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China Commodities Watch: Steel Mills Move House

July 15, 2019

Key Takeaways

- China's steel-mill relocations should enhance industry clustering and logistics.
- Large capex requirements will force some mills to sell out or merge, increasing market concentration.
- Relocations will focus more on upgrading output than reducing capacity.

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Chinese steel mills are relocating to reduce urban pollution and improve industrial clustering. S&P Global Ratings anticipates the process will help streamline the industry and boost efficiency. The cost of moving house could put strain on some steel companies' financials, however this should further the consolidation trend in the country's steel sector.

Led by China's top steel-producing provinces--Hebei, Shandong and Jiangsu--many regions have announced relocation plans for steel mills within their reign. Since late 2017, announced plans amount to at least 100 million tons per annum (mtpa) covering various cities in different provinces, or about 10% of national total capacity.

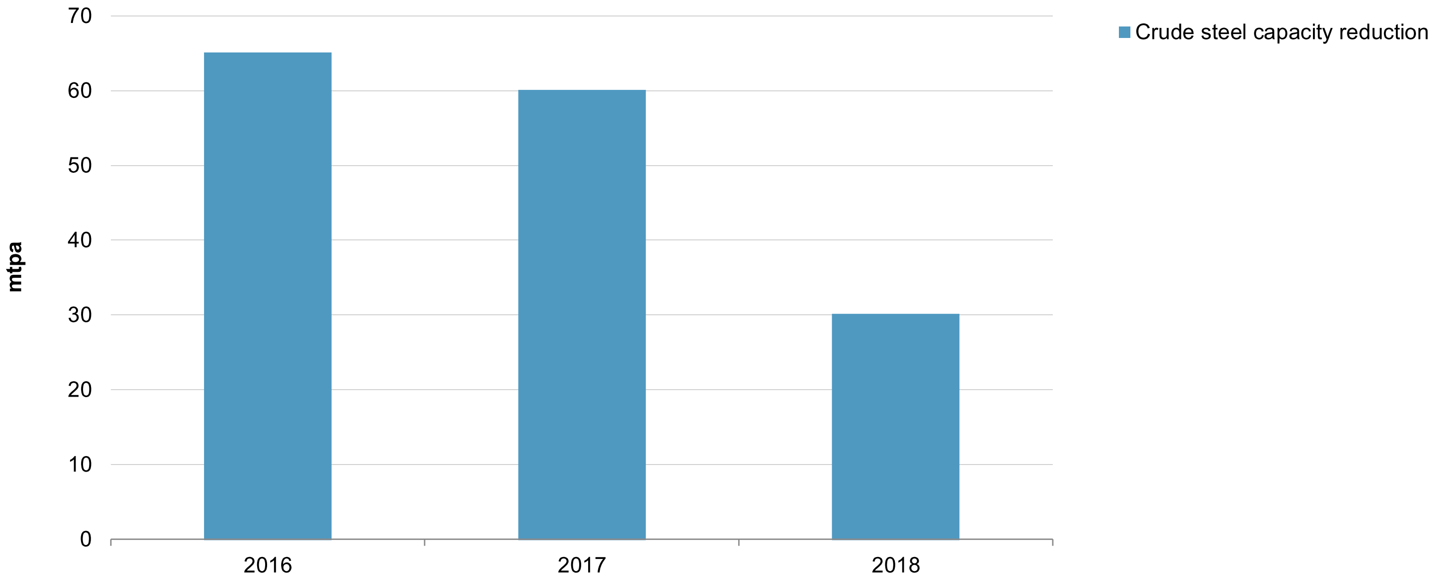
Relocating steel mills will help but not complete reform guidelines set by state planners. Under a plan devised by the Ministry of Industry and Information Technology (MIIT), the overriding targets to be reached by 2025 are: (1) structural adjustments with reduced capacity; (2) increased market concentration led by several large groups; (3) improved efficiency and profitability.

Clustering Takes Precedence Over Reducing Capacity

In our view, the key objective of relocation is to improve logistics and geographic layout by moving facilities out of populated cities and clustering them in coastal areas near ports. These objectives take precedence at this juncture because other goals, such as de-capacity, are already ahead of schedule. China has reduced crude steel capacity by 150 mtpa since 2016, according to China Iron and Steel Association. This exceeds timeline targets set by the MIIT's planning targets of reducing 100-150 mtpa by 2020 (see chart 1).

Chart 1

China Reduced Steel Capacity For Three Years Running



mtpa--million tons per annum. Source: S&P Global Platts.

We also believe that urban pollution is no longer the headline issue for relocation. Steel production is less polluting than in the past, due to large investments into monitoring and controlling pollution. Whether located in urban areas or elsewhere, the mills still need to meet new, tighter emissions standards.

Logistics should improve as mills relocate to coastal areas near ports...

Mills will focus on improving logistics and location by moving from inland to coastal areas. In our view, coastal areas have geographic advantages due to the China steel sector's heavy reliance on imported iron ore. We note that many steel mills have started to expand their presence near deep-water ports that can berth large ore carriers from Australia and Brazil. These include Qingdao Port and Rizhao Port in Shandong province; Caofeidian Port and Jingtang Port in Hebei; and Zhanjiang Port in Guangdong.

..or to industrial parks.

We also see moves to industrial parks, which facilitates consolidation and industry clustery. Shandong province recently announced a plan to consolidate steel capacity spread over 12 cities to the coastal regions of Rizhao-Linyi and to inland industrial parks around Laiwu-Taizhou by 2023. Jiangsu province has designated a range of coastal industrial parks to harbor steel capacity relocated from other cities. These moves are influential because Jiangsu and Shandong produced 106 and 74 million tons of crude steel in 2018, ranking the second and third after Hebei, accounting for 11% and 8% of the national total, respectively.

We believe the Chinese government will try to prevent steel mills from increasing capacity in the name of relocation. Still mills are supposed to adhere to the principle of "replacement at reduced capacity," usually 80% of original capacity. We note however that overall steel capacity began creeping up again in 2018, and that China's crude steel output set a record in 2018 and again in the first half of 2019. There seems to be no clear penalty for building more capacity, and good profitability could boost tax income for local governments, encouraging them to loosen their grips. Crude steel capacity is estimated to reach 1,150-1,200 mtpa by end of 2019, according to S&P Global Platts.

Relocation Will Also Give Rise To Fewer And Larger Players

Moving steel mills to coastal areas or industrial parks will accelerate industry consolidation and market concentration, thereby addressing one of the three major pillars of industry restructuring. The government's target is for the top-10 steel mills to account for 60% of China's total capacity by 2025, compared with 34% in 2015. It also expects to see three to four large steel manufacturing groups with capacity of over 80 mtpa each.

We believe large steel mills, especially state-owned enterprises (SOEs), will more likely drive market concentration through more mergers and acquisitions in the next five to 10 years. China Baowu Steel Group Corp. Ltd., formed by the merger of Baosteel and Wuhan Iron and Steel (WISCO), recently acquired Magang (Group) Holding Co. Ltd. by taking a 51% stake from the Anhui province State-owned Asset Supervision and Administration Commission (SASAC) at no consideration. Baowu's post-deal capacity has reached about 90 mtpa, making it the second-largest steel mill globally after ArcelorMittal. Two out of Baowu's four major production bases are close to Magang, which is located at the mouth of the Yangtze River, so this provides some synergies in transportation and raw materials procurement.

Baowu is the world's second-largest steelmaker by capacity, following its absorption of Magang.

Private steel mills will also look for alliances when replacing their smaller and older facilities. Combining capacity will help them achieve economies of scale and synergies, in our view. In Tangshan city, Hebei province, two privately owned steel mills--Hebei Tianzhu Iron & Steel Group Co. Ltd. and Tangshan Rongcheng Steel Co. Ltd.--will merge and move out of the city. The new entity has commenced the construction of a plant with capacity of 3.6 mtpa to replace their combined 4.5 mtpa old capacity. Tangshan Jianlong Iron and Steel Co. Ltd., and Tangshan Xinbaotai Iron & Steel Co. Ltd., both privately owned, will also merge and build new capacity of 3.2 mtpa, scheduled to be on stream around the end of 2020. Nonetheless, mergers among private mills could be a complicated and lengthy process, as owners negotiate over shareholding structure, control, and the new development plan.

Upgrades Will Add Capex Burdens

During the relocation and construction of new sites, steel mills will upgrade technology and also, in some cases, product offerings, with a slant to higher-value-added products. Many steel facilities are designed to make long-steel products serving construction-related demand, a segment that fit well with the construction and property-led investment of recent decades. This output is low-value-added compared with flat steel products used in sophisticated manufacturing. As China's manufacturing sector also moves up the value chain, demand for premium steel products will rise over time. Relocation provides an opportunity for steel mills to build advanced facilities when constructing new plants.

As they relocate, mills will upgrade technology and product offerings.

However, capital expenditure (capex) needs could constrain certain steel mills from upgrading. Relocation will make some mills vulnerable financially, in our view. Most steel mills barely survived the overcapacity that long plagued the industry, eking by on chronic thin margins or suffering periodic losses. Steel prices recovered during the past couple years only when capacity was removed, but the sector's financial buffers remain fragile. Relocating or rebuilding steel mills will require substantial capex. Past projects had typical price tags of Chinese renminbi (RMB) 50 billion for an 8-10 mtpa-capacity project, excluding pollution control facilities, which adds another 10%-20% to investment costs.

Table 1

Capital Expenditure For Past Steel Projects

Major projects	Date announced	Expected completeion	Total investment (bil. RMB)	Total capacity (mtpa)	Unit investment (RMB/ton)
Shougang Jingtang Phase I	2005	2010	67.7	10.0	6,770
Baosteel Zhanjiang	2012	2016	58.0	10.0	5,800
Fengnan Iron and Steel	November, 2017	2019	32.0	7.7	4,156
Guangxi Liuzhou Fangcheng Port Iron and Steel	December, 2017	End-2019	64.0	10.0	6,400
Meishan Steel	December, 2018	2022	50.0	10.0	5,000
Tangshan Tiancheng	March, 2019	End-2020	12.0	3.6	3,333

mtpa--Million tons per annum. RMB--Chinese renminbi. bil.--billion.

Relocation could cause releveraging

The heavy cost burden of relocations will likely reverse recent sector-wide deleveraging efforts. Even with subsidies to help cover costs, we expect an increase in leverage in the short term, since many subsidies are paid after the fact. This will be particularly so for weaker companies. Baoshan Iron & Steel Co. Ltd. (Baoshan) is one of the few major companies that has sufficient operating cash flows to be able to finance its relocation. Baoshan plans to relocate its facilities in Meishan, Nanjing, to a coastal city in Jiangsu province, as announced in December 2018. Total investment for the 8-10 mtpa project will be RMB50 billion over the next three years. After moving out of its original base in Nanjing city, the company will likely receive compensation from the local government, based in part on the value of the land being vacated.

Moving house is costly and will strain the weaker players.

Previous relocations provide some idea of the model. It took Shougang Group five years and RMB67.7 billion to relocate out of Beijing and build a new type of plant from scratch in Caofeidian, Hebei province. State support including access to banking lines helped underwrite the process. The new plant, completed in 2010, is located in a comprehensive industrial park, focuses on higher value-added products, and has been profitable since steel prices began recovering a few years ago.

Weaker mills might have more trouble borrowing in advance to fund relocations. Hebei province, for example, offered some favorable policies on land development, to steel mills that needed to relocate. But it will take some time before mills can eventually receive such subsidies--and they're not guaranteed.

The financial burdens of relocation may lead smaller players with weak balance sheets to exit the market or sell their capacity quota to large mills. Hebei province has an ambitious plan of relocating 50 mtpa capacity and further reducing 28 mtpa in 2019 and 2020. It produced 25% of China's crude steel in 2018--which is more than the crude steel output in India and Japan, the world's second and third largest steel producers, combined. Overall, the province has reduced total crude steel capacity to 220 mtpa in 2018 from the peak of more than 300 mtpa in 2013. Of this, more than 120 mtpa is located in the city of Tangshan--from where 13 enterprises will be relocated to a coastal industrial park, according to a government plan announced in April 2019. We estimate the number of steel mills in Hebei will be reduced to less than 30 from 40.

Overall, China aims to shut down more outdated steel mills and reduce crude steel capacity below 1,000 mtpa by 2025. We believe relocation will help, but more effort will be required to achieve the more balanced steel sector that state planners envision.

Sector Updates: Oil, Coal, Steel, And Chemicals

Oil: Brent softened in 2Q2019

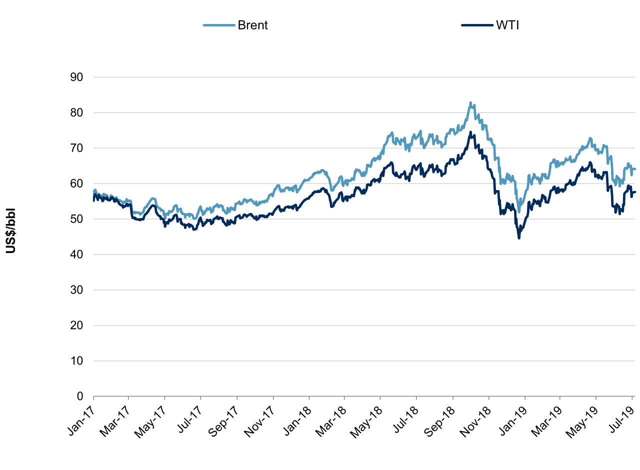
The Brent oil price has generally softened in the second quarter. It fell from ~$70 per barrel in early April to ~$60 per barrel in early June mainly due to concern about the trade dispute between China and the U.S. It then rebounded to ~$65 per barrel lately after both China and the U.S. agreed to restart trade negotiation, and OPEC extended its production cuts for another nine months until the end of March 2020. Our assumption of Brent is $60 per barrel for the rest of 2019 and 2020 and $55 per barrel from 2021 and onwards in light of rising U.S. production and new pipeline capacity will alleviate the takeout issue of rising Permian production.

We estimate China's refining margin weakened again in the second quarter, especially in June, as crude oil prices fell. As Brent recovered from late June, the refining margin should improve in the third quarter if the oil price stays at current levels. We have not factored in any potential benefit from the new sulfur requirement by the International Maritime Organization, effective from Jan. 1, 2020 to our rated refiners. We believe it still remains to be seen how much a benefit this will be to refiners.

In response to President Xi Jinping's call for larger domestic exploration and production spending to increase oil and gas output, China's three national oil companies have budgeted higher capex in 2019. Recently, PetroChina Co. Ltd. and China Petroleum & Chemical Corp. (Sinopec) signed framework agreements on cooperation in 81 exploration rights in China's Tarim, Junggar. and Sichuan basins. Moreover, Sinopec and CNOOC Ltd. have signed framework agreements on the exploration in Bohai Bay and Beibu Gulf. We see these agreements as a means to increase efficiency and reduce risk in exploration, aiming to raise production at well-controlled costs.

Chart 2

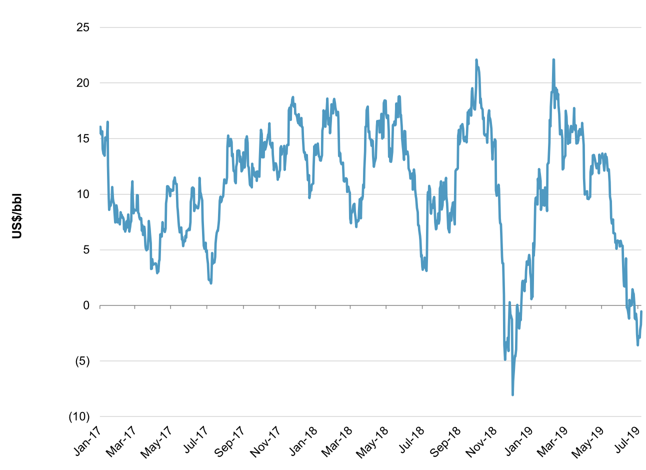
Oil Prices Softened In The Second Quarter 2019



bbl--barrel. Source: Bloomberg

Chart 3

China's Refining Margin Weakened In The Second Quarter 2019



bbl--barrel. Source: National Development and Reform Commission, Bloomberg, company data.

Coal: Prices face downward pressure in 2019

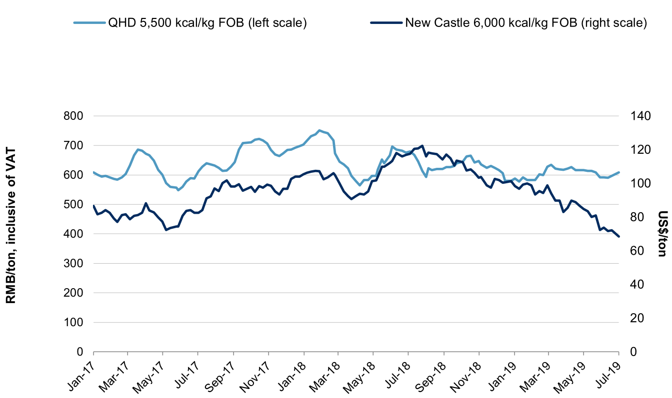
China's Qinhuangdao coal price (5,500 kcal/kg) averaged RMB609 per ton in the second quarter this year, down 3% year over year from RMB630 per ton. We expect China's coal prices to weaken in the second half due to rising domestic supply and softening demand.

China's raw coal production reached 333 million tons in June 2019, rose 10.4% year over year, the highest growth so far this year. China's coal production will likely continue to increase given there will be 200 million tons of new capacity in 2019 and 2020. In addition, coal mines in Shaanxi and Shandong provinces that were suspended in late 2018 due to mining accidents have been gradually resuming production.

On the demand side, China's coal-fired power generation further weakened in the second quarter. Coal-fired generation was flat in June and year to date. This is partly due to slowing power demand because of slowing economic activity, and partly due to higher generation from renewable sources.

Chart 4

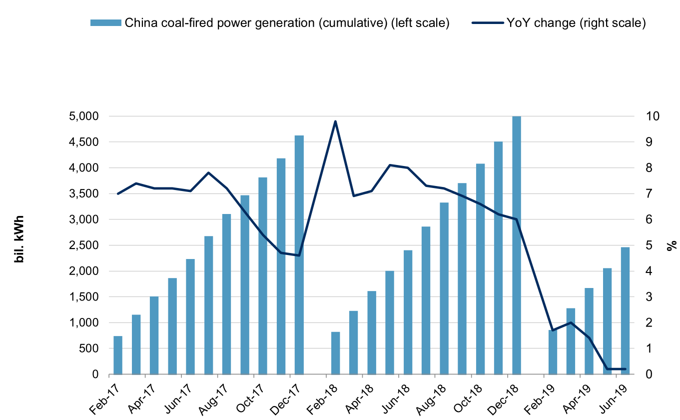
China's Qinhuangdao Coal Price Edged Down Slightly In Recent Months



RMB--Chinese renminbi. VAT--Value-added tax. QHD--Qinhuangdao. FOB--Freight on board. Source: Bloomberg

Chart 5

China's Coal-Fired Power Generation Was Flat In May 2019 Year To Date



bil. kWh--billion kilowatt hours. Source: China's National Bureau of Statistics.

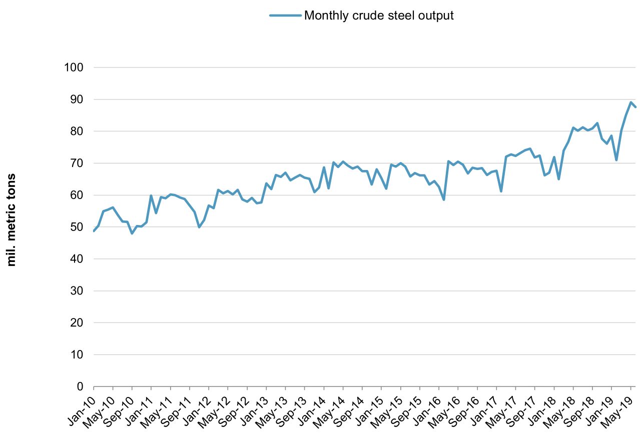
Steel: Production cut from Tangshan has limited impact on squeezed margin

Iron ore prices will continue weighing on steel margins amid a prolonged supply deficit. S&P Global Platts assessed the 62% Fe Iron Ore Index at $122.60/dry mt CFR North China on July 9, 2019, up 70% year to date. Meanwhile China's crude steel production continues to reach new highs, posting 262 million metric tons for the second quarter of 2019, well supporting the demand for iron ore. Steel margins continued to narrow in Q2 2019.

City officials in Tangshan unexpectedly announced production cuts during the last week of June, which lasts until the end of July. Shortly thereafter Handan, another steel-intensive city in Hebei, ordered 14 steel mills to cut production from July to August 2019. We estimate up to 100,000 metric tons per day of steel output will be affected during that period, or 5% of monthly national pig iron production. This actions relate to worsened air quality in these areas. The impact on steel prices will be limited in our opinion, and will also depend on if the policy will continue as well as the self-discipline of steel mills in execution.

Chart 6

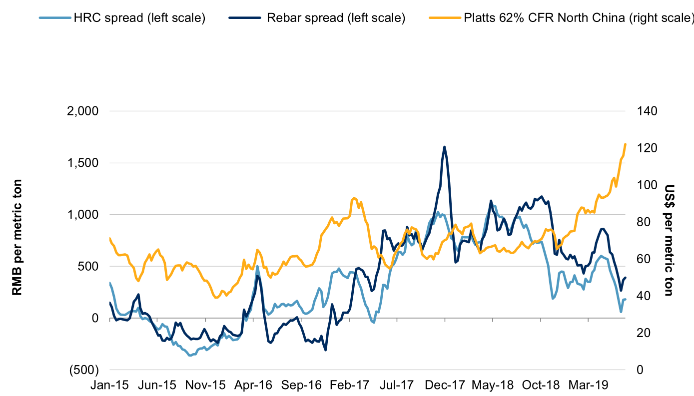
China's Steel Output Has Hit A Record High



bil.--billion.

Chart 7

Steel Spreads Are Narrowing



Note: Steel spreads are based on spot prices. RMB--Chinese renminbi. HRC--Hot rolled coil. Source: S&P Global Platts.

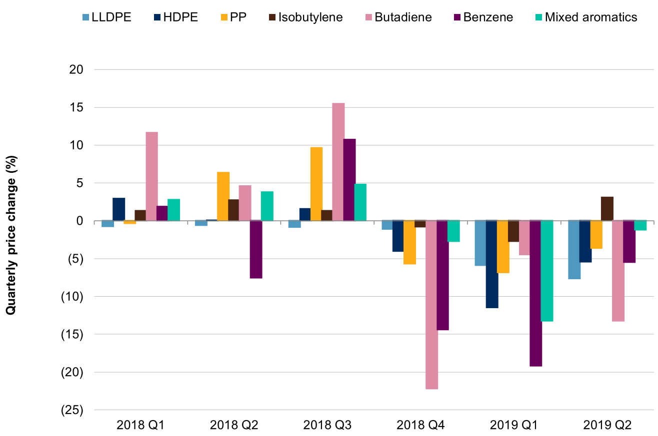
Chemicals: Macro factors continue to challenge margins

Weakening prices will likely continue to pressure domestic chemicals players in upcoming months. The softening domestic economic growth outlook and concerns over U.S.-China trade tension may continue to drag on chemical prices, and sector margins. Although we do not expect the first-order impact from the trade tensions to be significant for domestic players, the ripple effects from uncertainties surrounding OPEC production cuts will likely support feedstock prices and can dampen profitability of domestic players.

Domestic prices for petrochemical products continued to soften in the past quarter (see chart 8) and were in line with seaborne markets. Modest demand combined with capacity additions planned for China and other Asian regions will act as a double whammy for chemicals players in coming months. The retreat of crude oil prices in the past quarter has helped slightly moderate the impact on margins, but OPEC's recent decision to maintain the current level of production cuts will likely keep production costs at elevated levels.

Chart 8

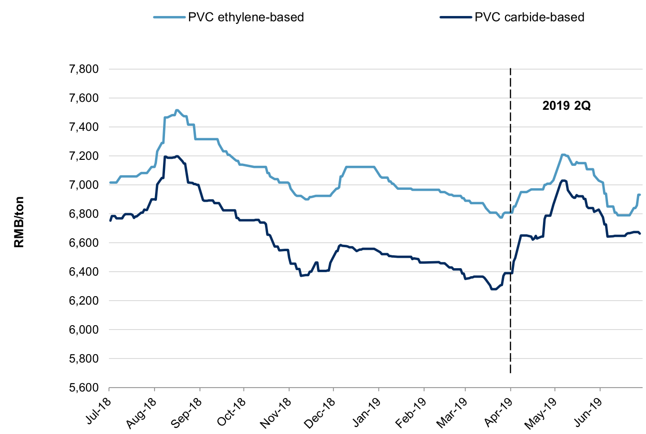
Petrochemical Prices Continue To Slump



LLDPE--Linear low-density polyethylene. HDPE--High-density polyethylene. PP – Polypropylene, Q--Quarter.
Source: Wind, S&P Global Ratings analysis.

Chart 9

PVC Is Showing Resilience In The Second Quarter 2019



RMB--Chinese renminbi. Source: Wind, S&P Global Ratings analysis

PVC price resilience may be tested in the coming months. Supply disruptions and high maintenance activity underpinned domestic PVC prices in the second quarter (see chart 9). In addition to the series of chemical plant accidents in the first half of the year, an explosion of a PVC plant in Inner Mongolia in April 2019 will likely lead to even higher intensity of safety inspections for PVC plants. Higher scrutiny may continue to cause tightness in the market and provide some support to prices.

Having said that, we expect support to the PVC price to be weaker compared with the second quarter. In recent months, producers of about 6 million tons of PVC annual capacity announced outage plans. The price support provided by the high maintenance level will likely be removed as these plants resume production.

Table 2

Ratings List

	Rating as of July 16, 2019	Latest action
Oil & Gas		
China National Petroleum Corp.	A+/Stable/--	
China Petrochemical Corp.	A+/Stable/A-1	
China Petroleum & Chemical Corp.	A+/Stable/--	
China National Offshore Oil Corp.	A+/Stable/--	
CNOOC Ltd.	A+/Stable/--	
China Oilfield Services Ltd.	BBB/Positive/--	
MIE Holdings Corp.		Rating withdrawn on May 14, 2019
CITIC Resources Holdings Ltd.	BB-/Positive/--	Outlook revised to positive on May 21, 2019
Wanda Group Co. Ltd.	B+/Negative/--	Outlook revised to negative on July 11, 2019
Coal		
China Shenhua Energy Co. Ltd.	A+/Watch Neg/--	

Table 2

Ratings List (cont.)

	Rating as of July 16, 2019	Latest action
Yankuang Group Co. Ltd.	BB/Stable/--	
Yanzhou Coal Mining Co. Ltd.	BB/Stable/--	
Shandong Energy Group Co. Ltd.	BB/Stable/--	
Zhongrong Xinda Group Co. Ltd.	B/Negative/--	
Mongolian Mining Corp.	B-/Stable/--	
Steel		
China Baowu Steel Group Corp. Ltd.	A-/Stable/--	
Baoshan Iron & Steel Co. Ltd.	A-/Stable/--	
Baosteel Resources International Co. Ltd.	BBB+/Stable/--	
Bao-Trans Enterprises Ltd.	A-/Stable/--	
Guangyang Antai Holdings Ltd.	B+/Stable/--	
Aluminum		
Aluminum Corp. of China Ltd.	BBB-/Stable/--	
China Hongqiao Group Ltd.	B+/Positive/--	
Qinghai Provincial Investment Group Co. Ltd.	CCC+/Watch Neg/--	
Gold		
China National Gold Group Co. Ltd.	BBB/Stable/--	
China Gold International Resources Corp. Ltd.	BBB-/Stable/--	
Zijin Mining Group Co. Ltd.	BBB-/Stable/--	
Zhaojin Mining Industry Co. Ltd.	BB+/Stable/--	
Shandong Gold Group Co. Ltd.	BBB-/Stable/--	
Other metals		
China Minmetals Corp.	BBB+/Stable/--	
Cement		
Anhui Conch Cement Co. Ltd.	A/Stable/--	
West China Cement Ltd.	B+/Positive/--	
Chemicals		
China National Chemical Corp. Ltd.	BBB/Stable/--	
China National Bluestar (Group) Co. Ltd.	BBB/Stable/--	
Sinochem International Corp.	BBB+/Stable/--	
Sinochem Hong Kong (Group) Co. Ltd.	A-/Stable/--	
Wanhua Chemical Group Co. Ltd.	BBB/Stable/--	
Shanghai Huayi (Group) Co.	BBB-/Positive/--	Outlook revised to positive on June 6, 2019
Shandong Yuhuang Chemical Co. Ltd.	B-/Negative/--	Rating lowered on June 14, 2019
Yingde Gases Group Co. Ltd.	B+/Stable/--	

Table 2

Ratings List (cont.)

	Rating as of July 16, 2019	Latest action
Xinjiang Zhongtai (Group) Co. Ltd.	BB+/Stable/--	

Source: S&P Global Ratings.

Related Research

Research Updates:

- Wanda Group Outlook Revised To Negative On Large Short-Term Debt Maturities; 'B+' Rating Affirmed, July 11, 2019.
- Shandong Yuhuang Chemical Downgraded To 'B-' On Heightened Liquidity Risk; Outlook Negative, June 14, 2019
- Shanghai Huayi Outlook Revised To Positive On Strong Cash Flows And Improved Profitability; 'BBB-' Rating Affirmed, June 6, 2019
- CITIC Resources Outlook Revised To Positive On Improving Financials; 'BB-' Rating Affirmed, May 21, 2019
- MIE Holdings 'CCC-' Rating Withdrawn At Company's Request, May 14, 2019
- Yanzhou Coal 'BB' Rating Affirmed With Stable Outlook; SACP Revised To 'bb' On Improved Financial Buffer, April 30, 2019
- MIE Holdings Corp. Rating Raised To 'CCC-' After Completion Of Exchange Offer; Outlook Negative, April 25, 2019

Bulletins:

- China National Bluestar's Proposed Guaranteed Senior Notes Assigned 'BBB' Rating, July 2, 2019
- Qinghai Provincial Investment Group's Coupon Payments Hinge On Timely Government Support And Self Financing, June 11, 2019
- China Baowu Bolsters Market Position With Magang Deal, June 5, 2019
- Strong Prices Will Enhance Conch And WCC's Downside Buffers, June 4, 2019
- Issue Rating On Yankuang Group's U.S. Dollar Notes Unaffected By Retap, May 8, 2019
- COSL Reports First Q1 Profit In Four Years, April 29, 2019

Full Analyses:

- Anhui Conch Cement Co. Ltd., May 29, 2019
- Yingde Gases Group Co. Ltd., May 15, 2019

- Wanhua Chemical Group Co. Ltd., May 9, 2019

This report does not constitute a rating action.