

Angang Steel (000898.SZ): Robust Outlook for Leading SOE

— Chuancai Research 2018 Company Report (20180419)



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Overview

❖ Northeast Leading SOE that benefits from the supply-side reform

The steel and iron industry has made remarkable achievements in the supply-side reform. As of May 2017, a total of 107 million production capacity had been reduced, and as of June 2017, substandard illegal capacity had been cut by 120 million tons. The smallest blast furnace of Angang steel was 2580 m³ which conforms to the size requirement and belongs to advanced capacity that will not be eliminated. During the 2017-2018 heating season, the capacity-cut policy by the Ministry of Environmental Protection led to the decrease of hot-rolled coil (HC) and strip steel output. Since strip supply is narrowed, and Angang produce both hot-rolled and cold-rolled coil (the former being a substitute of strip steel), Angang is likely to benefit from the policy.

❖ Improved industrial competition landscape as a result of M&A

Listed companies found it difficult to expand production capacity through new projects, but rather through acquisition of iron and steel assets from the parent company. Among the bases of Ansteel Group, Chaoyang Base is currently not part of the listed company and formed competition with Angang Steel. According to the Document 46, there will be 3 to 4 enterprises with an 80-million-ton production capacity. In 2016, Angang Steel production ranked the 4th, and was likely to become one of 3-4 80 million tons steel group. Currently the company has a capacity of 47 million tons, still far from the 80-million-ton level. We think through M&A, Angang Steel is likely to benefit from improved industrial competition landscape.

❖ We give the company "Increase" rating for the initial coverage

According to the steel supply and demand balance, we estimate the 4Q2017 gross profit to be slightly higher than 3Q2017; we expect the real estate and the infrastructure investment remains stable, the sustained capacity reduction and improved industrial concentration are conducive to sector fundamentals and profitability. If the demand side maintains steady growth, we expect the operating revenue of 2017-2019 to be CNY 72.47, 74.53, 75.28 billion, with the net profit attributable to parent company at CNY4.96, 5.05, 5.03 billion respectively, corresponds to a EPS of CNY 0.69, 0.70 and 0.69 and P/E of 9.54(X), 9.37(X) and 9.41(X), (as of Nov.23 2017 closing price). Given that the industry PE (TTM) is 15 (X), give the sector "Increase" rating.

❖ Risk reminder: fixed-asset investment growth; industrial policy change; weaker-than-expected M&A

Earnings Forecast and Valuation

	2016A	2017E	2018E	2019E
Operating revenue (CNY million)	57,882	72,465	74,527	75,276
+/-%	10%	25%	3%	1%
Net Profit (CNY million)	1616	4958	5048	5027
+/-%	-65%	207%	2%	0%
EPS (CNY)	0.22	0.69	0.70	0.69
PE	29.28	9.54	9.37	9.41

Source: Company announcement, Chuancai Research

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Analyst

Li CHEN

SAC Reg. No: S1100517060001
8610 - 66495901
chenli@cczq.com

Peng WANG

SAC Reg. No: S1100516120001
8621 - 68595118
wangpeng@cczq.com

Contact

Wenyi ZHOU

SAC Reg. No: S1100117120006
8610 - 66495910
zhouwenyi@cczq.com

Research Division

Beijing Floor 15, China Overseas International Center, 28 Pinganli West Street, Xicheng District, 100034

Shanghai Floor 11, Hang Seng Building, 1000 Lujiazui Ring Road, 200120

Shenzhen Floor 21, Duty-free Building, 6 Fuhua 1st Road, Futian District, 518000

Chengdu Floor 17, Unit B, China Overseas International Center, China (Sichuan) Pilot-free Trade Zone, 610041

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I. Investment rationale

1.1. Key catalysts

1) The capacity reduction during the heating season has led to the drop of steel products output (including hot rolled, band steel and cold-rolled products). Since the downstream sectors such as automobile, home appliance present weaker seasonality, the demand is likely to remain stable in winter. The company is likely to benefit from the narrowed supply and a wide range of product varieties.

2) Under the backdrop of supply-side reform, M&A becomes a better choice over capacity expansion for steel enterprises.

3) According to the national strategic layout, there will be 3 to 4 steel enterprises with a production capacity of approximately 80 million tons. Currently, Angang Steel possesses a capacity of 47 million tons, ranking the 4th nationwide in 2016. The company attempts to improve the industrial competition landscape through M&A efforts.

1.2. Earnings assumptions and forecasts

Earnings assumptions: 1) based on our estimation about the supply-demand structure, we think there is slight upside room for gross profit of 4Q2017 compared with 3Q2017; 2) demand from real estate and infrastructure investment is likely to remain stable, along with the sustained capacity reduction and improvement in industrial concentration, the fundamentals will power on with robust profitability; 3) note that the company will start paying corporate income tax in 2018.

Earnings forecasts: with the demand side being broadly stable, we estimate the operating revenue of 2017-2019 will be CNY 72.47, 74.53 and 75.28 trillion, respectively, with net profit attributable to the parent company of CNY 4.96, 5.05, 5.03 billion respectively, EPS CNY0.69, 0.70, 0.69 and PE 9.54 (X), 9.37 (X) and 9.41 (X).

1.3. Valuation level and investment conclusion

The company's PE in 2017 was 9.54 (X), considering the average industrial PE (TTM) of 15(X) and the company's valuation of 12(X), the reasonable valuation of the company is around 15(X). We give the industry "Increase" rating for the

initial coverage.

Table 1: Company earnings forecasts and valuation

Comp any	Latest rating	Curre nt price	Circulat ion market value	EPS (CNY)				PE				PB
				16A	17E	18E	19E	16A	17E	18E	19E	
Angan g Steel	Increa se	6.54	406	0.22	0.69	0.70	0.69	29	10	9	9	0.99

Source: WIND, Chuancai Research; Note: current price is as of the Nov.23 2017 closing price.

Table 2: Company earnings forecasts

Ticker	Company	EPS Chuancai Forecasts				WIND Consensus Forecasts			
		16A	17E	18E	19E	16A	17E	18E	19E
000898. SZ	ANSC	0.22	0.69	0.70	0.69	0.22	0.63	0.70	0.79

Source: WIND, Chuancai Research

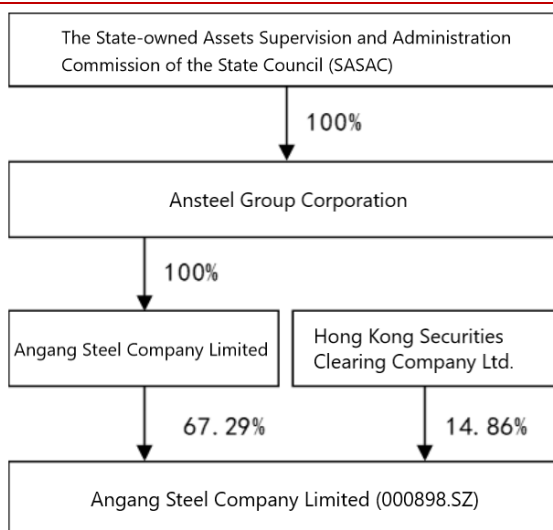
II. Company profile

2.1. Angang Steel (000898.SZ): steel & iron SOE in Northeast China

The Angang Steel Company Limited was established on May 8, 1997 by Ansteel Group Corporation (Ansteel), and was listed on both the Hong Kong Exchange Market (0347.HK) and Shenzhen Stock Exchange (000898.SZ) in the same year.

The company has a total of 7.235 billion outstanding shares among which 6.149 billion are A-shares while 1.086 billion are H-shares. The controlling shareholder is the Ansteel Group Corporation, with a shareholding of 67.29%. The actual controller of the company is State-owned Assets Supervision and Administration Commission of the State Council (SASAC). All the company's listed shares are outstanding shares, and as of Nov 23, 2017, the total outstanding shares are 46.9 billion.

Figure 1: Angang Steel Equity Structure



Source: Company data, Wind, Chuancai Research

2.2. Products categories: mostly coils

The company has two production bases, rendering a total of 250 tons steel production capacity. The company developed a complete set of steel production processes including coking, sintering, smelting, and rolling, as well as a comprehensive system for production of iron, steel and steel products. The iron making, steel making and steel rolling capacity have reached 24 million, 25.2 million and 24.37 million, respectively, with improved products structure and increasing proportion of high value-added products. Containers, auto plates, pipeline plates, cold-rolled silicon steel, shipbuilding plates, coated plates, high-speed steel rails, high-grade petroleum pipes and other products occupy an important position in China.

Table 3: Angang steel's major products

	Capacity (10000 tons)	Note
Pig Iron	2400	Blast furnace: 3200m ³ *3, 2580m ³ *5, 4038m ³ *2
Crude steel	2520	Converter: 100t*6, 180t*3, 260t*2
Steel products	2437	
Hot rolled coil	826	
Cold rolled coil	420	
Wide plate	360	
Medium plate	80	
Cold-rolled silicon steel	90	

GI & PPGI	190
Seamless Steel Pipe	46
Large section	270
Wire rod	155

Source: Commercial Paper, Chuancai Research

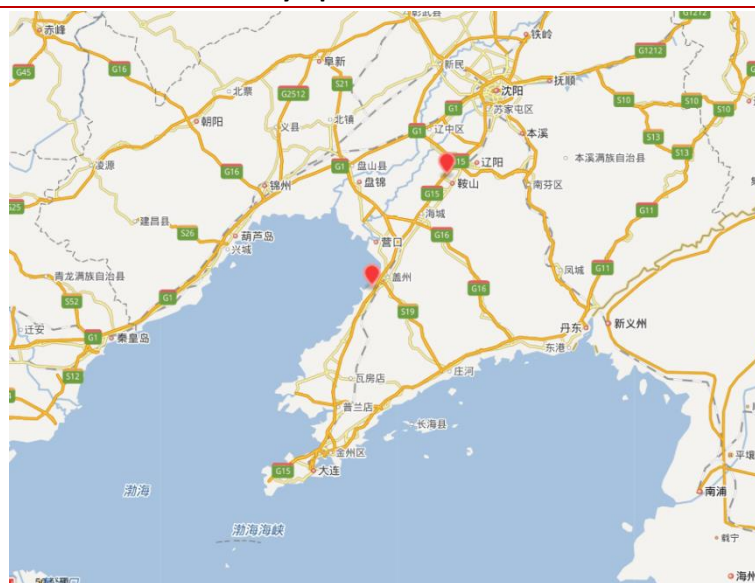
Table 4: Angang steel's production and sales

	Capacity	2014		2015		2016	
		Output	Sales	Output	Sales	Output	Sales
Pig Iron	2400	2178		2079		2183	
Crude steel	2520	2145		2051		2182	
Steel products	2437	2005	1999	1893	1910	1986	1994
Hot rolled coil	826	857	854	772	773		761
Cold rolled coil	420	424	424	391	407		435
Wide plate	360	236	232	227	236		240
Medium plate	80	76	75	74	78		85
Cold-rolled silic on steel	90	73	72	66	66		90
GI & PPGI	190	118	123	124	122		129
Seamless Steel Pipe	46	33	34	25	26		27
Large section	270	75	71	95	90		110
Wire rod	155	114	114	120	114		117

Source: Rating report, Company announcement, Chuancai Research; Uni 10,000 tons

The company has completed the layout of Anshan base and Bayuquan base. The Anshan Base has realized a total of 18.7 million tons capacity including both the Northeast base and Western base. The later has been recognized as a producer of high value-added products, including wide plate, hot rolled coil and cold rolled coil, with a yearly pig iron output of 6.5 million tons, crude steel output of 6.5 million tons and steel products of 6.2 million tons.

Figure 2: The Anshan Base and Bayuquan Base



Source : Baidu online map, Chuancai Research

Stable source of iron ore, and the coke can be fully self-sufficient. The main source of raw materials come from iron concentrate (powder), injection coal, coke, steel scrap, the cost of which could be lowered through centralized purchasing. As for Iron ore, areas close to Anshan has abundant iron resources; as of late 2016, the company has in its capacity 8.8 billion tons iron ore resources, with 230 million ton/year mining capacity and 65 million tons/year mineral process capacity, ranking the top among all iron companies nationwide. About 60% of iron ore demand could be acquired from shareholders and related parties which ensure stable supply of iron.

Meanwhile, the coal required comes mainly from the market, with the supply of coke broadly self-sufficient. In terms of coal purchasing, the company has formed a medium-to-long term cooperation with Shanxi Coking Coal Group, Fushun Coal Group, Yangmei Coal Group, Shenhua Group.

Close to the harbor, Bayuquan base is advantageous in raw materials and products transportation. Located in Yingkou, the crude steel output totaled 6.5 million tons with the raw materials come mainly from the overseas market. The Port of Yingkou has an overall 200,000 tons iron ore transportation capacity; as the project proceeds smoothly, Angang Steel has signed a contract with the port.

The shipping routes of Bayuquan continues to expand, and has established

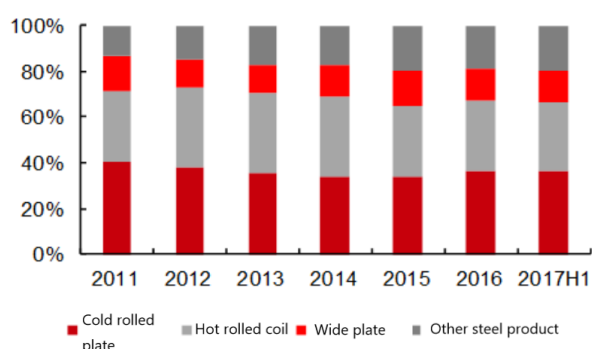
transportation services with more than 100 ports in 40 countries. It has the advantages of raw materials and finished products transportation, which is conducive to the solution of heavy plate transportation problems.

2.3. Financial performance: 3Q17 single-quarter profit of CNY 600 million

In 1-3Q2017 the weighted ROE stands at 7.08%, the highest since 2008. The operating revenue of 1-3Q2017 totaled CNY60.51 billion, up 47.44% YoY. The net profit attributable to the parent company was CNY 3.285 billion, up 236.23% YoY. The basic EPS was CNY 0.45 (up 236.30%) while the weighted average EPS rose by 7.08%, up 4.85 basic points. Specifically, the 3rd quarter realized a revenue of 21.449 billion, up 8.96% QoQ and 37.41% YoY;

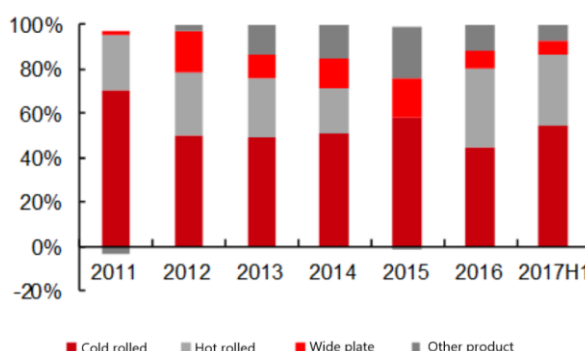
The company revenue and gross profit come mainly from hot-rolled coil (HRC) and cold-rolled coil (CRC). Historically, HRC and CRC contribute to 70% of the company's prime operating revenue, where CRC is stable in contributing to the gross profit (about 50%) of the company. In 1H2017, benefited from the supply-side reform and the pick-up of mechanic engineering, automobile sectors, coil products generally show good profitability.

Figure 3: Prime operating revenue



Source: Wind, Chuancai Research

Figure 4: Prime operating revenue ratio



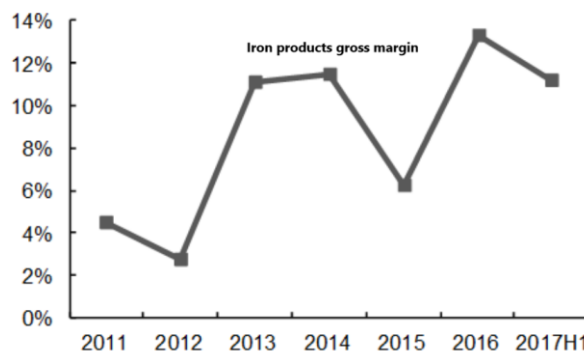
Source: Wind, Chuancai Research

Figure 5: Prime operating business gross margin



Source: Wind, Chuancai Research

Figure 6: Steel products gross margin



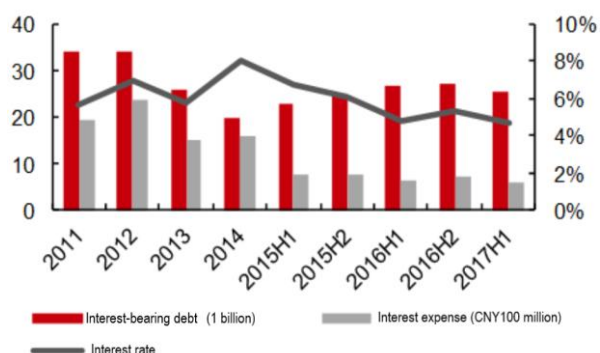
Source: Wind, Chuancai Research

In the context of the supply side reform, the company's capital expenditure is relatively small. At present, the company's short-term investments are mainly concentrated on technical innovation, energy conservation, and emission reduction.

The main projects under construction include the environmental protection renovation project of the converter workshop in the 3rd District of Steelmaking Plant, the new pre-straightening machine and the cold straightening machine project in the 4300wide plate line, the 60,000 square meter/h oxygen generating unit project in the energy management and control center, and the cold rolling high strength. The total investment of the company is CNY 2.008 billion. As of March 31, 2017, a total of CNY1.585 billion has been invested. The sources of funds are mainly cash inflows from operating activities and bank borrowings, and the capital expenditure pressure is relatively small.

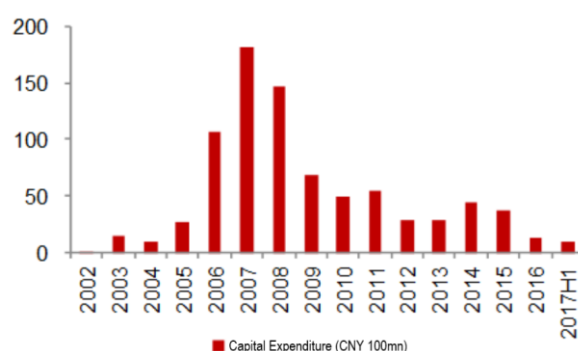
With the falling capex and the revival of the industrial and the company's profitability, the company's future interest-bearing liabilities, financing interest rates and interest expenses are expected to decline, further optimizing the company's profit statement and balance sheet.

Figure 7: Average interest-bearing debt and interest expense



Source: Wind, Chuancai Research

Figure 8: Company capital expenditure



Source: Wind, Chuancai Research

III. Investment highlights

3.1. Effective capacity reduction results

As of May 2017, the legitimate crude steel capacity has been reduced by 107 million tons. The country plans to reduce the crude steel production capacity by 140 million tons in 3-5 years. In 2017, China plans to reduce the crude steel production capacity by 50 million tons; by the end of May 2017, the country has reduced its crude steel production capacity by 42.39 million tons. It is expected that the capacity will be reduced by over 7.61 million tons from June to December 2017, and that crude steel production capacity will be reduced by 25 million tons in 2018.

In view of production equipment, the Angang's current minimum blast furnace is 2580 cubic meters, the largest blast furnace reached 4038 cubic meters. The company's production equipment meets the standards of scale, which belongs to advanced production capacity, and was not listed in capacity-cut category.

In 1H2017, it reduced the production capacity of substandard illegal steel by 120 million tons. On February 15, 2017, the National Development and Reform Commission (NDRC) and the Ministry of Industry and Information Technology (MIIT) jointly issued the "Notice on Further Implementing the Policy of Maintaining and Maintaining Pressure to Promote the Balanced Operation of the Steel Market", which mentions: strictly cracking down illegal production and sales of steel; By the end of June 2017, the production of industrial frequency furnaces and intermediate frequency furnaces would be

banned.

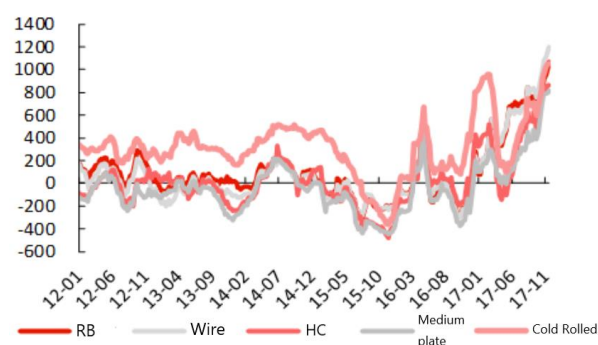
Table 5: Annual data on new construction of steel industry chain

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Coal mining	39402	43304	33978	48249	57410	60740	65209	44238	34766	25306
YoY		10%	-22%	42%	19%	6%	7%	-32%	-21%	-27%
Coke	5790	7453	10249	9077	11182	9318	7126	7300	4816	2192
YoY		29%	38%	-11%	23%	-17%	-24%	2%	-34%	-54%
Iron mining	10408	11182	11069	9772	17152	17516	21159	25736	14833	14602
YoY		7%	-1%	-12%	76%	2%	21%	22%	-42%	-2%
Pig iron	4047	7976	6014	2244	2277	4514	3661	1120	748	898
YoY		97%	-25%	-63%	1%	98%	-19%	-69%	-33%	20%
Crude steel	2078	3937	2967	1890	1595	3204	2491	2507	1847	2491
YoY		89%	-25%	-36%	-16%	101%	-22%	1%	-26%	35%

Source : The State Statistical Bureau, Chuancai Research ; Unit: 10,000 ton/Year

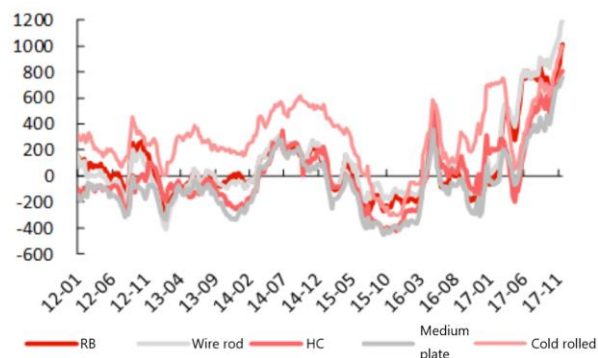
In addition, for projects where there is a serious overcapacity in the construction of an industrial project, it is necessary to formulate a capacity replacement plan and implement equivalent or decrement replacement. **The profitability of the steel industry has recovered, with a record high in 3Q2017.**

Figure 9: Domestic iron ore per ton profit



Source : Wind, Chuancai Research; Unit: CNY

Figure 10: Imported iron ore per ton profit



Source : Wind, Chuancai Research; Unit: CNY

3.2. Improved competition landscape as a result of M&A

Listed companies found it difficult to expand production capacity through new projects, but rather through Acquisition of iron and steel making

assets. In view of new construction projects and fixed assets investment, there has been negative growth since 2013 and new construction projects are primarily previously approved projects. Currently, the Angang Steel contains three steelmaking bases: Anshan base, Bayuquan base and Chaoyang base, where the first two belong to Angang Steel while the Chaoyan Base is temporarily not.

In March 2007, the company received an opinion letter from Ansteel Group, inquiring whether the company would finance the steel project. According to the company's 2016 annual report, Ansteel Group promised that at the time of the company's request for an acquisition, it will give priority to the company at a reasonable price. At present, the company has no such plans.

Angang Steel attempts to become one of the 80-million-ton production capacity enterprises. In 2016, the SASAC together with NDRC and MIIT, submitted to the State Council a national-level design proposal for the overcapacity and structure adjustment of the steel industry, "No. 46 Document". Accordingly, by 2025, 60%-70% of China's steel industry's output will be concentrated in about 10 large-scale enterprises, including 3 to 4 enterprises with an 80-million-ton production capacity and 6-8 ones with 40 million tons capacity, individually. There will also be some specialized steel groups by 2025.

Table 6: The crude steel production and ratio of total output of the top 11 largest steel enterprises

Ranking	Enterprise	2016 crude steel output (10,000 tons)	Crude steel output ratio
1	China Baowu Steel Group Corporation	6381	8%
2	Hesteel Group Co., Ltd	4492	6%
3	Shagang Group	3325	4%
4	Anshan Iron and Steel Group Corporation	3319	4%
5	Shougang Group	2680	3%
6	Shandong Iron & Steel Group Co., Ltd	2302	3%
7	Magang (Group) Holding Co., Ltd.	1863	2%
8	Beijing Jianlong Heavy Industry Group Co., Ltd	1645	2%
9	Valin Group	1548	2%
10	Benxi Steel Group Corporation	1440	2%
11	Rizhao Steel Holding Group Co., Ltd	1386	2%

Source : Selected news; Chuancai Research

In 2016, the top 10 steel enterprises' crude steel production output accounted for 36% overall amount, which is far from the national plan's 60%-70% target. From 2016, Angang Steel crude steel production reached 33.19 million tons, ranking the 4th, and it is expected to become one of 3-4 80 million tons steel group.

In 2016, the average capacity utilization rate of Tangshan Steel Plant was 89.23%. Considering that Tangshan steelmaking capacity utilization rate was higher than other cities, and that the utilization rate of the state-owned enterprises was generally higher than that of other enterprises. We estimate the capacity utilization rate was 89.23%, and the Angang Steel's crude steel production capacity was about 37 million tons.

3.3. Located close to North China, the company is going to benefit from production reduction policy

The coil production capacity accounts for great proportion of the overall capacity in the production-cut regions, the impact of the capacity reduction is worth attention. In March 2017, the Ministry of Environmental Protection and the National Development and Reform Commission issued the "2017 Beijing Air Pollution Prevention and Control Work Plan for Beijing, Tianjin, and the surrounding areas". The work plan includes 26+2 cities including Beijing, Tianjin and Shijiazhuang, etc.

The work plan requires enterprises to arrange production schedule in a way that avoid the peak time; Shijiazhuang, Tangshan, Handan, and other major cities were requested to cut steel production capacity by 50% in the heating season.

According to our calculation, the crude steel production capacity of "2+26" cities and other capacity reduction cities totals more than 350 million tons, where crude steel capacity accounts for more than 30% of the country's total; the heating season production limit is expected to affect crude steel output by 40-50 million. The major crude steel products from the capacity limitation area include rebar, wire rod, section, wide plate, hot-rolled coil, cold-rolled plate and strip, which contributes to 28%, 53%, 46%, 35%, 32%, 29% and 82% of China's overall capacity, respectively.

Under the assumption that fixed assets grew at a rate of 6%YoY in 4Q2017, we estimate that from November to December, the supply gap will increase by 2.43

million tons month-on-month. If winter inventory is taken into consideration, the supply gap will further expand.

Table 7: Heating season production capacity data

		Crude Steel	RB	Wire	Section	Wide plate	HC	Cold rolled iron	galvanized	Strip
2+26	Capacity	32947	5683	8800	1450	2540	6365	2220	1225	8148
capacity limit area	Ratio	29%	23%	44%	46%	29%	29%	28%	32%	82%
Non 2+26	Capacity	6087	1270	1660	0	520	650	150	0	0
capacity limit area	Ratio	5%	5%	8%	0%	6%	3%	2%	0%	0%
Capacity	Capacity	39034	6953	10460	1450	3060	7015	2370	1225	8147.5
limit area	Ratio	34%	28%	53%	46%	35%	32%	29%	32%	82%

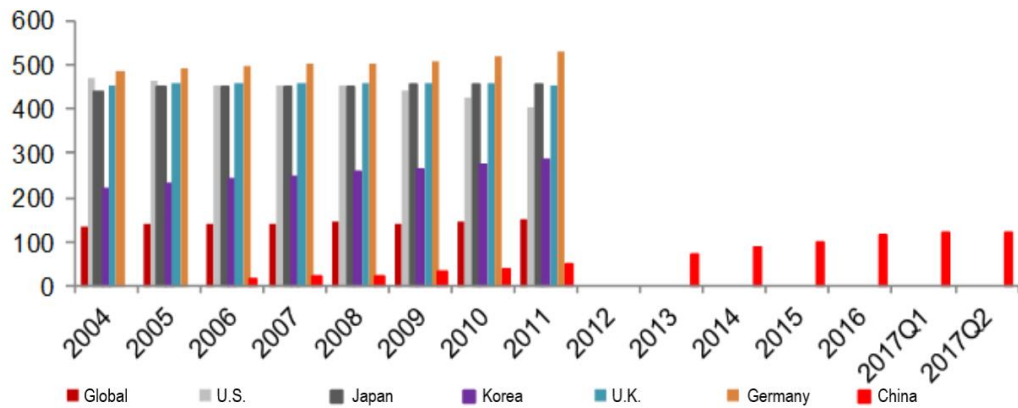
Source: Chuancai Research; Unit: 10,000 tons

The steel enterprises that produce hot coils and cold coils are mostly large steel enterprises with better environmental protection measures and less production restrictions; and the production of strip steels is mostly small and medium-sized steel enterprises with poor environmental protection measures and limited production, which has amplified the impact. If the steel strip is out of stock, downstream companies may consider using HC as substitutes, which is likely to further benefit HC.

3.4. Recovery of downstream demand, attention paid to ships, oil and gas, etc.

3.4.1. The number of passenger cars per 1000 people lag behind the developed markets

The number of passenger cars per 1000 people is far behind the United States, Britain, Japan, and South Korea. Stimulated by the purchase tax incentives in 2016-2017, sales of passenger cars in 1-10M2016 and 1-10M2017 increased by 15.85% and 2.34% YoY respectively.

Figure 11: The number of passenger cars per 1000 people

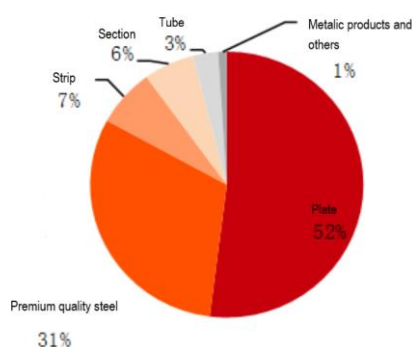
Source: Wind, Chuancai Research; Unit: 1 Vehicle

Steady growth of steel demand for the purpose of automobile industry.

Automobiles are an important downstream demand for the steel industry. The proportion of various steels in the total weight of automobiles is about 70%, and the steel consumption of automobiles accounts for about 8% of domestic crude steel demand. For automotive steels, steel plates account for 52%, high-quality steels 31%, and steels 17%. The steel products used for automotive includes hot rolled plate, cold rolled plate and galvanized sheet.

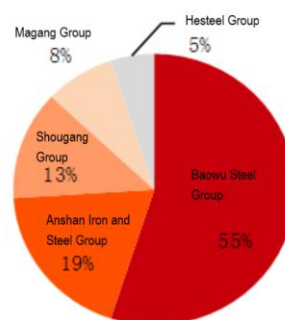
Since 2016, the truck renewal cycle has come and the growth rate of the production and sales of trucks picked up, which has boosted the demand for hot-rolled sheets. In the medium to long term, passenger cars have greater growth potential as they are in demand of better quality hot rolled coil and cold rolled coil. With the advancement of new energy vehicles, the automobile industry requires more light-weight, high strength products. As a result, cold-rolled coil is likely to be more widely applied in the automobile sector.

Figure 12: Proportion of Steel in Automotive Steel (by molding)



Source: Wind, Chuancai Research

Figure 13: Main domestic auto sheet supply ratio



Source: Custeel.com database (automobile steel plates include generic plates), Chuancai Research

Cold rolled and galvanized plates could be also used in home appliances and areas besides automobiles. Around 2010, the gross profit of cold rolled strip per ton was CNY 600-800 higher than that of other steel products. Because of the sound profits, it gradually became the main direction of steel investment. The year 2014-2016 was the peak time for the production of cold-rolled and galvanized auto plates. According to incomplete statistics, the cold-rolled and galvanized production capacity during the period was more than 16 million tons.

Table 8. Major cold-rolled automobile plate production lines put into operation in China in 2014-2016

	Compa ny	Project	Year put into operation	product	Rolling mill	Capacity/1 10,000 ton	Application
1	Benxi Steel	Cold rolled	2015	Cold rolled, galvanized	2150mm	220	Home appliance & vehicle plates
2	Valin	Anmi project	2014	Cold rolled, Galvanized	2200mm	150	Home appliance & vehicle plates
3	Tangste el	Kaiping park	2015	Cold rolled, Galvanized	1750mm	150	Home appliance & vehicle plates
4	Ansteel	Kobe project	2016	Cold rolled		40	vehicle plates
5	Ansteel	Guangzhou	2016	Galvanized	GI & GA	45	Galvanized vehicle plates
6	Ansteel	Chongqing	2015	Galvanized	1650mm galvanized	45	Galvanized vehicle plates
7	pzhstee l	Xichang	2014	Cold rolled, Galvanized	2030mm	170	Home appliance & vehicle plates
8	Wuhan Steel	Fangcheng	2015	Cold rolled, Galvanized	2030mm	220	Galvanized vehicle plates,

							home appliance
9	Baogang Group	New system auto board	2016	Cold rolled	2030mm	150	Home appliance & vehicle plates
10	Baosteel	Zhanjiang	2016	Cold rolled, Galvanized	2030mm	220	High-end auto plates
11	Baosteel	No.4 galvanized	2015	Galvanized	1880mm	42	High-grade galvanized sheet high-strength steel auto sheet
12	POSCO	Guangdong galvanized II	2015	Galvanized	High quality galvanized, alloy	23	Vehicle sheet
13	Mangan Group	Hefei galvanized	2017	Galvanized	Galvanized, Galvanized silicon	32	High-end home appliance
14	Total					1507	

Source: From news and company announcement, Chuancai research

In general, after 2016, the new production capacity of cold-rolled coil and galvanized sheet was declining, and the balance between industry supply and demand will gradually improve.

The company is an important automotive steel supplier in China. The company is the earliest company producing steel for automobiles, which could produce hot-rolled products such as steel for automobile beams, steel for high-strength wheels, as well as cold-rolled and galvanized products such as deep-drawn steel, high-strength steel and third-generation automobile steel. At present, the company has a galvanized sheet production capacity of 1.6 million tons and a color-coated sheet production capacity of 30,000 tons. In addition, the company's associated company TAGAL (Angang holds 50% of shares and does not include consolidated statements) has 800,000 tons of galvanized sheet production capacity.

3.4.2. The global shipbuilding industry is recovering, yet it takes time for domestic companies to benefit.

The BDI index rose and global ship orders on the rise. On February 11, 2016, the BDI index fell to a 290-point low in 15 years. Since this year, BDI has

rebounded to a maximum of 1588 points, which is 5.5 times the lowest point. The BDI index reflects the profitability of shipping companies and has a strong conduction effect on new ship orders.

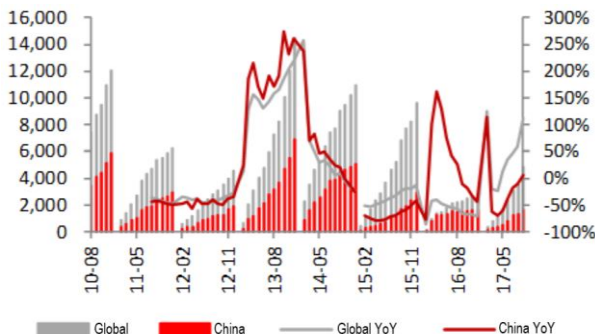
Figure 14: Baltic Dry Index (BDI)



Source: Wind, Chuancai Research

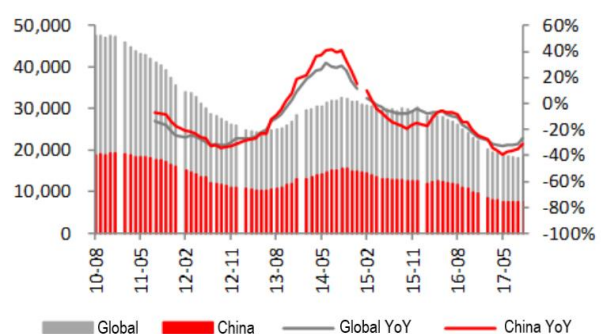
It will take time for overseas new ships orders to increase and conduct to China. In 2017, the global shipbuilding market showed signs of recovery. In 1-9M2017, the world's new cumulative ship orders reached 48.43 million dwt, an increase of 112%YoY; and it was 21.01 million dwt more than the cumulative new ship orders in 2016.

Figure 15: Clarksons new orders



Source: Wind, Chuancai Research; Unit: 10,000 tons

Figure 16: Clarksons existing orders



Source: Wind, Chuancai Research; Unit: 10,000 tons

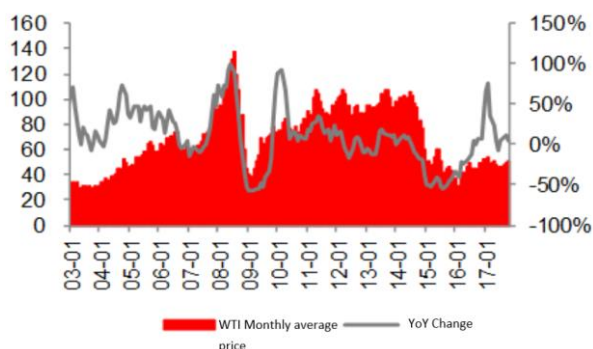
In terms of global shipbuilding industry, China remains less competitive and the

recovery of global ship orders has not been transmitted to domestic market. It takes time for domestic shipbuilding enterprises and raw materials to benefit from the recovery.

3.4.3. Increased CAPEX from the three barrels of oil positive to the seamless tube

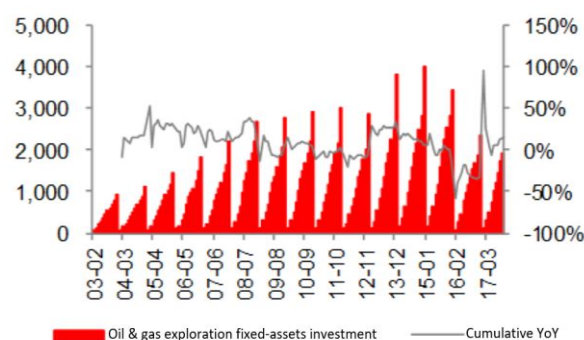
After June 2014, crude oil prices fell by over 50% and as a result capital expenditure in the oil and gas industry declined.

Figure 17: WTI crude oil monthly average and YoY change



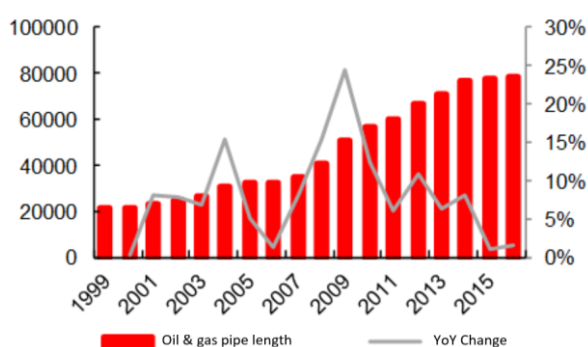
Source: Wind, Chuancai Research; Unit: \$/barrel

Figure 18: Oil and gas exploration, fixed assets investment and accumulative growth



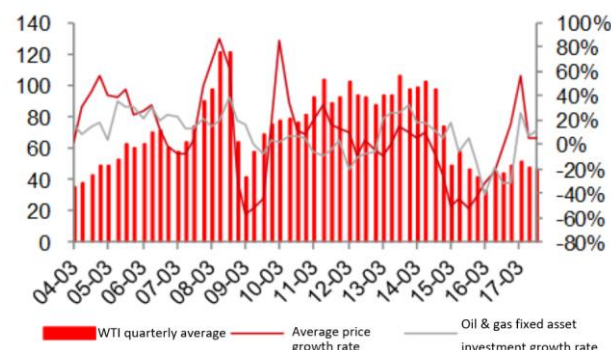
Source: Wind, Chuancai Research; Unit: CNY 100mn

Figure 19: Oil and gas pipeline length and YoY growth



Source: Wind, Chuancai Research; Unit: km

Figure 20: WTI Annual Growth Rate and Oil and Gas Investment in Fixed Assets



Source: Wind, Chuancai Research; Unit: \$/barrel

The monthly average price of WTI rebounded by 67%, the “three barrels of oil” increased capital expenditure in 2017. While the capital expenditures

from the “three barrels of oil” continued to decline in 2015-2016, it started to increase in 2017. Sinopec’s capital expenditure growth rate in 2017 reached 44%, of which exploration and production projects reached a growth rate of 57%.

Table 9. CAPEX of PetroChina, Sinopec and CNOOC

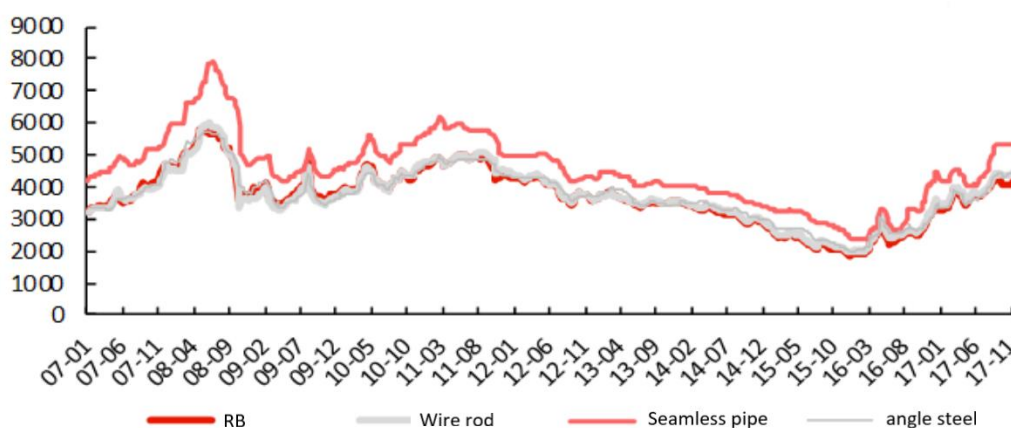
		2011	2012	20123	2009	2010	2011	
PetroChina	Exploration and production	1622	2272	2264	2215	1578	1302	1436
	Growth rate		40%	0%	-2%	-29%	-17%	10%
	Gas pipeline	626	729	574	329	204	203	222
	Growth rate		16%	-21%	-43%	-38%	0%	9%
							
	Total	2844	3525	3187	2917	2022	1724	1913
	Growth rate		24%	-10%	-8%	-31%	-15%	11%
Sinopec	Exploration and production	587	783	1053	802	547	322	505
	Growth rate		33%	35%	-24%	-32%	-41%	57%
							
	Total	1302	1587	1851	1546	1124	765	1102
	Growth rate		22%	17%	-16%	-27%	-32%	44%
CNOOC	Exploration and production (China)	311	419	549	628	347	213	
	Growth rate		35%	31%	15%	-45%	-39%	
	Exploration and production (Overseas)	94	181	345	429	312	275	
	Growth rate		92%	91%	24%	-27%	-12%	
	Total	405	600	894	1057	659	487	600-700
	Growth rate		48%	49%	18%	-38%	-26%	23%-44%

Source: Company announcement, Chuancai Research; Unit: CNY 100 mn

In 2016, the capital expenditure of CNPC’s oil and gas pipeline segment was CNY20.3 billion, which was mainly used for the construction of the West-East Gas Pipeline III and the Jinzhou-Zhengzhou refined oil pipeline. It is estimated that the oil and gas pipeline expenditure in 2017 totals CNY22.2 billion, an increase of 9% YoY.

Due to the overcapacity in the seamless steel pipe industry and the downturn in the downstream oil and gas industry, oil and gas extraction business continued to shrink. A number of domestic seamless steel pipe enterprises closed down and the company's seamless steel pipes also suffered serious losses. The seamless steel pipe industry has undergone a major reshuffle and is objectively beneficial to the company.

Figure 21: Seamless Steel Pipe Prices



Source: Wind, Chuancai Research; Unit: CNY/ton

IV. Valuation: give the company "Increase" rating

Earnings estimate: 1) According to the calculation of steel supply and demand balance, the gross profit of 4Q2017 steel per ton was slightly higher than that of 3Q2017, and the company's 2017Q4 performance remains unchanged; 2) we expect the real estate and the infrastructure investment remain stable, the sustained capacity reduction of the steel industry as well as improved industrial concentration are conducive to the sector fundamentals and profitability; 3) Note that the company will start to pay enterprise income tax since 2018.

Table 10. Company earnings forecast (incomplete)

	Steel product	Unit	2014A	2015A	2016A	2017E	2018E	2019E
Sales	Cold rolled plate	10,000 ton	854	773	761	776	784	784
	Hot rolled plate	10,000 ton	619	595	654	667	674	674
	Medium wide plate	10,000 ton	307	314	325	332	335	335
	Other steel products	10,000 ton	219	230	254	259	262	262
	Total	10,000 ton	1,999	1,912	1,994	2,034	2,054	2,054
Gross profit per ton	Cold rolled plate	Yuan	498	254	450	578	601	652
	Hot rolled plate	Yuan	282	-7	421	549	571	623
	Medium wide plate	Yuan	379	190	186	313	336	384
	Other steel products	Yuan	580	335	357	485	508	576
	Average		435	193	353	481	504	559
Gross profit	Total	CNY 100 mn	86	33	77	104	110	121

Source : Chuancai Research

Earnings forecast and rating: if the demand side maintains steady growth, we expect the operating revenue of 2017-2019 will be CNY 72.47, 74.53, 75.28 billion, with the net profit attributable to parent company at CNY4.96, 5.05, 5.03 billion respectively, corresponds to a EPS of CNY 0.69, 0.70 and 0.69 and P/E of 9.54(X), 9.37(X) and 9.41(X). Given that the industry PE (TTM) is 15 (X), give the sector “Increase” rating.

Risk reminder

Macroeconomic and policy change; Environmental risks; Less-than-expected downstream demand

Earnings Forecast

Balance sheet					Income statement				
Unit: CNY million					Unit: CNY million				
Fiscal Year	2016	2017E	2018E	2019E	Fiscal Year	2016	2017E	2018E	2019E
Current asset	25676	40571	48616	57434	Operating revenue	57882	72465	74527	75276
Cash	1968	5144	15407	23450	Operating cost	50186	62016	63504	63161
Accounts receivable	1942	3221	3042	3164	Business tax & surcharges	271	780	803	811
Other accounts receivable	362	375	413	408	Selling expenses	1928	2175	2176	2157
Prepayments	2586	3792	3680	3727	Administrative expenses	1626	1349	1485	1483
Inventories	10466	13252	12929	13117	Financial expenses	1286	1174	1173	1069
Other current assets	8352	14786	13145	13569	Impairment losses	1421	200	200	200
Non-current assets	62393	59197	55758	52289	Gains & losses from changes in fair value	0	1	1	1
Long-term equity investments	2968	2670	2769	2736	Gains on investment	427	208	281	256
Fixed assets	49065	46051	42894	39658	Operating Profit	1591	4979	5469	6653
Intangible assets	5755	5329	4883	4443	Non-operating income	61	101	88	92
Other non-current assets	4605	5147	5212	5452	Non-operating expenses	32	45	41	42
Total assets	88069	99768	104374	109723	Total profit before tax	1620	5035	5516	6703
Current Liabilities	36789	42377	41891	42222	Income taxes	5	76	469	1676
Short-term debt	18995	21103	20400	20635	Net income	1615	4959	5047	5027
Accounts payable	10055	13808	13667	13750	Minority interest income	-1	1	-0	0
Other current Liabilities	7739	7467	7824	7838	Net income attributable to shareholders of the parent company	1616	4958	5048	5027
Non-current Liabilities	5992	7627	8662	9830	EBITDA	6328	10382	10956	12118
Long-term debt	1296	2732	3801	4993	EPS (CNY)	0.22	0.69	0.70	0.69
Other Non-current liabilities	4696	4895	4861	4837					
Total Liabilities	42781	50004	50553	52052	Financial Ratios				
Minority Interests	406	407	407	407	Fiscal year	2016	2017E	2018E	2019E
Capital stock	7235	7235	7235	7235	Growth ability				
Capital reserve	31519	31519	31519	31519	Operating revenue	9.7%	25.2%	2.8%	1.0%
Retained earnings	6064	10602	14658	18507	Operating profit	-58.9%	212.9%	9.9%	21.6%
Equity attributable to Shareholders of the Parent Company	44882	49357	53414	57265	Net profit attributable to the parent company	-64.8%	206.8%	1.8%	-0.4%
Liabilities & Equity	88069	99768	104374	109723	Profitability				
					Gross margin (%)	13.3%	14.4%	14.8%	16.1%
Cash Flow Statement					Net margin (%)	2.8%	6.8%	6.8%	6.7%
Fiscal Year	2016	2017E	2018E	2019E	ROE (%)	3.6%	10.0%	9.5%	8.8%
Cash flow from operating activities (CFO)	4349	4303	11908	9784	ROIC (%)	4.5%	9.1%	10.0%	10.0%
Net Profit	1615	4959	5047	5027	Solvency				
Depreciation & Amortization	3451	4230	4314	4397	D/A (%)	48.6%	50.1%	48.4%	47.4%
Financing Expenses	1286	1174	1173	1069	ND/A (%)	47.81%	43.76%	45.40%	46.38%
Investment loss	-427	-208	-281	-256	Current Ratio	0.70	0.96	1.16	1.36

working capital change	-1590	-6235	1732	-450	Quick Ratio	0.40	0.62	0.83	1.03
Other CFO	14	383	-78	-2	Operating Efficiency				
Cash Flow from Investing Activities	-550	-829	-594	-672	Asset turnover	0.66	0.77	0.73	0.70
Capital Spending	1393	1600	1067	1244	AR turnover	38	28	24	24
Long-term investment	0	-295	98	-33	AP turnover	6.33	5.20	4.62	4.61
Other investing cash flow	843	476	571	540	Per share data (CNY)				
Cash Flow from Financing Activities	-5413	-298	-1051	-1070	EPS (diluted)	0.22	0.69	0.70	0.69
Short-term Debt	2676	2108	-703	234	CFPS (diluted)	0.60	0.59	1.65	1.35
Long-term Debt	334	1436	1069	1191	BPS (diluted)	6.20	6.82	7.38	7.91
Increase in Common Stock	0	0	0	0	Valuation				
Increase in Capital Surplus	0	0	0	0	P/E	29.28	9.54	9.37	9.41
Other Cash Flow from Financing	-8423	-3842	-1418	-2495	P/B	1.05	0.96	0.89	0.83
Net Change in Cash	-1633	3176	10263	8042	EV/EBITDA	10	6	6	5

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Explanation of sector ratings: Analyst expects a sector rated "OVERWEIGHT" to outperform the market by 30% or more over the next 6 months, "Increase" between 15% and 30%, "Neutral" to end up between -15% and +15%, and "UNDERWEIGHT" to fall behind the market by 15% or more, over the next 6 months.

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