

Senior unsecured

< 2 y	2-5 y	5-10 y	> 10 y

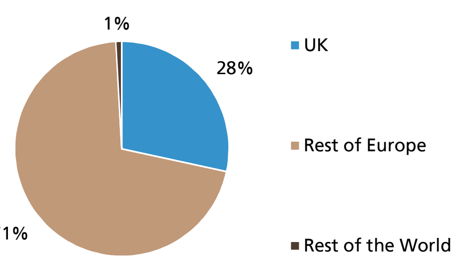
Issuer credit outlook Improving

Source: UBS, Bloomberg, as of 12 January 2016.

Latest results

Although comparison is somewhat limited due to the Inovyn formation as well as several asset disposals, Kerling reported relatively good 3Q15 results. Although revenues declined by EUR 141m to EUR 887m (or by EUR 12m to EUR 818m excluding the disposal of remedy assets), profitability greatly improved. The decline was largely volume-driven as sales prices for both PVC and caustic soda increased, while PVC volumes declined on the back of weaker demand and an outage at one of Kerling's facilities. However, the decline in revenues was more than offset by large cost savings. A 14% decline in ethylene prices in combination with a weaker EUR significantly improved profitability. EBITDA for the quarter increased by 148% y/y to EUR 134m (15.2% margin). Operating cash flow declined to EUR 48m (from EUR 94m in 3Q14) largely due to adverse working capital movements (a concern when feedstock and inventory prices are falling). Net debt declined slightly (by at least 10%) to EUR 890m (EUR 956m, as of FY2014) driven by the asset disposal.

Fig. 14: Revenues by region



Source: UBS, Company reports, as of FY 2014.

Credit view

We change our credit outlook on Kerling to improving from stable following the formation of the Inovyn JV which, in combination with the strong results, led to a significant improvement of the company's credit metrics. We expect earnings to continue to grow, supported by increasingly low feedstock prices and ongoing synergies between the two JV partners. Increased specialization of their plants, better pricing power for the purchase of raw materials and energy, as well as cost savings from a combined marketing and sales force should support margins. The ongoing European recovery should also lead to higher demand in the construction industry, which is one of the main end-consumers of many of its chlor-vinyl products. Although the company's caustic soda division showed signs of improvement, we remain cautious as the pulp and paper industry (one of the key consumers of caustic soda) in Europe is still in a structural decline. Overall we are optimistic about the business outlook, but still see downside risks due to the high cyclicality of the industry.

Company Description

Kerling is one of the leading Western European producers of PVC, caustic soda, and caustic potash as well as brine and water chemical products. On 1 July 2015, most of Kerling's chlor-vinyls activities were brought into a joint venture with a subsidiary of Solvay SA. The joint venture is named Inovyn and operates 17 sites in eight countries. Kerling is indirectly owned by INEOS AG and is based in the United Kingdom.

Kerling's net leverage strongly improved during the past nine months to 4.3x from 8.4x at the beginning of the year. Proceeds from asset sales helped reduce net debt, while EBITDA increased by 110% on an LTM basis. Absent a severe market downturn or strong oil price recovery, we expect further EBITDA growth as synergies from the JV materialize. That said, we still view the free cash flow generation as weak and do not expect a material reduction in net debt. In addition, we see the risk of a potential releveraging once Solvay exits the JV in about three years. Overall, we still expect a rating upgrade by both S&P and Moody's from the current low levels within the next 12 months.

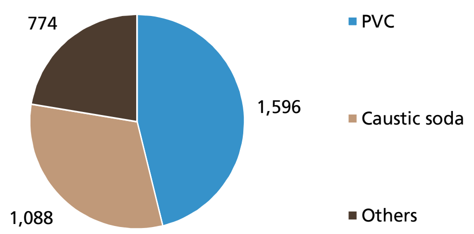
We view Kerling's liquidity as rather weak despite recent improvements. It had EUR 67m in cash and cash equivalents as of 30 September 2015 and EUR 10m available under its credit facility. In addition, Kerling has access to a EUR 300m receivables securitization facility, of which EUR 99.3m has been drawn. We expect liquidity to improve over the next quarters as the adverse working capital movements are expected to reverse. Absent a successful bond refinancing, we think Kerling would be unable to repay its 2017 bond, which increases the company's credit risk in our view. We therefore amend our credit risk flag to reflect this possible scenario.

Investment view

We change our view on Kerling's 10.625% 2017 bond to expensive from fair as we expect this bond to be refinanced in the near future. The bonds become callable at par starting February, and with a current price of 100.9, we see limited value in purchasing these bonds.

Fig. 15: Product sales volumes

In kilotonnes



Source: UBS, Company reports, as of FY 2014.

Table 5: Company bonds

CIO view	Issuer	ISIN	Ccy	Cpn	Amt. Out. (M)	Maturity	Ratings (S&P / Fit. / Mdy)	Ind. Off. Pr.	YTM	YTW	ASW	Next call date	Next call px
expensive	KERLING PLC	XS0480857415	EUR	10.625	785	01/02/2017	B- / n.a. / Caa1 /*+	100.7	9.9%	1.6%	182	11/02/2016	100.0

Source: UBS, Bloomberg, as of 12 January 2016.

Table 6: Summary of financial information

EUR, million	**FY Dec 2012** 12 months	**FY Dec 2013** 12 months	**FY Dec 2014** 12 months	**LTM Sept 2015** 12 months
Revenue	2,646	2,554	2,476	2,636
EBITDA	149	179	153	321
EBIT	21	25	9	170
Interest expense	99	98	99	100
Net income	-64	-54	-97	-177
Funds from operations (FFO)	46	48	41	190
Working capital	-54	76	-3	-149
Cash flow from operations (CFO)	-7	124	38	41
Capex	85	67	69	74
Disposal of businesses	4	-2	1	409
Free cash flow	-93	57	-31	-33
Cash & short investments	52	55	38	67
Total debt	1,214	1,207	1,320	1,437
Net debt	1,162	1,152	1,282	1,370
EBITDA margin	5.6%	7.0%	6.2%	12.2%
EBIT margin	0.8%	1.0%	0.3%	6.5%
EBITDA/cash interest expense	1.5x	1.8x	1.5x	3.2x
Debt/EBITDA	8.2x	6.7x	8.6x	4.5x
Net debt/EBITDA	7.8x	6.4x	8.4x	4.3x
FFO/net debt	4.0%	4.2%	3.2%	13.8%
FCF/net debt	-8.0%	4.9%	-2.4%	-2.4%

Source: UBS, company reports, as of 3Q 2015.

Perstorp (PERHOL)

Strengths

- Leadership position in most of its key markets and longstanding customer portfolio.
- Diversified product portfolio within niche chemical segments, where it is in most cases among the top three players.
- Above market EBITDA margins commensurate with a Ba rating and resilient sales despite cyclical end-customer industries.
- Involvement of a strong sponsor (PAI Partners) that recently sold a major equity investment, leaving it with additional cash to support the business if needed.

Risks

- Intermediate chemical producer with a highly cyclical business and a limited ability to influence demand or profitability.
- Significant leverage in combination with low free cash flow generation limits ratings upside in our view.
- Highly exposed to changes in raw material costs as well as its reporting currency, the Swedish krona (SEK appreciation negatively affects profitability but reduces debt and interest expenses).
- Complex product portfolio. The group's wide range of products leaves it with no clear earnings driver.

Fig. 16: Issuer profile

Sub-asset class	High Yield
Industry/Sector:	Material
Country:	Sweden
Moody's:	Caa1, stable
S&P:	CCC+, stable
Fitch:	n.a.

CIO Credit risk flags

Senior unsecured

< 2 y	2-5 y	5-10 y	> 10 y

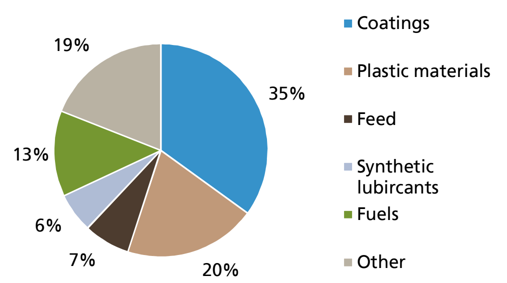
Issuer credit outlook Stable

Source: UBS, Bloomberg, as of 12 January 2016.

Latest results

Although revenues declined by about 2% in 3Q15 mainly due to the scheduled maintenance shutdown at one of its facilities, Perstorp reported good results. While volumes decreased by 4% compared to a year ago, organic volume-based sales increased by 3% excluding the maintenance shutdown. Sales prices decreased by 6% y/y as lower raw material prices affected prices of downstream derivatives as well. The depreciation of the Swedish krona offset most of the effect and positively contributed 7% to net sales (SEK 35m to EBITDA). Year-over-year EBITDA increased for the ninth consecutive quarter to SEK 420m (15.1% margin). Despite higher operating earnings, free cash flow decreased by SEK 294m mainly on the back of adverse working capital movements and slightly higher capex. In combination with the SEK depreciation, gross debt increased by SEK 1.6bn, but overall leverage still declined to 7.6x from 9.0x since the beginning of the year.

Fig. 17: Net sales by market segment



Source: UBS, company reports, as of 3Q 2015..

Credit view

We maintain our stable credit outlook. We believe Perstorp will continue to benefit from its higher-growth niche products, well-integrated operations, and diverse product mix. In addition, we expect raw material prices to remain low and do not expect a meaningful appreciation of the SEK against the USD or EUR. We therefore see further potential for modest EBITDA growth given that 2015 results were negatively affected by several shutdowns. That said, we note that the company still operates in a highly competitive industry with a number of players such as BASF having greater financial flexibility. We therefore see increasing risk for further pricing pressure amid low oil prices.

Despite Perstorp's improved performance over the recent quarters, we currently view a rating upgrade as unlikely given the high leverage of 7.6x. The company is burdened with more than SEK 13bn, causing

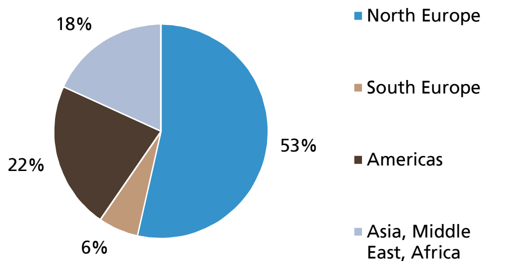
Company Description

Perstorp is a Swedish-based highly diversified intermediate specialty and fine chemical manufacturer. The group mainly focuses on additives and performance-enhancing products and caters to diverse end-markets, predominantly in coatings, plastic processing, and automotive industries. The group has a 130-year-old history and is owned by PAI Partners (86%) and the group's management and other employees (14%) through an intermediate holding company Financière Forêt S.à.r.l.

associated interest expenses of SEK 1.2bn as of LTM 3Q15. Perstorp is therefore struggling to generate meaningful cash flows, which could be used to lower the company's debt. Absent meaningful asset sales, we also see limited room for reducing the company's debt burden.

Perstorp had SEK 648m of unrestricted cash (SEK 232m restricted) in addition to SEK 418m of undrawn capacity under its revolving credit facility (SEK 550m in total). While we think liquidity for the next 12 months is adequate to meet ongoing business expenses, we note that access to the facility is subject to meeting maintenance covenants, including minimum cash interest coverage of 1.25x, maximum leverage of 9.5x, and minimum LTM EBITDA of SEK 940m. We currently see adequate headroom under all covenants. That said, liquidity could become an issue in case Perstorp is unable to refinance its outstanding bonds in due time as all of its bonds mature between May and August 2017.

Fig. 18: Net sales by geography



Source: UBS, company reports, as of 3Q 2015.

Investment view

Although Perstorp's bonds are one of the highest yielding bonds within our coverage (outside the energy sector), we currently do not deem them attractive. All of the bonds become callable starting May 2016 at par, which limits the price upside in our view. Given that all of the bonds mature in 2017, we see a higher chance for selective refinancing prior to their maturity. We therefore continue to view them as fairly valued.

Table 7: Company bonds

CIO view	Issuer	ISIN	Ccy	Cpn	Amt. Out. (M)	Maturity	Ratings (S&P / Fit. / Mdy)	Ind. Off. Pr.	YTM	YTW	ASW	Next call date	Next call px
fair	PERSTORP HOLDING AB	XS0855179536	EUR	9.000	270	15/05/2017	CCC+ / n.a. / B2	100.9	8.2%	6.1%	621	11/02/2016	104.5
fair	PERSTORP HOLDING AB	USW64150AA84	USD	8.750	380	15/05/2017	CCC+ / n.a. / B2	98.5	10.0%	10.0%	887	11/02/2016	104.4
illiquid	PERSTORP HOLDING AB	USW64150AB67	USD	11.000	370	15/08/2017	CCC- / n.a. / Caa2	100.9	10.4%	8.3%	765	11/02/2016	105.5

Source: Bloomberg, UBS, as of 12 January 2016

Table 8: Summary of financial information

SEK, million	FY Dec 2010 12 months	FY Dec 2011 12 months	FY Dec 2012 12 months	FY Dec 2013 12 months	FY Dec 2014 12 months	LTM Sept 2015 12 months
Revenue	10,600	11,297	10,036	10,343	11,084	11,323
EBITDA	1,649	1,544	1,277	1,095	1,269	1,717
EBIT	619	584	654	-9	633	1,036
Interest expense	673	520	468	785	1,031	1,209
Net income	-316	-405	13	-1,891	-1,786	-1,314
Funds from operations (FFO)	1,025	986	551	226	257	396
Working capital	-211	68	-384	-213	720	363
Cash flow from operations (CFO)	814	1,054	167	13	977	759
Capex	889	592	490	735	837	656
Free cash flow	-75	462	-323	-722	140	103
Cash & short investments	395	453	678	905	1,019	880
Total debt	12,264	11,147	10,522	10,436	11,420	13,011
Net debt	11,869	10,694	9,844	9,531	10,401	12,131
EBITDA margin	15.6%	13.7%	12.7%	10.6%	11.4%	15.2%
EBIT margin	5.8%	5.2%	6.5%	-0.1%	5.7%	9.1%
EBITDA/cash interest expense	2.5x	3.0x	2.7x	1.4x	1.2x	1.4x
Debt/EBITDA	7.4x	7.2x	8.2x	9.5x	9.0x	7.6x
Net debt/EBITDA	7.2x	6.9x	7.7x	8.7x	8.2x	7.1x
FFO/net debt	8.6%	9.2%	5.6%	2.4%	2.5%	3.3%
FCF/net debt	-0.6%	4.3%	-3.3%	-7.6%	1.3%	0.8%

Source: UBS, company reports, as of 3Q 2015.

UBS CIO risk views

Credit risk flags

CIO attaches a credit risk flag to the instruments under its coverage. Credit risk is assessed based on the remaining tenor and / or instrument type. The flag indicates the likelihood that a holder of the instrument will not receive a coupon or principal payment when it comes due. For subordinated and hybrid instruments, which are usually callable and have a remote or no fixed maturity date, we apply one uniform credit risk flag per issuer and instrument type. The idea is to reflect the possibility of contractual trigger events or regulatory intervention occurring. Either can impose losses on bondholders regardless of the remaining term of the instrument or a specific issuer default event. Credit risk flags only indicate our view of the riskiness of a particular instrument. Credit risk flags should not be seen as recommendations to buy, hold or sell. In fact, any combination of risk flags and relative value recommendations is possible.

Very low credit risk

We believe that the probability of debt payments not being made when they come due is very low (cumulative probability of less than 2%).

Medium credit risk

We believe that the probability of debt payments not being made when they come due is low to medium (cumulative probability of non-payment between 2% and less than 20%).

High credit risk

We believe that the probability of debt payments not being made when they come due is at least one in five cumulatively.

Issuer credit outlook

We complement the instrument-specific risk information of the credit risk flags by indicating our outlook for the credit quality of an issuer over the next 12 months. Depending on instrument pricing, all combinations of an issuer credit outlook and relative valuation recommendations are possible.
Improving: We expect the credit profile of the issuer to improve, to an extent that may result in upgrades by rating agencies.
Stable: We do not expect the credit profile of the issuer to change meaningfully.
Deteriorating: We expect the credit profile of the issuer to deteriorate, to an extent that may result in downgrades by rating agencies.

UBS CIO valuation views

Relative value bond recommendations

Our relative value bond recommendations are based on an average investment horizon of six to 12 months. They reflect our assessment of a bond's attractiveness relative to comparable instruments under CIO coverage. Comparable instruments typically exhibit similar credit quality, are denominated in the same currency, belong to the same segment of the bond market, and have a similar remaining tenor until redemption.
Views on a particular instrument can change within the six- to 12-month time frame, and those that apply to one instrument do not necessarily apply to others of the same issuer. Views on a particular instrument may be withdrawn if it does not have a sizeable basket of comparable instruments under CIO coverage.

attractive

Bonds seen as “attractive” are expected to generate a total return exceeding the average return of comparable instruments. Our recommendation can stem from a positive view on the issuer’s credit profile not fully reflected in the price, unduly high risk premiums, our take on an instrument's call probability, the risk of coupon deferrals, and external factors including regulatory intervention.

fair

Bonds seen as "fair" are expected to produce a total return broadly in line with the average return of comparable instruments.

expensive

Bonds seen as "expensive" are expected to earn a total return that is less than the average return of comparable instruments. Our recommendation can stem from a negative view on the issuer’s credit profile not fully reflected in the price, unduly tight risk premiums, our take on an instrument's call probability, the risk of coupon deferrals, and external factors including regulatory intervention.

Sell recommendations

Sell

A Sell recommendation is assigned when the risk of an adverse outcome for an instrument exceeds what is reflected in its current valuation. Such situations can include those in which the instrument appears likely to post negative total returns until redemption, either due to a highly negative yield to maturity or an imminent call at a price below market valuations.

For details please see "Understanding bonds: A guide to CIO's credit offering", published 22 January 2019.

Appendix

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Appendix

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