

Section IV Discussion and Analysis about Operation

1. Analysis of Cost and Revenue

√Applicable □ Not applicable

(1) Principle business by industries, products and regions

Unit: Million Yuan Currency: RMB

Principal business by industries						
Industry	Operating revenues	Operating costs	Gross margin(%)	YoY change in revenue	YoY change in cost	YoY Change in gross margin
Steel manufacturing	103,243	85,874	16.8	6.6	-2.7	Up by 8.0 ppt.
Processing and distribution	158,192	153,414	3.0	12.4	12.6	Down by 0.2 ppt.
Information technology	3,956	2,813	28.9	0.5	-1.8	Up by 1.6 ppt.
E-commerce	38,753	38,641	0.3	93.2	92.9	Up by 0.2 ppt.
Chemical industry	7,659	7,142	6.8	0.4	-1.5	Up by 1.9 ppt.
Finance	530	253	52.3	-15.6	-17.3	Up by 1.0 ppt.
Offset between segments	-126,497	-126,025				
Total	185,837	162,112	12.8	13.2	8.4	Up by 3.8 ppt.

Principal business by products						
Products	Operating revenue	Operating cost	Gross margin (%)	YoY change in revenue (%)	YoY change in cost (%)	YoY change in gross margin (%)
Cold-rolled carbon steel sheets and coils	43,033	33,117	23.0	3.3	-7.2	Up by 8.7 ppt.
Hot-rolled carbon steel sheets and coils	28,592	22,262	22.1	24.7	9.9	Up by 10.5 ppt.
Steel tubes and pipes	6,271	6,254	0.3	-15.8	-16.8	Up by 1.2 ppt.
Other steel products	8,581	7,637	11.0	11.6	3.0	Up by 7.4 ppt.
Total	86,476	69,271	19.9	8.5	-2.3	Up by 8.8 ppt.

Principal business by regions						
Regions	Operating revenue	Operating cost	Gross margin(%)	YoY change in revenue (%)	YoY change in cost (%)	YoY change in gross margin (%)
Domestic market	162,083	139,633	13.9	13.6	8.0	Up by 4.5ppt
Overseas market	23,754	22,479	5.4	10.4	11.4	Down by 0.9ppt

Notes of principle business by industries, products and regions

√ Applicable □ Not applicable

Based on the internal organizational structure, the Company is divided into segments of steel manufacturing, processing and distribution, information technology, e-commerce, chemical industry and finance. The steel manufacturing segment includes all steel manufacturing units; the processing and distribution segment includes the trading units such as Baosteel International and overseas company; the information technology segment offers the business of Baosight Software; the e-commerce segment includes Ouyeel etc.; the chemical industry segment offers the business of Chemical Company; the finance segment offers the business of Finance Co.

Due to the influence of steel market recovery, the growth in needs of downstream industries and the cost cut-down in all departments of the Company, the gross margin ratio of major items in 2016 has grown substantially compared to last year.

(2). Production and sales analysis

√ Applicable □ Not applicable

Unit: Ten thousand tons

Major items	production	sales	inventory	YoY change in production (%)	YoY change in sales (%)	YoY change in inventory (%)
Cold-rolled carbon steel sheets and coils	987	973	121	4.3	3.1	-1.5
Hot-rolled carbon steel sheets and coils	959	1,004	54	7.9	13.6	22.9
Steel tubes & pipes	153	156	29	-6.8	-3.0	16.2
Other steel products	276	275	26	18.8	22.1	32.5
Total	2,374	2,409	230	6.4	8.8	8.9

Notes: Steel products production does not include trial production of Zhanjiang Steel in 2016.

The Company exported 3.324 million tons of steel products in 2016, representing a year-on-year increase of 769 thousand tons, with export channel sales set out as follows:

Region	2016 (ratio%)	2015 (ratio%)
East Asia and Australia	18.5	23.3
Europe and Africa	22.7	24.0
America	9.6	14.4
Southeast Asia and South Asia	49.1	38.4
Total	100.0	100.0

In 2016, Baosteel products were exported to more than 70 countries and regions, the traditional market sales in South Korea and Italy, etc. remained stable and can be deeply developed; the emerging markets in Vietnam, India, Saudi Arabia and Turkey grew significantly on year-on-year basis.

In 2016, the export for six kinds of strategic products (automotive steel, silicon steel, energy and steel for line pipes, high-grade sheet products, tin plate, high-grade ship plate and maritime work steel) of Baosteel carbon steel sheet accounted for 66% of total volume of carbon steel plate export.

Relying on advanced technical advantages and product advantages, global marketing network of serving the customers, Baosteel has established the strategic cooperation relation with many world multinational companies, in order to promote the overseas strategic layout. The company actively deepens the cooperation with overseas strategic users to promote to supply material for GM, Volkswagen and other famous multinational enterprises and has become the global supplier of many multinational companies.

(3). Cost analysis

Unit: Million Yuan Currency: RMB

Industry	Items	By Industries					Notes
		Amount in the period	Ratio in overall cost(%)	Amount in the same period last year	Ratio in overall cost in the same period last year(%)	Change of amount in this period from the previous period (%)	
Iron & steel manufacturing	Fuel and raw materials	53,005	62.1	52,591	63.7	0.5	
	Others	32,344	37.9	29,974	36.3	2.9	
	Total	85,349	100	82,565	100	3.4	

Note: Only the cost of the iron & steel manufacturing was included. Costs of other sectors such as the processing and distribution, information technology, e-commerce, chemical industry and finance units were not included.

(4). Major customers and major suppliers

√ Applicable □ Not applicable

The Company's sales to the top five customers was RMB 21.26 billion, making up 11.5% of its annual sales volume; the Company's sales to the related parties of the top five customers was RMB 10.04 billion, making up 5.4% of its annual sales volume.

The Company's procurement from the top five suppliers was RMB 18.4 billion, making up 40.3% of its annual fuel and raw material procurement volume; the Company's procurement from the related parties of the top five customers was RMB 2.48 billion, making up 5.4% of its annual procurement volume.

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2. Cost

Applicable Not applicable

(1) Sales expenses and administrative expenses

Unit: Million Yuan Currency: RMB

Items	Amount in the period	Amount over the same period last year	Change of amount in this period from the previous period (%)
Sales expense	2,268	2,153	5.3
Administrative expense	7,588	7,287	4.1

(2) Financial expenses

Unit: Million Yuan Currency: RMB

Items	Amount in the period	Amount over the same period last year	Change of amount in this period from the previous period (%)
Interest incomes	-290	-561	-48.3
Interest expenditures	2,231	1,206	85.0
Gains and losses from currency exchange	173	1,685	-89.7
Others	72	62	15.9
Total	2,186	2,393	-8.6

Financial expenses of the year decreased RMB 210 million compared to the same period last year, mainly due to: In August last year, the Central Bank adjusted the RMB exchange rate parity formation mechanism, the RMB was rapidly devalued against the USD, the Company implemented the foreign currency debt conversion to form the exchange loss of RMB 1.69 billion in accordance with the up-and-out principle of "foreign exchange financing rate plus exchange rate lock-in cost" less than RMB financing cost comparison, but because the financing standard currency has been conserved as the RMB this year, the total exchange loss is RMB 170 million with a year-on-year decline of RMB 1.51 billion. With an influence of long-term decrease in principal receivable of Wusong land plot, this year interest income reduced RMB 270 million on year-on-year basis; In order to avoid the exchange rate risk and exchange rate loss, the Company mainly adopted the RMB-oriented financing strategies in 2016, the direct financing scale had a net increase of RMB 13 billion on year-on-year basis in view of the Company's judgment for the direct financing window and the need for liquidity management, the financing interest rate rose slightly compared with the foreign exchange-oriented financing strategy in 2015, and the construction in progress of the subsidiary - Zhanjiang Iron & Steel has been transferred as the fixed asset, the corresponding financing interest is no longer capitalized and included in the financial expense, with an influence of the above multiple factors, this year interest expenditure increased RMB 1.02 billion on a year-on-year basis. Meanwhile, the Company implemented the low risk preservation or appreciation of value for the periodic idle fund, the corresponding revenue shall be confirmed periodically in accordance with expiration date.

3. R&D Investment

R&D investment table

Applicable Not applicable

Unit: Million Yuan Currency: RMB

Expenditure of R&D investment	3,662
Capitalization of R&D investment	-
Total R&D investment	3,662
Ratio of total R&D investment to operating revenue (%)	2.0
Amount of R&D personnel	1,060
Ratio of R&D staff to total staff(%)	2.8
Ratio of R&D investment capitalization (%)	-

Explanation

Applicable Not applicable

In 2016, the Company constantly developed steel competitive products, such as high induction grain-oriented silicon steel (B27R080, B30R090) and continuous tubing plate to achieve the first release in the world. The Company's multiple achievements in scientific research won the "Award for Scientific and Technological Advancement" of the State, Shanghai and metallurgical industry, of which Thin-strip Casting and Rolling Process, Equipment and Technology Integration and Product R&D of Control Engineering won the Special Award of Metallurgical Science and Technology Progress, in addition, four achievements respectively won the Second and Third Prize of Metallurgical Science and Technology Progress; Baosteel DCR Product and Core Technology Research won the First Prize of Shanghai Science and Technology Progress, in addition, three achievements respectively won the Second and Third Prize of Shanghai Science and Technology Progress;

4. Cash flow

√ Applicable □ Not applicable

In 2016, the cash and cash equivalents of the Company increased by 360 million, among which, the net cash flow arising from operating activities was RMB 16.37 billion, the net cash flow arising from investing activities was RMB -17.76 billion, the net cash flow arising from financing activities was RMB 1.58 billion, and the net cash flow arising from the effect of fluctuation in exchange rate was RMB 180 million. Without considering the impact of the Finance Co., the cash and cash equivalents increased by RMB 2.71 billion, among which, the net cash flow arising from operating activities was RMB 18.41 billion, the net cash flow arising from investment activities was RMB -17.7 billion, the net cash flow arising from financing activities was RMB 1.84 billion and the net cash flow arising from the effect of fluctuation in exchange rate was 160 million.

Unit: Million Yuan Currency: RMB

Items	2016		2015		Variation year on year	
	Including Finance Co.	Excluding Finance Co.	Including Finance CO.	Excluding Finance Co.	Including Finance Co.	Excluding Finance Co.
Net cash flow arising from operating activities	16,373	18,411	21,177	17,801	-4,804	610
Net cash flow arising from investing activities	-17,765	-17,704	-21,676	-20,003	3,911	2,298
Net cash flow arising from financing activities	1,580	1,843	-1,119	-580	2,699	2,423
Effect of fluctuation in exchange rate on cash	177	164	-564	-571	741	736
Net increase in cash and cash equivalents	365	2,714	-2,182	-3,353	2,547	6,067

Without regard to the impact of Finance Co., the net cash flow arising from operating activities was RMB 18.41 billion, an increase of RMB 610 million from the RMB 17.8 billion at the same period last year. This is mainly caused by the following factors:

- (1) The net profit this year was RMB 8.97 billion, RMB 8.17 billion more than the RMB 800 million at the same period last year.
- (2) Depreciation and amortization was RMB 12.31 billion, RMB 1.69 billion more than the RMB 10.62 billion at the same period last year.
- (3) Assets impairment was RMB 1.08 billion, RMB 400 million less than the RMB 1.48 billion at the same period last year.
- (4) Financial expense was RMB 2.21 RMB, RMB 260 million less than the RMB 2.47 billion at the same period last year.
- (5) Asset loss, fair value change loss, investment loss, deferred tax asset and liabilities decreased RMB 620 million cash flow, with a loss of 270 million at the same period last year, representing a decreased cash flow of 350 million.
- (6) Inventory increased than that at the beginning of the year and decreased RMB 12.41 billion cash flow, with an increase of cash flow of RMB 2.81 billion due to decrease of inventory at the same period last year, representing a decreased cash flow of RMB 15.21 billion for two years.
- (7) operational receivable items decreased RMB 10.43 billion cash flow than that at the beginning of the year, with an increase of RMB 1.08 billion due to decrease of receivables at the same period last year, representing a decreased cash flow of 11.51 billion for two years.
- (8) Operational receivable items increased RMB 17.32 billion cash flow than that at the beginning of the year, with a loss of RMB 1.18 billion due to the decrease of payables at the same period last year, representing an increased cash flow of RMB 18.48 billion for two years.

Without regard to the impact of Finance Co., the net cash flow of investing activities was RMB -17.7 billion, RMB 2.3 billion less than the RMB -20 billion at the same period last year. This is mainly caused by the following factors:

- (1) Cash for purchasing fixed assets, intangible assets and long-term assets was RMB 11.53 billion, with RMB 12.24 billion more cash flow than the RMB 23.97 billion at the same period last year, mainly due to less expense on Dongshan Base Construction.
- (2) The net outflow of other investing activities was RMB 6.17 billion, with RMB 10.14 billion more cash outflow than the RMB 6.17 billion at the same period last year, representing an increased outflow of RMB 10.14 billion, mainly due to more expense on low risk asset operations this year.

Unit: Million Yuan Currency: RMB

Items (without regard to Finance Co.)	2016	2015	Year-on-Year Variation
Cash inflow arising from investing activities	64,366	23,053	41,313
Cash outflow arising from investing activities	82,070	43,055	39,015
Net cash flow arising from investing activities	-17,704	-20,003	2,298

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Without regard to the impact of Finance Co., the net cash flow arising from financing activities was RMB 1.84 billion, RMB 2.42 billion more than the RMB -580 million at the same period last year. Details are as follow:

Unit: Million Yuan Currency: RMB

Items (without regard to Finance Co.)	2016	2015	Year-on-year variation
Impact of change in financing scale on flow	4,981	3,986	995
Cash paid for distribution of dividends and profits or repayment of interest	-3,822	-4,966	1,144
Cash paid for repurchase of stocks	0	-1,500	1,500
Cash received from investors	720	1,900	-1,180
Other cash related to financing activities	-36	0	-36
Net cash flow arising from financing activities	1,843	-580	2,423

(II) Analysis of assets and liabilities

√ Applicable □ Not applicable

1. Assets and liabilities status

Unit: Million Yuan Currency: RMB

Items	Amount at the end of the reporting period	Ratio against total assets at the end of the reporting period (%)	Amount at the end of last reporting period	Ratio against total assets at the end of last reporting period (%)	YoY ratio change (%)	Notes
Current assets	102,210	38.1	69,903	29.9	46.2	
Including: Cash and cash equivalents	10,477	3.9	7,817	3.3	34.0	Concentration for the payment collection at the end of year
Inventory	35,779	13.4	23,516	10.0	52.1	Raw material price increase and strategic reserve capacity increase and other reasons
Receivables	20,632	7.7	17,351	7.4	18.9	
Prepayments	7,800	2.91	4,160	1.8	87.52	Purchasing price rise and business scale growth
Non-current assets	165,773	61.9	164,220	70.1	0.9	
Including: Fixed assets	118,102	44.1	91,068	38.9	29.7	
Construction-in-progress	9,310	3.5	33,628	14.4	-72.3	The construction in progress of Zhanjiang Iron & Steel transferred as the fixed asset
Long-term equity investment	5,310	2.0	5,010	2.1	6.0	
Total assets	267,983	100.0	234,123	100.0	14.5	
Current liabilities	119,890	44.7	91,860	39.2	30.5	
Including: Short-term borrowings	27,754	10.4	27,111	11.6	2.4	
Payables	33,979	12.7	25,820	11.0	31.6	Purchasing price rise and business scale growth
Deposit received	21,745	8.11	12,468	5.3	74.41	Product price rise and increased sales volume
Non-current liabilities due within one year	155	0.1	208	0.1	-25.7	
Other current liabilities	18,054	6.7	10,057	4.3	79.5	Newly-issued ultra-short term financing bill
Non-current liabilities	16,672	6.2	20,117	8.6	-17.1	
Including: Long-term borrowings	296	0.1	9,111	3.9	-96.7	Adjustment of financing structure
Notes payables	14,077	5.3	8,747	3.7	60.9	Newly-issued medium-term note
Total liabilities	136,562	51.0	111,977	47.8	22.0	
Shareholders' equity	131,421	49.0	122,146	52.2	7.6	
Total Liabilities and shareholders' equity	267,983	100.0	234,123	100.0	14.46	

2. Limited status of major assets at the end of reporting period

Applicable Not applicable

Unit: Million Yuan Currency: RMB

Items	Carrying value at the end of the year	Limited cause
Cash and cash equivalents	1,003	Reserve requirement in the People's Bank of China by Finance Co.
Notes receivables	524	Pledge billing RMB 510 million, discount RMB 20 million
Fixed assets	592	Mortgage from subsidiaries
Intangible assets	89	Mortgage from subsidiaries
Total	2,209	

(III) Analysis of industrial operations

Applicable Not applicable

Analysis of steel industry operations

1. Steel manufacturing and sales by processing

Applicable Not applicable

Unit: Million Yuan Currency: RMB

By processing	Production (ton)		Sales volume (ton)		Operating revenue		Operating cost		Gross margin (%)	
	This year	Previous year	This year	Previous year	This year	Previous year	This year	Previous year	This year	Previous year
Cold-rolled steel	9,865,762	9,456,127	9,733,394	9,445,106	43,033	41,655	33,117	35,695	23.0	14.3
Hot-rolled steel	9,587,806	8,888,578	10,040,169	8,839,070	28,592	22,937	22,262	20,259	22.1	11.7
others	3,567,259	3,279,873	3,613,875	3,271,513	12,597	13,054	11,918	12,923	5.4	1.0

Note: the above table only contains manufacturing and sales information of self-made steel, excluding information of steel billet.

2. Steel manufacturing and sales by form of product

Applicable Not applicable

Unit: Million Yuan Currency: RMB

By form	production (ton)		Sales volume (ton)		Operating revenue		Operating cost		Gross margin (%)	
	This year	Previous year	This year	Previous year	This year	Previous year	This year	Previous year	This year	Previous year
Strips	20,902,733	19,500,501	21,233,112	19,454,468	75,500	68,163	59,268	59,689	21.5	12.4
Tubes&pipes	1,525,339	1,637,311	1,562,650	1,611,194	6,271	7,450	6,254	7,520	0.3	-0.9
others	592,755	486,766	591,676	490,026	2,452	2,033	1,776	1,668	27.6	17.9

Note: the above table only contains manufacturing and sales information of self-made steel, excluding information of steel billet.

3. Steel sales by marketing channels

Applicable Not applicable

Unit: Million Yuan Currency: RMB

By marketing channels	Operating revenue		Ratio to total operating revenue (%)	
	This year	Previous year	This year	Previous year
Off-line marketing	125,259	122,807	67.4	74.8
On-line marketing	34,053	18,728	18.3	11.4

4. Iron ore supplies

Applicable Not applicable

Unit: Million Yuan Currency: RMB

Iron ore source of supply	Supply (ton)		Expenditure	
	This year	Previous year	This year	Previous year
Domestic procurement	6,400,000	2,420,000	3,052	792
Overseas import	40,230,000	34,460,000	14,715	14,296

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(IV) Investment analysis

1. Analysis of equity investment outside Baosteel

Applicable Not applicable

In 2016, the Company spent RMB 1.97 billion in equity investment, RMB 2.88 billion less than that in last year, which was down by 59.3%.

The main equity investment

Applicable Not applicable

Unit: Million Currency: RMB

Name of investee	Main business	Proportion of Baosteel's equity in the investee	Actual capital contribution from Baosteel
Shanghai Baosteel Asset Management Co., Ltd.	Asset management	100%	1,000
Shanghai Ouyeel Finance Service Co., Ltd.	E-commerce	54.91%	500
Ouyeel International Co., Ltd.	E-commerce	100%	99
Baochem Zhanjiang Co., Ltd.	Chemical industry	100%	90
Total			1,689

Note: statistics according to the capital contribution of the Company to the equity investment project in the year.

2. Main non-equity investment

Applicable Not applicable

In 2016, the Company completed the fixed-asset investment of RMB 14.75 billion, of which: Zhanjiang Iron & Steel project completed the investment of RMB 7.74 billion.

(1) Raised fund project situation

None.

(2) Non-raised fund project

① Completed and operated project

Zhanjiang Iron & Steel Project. In order to carry out the Plan of National Steel Industry Adjustment and Revitalization and steel industry strategic adjustment between Guangdong and Shanghai, the iron-making, steel-making, hot rolling and cold rolling production line in Donghai Island, Zhanjiang City of Guangdong Province were newly built with an annual output of 8.23 million tons of pig iron, 8.928 million tons of molten steel, 8.749 million tons of continuous casting billets and 6.89 million tons of steel product. No. 2 blast furnace system of the project started the heat load test run in advance on Jul. 15, which marked the Phase-I project of Zhanjiang Iron & Steel construction completely.

Closed Transformation for Phase-I and Phase-II Mine Field (OC, OD) Bar C-type. In order to further improve the raw material mine area environment, decrease unorganized emissions of the dust, reduce material loss and boiling water content, the closed transformation will be implemented for the open-air mine, the transformed material yard will synchronize to realize the completely automatic operation. The project was completed and put into operation in September.

Reconstruction of E and F bar silo in the coal yard. In order to further improve the coal year area environment, decrease unorganized emissions of the dust, reduce the material loss, the open-air coal yard will be reconstructed as the silo. The project was completed and put into operation in Jun. 2016.

② Continuously-constructed project

Closed Transformation for Phase-I and Phase-II Blending Yard (BA, BB) and Secondary Material Yard (OA, OB). In order to solve material dust and erosion of Phase-I and Phase-II blending yard and secondary material yard, reduce the material pollution to the surrounding environment, the closed transformation will be implemented for the open-air blending yard, and the plan is going to be put into operation at the end of June 2017. Currently, the civil construction and steel structure installation are in progress.

3. Assets by Fair Value and Measurement

Applicable Not applicable

Unit: Million Yuan Currency: RMB

Items	At the end of 2015	At the end of 2016	Purchase in the reporting period	Sales in the reporting period	Change of fair value
Assets by fair value and measurement and its change recorded in the gains/losses in the reporting period	873	1,123	3,515	3,401	136
Available-for-sale financial assets	1,331	3,529	2,644	570	124
Total	2,204	4,652	6,159	3,971	260

(V) Main holding and joint-stock company analysis

Applicable Not applicable

1. Shanghai Meishan Iron & Steel Co., Ltd.

As of the end of 2016, the Company owned 77.0% of the equity. With a registered capital of RMB 7.08 billion, Meishan Steel specializes in the processing and sales of black metal smelting and rolling. By the end of 2016, Meishan Steel had a total asset of RMB 30.76 billion, a net asset of RMB 9.79 billion, and a net yearly profit of RMB 360 million.

2. Baosteel Zhanjiang Iron & Steel Co., Ltd.

As of the end of 2016, the Company owned 90% of the equity. With a registered capital of RMB 20 billion, Zhanjiang Steel's main business specializes in the processing and sales of black metal smelting and rolling. Parts of projects of the Company is under construction at present. By the end of 2016, Zhanjiang Steel had a total asset of RMB 63.05 billion, a net asset of RMB 17.88 billion, and a net yearly profit of RMB -700 million.

3. Baosteel-NSC Automotive Steel Sheets Co., Ltd.

As of the end of 2016, the Company owned 50% of the equity. With a registered capital of RMB 3 billion, BNA's main business includes manufacturing and sales of cold-rolled steel sheets and hot-dip galvanized steel sheets for automobile, automotive parts and other services related to its principal business. By the end of 2016, BNA had a total asset of RMB 5.03 billion, a net asset of RMB 3.51 billion, and a net yearly profit of RMB 260 million.

4. Yantai Lubao Steel Tubes Co., Ltd.

As of the end of 2016, the Company owned 100% of the equity. With a registered capital of RMB 500 million, Lubao Steel Tube's main business includes processing and sales of seamless steel pipe. Its major products include structural seamless steel pipe, low/medium pressure boiler seamless pipe, seamless pipelines for transportation of fluids, and hydraulic seamless pipe, as well as high pressure boiler seamless pipe, seamless pipe for oil pipelines, geological drillings, oil pipelines and oxygen cylinder pipe. By the end of 2016, Lubao Steel Tubes had a total asset of RMB 840 million and a net asset of RMB 560 million and reporting a net yearly profit of RMB -90 million.

5. Baosteel Huangshi Coated and Galvanized Sheet Co., Ltd.

In 2016, Huangshi State-owned Assets Management Co., Ltd. increased its capital investment by RMB 72 million to the Company, and the initial capital contribution of RMB 40 million had been completed. After the completion of all increased capitals, the equity ratio of Huangshi Coated and Galvanized held by Baosteel has been decreased from 58.45% to 50.63%. With a registered capital of RMB 167 million, Huangshi's main business includes production and sales of cold-rolled sheets, aluminum coated steel sheets, prepainted steel sheets and related coated steel products. By the end of 2016, Huangshi had a total asset of RMB 1.06 billion, a net asset of RMB 460 million, and reporting a net yearly profit of RMB 30 million.

6. Shanghai Baosteel International Economic & Trading Co., Ltd.

As of the end of 2016, the Company owned 100% of the equity. With a registered capital of RMB 2.25 billion, Baosteel International's main business includes imports and exports of goods and technology approved by the government, the imports of steel and scrap steel, processing with imported materials and compensation trade. By the end of 2016, Baosteel International had a total asset of RMB 45.86 billion, a net asset of RMB 14.64 billion, and reporting a net yearly profit of RMB 1.46 billion.

7. Shanghai Baosight Software Co., Ltd.

As of the end of 2016, the Company owned 55.5% of the equity. With a registered capital of RMB 783 million, Baosight's main business includes computer, automation, network communication and the research, design, development, manufacturing and integration of software and hardware. By the end of 2016, Baosight had a total asset of RMB 6.84 billion, a net asset of RMB 4.25 billion, and reporting a net yearly profit of RMB 370 million.

8. Shanghai Baosteel Chemical Co., Ltd.

As of the end of 2016, the Company owned 100% of the equity. With a registered capital of RMB 2.11 billion, Baosteel Chemical's main business includes production and sales of raw chemical materials and products, "four techniques" services in chemical industry, and import and export activities of its own products. By the end of 2016, Baosteel Chemical had a total asset of RMB 5.3 billion, a net asset of RMB 3.66 billion, and reporting a net yearly profit of RMB 70 million.

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9. Shanghai Baosteel Asset Management Co., Ltd.

In 2016, the Company invested RMB 1 billion to set up Shanghai Baosteel Asset Management Co., Ltd. with the sole proprietorship, whose main business is for asset management; Maintenance of construction machinery and metallurgical equipment; Design, manufacturing, installation and maintenance of mechanical and electrical equipment (except for special equipment); Goods and technology import and export business; Technical development, transfer, consulting, services, etc. in the field of metallurgical technology. In Dec. 2016, it purchased 95.82% of equities of Nantong Baosteel Iron & Steel Co., Ltd. which was held by the Company. By the end of 2016, this company's total assets have been RMB 750 million, net assets of RMB 690 million, and net profits of RMB 550 thousand in this year.

10. Baosteel Group Finance Co., Ltd.

By the end of 2016, the Company owned 62.1% of equities of this company whose registered capital is RMB 1.4 billion, the main business for absorbing deposits from member units, applying for loans to member units, internal transfer and settlement between the member units, entrusted loans and entrusted investment for member units, inter-bank borrowing, etc. By the end of 2016, this company's total assets have been RMB 15.09 billion, net assets of RMB 1.97 billion, and net profits of RMB 130 million in this year.

11. Yantai Baosteel Pipe Co, Ltd.

By the end of 2016, the Company owned 80% of equities, the rest 20% owned by Yantai Lubao Steel Tubes Co., Ltd. who has registered capital of RMB 4 billion, with the main business for production, processing and sales of steel tubes, ancillary products and by-products; Consulting services for steel pipe rolling technology, warehousing, goods, import and export business etc. By the end of 2016, this company's total assets have been RMB 4.16 billion, net assets of RMB 1.03 billion, and net profits of RMB -350 million in this year.

12. Ouyeel Co., Ltd.

By the end of 2016, the Company and its subsidiary Baosteel International jointly owned 51% equities of this company (the Company holds 8.67% equities in this company). The registered capital of this company is RMB 2.4 billion. Its main business is in the e-commerce field of technical consulting, technology development, technical services, technology transfer, industrial investment, investment management, equity investment management, investment consulting, economic information consulting, enterprise management consulting, domestic trade (except special approval), engagement in import and export business of goods and technology. By the end of 2016, this company's total assets have been RMB 14.34 billion, net assets of RMB 2.41 billion, and net profits of RMB -290 million in this year.

13. Overseas Company

By the end of 2016, the Company has set up foreign subsidiaries in the US, Japan, Germany, Singapore and Hong Kong, played a significant role in expanding sales and purchasing network of the Company, and improving the competitiveness of the Company in the international market.

III. Discussion and Analysis of the Company's Future Development

(I) Industry structure and trend

Applicable Not applicable

In 2017, the growth of the world economy will be impacted by the Fed rate hike, unstable European economy and other uncertain factors, and the vast developing countries including China under great financial pressure, at the same time, the bigger challenge would be faced in front of China's foreign trade.

In 2017, global crude steel production is expected to slightly increase by 0.1% to 1.62 billion tons on year-on-year basis. As China's real estate construction slowed down, from 2017 to 2018, China's crude steel production is expected to decline, which may be risky for China's steel enterprises. In contrast, the crude steel production in India is expected to continue to grow strongly over the next two years and is expected to overtake Japan as the world's second largest producer of crude steel in 2018. Due to the increase in domestic steel demand and anti-dumping support for low-priced imported steel, the crude steel production in the United States and the European Union will be expected to increase over the next two years.

2017 is not only a year for deepening structural supply-side reform but also a crucial time for resolving excessive steel production capacity. Domestic economic growth will be generally stable, continually maintaining the medium-to-high speed growth, in more balanced structure. The work to reduce excessive steel production capacity will continue to move forward. The recycled steel, intermediate frequency furnace and other backward production capacity will gradually withdraw from the market. But in the overall view, the oversupply situation in the domestic market is hard to turn better fundamentally in the short term.

In 2017, China's steel market demand is expected to remain stable, with the steel production keeping at a high level, but because of the domestic and foreign market environment is more complicated, the steel export trade friction may be a lot more, and the annual export volume in a trend of decline. The steel industry is still at transformation and struggling stage. The whole market changed a little, so it will still be difficult for steel price to rise sharply. Resolving excessive production capacity and eliminating backward production capacity will be the key factors for the smooth operation of steel price.

(II) Company development strategy

Applicable Not applicable

In 2016, after reviewing and sorting out the last round of planning, systematically analyzing the external development environment and national development strategy, the Company actively took the opportunities and responded to threats, launching a new round of development planning (2016-2021), and refining connotation of the development strategy of "one body with two wings". Namely: to adhere to the steel business development as the main body, to strengthen the comprehensive competitiveness, to insist on the strategic objectives "becoming the world's most competitive steel enterprise, becoming the listed company of the most investment value and to undertake China's mission of turning from the iron and steel giant to iron and steel power; At the same time, the Company fully grasps the opportunities of the times, through the development by two wings of intelligent manufacturing in the steel industry and Ouyee Co., Ltd., to gain the Company's new advantage in the Internet era and intelligent era ahead of other competitors. The Company's new development strategy is connected with the national strategy, closely following the pulse of era, in clear strategic positioning, with explicit ways and measures, and in line with the development environment of China's steel industry.

In 2016, with the development strategy of "one body with two wings", the company gained a total profits of RMB 11.52 billion in the whole year, and achieved the best planning objectives among the domestic counterparts; with three initial releasing products to the world like high magnetic induction oriented silicon steel, and 6 significant new technological breakthroughs like acid free phosphorus removal technology; Streamlining organizational structure, improving labor efficiency, the annual staff of 2,222 people to be optimized, the official labor efficiency improved by 6.5%.

(III) Business plan

Applicable Not applicable

1. Progress of the preliminary development strategy and business plan during the reporting period

In the annual business objectives, in 2016, the Company's overall cost reduced by RMB 5.85 billion, net cash inflow from operating activities of RMB 18.41 billion (excluding Finance Company), cold rolled automobile sheet occupancy of more than 50%, formal labor efficiency ratio increasing by 6.5%, exceeding the annual business objectives, and realizing the optimal performance of domestic industry.

2. Business objectives, plans and key works of the Company to be implemented in 2017

In 2017, the Company will focus on business policy of "one body with two wings, four-place coordination for development, reform and innovation; difference competition, cost reform, green and lean for success", stressing firmly on three-year planning objective of cost reduction without wavering, striving to achieve the business objectives of "being domestic leader of business performance, being global top three of profit per ton; cost reduction of more than RMB 6 billion; synergy benefit from Baowu of more than RMB 1 billion; Zhanjiang Iron & Steel of overall profitability; formal labor efficiency improved by more than 6%".

In 2017, Baosteel plans to produce 45.22 million tons of iron (including: Wugang Limited of 15.32 million tons), 46.19 million tons of steel (including: Wugang Limited of 15.68 million tons), to sell 43.94 million tons of commercial billet (including: Wugang Limited of 14.4 million tons), total operating incomes of RMB 338.5 billion and operating costs of RMB 310.2 billion. The management of the Company will continue to consolidate the results of cost reduction and breakthrough in profound zone as the main work, in order to maintain the Company's leadership in the domestic carbon steel sheet markets and relative leading position in global business performance as the objective. Through promotion of joint restructuring, strengthening of coordination between all bases, continuous implementation of the cost reduction, the Company can be assured to complete the production and business objectives and to strive for more excellent business performance.

Guided by the Company's business policy and objectives in 2017, and in line with the requirements of planning and requirements of the group company, the Company will promote the following works in the year:

(1) Promote joint restructuring and make full use of synergy effects. Earnestly complete the joint restructuring of Baowu, making full use of synergy effects, comprehensively optimizing allocation of resources, and enhancing the sustainable profitability. Meanwhile, further improving the leading ability of technology, promoting interactive communication and manufacturing capacity of multi bases and establishing the benchmarking mechanism in four production bases as soon as possible, to form the Company's virtuous circle of internal benchmarking improvement. Planning operational information architecture in future four bases of Baosteel, to support multi-base collaborative integration operation.

(2) Focus on new product development, lead the market and users. Insist on technical guidance, providing the users with overall solution of high-quality steels and materials with the stable quality and reasonable cost. Vigorously boost R & D schedule of initial releasing products and original technology to each team, consolidating coordination of production, study, research and application, exploring the establishment of the collaborative research and development mode of research institute and local technology center, accelerating the technology transplanting coverage of core process, with full play of radiation efficiency of R & D advantage resources from the research institute and the Baoshan base factory headquarters.

(3) Strengthen multi-base coordination and achieve stable and efficient manufacturing. Further intensify the whole process control of Baoshan base to improve manufacturing capacity. Set up a stable and controlled production operation system in Meishan base, to constantly upgrade the standardization and refinement of technology, management, on-site operation, equipment operation and maintenance and other links. Comprehensively upgrade all the production technical indexes in Dongshan base, exploiting potential cost improvement. Further expand the market in Steel Tube and Strip Division, to improve business performance.

(4) Adhere to objective of cost reduction without unwavering, enhance cost competitiveness. Continue to exploit new projects and potential points to reduce cost, and promote cost reduction in depth, to ensure that all costs not rebound on year-on-year basis and the indexes are not bad, and to effectively support the Company's overall business performance objectives.

Section IV Discussion and Analysis about Operation

(5) Pay attention to environmental improvement and construct the urban steel mills. Baoshan base needs to be comprehensively enhanced on the environmental protection process performance and system capacity, to steadily push forward the new standards of environmental protection for realization and improvement, and plan supervision projects of clean air. Meishan base needs to "promotion and upgrading" in front area of the factory and "optimization and improvement" in north area of the factory, and other environmental protection and greening projects, to push forward the pollutant emission reduction and increase the risk control and management of discharge of waste gas and waste water; Dongshan base needs to fully carry forward the environmental protection acceptance of the two blast furnace systems, to improve the environmental management system and system certification, and to broaden the comprehensive utilization of social channels and to enhance the utility value of secondary resources.

(6) Develop variety competition advantages and consolidate the market leading position. Keep improvement and optimization of the multi-base operation mode, and better complete the production organization in multi bases; Keep optimization of the product structure to ensure and improve the market share of various steel products; Further strengthen product development management. According to new product requirements and needs of technology research, promote collection and delivery of new product requirements and increase implementation efficiency of new product development requirements.

(7) Innovate the human resources mechanism and motivate the vitality of staff team. Combined with the joint restructuring process of Baowu, on the base of multi-base human resources management mode, carry out the top-level design of human resources, explore various means to increase the labor efficiency in full coverage, innovate salary and welfare incentive mechanism and build the core talent team.

(8) Take the pilot projects as the starting point, and actively promote intelligent manufacturing. Baoshan base needs to actively promote the furnace front operation of blast furnace, automation of cold rolling packaging and other robot application demonstration and reconstruction projects, and establishment of the intelligent procurement platform into operation. Meishan base needs to continuously promote intelligent centralized control of key areas and model production projects of key processes. Steel Tube and Strip Division needs to continue promoting the industrial robot and intelligent detection, making breakthroughs in product identification and tracking, end-to-end personal service for strategic users, surface detection for hot steel tube, automatic thread determination technology etc.

3. In 2017, the Company's business plan not constitutes a company's performance commitment to the investors, prompting the investors to maintain sufficient risk awareness.
4. The capital requirements required to maintain the Company's current business and to complete the investment projects under construction, and the investment funds' sources, costs and usage, involved in the company's business plan.

In Baoshan base, the Company's budget of fixed assets investment is RMB 15.9 billion in 2017, mainly used for optimization of oriented silicon steel product structure, optimization of tinplate product structure, series project reconstruction in raw material field of "coal in stock, mine in shack"; Reconstruction of outsourcing coke and coal silo in Meishan base; 1550 cold rolling project and factory station project construction in Dongshan base; In Qingshan base, new steel rail production line with on-line heat treatment function added in large strip branch of strip factory and other key projects.

(IV) Possible risks

Applicable Not applicable

1. Overall risk situation of the company and related risk countermeasures

In 2016, Zhanjiang Iron & Steel realized the transformation from construction to operation, and production and business results exceeded expectations. The construction of Zhanjiang Iron & Steel was steadily moving on. In January, it completed the test run of 2030 cold rolling hot load. In March, No. 1 blast furnace system was fully completed. In July, No. 2 blast furnace was successfully ignited. With the successive trial production of production lines, Zhanjiang Iron & Steel quickly upgraded the technical and economic indexes. The continuous annealing of one blast furnace, hot rolling and cold rolling successively achieved monthly production, successfully passing the ISO9001 certification and conformity certification of ISO/TS16949 by BSI. The related products have been supplied to more than 50 car users. At the same time, seize the favorable opportunities to accelerate production capacity increasing and realize the overall positive product gross margin.

Take the cost reduction and energy and medium integration as the drive, greatly promote the management optimization of energy system and to realize efficient, economical, safe and stable supply of energy system. Overcome the influence of coal control on the logistics and energy, fully debase the energy cost per ton and energy consumption of main process, continuously reduce the gas and oxygen release, to exceed the annual energy cost reduction objective and to complete the energy saving quantity of 89,900 tons of standard coal in process. Strengthen the process management and control, and environmental risk management and control. The 100% online emission process of key pollution sources reached up to standards, with no major environmental risk events throughout the year. A series of emergency management and control measures marked by G20 summit have been highly recognized by the local environmental protection department, and approved by the Second Central Environmental Protection Inspectorate for the flight inspection.

2. Newly-increased risk factors in 2017

In 2016, with the official establishment of Baowu group, Baosteel exchanged shares by absorption merger of Wuhan Iron and Steel Company Limited, so it is urgent to play a strong synergy and scale effect of the powerful combination and rapidly increase the sustainable profitability. In 2017, during the integration process of Baowu, through business and management integration in various aspects, there may be risks of not reaching the maximized cross-regional synergetic effects in procurement, production, sales, personnel, and so on within the target period.