

# Credit Analysis of Steel Sector Issuers

August 20, 2020

## Key Takeaways

- Relatively large differences exist between steel companies in terms of their business risk profiles. With relatively little variety among Chinese steel products, gauging the business risk profiles of issuers in the industry depends largely on their scale and costs.
- Steel producers also vary in terms of leverage level. Following supply-side reforms, steel companies have seen improving profitability and gained greater control of pressure from capital expenditure. We view steel firms as being in a better position to pay their debts, while some space remains for handling steel price fluctuations or partial increases to capital expenditure.
- In our opinion, among our sampled firms, China Baowu and Bao Steel are strongest in terms of indicative issuer credit quality. HBIS Group, Shougang Group and Ansteel closely follow, but Xining Special Steel's indicative issuer credit quality tends towards a relatively lower level.

## Overview

We have chosen 24 companies representative of the steel sector, and have carried out a desktop analysis by applying our relevant methodologies to public information. Through our analysis, we have arrived at a preliminary view of the range of indicative issuer credit quality among these companies. The business operations of these 24 firms cover the majority of those currently typical of the industry, and their business scale is large. For a full list of the enterprises that make up our sample, please refer to the appendix.

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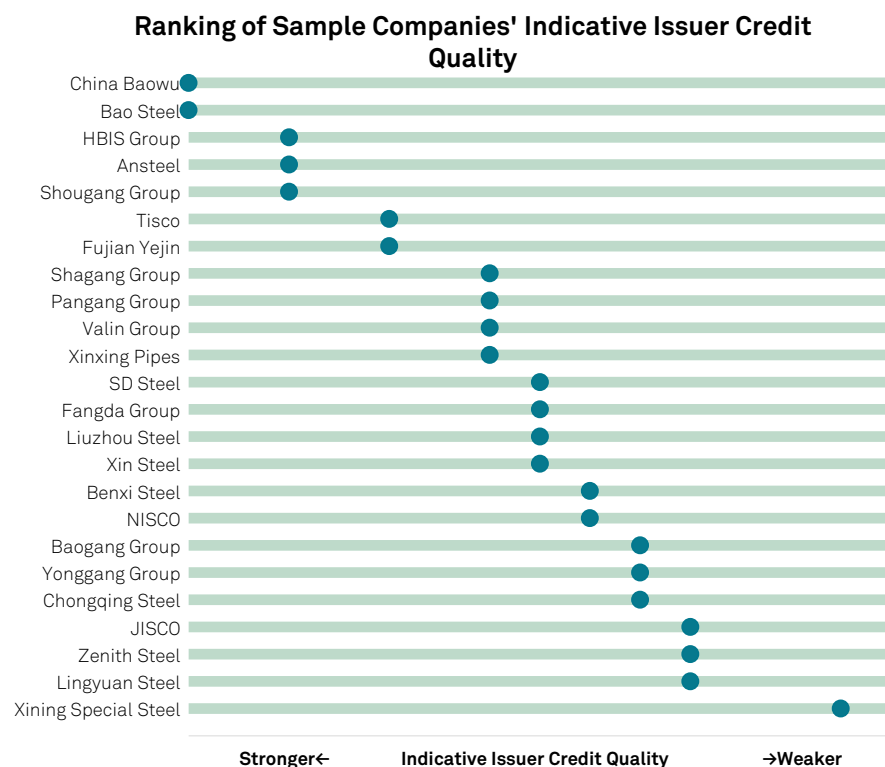
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Chart 1



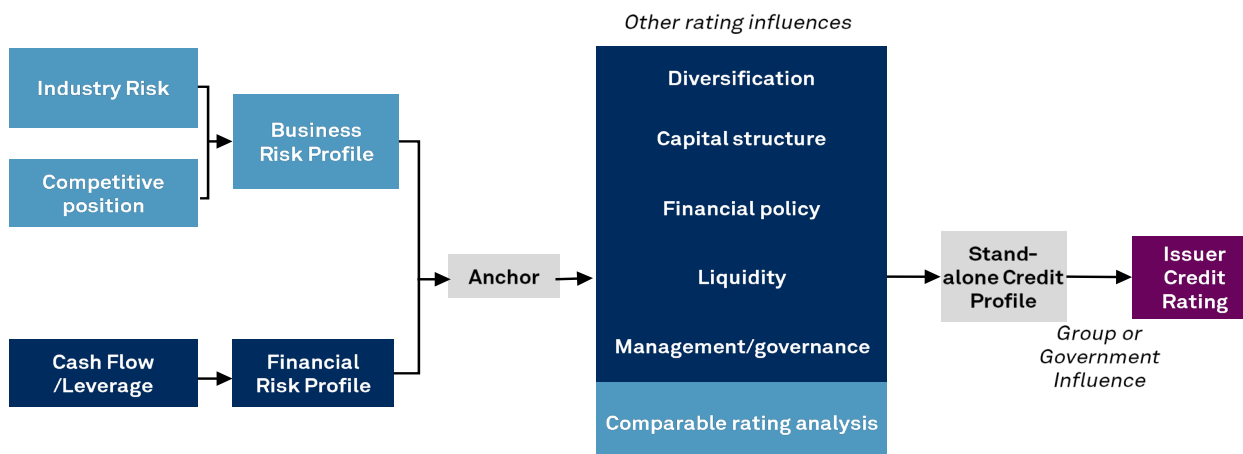
Note: The chart only displays a relative ranking of indicative issuer credit quality.

Source: S&P Global (China) Ratings.

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This report on companies' indicative issuer credit quality uses S&P Global (China) Ratings' corporate methodology framework. When we analyze the credit quality of non-financials, we usually begin with analysis of the entity's business risk profile, before looking at its financial risk profile and other factors to arrive at its Stand-alone Credit Profile (SACP). We then analyze the external support that enterprises can obtain, including group or government support, to arrive at the Issuer Credit Rating (ICR).

Chart 2



Source: S&P Global (China) Ratings.

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## About This Article

S&P Ratings (China) Co., Ltd. (S&P China) has conducted a desktop analysis of a selection of entities, which we have chosen based on their asset sizes, representativeness of most regions and availability of public information. The analysis contained herein has been performed using S&P China Methodologies. S&P China Methodologies and analytical approaches are intended specifically for use in China only, and are distinct from those used by S&P Global Ratings. An S&P China opinion must not be equated with or represented as an opinion by S&P Global Ratings, or relied upon as an S&P Global Ratings opinion.

This desktop analysis has been conducted using publicly available information only, and is based on S&P China's methodologies for corporates. The analysis involves a desktop application of our methodologies to public information to arrive at a potential view of credit quality across sectors. It is important to note that the opinions expressed in this report are based on public information and are not based on any interactive rating exercise with any particular entity. The opinions expressed herein are not and should not be represented as a credit rating, and should not be taken as an indication of a final credit rating on any particular entity, but are initial insights of potential credit quality based on the analysis conducted. This desktop analysis does not involve any surveillance. The opinions expressed herein are not and should not be viewed as recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security.

We have conducted this desktop analysis on individual corporates and present the results contained herein at an aggregate group level. The different sections of this research show the statistics and performance of different groups of entities and the market more broadly against the metrics we generally consider most relevant under our methodologies. Given the desktop nature of this analysis, and that we have not conducted an interactive review with any particular entity, we may have made certain assumptions in lieu of confirmed information and where relevant we may also have attempted to consider any possibility of parent, group, government or other forms of potential support, to inform our view of potential credit quality. S&P China is not responsible for any losses caused by reliance on the content of this desktop analysis.

## Business Risk Profile

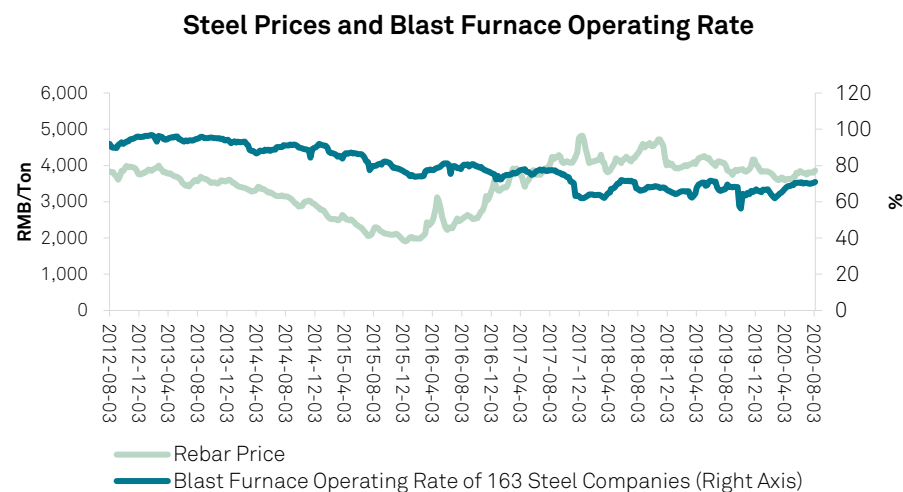
In general, we assess a company's business risk profile by considering its industry risk and competitive position.

### Industry Risk Ranking

In our view, the industry risk ranking of the steel sector is "moderately-high" (4), putting it at a mid-to-high level in our six-tier ranking. We regard Chinese steel enterprises as having relatively strong cyclical, highly similar products and lower industry concentration.

The steel sector is a typical cyclical industry. There is a clear mismatch between changes in supply and demand, leading to periodic fluctuations in steel prices and exposing steel producers' profitability and cash flow to industry cyclical. Since 2016, with the implementation of supply-side reforms, the pattern of supply and demand in the steel sector has changed. Steel companies' operational and financial situations have improved, with the sector entering a new stage of development.

Chart 3

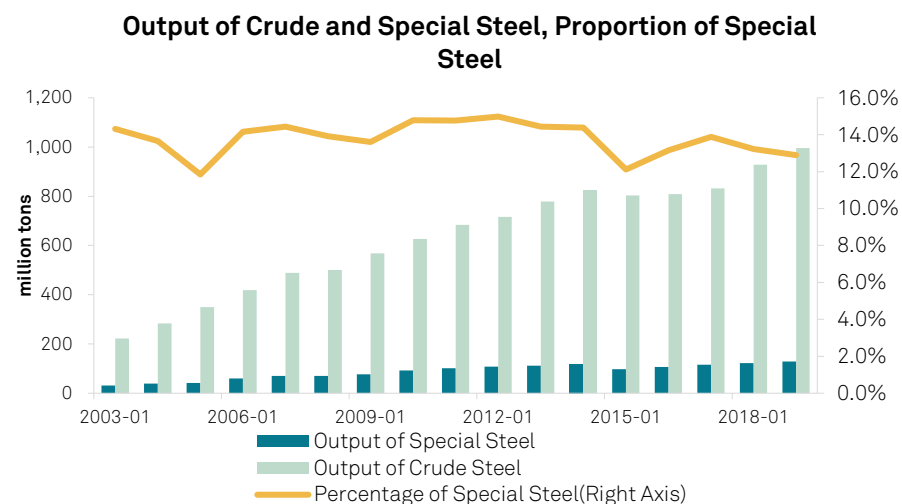


Source: Wind, S&amp;P Global (China) Ratings.

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China's steel industry stands out for being large but lacking in strength, while seeing significant uniformity among its products. China is the world's largest steel producer. In 2019, crude steel output reached 990 million tons, representing more than half of global output. After years of development, China's steel production growth has consistently slowed down, with the industry entering a mature stage. Although China's steel output is large, most products are ordinary steel. In recent years, the proportion of special steel in crude steel output has gradually decreased, reaching only 13% in 2019. In addition, there is a clear lack of differentiation of steel products, and, amid fierce industry competition, there is little added value brought by brand and performance.

Chart 4



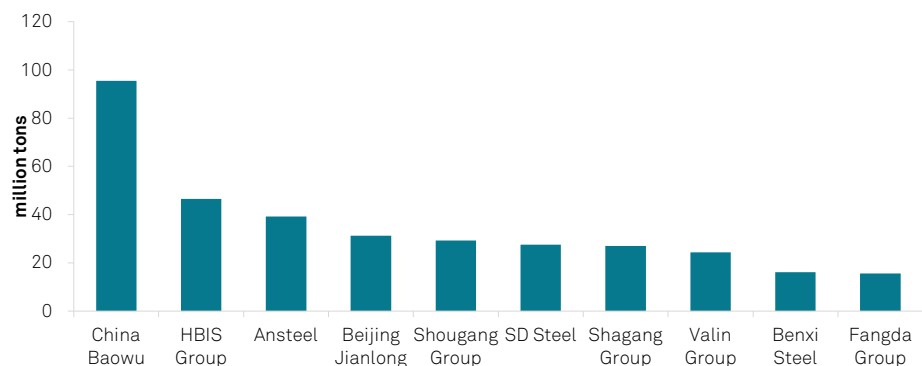
Source: Wind, S&amp;P Global (China) Ratings.

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Another characteristic of the steel industry is its lower industry concentration. Despite increasing after supply-side reforms were introduced, industry concentration remains at a relatively low level. In 2019, the total market share (based on production) of the industry's top 10 firms was only 35%. Lower industry concentration leaves Chinese steel producers in a relatively weaker position when bargaining with upstream international iron ore enterprises which have higher concentration. We view this represents a significant constraint for the development of the industry.

Chart 5

## Top 10 steel producers in China, 2019

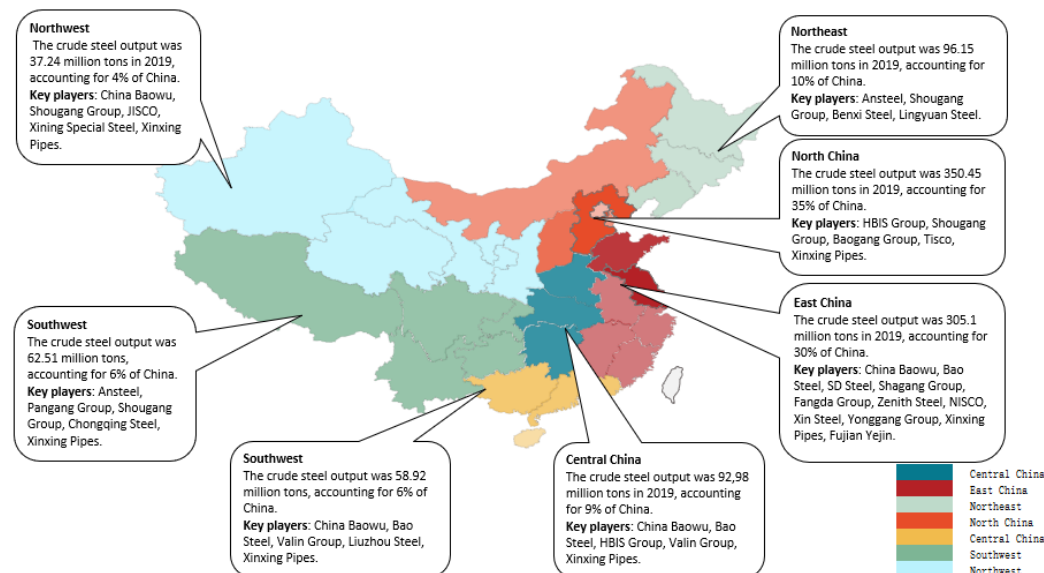


Note: The chart displays the companies' crude steel output.  
 Source: Public information, S&P Global (China) Ratings.  
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In terms of regional distribution, China can be split into seven regional markets: East China, North China, South China, central China, Southwest China, Northwest China and Northeast China. Steel demand in each region is different, with large-scale steel producers in each area. North China has some advantages in terms of its mineral resources and transportation, with its crude steel output ranking first and accounting for about 35% of China's total output. Competition is more intense in East China, which has a significantly higher number of steel enterprises than other regions due to its proximity to coastal ports and high demand for steel from downstream industries.

Chart 6

## Geographic Distribution of Steel Producers



Source: Wind, public information, S&P Global (China) Ratings.  
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## Analysis of Competitive Position

We generally consider the competitive position of an enterprise from four aspects: competitive advantage, scale, scope and diversity, operating efficiency and profitability. Within the steel sector, due to the high similarity of steel products, we usually pay greater attention to companies' operating efficiency and scale, scope and diversity.

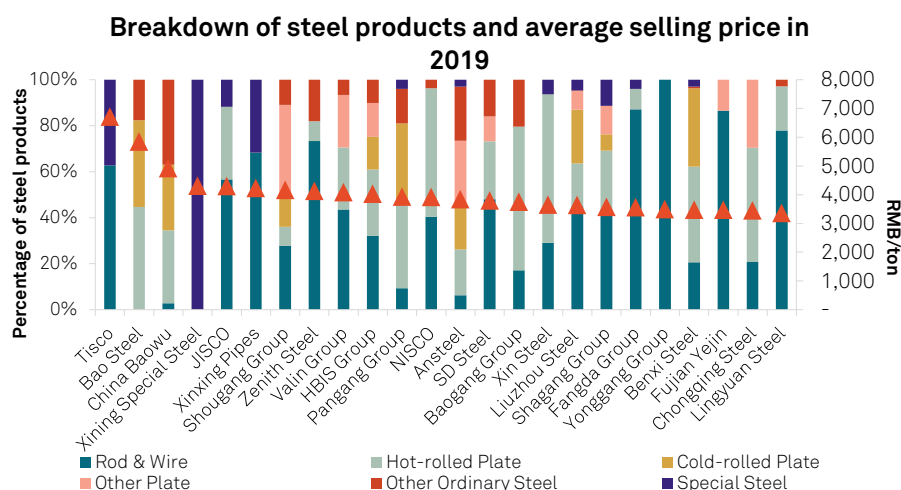
## Competitive Advantage

In our view, the competitive advantages of steel producers are typically reflected in the level of their products' added value, the company's market position, relationship with upstream and downstream industries and bargaining power.

However, as mentioned above, China's steel enterprises mainly produce ordinary steel with little variety among products. Most steel issuers are ordinary steel producers, manufacturing products like rebar, wire rods, hot-rolled plates, cold-rolled plates, medium and heavy plates and steel pipes etc. Differences in prices between ordinary steel products can generally be attributed to steel rolling costs and respective supply and demand. For rebar, rolling costs and added value are generally lower than other products, but gross profit has been relatively high in recent years. This can be attributed to the large-scale elimination of substandard steel capacity following supply-side reform, while improved prospects for the real estate construction sector has boosted supply and demand trends for rebar. The production of cold-rolled sheet steel is complex, and rolling and electroplating costs are high. Despite the higher prices, this product has seen lower overall gross profit due to declines in the automobile sector in recent years. Steel rail products similarly have higher-level functions and production costs, but their producers have lower bargaining power, leading to average gross profits. In general, there is little differentiation between similar steel products, and unique functionality or brand-added value do not hold much sway in making firms more competitive, especially in the field of ordinary steel.

Therefore, we believe that steel enterprises do not have obvious competitive advantages over one another, and the majority of firms are generally average for the industry. Only a few enterprises have been able to enhance their reputations and bargaining power in certain areas through their better-quality products. For example, Bao Steel has a more obvious competitive advantage in the automotive plate market, and Tisco has an edge in the stainless-steel sector. However, we generally do not see these differences as having a significant bearing on the competitive position of these enterprises.

Chart 7



Note: 1. Proportion of steel products is calculated according to steel sales volume; 2. Average selling price = steel sales revenue/total steel sales volume; 3. 2018 data used for China Baowu and Ansteel; 4. Baogang Group, Fangda Group, NISCO, Xin Steel didn't disclose details on types of plates sold, we put it under hot-rolled plate in the chart.

Source: Public information, S&P Global (China) Ratings.

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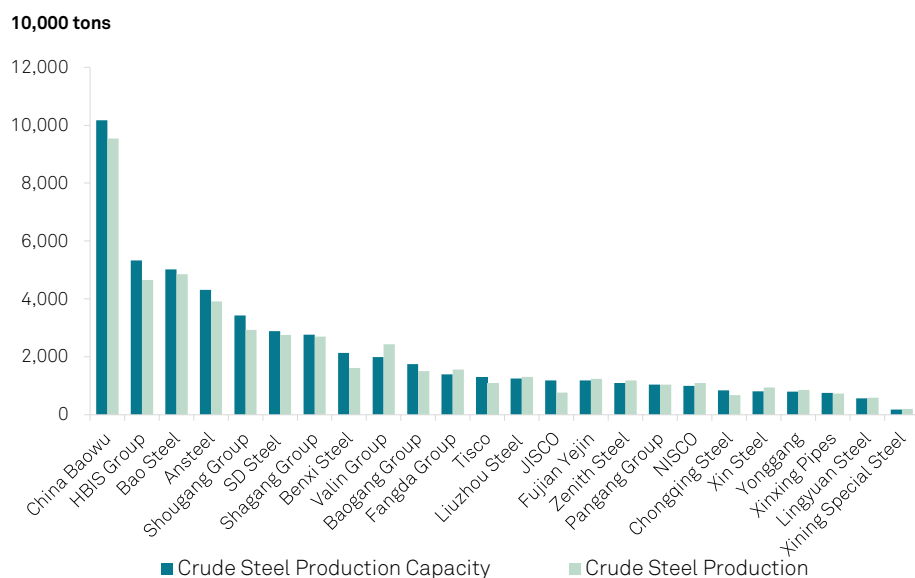
## Scope, Scale and Diversity

When considering the scale, scope and diversity of steel enterprises, we mainly focus on their production capacity, geographic scope of production and sales as well as the diversity of products and the industrial chain.

Expanding scale and product diversity is one means of increasing competitiveness. In the past decade, steel enterprises have looked to enhance their market position and market share through continuously increasing scale and capacity. Significant differences exist between steel issuers in terms of scale. After merging with Masteel Group in 2019, China Baowu saw its annual crude steel production capacity reach 100 million tons. In contrast, the total capacity of HBIS Group, Bao Steel and Ansteel exceeded 40 million tons each, while the crude steel production capacity of smaller steel issuers is only a few million tons. The average production capacity of the companies in our sample, as a group, is about 22 million tons. Expanding scale is, in our view, conducive to enterprises achieving economies of scale, reducing energy consumption per unit, depreciation and costs, and supports their bargaining power with upstream and downstream industries. Beyond total production capacity, scale at a unit-level is also very important. If the production capacity of an enterprise is composed of multiple small-scale blast furnaces, such a set-up does not help improve efficiency and reduce costs. At the same time, such a company may face constraints related to environmental protection regulations and energy consumption, and there is a risk of technology becoming obsolete.

Chart 8

### Capacity and Output of Steel Enterprises in 2019



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Due to transportation costs and other factors, steel enterprises are usually influenced by their local regions. In terms of regional distribution, output in North China is the largest, and exceeds local demand. However, the region's good transportation infrastructure encourages companies to produce steel for export. Both output and demand in East China are relatively large. West China is limited by its transportation links, but steel prices are generally higher than in East China. In Southwest China, large-scale infrastructure investment means there is significant steel demand. However, transportation limitations make it difficult for East China producers to move significant quantities of steel to West China, leaving some room for local producers. At present, beyond China Baowu, Ansteel and other large-scale steel enterprises, most steel issuers are not operating on an interregional basis. However, we regard having a more prominent market position

in a region or specific market as a solution, to some extent, to alleviating problems related to regional concentration.

Chart 9

### Geographic Distribution of Bases of Sampled Steel Producers

	NE China	North China	East China	Central China	South China	SW China	NW China	Crude Steel Capacity ( 1 million tons )
China Baowu			◆	◆	◆		◆	101.7
HBIS Group		◆		◆				53.4
Bao Steel			◆	◆	◆			50.2
Ansteel	◆					◆		43.1
Shougang Group	◆	◆				◆	◆	34.3
SD Steel			◆					28.9
Shagang Group			◆					27.6
Benxi Steel	◆							21.4
Valin Group				◆	◆			20.0
Baogang Group		◆						17.5
Fangda Group			◆					14.0
Tisco		◆						12.9
Liuzhou Steel					◆			12.5
JISCO							◆	11.9
Fujian Yejin			◆					11.8
Zenith Steel			◆					11.0
Pangang Group						◆		10.4
NISCO			◆					10.0
Chongqing Steel						◆		8.4
Xin Steel			◆					8.1
Yonggang Group			◆					8.0
Xinxing Pipes		◆	◆	◆	◆	◆	◆	7.6
Lingyuan Steel	◆							5.7
Xining Special Steel							◆	1.8

Note: The diamond represents that the company has production bases in this area. The dark red represents that the main production bases of the company are concentrated in this area.

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In our opinion, producing a range of products to varied specifications can help diversify against the risk of facing different types of demand from downstream industries. Downstream demand for steel is wide and includes industries such as engineering and construction, household appliances, automobiles, machinery, shipbuilding and pipeline construction. Each sector differs in terms of its demand. Most steel firms in our sample produce a range of products, including various long-form products, steel plates and profiles. A small number of enterprises have little variety in terms of products, such as Fangda Group and Yonggang Group, which mainly focus on wire and bar products. Bao Steel meanwhile mainly focuses on steel plate production, which may leave it open to potential risks from price fluctuations. In addition, for producers of similar products, increasing launches of new models or specifications to meet various demands also helps increase customer stickiness.

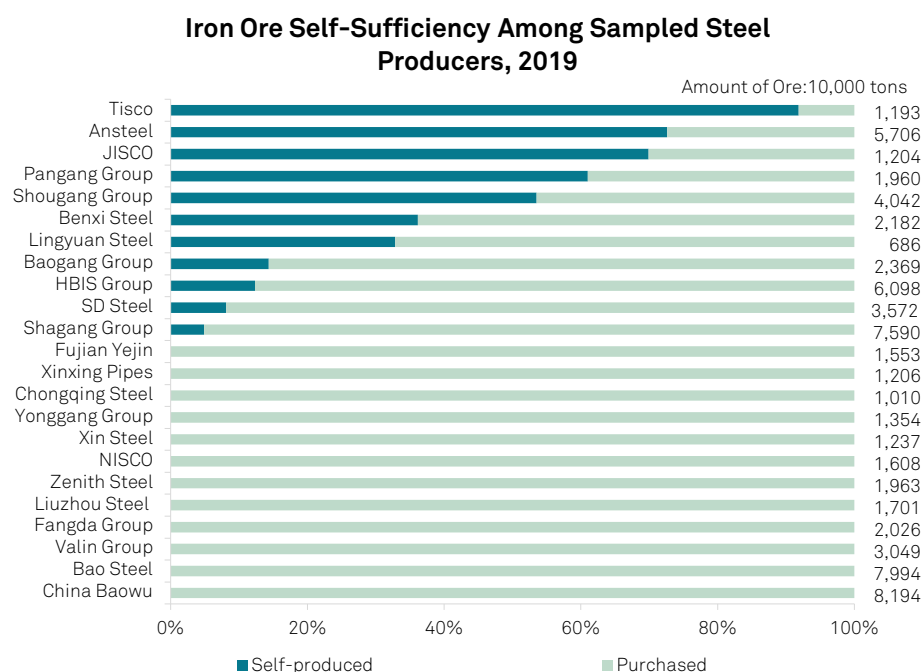
### Operating Efficiency

When considering the operating efficiency of steel enterprises, we generally pay greater attention to the cost structure of raw materials, energy costs and human resources, as well as the utilization of production capacity, flexibility of production and assets' status. We view cost advantage as particularly important for steel producers with similar products during industry downturns.



Overall costs for steel enterprises include raw material costs such as iron ore, coking coal, coke, scrap metal, auxiliary materials and transportation. Other costs include production costs like steel rolling, electricity costs and environmental protection, as well as relatively fixed costs such as labor, depreciation and period costs. We believe that higher self-sufficiency in raw materials helps mitigate the risk of price fluctuations in raw materials. Iron ore and coal are the two main raw materials for steel production, accounting for a relatively high proportion of costs. China imports large quantities of iron ore every year and is highly dependent on overseas imports. Significant differences still exist between firms in terms of iron ore costs. This can largely be attributed to companies differing in terms of self-sufficiency over high-grade iron ore production and transportation costs. Among steel issuers, some enterprises have developed their business through their proximity to mines, allowing them high levels of self-sufficiency for iron ore. Such firms include Ansteel, Pangang Group, JISCO and Baotou Steel Group. In recent years, some other firms have expanded their acquisition of overseas iron ore resources, such as SD Steel and Shougang Group. We believe that greater self-sufficiency in sourcing iron ore can give steel enterprises some flexibility on costs. When international iron ore prices are at a low level, these steel enterprises can increase their imports. When prices are high, steel producers with access to mines can source their iron ore accordingly. However, for some enterprises which have conducted mining for a long time, resources may lack in quality and further mine exploration may lead to higher costs. Some firms may see disappointing performances in their overseas mining ventures, also leading to higher costs.

Chart 10



Note: 2018 data used for China Baowu, Baogang Group and Fangda Group; Xinxing Special Steel didn't disclose iron ore information.

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Few steel enterprises operate their own coal mines. Steel producers usually set up their own coking equipment and purchase coking coal. China's coking industry has relatively low industry concentration, with independent coking companies typically small in scale. Their bargaining power towards the steel industry is average. Following supply-side reforms, coke prices have increased significantly in recent years, and occupy a significantly larger proportion of steel producers' costs. At present, large-scale steel enterprises are generally highly self-sufficient

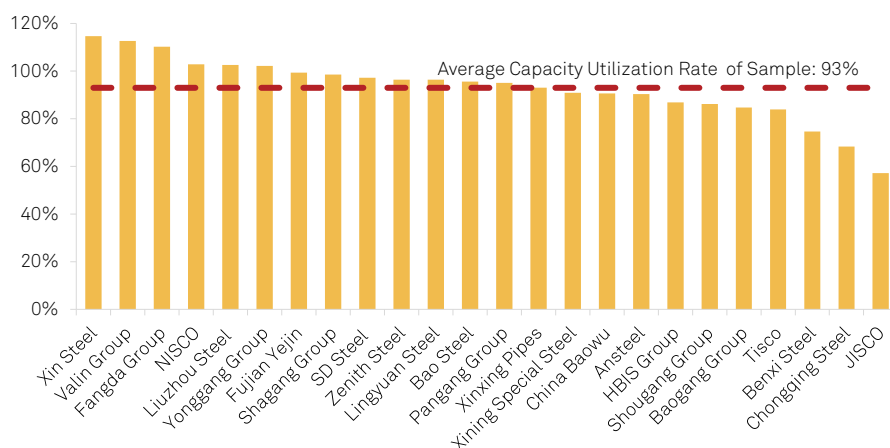
regarding coke, leading to some cost advantages. However, small and medium-sized steel producers have lower self-sufficiency rates and still need to purchase large quantities of coke, which can weigh down on cost control.

Technological differences also affect cost. In the steel industry, steel production is generally achieved through long and short processing. The cost per ton of steel for long-process enterprises is usually low, but unfavorable factors such as the need for large investment, long construction period, inflexible production lines and greater emissions can have an impact. The latter factor may lead to environmental restrictions during the central heating season or highly polluted conditions. Following supply-side reform, many short-process electric furnaces emerged due to the relatively low investment barriers, short construction times, flexible production and reduced emissions. Production costs are however relatively high.

In our view, higher capacity utilization can support firms looking to achieve economies of scale and reduce their unit costs. After supply-side reforms, higher steel prices and stronger downstream demand have seen producers maintain high capacity utilization rates, with some steel enterprises even close to full capacity. We expect that this can help steel producers achieve economies of scale and reduce their fixed costs per unit. However, some enterprises see significant differences in capacity utilization during peaks and troughs in the cycle, resulting in fluctuating costs.

Chart 11

### 2017-2019 Average Capacity Utilization



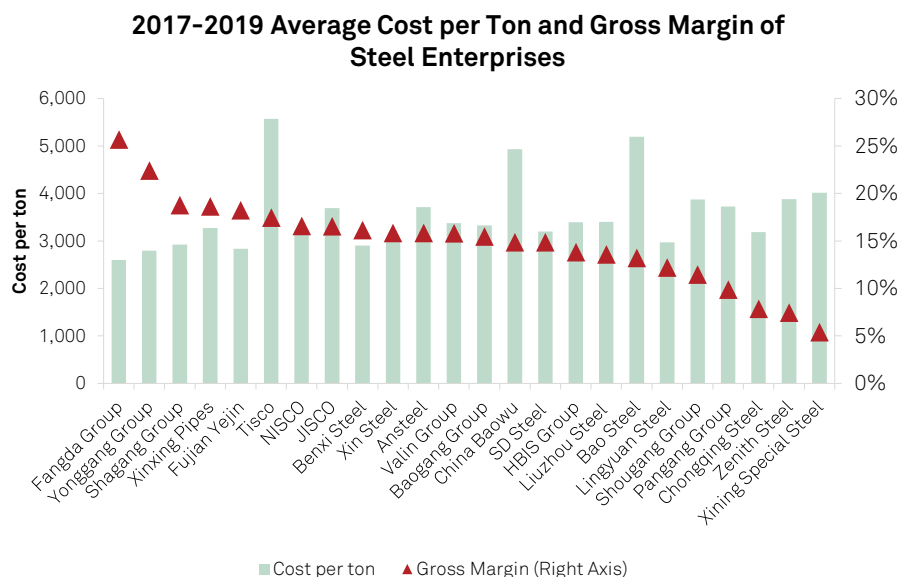
Note: Chart displays capacity utilization rate for crude steel among our sampled companies..

Source: Public information, S&P Global (China) Ratings.

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Due to the abovementioned factors, steel producers differ from one another on cost per ton of steel and gross margins. Fangda Group, Yonggang Group and Shagang Group have seen higher gross margins in recent years due to improved production cost control and more favorable supply and demand trends for wire and bar products. Xining Special Steel, Zenith Steel and Chongqing Steel have relatively higher production costs, and their gross profit margins rank relatively lower among the sampled enterprises.

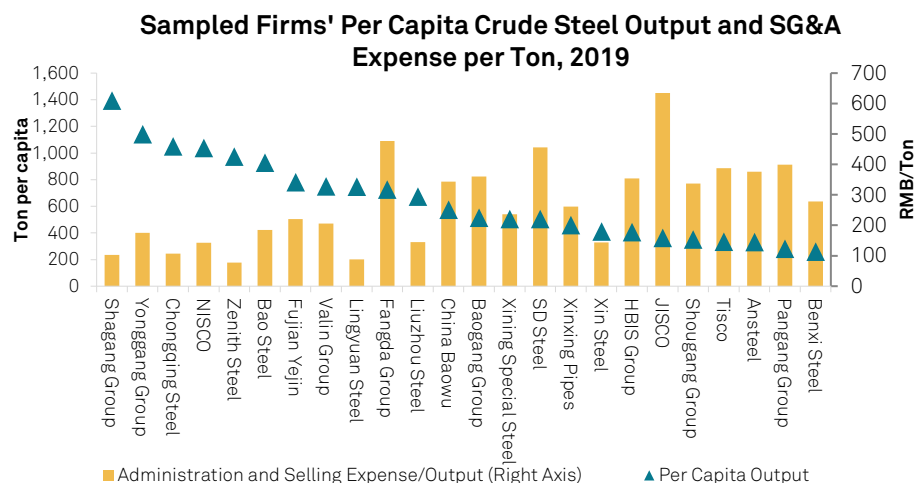
Chart 12



Source: Public information. S&P Global(China)Ratings.  
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Labor, period costs and other indicators also provide an insight into how steel companies manage costs. These indicators are affected by the scale and management level of the enterprise, personnel costs, the degree of automation and IT adoption, and historical factors. Private steel enterprises such as Shagang Group, Yonggang Group, NISCO and Zenith Steel perform well in terms of selling, general and administrative expense and steel produced per staff member. In contrast, state-owned steel enterprises generally have heavier staffing costs.

Chart 13



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## Profitability

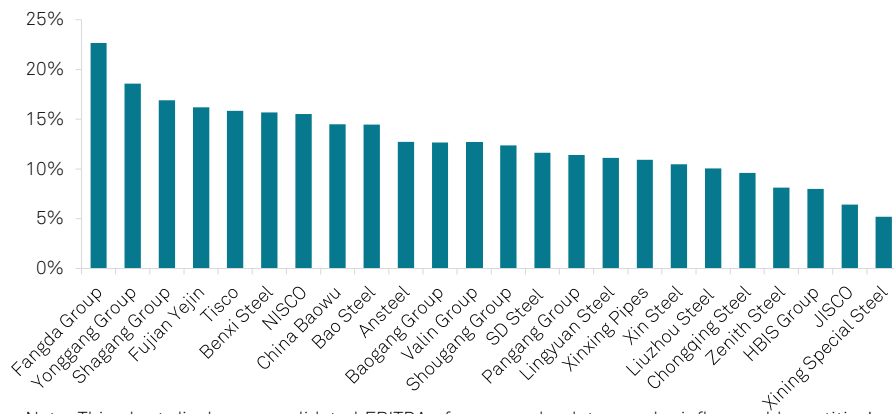
Profitability is a more comprehensive indicator that we consider when analyzing competitive position. Higher added value of products, stronger bargaining power and excellent cost control

ability are all factors that can help improve profitability. When we evaluate steel producers' profitability, the main indicators we consider include EBITDA margin and return on capital (ROC).

In our view, an entity's EBITDA margin reflects the added value and premium of steel companies' products, but more importantly it represents their cost management abilities. We view that Fangda Group, Shagang Group and Yonggang Group have better cost control ability. As the chart below shows, their EBITDA margins and ROC are higher than the industry's average level. However, JISCO and Xining Special Steel are relatively weaker at controlling costs, with their profitability indicators being weaker than the average of sample companies.

Chart 14

### 2017-2019 Average EBITDA Margin of Steel Enterprises



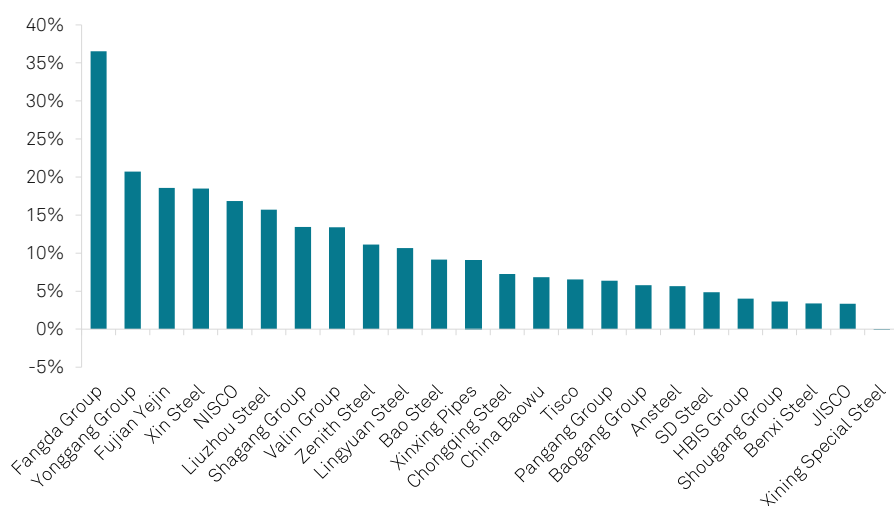
Note: This chart displays consolidated EBITDA of our sample, data may be influenced by entities' non-steel operations. Chongqing Steel was restructured from Nov 2017, so we only use 2018-2019 financials for Chongqing Steel.

Source: Wind, Public Information. S&P Ratings (China).

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Chart 15

### Average ROC of Steel Companies in 2017-2019



Note: Chongqing Steel was restructured from Nov 2017, so we only use 2018-2019 financials for Chongqing Steel.

Source: Wind, S&P Global (China) Ratings.

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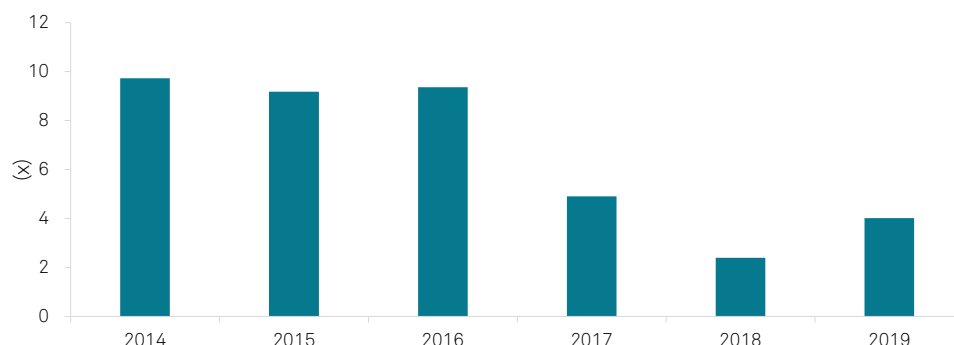
Considering all of the above factors, we regard China Baowu, Bao Steel, HBIS Group, Shougang Group and Shagang Group as having stronger competitive positions among our sampled firms. At the other end of the spectrum, JISCO, Zenith Steel, Lingyuan Steel, Chongqing Steel and Xining Special Steel are relatively weaker in this aspect.

## Financial Risk

As a typical cyclical industry, the steel sector sees significant price fluctuations in tandem with the cycle, which has a significant impact on companies' profits and cash flow. From 2013, steel prices were in a downward spiral amid oversupply, reaching a trough in 2015. Steel producers' operations encountered significant challenges, and some issuers even defaulted. Since 2016, steel prices have risen rapidly in line with supply-side reforms. With increased demand from downstream industries such as infrastructure and real estate construction, steel prices have maintained a high level. The profitability and debt levels of most companies have improved significantly compared to the situation before supply-side reform. As shown in the chart below, the leverage levels of our sampled companies have decreased significantly since 2017, with a slight rise in 2019 due to falling steel prices.

Chart 16

2014-2019 Leverage of Steel Producers

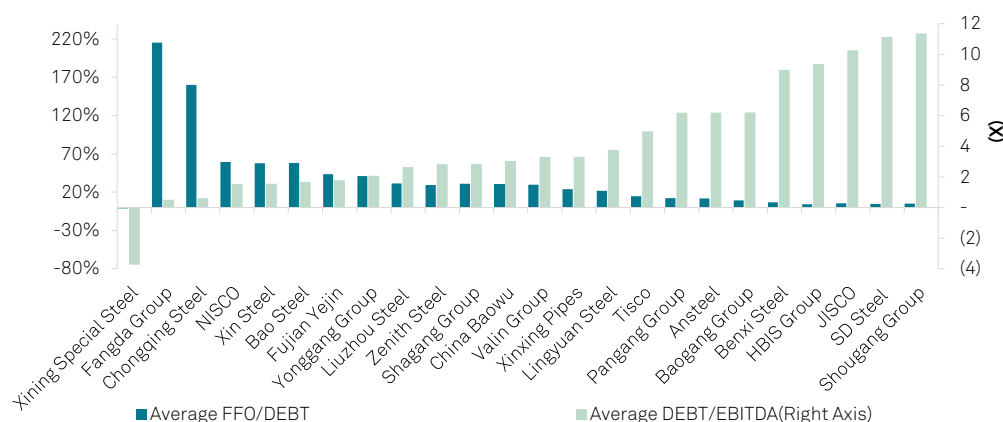


Note: Chart displays median debt/EBITDA ratio of 24 sampled entities for each year.  
Source: Wind, Companies' Annual Reports, S&P Global (China) Ratings.  
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With companies improving their profitability and bringing capital expenditure pressure under control, we see the overall solvency of steel enterprises as better than it was prior to supply-side reform. However, significant differences still exist between companies in terms of leverage. Xining Special Steel, Shougang Group, SD Steel and JISCO still have financial leverage levels significantly higher than other sampled firms, with no suggestion of a reduction in leverage even during the period of good industry prosperity. The leverage levels of Bao Steel, Xin Steel, NISCO and Fangda Group are relatively low for the industry. After Chongqing Steel restructured, its debt burden has also significantly improved.

Chart 17

## 2017-2019 Financial Ratios of Steel Enterprises



Note: Chongqing Steel was restructured from Nov 2017, so chart only displays 2018-2019 two-year average data.

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We expect that as policy shifts towards controlling newly added steel production capacity, steel enterprises generally do not face significant burdens from capital expenditure, which may alleviate some of the pressure from rising leverage during a downward cycle. The capital expenditure of steel enterprises generally recovered after industry profits improved in 2018. Overall capital expenditure is mainly on technical transformation and updating capacity. However, due to limitations on newly added capacity, there is minimal demand for large-scale capital expenditure. The EBITDA of most of our sampled companies can go further in covering capital expenditure. China Baowu, Bao Steel and Liuzhou Steel's capital expenditure increased significantly in 2019, with the bulk spent on rebuilding or relocating production bases within the scope of regulations on new capacity. However, we expect improving profits following supply-side reforms to give these companies some room to handle their increased capital expenditure.

Chart 18

## 2017-2019 Steel Producers' CAPEX

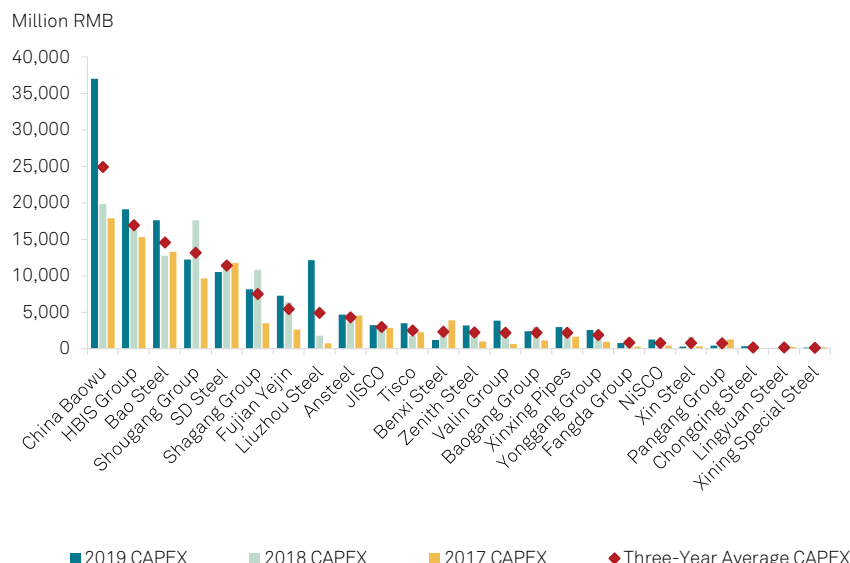
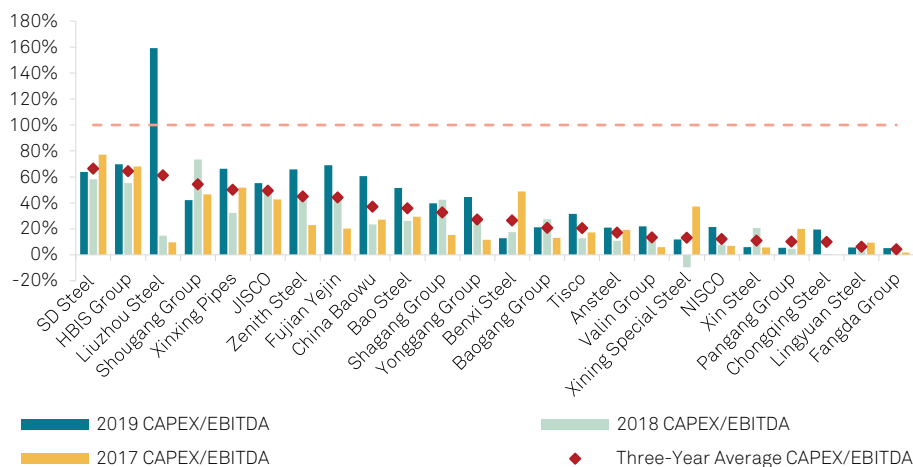


Chart 19

## 2017-2019 Steel Producers' CAPEX/EBITDA

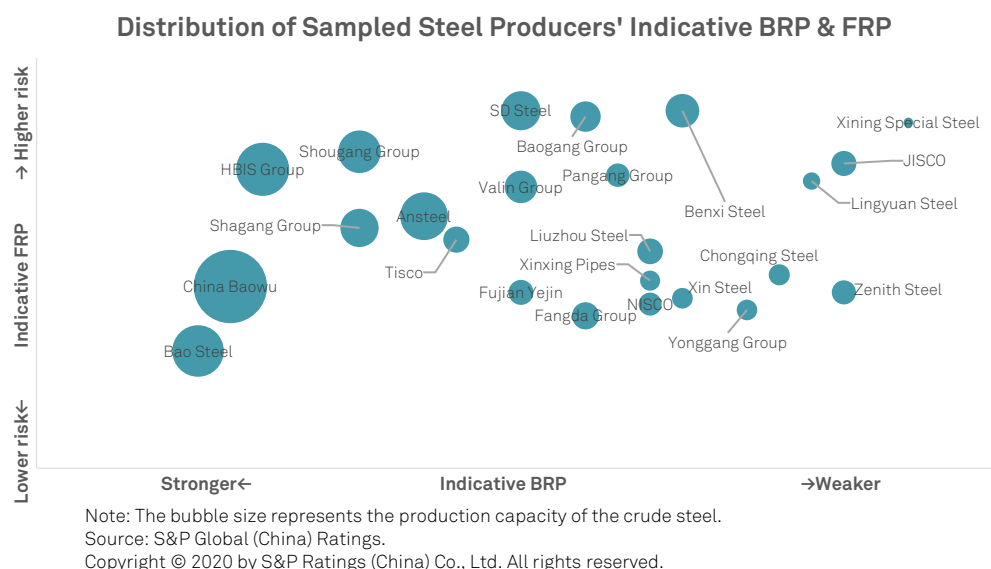


Overall, we view the leverage level of some steel enterprises as having improved due to the impact of supply-side reform. With their financial resilience enhanced, these steel companies have some space to cope with potential fluctuations in steel prices or partial increases to capital expenditure in the next 1-2 years. However, significant differences exist between the companies in terms of leverage level.

## Indicative Distribution of Business and Financial Risk Profiles

Based on the above analysis, we have arrived at the indicative business and financial risk profiles of the 24 companies in our sample, as shown in the chart below. Generally, the combination of business risk profile and financial risk profile form the benchmark for us to judge the credit quality of an enterprise. On this basis, we typically combine the degree of diversification, capital structure, financial policy, management and governance, liquidity and other relevant factors to arrive at our evaluation of the enterprise's SACP.

Chart 20



## Support

After arriving at the companies' SACP, we also consider the influence of government or group support on credit quality. State-owned enterprises account for a large proportion of China's major steel companies. Generally, we view steel enterprises as being of relatively high importance to local governments, as the industry is typically considered an important pillar industry that supports regional economic development. At the same time, local governments generally do not have multiple steel enterprises under their jurisdiction.

For the regional state-owned enterprises in our sample, we typically view them as being able to obtain a high level of local government support. In our analysis, government support reflects two aspects: a government's capacity to support and a government's willingness to support. In our opinion, local governments may differ in terms of support capacity because of the local economic, financial and debt situation and other factors. Such differences may have a significant influence on the indicative support capacity of the companies in our sample. On the other hand, there is little difference, in our opinion, between local governments in terms of their willingness to support steel producers. This is because regional state-owned steel companies typically have strong regional monopolies, such as HBIS Group and SD Steel. However, our analysis of willingness to support may also consider historic local government support for regional SOEs, such as how local governments have previously dealt with SOE debt problems.



## Appendix

### List of Sampled Companies

No.	Entity Name	Abbreviated Name	Entity Type
1	Ansteel Group Corporation	Ansteel	Centrally administered SOE
2	Baoshan Iron & Steel Co.,Ltd.	Bao Steel	Centrally administered SOE
3	Baotou Iron & Steel (Group) Co.,Ltd.	Baogang Group	Locally administered SOE
4	Ben Gang Group Corporation	Benxi Steel	Locally administered SOE
5	Chongqing Iron & Steel Company Limited	Chongqing Steel	Other <sup>2</sup>
6	Fujian Metallurgical (Holding) Co., Ltd.	Fujian Yejin	Locally administered SOE
7	Guangxi Liuzhou Iron and Steel Group Company Limited	Liuzhou Steel	Locally administered SOE
8	Hebei Iron&Steel Group Co.,Ltd.	HBIS Group	Locally administered SOE
9	Hunan Valin Iron&Steel Group Co.Ltd.	Valin Group	Locally administered SOE
10	Jiangsu Shagang Group Co.,Ltd	Shagang Group	POE
11	Jiangsu Yonggang Group Co.,Ltd.	Yonggang Group	POE
12	Jiuquan Iron and Steel (Group) Co.,Ltd	JISCO	Locally administered SOE
13	Liaoning Fangda Group Industrial Co., Ltd.	Fangda Group	POE
14	Lingyuan Iron & Steel Co.,Ltd.	Lingyuan Steel	Locally administered SOE
15	Nanjing Iron & Steel Co.,Ltd.	NISCO	POE
16	Pangang Group Co.,Ltd.	Pangang Group	Centrally administered SOE
17	Shandong Iron & Steel Group Co.,Ltd	SD Steel	Locally administered SOE
18	Shougang Group Co.,Ltd.	Shougang Group	Locally administered SOE
19	Taiyuan Iron & Steel (Group) Co.,Ltd.	Tisco	Locally administered SOE
20	Xining Special Steel Co.,Ltd	Xining Special Steel	Locally administered SOE
21	Xinxing Ductile Iron Pipes Co.,Ltd.	Xinxing Pipes	Centrally administered SOE
22	Xinyu Iron&Steel Group Co., Ltd.	Xin Steel	Locally administered SOE
23	China Baowu Steel Group Corporation Limited	China Baowu	Centrally administered SOE
24	Zenith Steel Group Co.,Ltd.	Zenith Steel	POE

Note: 1: Companies listed in alphabetical order, based on pinyin name. 2: According to Chongqing Steel's public announcements, the company is undergoing an ownership change, and actual control of equity may be transferred from Four Rivers Investment Holdings Asset Management Co. Ltd. to China Baowu Steel Group Corporation Limited.

This report does not constitute a rating action.

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