

Stock code: 600320 900947

Stock Name: Zhenhua Heavy Zhenhua B-share

Shanghai Zhenhua Heavy Industries Co., Ltd.

Annual Report 2019

CONTENTS

Section I	Definitions	1
Section II	Company Profile and Principal Financial Indexes	2
Section III	Business Profile	6
Section IV	Discussion and Analysis of the Performance	7
Section V	Important Events	18
Section VI	Changes in Ordinary shares and Shareholders' Situation	31
Section VII	Preferred Shares	36
Section VIII	Directors, Supervisors, Senior Executives and Employees	37
Section IX	Corporate governance	43
Section X	Related Information on Corporate Bonds	45
Section XI	Financial Report	46
Section XII	List of Reference Documents	177



Important Notice

- 1** The Board of Directors, Board of Supervisors, directors, supervisors and senior executives of the Company hereby guarantee the truthfulness, accuracy and completeness of the contents carried in this annual report, guarantee no false record, serious misleading statement or great omission carried in this annual report and guarantee to assume the legal responsibilities jointly and separately.
- 2** All directors of the Company are present at the board meeting.
- 3** Ernst & Young LLP. (Special General Partnership) issues the standard audit report without qualified opinion for the Company.
- 4** Zhu Lianyu, the chairman of the Company, Huang Qingfeng, responsible person for accounting, and Zhu Xiaohuai, the person in charge of accounting organ (accountant in charge) hereby declare that the financial statements in this Annual Report are true, accurate and complete.
- 5** Proposal for profit distribution or common reserves capitalizing during the reporting period reviewed by the board of directors
Profit distribution proposal for 2019: based on the total share capital registered on the registration date of the implementation of equity distribution, a cash dividend of RMB 0.5 per 10 shares (tax-included) will be distributed to all shareholders from the undistributed profit as at Dec 31, 2019. The total cash dividend to be distributed will be RMB 263,417,675.05 based on the total share capital of 5,268,353,501 shares as at December 31, 2019. The Company will neither distribute the bonus shares nor transfer the capital public reserves into the paid-in capital.
- 6** Risk declaration of forward-looking statements
☐Applicable ☒Not Applicable
- 7** Does the Company have non-operating funds occupied by the holding shareholder and its related parties?
No
- 8** Does the Company provide the external guarantees in breach of the stipulated decision-making procedure?
No
- 9** Major Risk Warning
The company has described the related potential risks in this annual report. Investors may pay attention to the same. Please refer to discussion and analysis of the performance and related chapters for the risks the company may be confronted with in the future development.
- 10** Others
☐Applicable ☒Not Applicable

Section I | Definitions

I. Definitions

The terms used in this report shall be defined as follows, unless otherwise specified:

Definitions of high frequency terms		
Company, the Company	Refers to	Shanghai Zhenhua Heavy Industries Co., Ltd.
CCCC	Refers to	China Communications Construction Company Ltd.
CCCG	Refers to	China Communications Construction Group Co., Ltd.
CCCG HK	Refers to	CCCG (HK) Holding Limited
Reporting period	Refers to	From Jan. 1, 2019 to Dec. 31, 2019



Section II | Company Profile and Principal Financial Indexes

1 Company Information

Company name in Chinese	上海振华重工（集团）股份有限公司
Abbreviation of the Company name in Chinese	振华重工
Company name in English	SHANGHAI ZHENHUA HEAVY INDUSTRIES CO., LTD.
Abbreviation of the Company name in English	ZPMC
Legal representative of the Company	Zhu Lianyu

2 Contact information

Secretary of the Board of Directors	
Name	Sun Li
Address	No. 3261, Dongfang Road, Shanghai
Telephone	021-50390727
Fax	021-31193316
E-mail	IR@ZPMC.COM

3 Basic Information

Registered address	No.3470, Pudong South Road, Shanghai
Postal code of registered address	200125
Office address	No. 3261, Dongfang Road, Shanghai
Postal code of office address	200125
Website	http://www.zpmc.com
E-mail	IR@ZPMC.COM

4 Information disclosure and placement location

Newspaper designated by the Company for information disclosure	Shanghai Securities News, Hong Kong Wen Wei Po
Website designated by China Securities Regulatory Commission (CSRC) for publishing the annual report of the Company	www.sse.com.cn
Placement location of the annual report of the Company	Securities Affairs Office

5 Stock information

Stock Information				
Stock type	Stock exchange	Stock abbreviation	Stock code	Stock abbreviation before change
A-share	Shanghai Stock Exchange (SSE)	Zhenhua Heavy	600320	ZPMC Industries
B-share	Shanghai Stock Exchange (SSE)	Zhenhua B-share	900947	-

6 Other relevant information

Public accounting firm engaged by the Company (domestic)	Name	Ernst & Young LLP (Special General Partnership)
	Office address	Room 01-12, Floor 17th, Ernst & Young Tower Oriental Plaza, No.1 East Changan Street, Dongcheng District, Beijing
	Signed by the Accountants	Liu Wei, Gu Chengli

7 Main accounting data and financial indexes in recent three years

(I) Main accounting data

Unit: Yuan Currency: RMB

Main accounting data	Year 2019	Year 2018	Year-on-year change (%)	Year 2017
Operating revenue	24,595,587,883	21,812,389,644	12.76	21,858,814,000
Net profit attributable to the shareholders of the listed company	514,930,143	443,005,092	16.24	300,195,422
Net profit attributable to the shareholders of the listed company after deducting the non-recurring profits and losses	311,117,615	121,335,528	156.41	277,837,568
Net cash flows from operating activities	1,290,213,109	553,943,979	132.91	1,332,209,274
	At the end of 2019	At the end of 2018	Year-on-year change (%)	At the end of 2017
Net assets attributable to the shareholders of the listed company	15,543,404,014	15,185,861,952	2.35	15,011,306,366
Total assets	74,410,783,300	70,598,364,627	5.40	67,519,953,829

(II) Major financial indexes

Major financial indexes	Year 2019	Year 2018	Year-on-year change (%)	Year 2017
Basic earnings per share(RMB/share)	0.098	0.084	16.67	0.057
Diluted earnings per share (RMB/share)	0.098	0.084	16.67	0.057
Basic earnings per share after deducting non-recurring profits and losses (RMB/share)	0.059	0.023	156.52	0.053
Weighted average ROE (%)	3.39	2.92	+0.47	1.99
Weighted average ROE after deducting non-recurring profits and losses (%)	2.06	0.80	+1.26	1.84



Notes to the main accounting data and financial indexes in the past 3 years before the end of the reporting period

☐Applicable ☒ Not Applicable

8 Differences in accounting data under domestic and overseas accounting standards

1.Difference in net profits and net assets attributable to the shareholders of the listed company in the financial statement synchronously disclosed under the international and national accounting standards

☐Applicable ☒ Not Applicable

2.Difference in net profits and net assets attributable to the shareholders of the listed company in the financial statement synchronously disclosed under the domestic and overseas accounting standards

☐Applicable ☒ Not Applicable

3.Explanation for differences between the domestic and overseas accounting standards:

☐Applicable ☒ Not Applicable

9 Main financial data in 2019 by quarters

Unit: Yuan Currency: RMB

	Q1 (Jan. to Mar.)	Q2 (Apr. to Jun.)	Q3 (Jul. to Sep.)	Q4 (Oct. to Dec.)
Operating revenue	4,776,791,974	5,409,998,760	5,351,591,749	9,057,205,400
Net profit attributable to the shareholders of the listed company	98,988,791	123,433,885	20,809,039	271,698,428
Net profit attributable to the shareholders of the listed company after deducting the non-recurring profits and losses	-134,306,822	172,856,694	145,747,664	126,820,079
Net cash flows from operating activities	59,817,552	1,002,962	30,455,376	1,198,937,219

Notes to differences between the quarterly data and the data in periodically disclosed reports

☐Applicable ☒ Not Applicable

10 Non-recurring profit and loss items and amount

☒Applicable ☐Not applicable

Unit: Yuan Currency: RMB

Non-recurring profit and loss items	Amount in 2019	Note (if applicable)	Amount in 2018	Amount in 2017
Profit or loss from disposal of non-current assets	49,091,913		155,557,716	13,285,984
Government grants included in current profits and losses except for government grants closely related to the Company business, in line with national policies and obtained by quota or quantity at unified state standards	93,271,980		114,412,517	83,502,544
Profit or loss on changes in fair values of financial assets held for trading and financial liabilities held for trading and investment income obtained from disposal of financial assets held for trading, financial liabilities held for trading and available-for-sale financial assets, except for effective hedging operations associated with the company's normal operations	146,517,397		74,200,750	20,563,270
Reversal of provision for impairment of receivables subject to separate impairment test			150,327,138	-

Non-recurring profit and loss items	Amount in 2019	Note (if applicable)	Amount in 2018	Amount in 2017
Other non-operating revenue and expenses except for the above-mentioned items	-18,553,180		-67,069,856	-70,077,032
Affected amount of minority equity	-23,013,076		-30,908,588	-14,565,022
Affected amount of income tax	-43,502,506		-74,850,113	-10,351,890
Total	203,812,528		321,669,564	22,357,854

11 Items measured at fair value

√Applicable □Not applicable

Unit: Yuan Currency: RMB

Item	Beginning balance	Ending balance	Current change	Impact on current profits
Jiangxi Huawu Brake Co., Ltd.	102,163,301	132,211,332	30,048,031	30,048,031
Qingdao Port International Co., Ltd.	476,713,253	510,671,771	33,958,518	33,958,518
China Railway Signal & Communication Corporation Limited	591,773,048	479,560,537	-112,212,511	-112,212,511
Shenwan Hongyuan Group Co., Ltd.	889,792	1,119,345	229,553	229,553
COSCO Shipping Holdings Co., Ltd.	0	585,555,555	585,555,555	165,555,556
Derivative financial assets	44,481,806	22,235,244	-22,246,562	-22,246,562
Derivative financial liabilities	0	-7,312,741	-7,312,741	-7,312,741
Equity instrument investment	8,438,278	8,438,278	0	0
Hunan Fengri Power & Electric Co., Ltd.	20,398,051	24,348,689	3,950,638	0
CCCC Highway Bridges National Engineering Research Centre Co., Ltd.	18,693,215	17,649,136	-1,044,079	0
CCCC National Engineering Research Center of Dredging Technology and Equipment	7,837,146	9,005,378	1,168,232	0
Shanghai Zhenhua Port Machinery (Group) Shenyang Elevator Co., Ltd.	2,271,400	2,865,664	594,264	0
ZMPC Ningbo Transmission Machinery Co., Ltd	5,308,514	7,241,610	1,933,096	0
Shanghai Zhenhua Gangkou Machine (Group) Longchang Lifting Equipment Co., Ltd.	818,203	870,791	52,588	0
Total	1,279,786,007	1,794,460,589	514,674,582	88,019,844

12 Others

□Applicable √Not applicable



Section III | Business Profile

I. Main business, business model of the Company and the industrial profile during the reporting period

The Company is a famous heavy-duty equipment manufacturer, and a state-owned listed company on A and B shares, with the headquarters in Shanghai and multiple production bases in Shanghai and Nantong. It is also the biggest port heavy-duty machinery equipment manufacturer in the world. The business scope of ZPMC mainly covers: marine heavy industry, heavy special steel structure, marine transportation and installation, system integration, engineering general contracting, electrical product, software development and integration, investment and financing business, integrated services; It is also actively expanding smart industries, livelihood consumption, integrated development and digital industries. At present, the products of the Company enter 103 nations and regions.

The business scope of the Company covers: design, construction, installation and contracting of large port loading and unloading system and equipment, offshore heavy equipment, engineering machinery, engineering vessels and large metal structural parts and their parts and components; ship repair; leasing of equipment; leasing of self-owned houses; leasing of self-produced crane; sales of the products made by the sales company; international sea transportation by special purpose vessels that can be transported with the whole equipment; specialized contracting of steel structure engineering; construction of electric construction engineering; and construction of electromechanical installation and construction engineering; research and development, installation and sales of oil and gas exploration equipment and mechanical engineering equipment; design of marine engineering buildings; technology development, technical consulting, technical services, and technology transfer in the fields of computer software and information, computer network, mechanical technology, environmental protection technology, new energy technology, intelligent technology; installation and maintenance of railway and urban rail transportation equipment and accessories; property management; loading, unloading, handling and storage; parking lot (warehouse) operation and management; import and export business of goods and technologies (In case of quota, license management, special regulations, quality inspection, safety inspection and construction qualification requirements involved, it shall not carry out the business activities before obtaining the corresponding qualifications or licenses in accordance with the relevant national regulations).[Items subject to approval according to law can be carried out only after such approval is granted by the competent authorities]

II. Explanation for major changes in prime assets of the Company during the reporting period

☐Applicable ☒ Not Applicable

III. Analysis of the core competitiveness during the reporting period

☒ Applicable ☐ Not Applicable

There was no material difference in the core competitiveness of the Company during the reporting period.

Section IV | Discussion and Analysis of the Performance

I. Discussion and Analysis of the Performance

In 2019, under the guidance of the "One Entity with Two Wings" strategy, the Company proceeded with confidence, seized development opportunities, and took innovation as its source of power. Through continuous deepening of reforms and continuous improvement of management system construction, the Company's core competitiveness was further consolidated. Its business segments are developing with steady progress.

During the reporting period, the Company's leading position in the port machinery business was further consolidated. It explored new market of port machinery products, and the business entered 103 nations and regions. Many new domestic and international projects have been signed for the automated terminal business. Offshore destocking work of offshore engineering has achieved periodic results, and has successfully delivered several large offshore projects. The steel structure business has improved significantly, and the amount of newly signed contracts has increased sharply. Investment business projects under construction progressed steadily, signing the first operational investment project. For the marine service business, the expansion of the high-end shipping, installation and offshore wind power general contracting business markets are further strengthened. The market share of the electrical business and the market influence of the EZ brand have further increased. Progress has been made in integrated services, and after-sales service quality and contract value have been improved. The general contracting business continued to proceed with steady progress.

Emerging business achieved remarkable results. In the smart industry sector, the port automation business leverages 5G technology, the smart parking business has blossomed in multiple ways, and the warehousing and logistics business has achieved a breakthrough. In the livelihood consumption industry, it focused on old residential area renovation, prefabricated construction, security and other services. While accumulating project experience, new markets are gradually opened up. It conducts in-depth development of integrated development industry. Digital exhibition industry continues to improve. The Terminexus e-commerce cloud platform continues to be optimized, and the Company's ERP, PLM, ECM and other digital projects are progressing orderly.

II. Performance during the reporting period

During the reporting period, the Company realized the operating revenue amounting to RMB 24,595,587,883, representing a year-on-year increase of 12.76%; the total profit was RMB 590,872,197, with a year-on-year increase of 10.02%; the net profit attributable to the owner of the parent company was RMB 514,930,143, with a year-on-year increase of 16.24%.

1 Analysis of the performance

1. Analysis table of changes in the related items in profit statement and cash flow statement

Unit: Yuan Currency: RMB

Item	Amount in the current period	Amount in the same period of the last year	Change (%)
Operating revenue	24,595,587,883	21,812,389,644	12.76
Operating cost	20,590,531,322	18,082,285,752	13.87
Selling and distribution expenses	122,517,036	115,541,161	6.04
General and administrative expenses	1,095,131,287	1,142,337,348	-4.13
Research and development expenditures	887,096,178	672,614,073	31.89
Financial expenses	1,496,586,414	1,522,264,813	-1.69
Investment income	174,600,552	116,030,979	50.48
Income from changes in fair value	88,019,844	44,481,806	97.88



Item	Amount in the current period	Amount in the same period of the last year	Change (%)
Losses from credit impairment	-38,761,593	-	N/A
Gains from disposal of assets	49,091,913	155,557,716	-68.44
Net cash flows from operating activities	1,290,213,109	553,943,979	132.91
Net cash flows from investing activities	-1,547,161,450	-2,779,460,550	-44.34
Net cash flows from financing activities	141,933,820	-408,453,790	-134.75

2. Analysis of revenue and cost

√ Applicable □ Not Applicable

The increase in the research and development expenditures was mainly caused by the increase in the expenses for research and development projects of the Company.

The increase in the investment income was mainly caused by the increase in the cash dividends from the financial assets share investment of the Company.

The increase in the gains from changes in fair value was mainly caused by the increase in the gains from changes in the fair value of share investment of financial assets held for trading.

The changes in the losses from credit impairment was mainly caused by the implementation of the new financial instrument standards by the Company and reclassification of losses from credit impairment.

The decrease in the gains from disposal of assets was mainly caused by the decrease in the net gains from the disposal of fixed assets.

The changes in the net cash flows from operating activities were mainly caused by the increase in the payment for goods and project payments received from the Company for the sales of goods and rendering of labor services.

The changes in the net cash flows from investing activities were mainly caused by the decrease in the cash paid to purchase and construct fixed assets.

The changes in the net cash flows from financing activities was mainly caused by the increase in bank borrowings.

(1) Main businesses by sectors, products and regions

Unit: Yuan Currency: RMB

Main business by products						
Product	Operating revenue	Operating cost	Gross profit rate (%)	Year-on- year change in operating revenue (%)	Year-on-year change in operating cost (%)	Year-on-year change in gross profit rate (%)
Port machinery	16,458,563,164	13,240,912,286	19.6	9.8	16.1	-4.3
Heavy-duty equipment	1,491,597,749	1,218,182,031	18.3	-45.7	-53.3	+13.3
“Building-construction” and project construction items	2,564,145,018	2,428,961,159	5.3	74.9	66.9	+4.6
Steel structure and related income	2,709,430,977	2,571,473,994	5.1	73.8	55.3	+11.3
Marine transport and others	989,117,844	959,513,561	3.0	19.6	17.9	+1.4

Main business by regions

Region	Operating revenue	Operating cost	Gross profit rate (%)	Year-on- year change in operating revenue (%)	Year-on-year change in operating cost (%)	Year-on-year change in gross profit rate (%)
Mainland, China	12,346,088,297	11,200,513,063	9.3	22.9	11.8	+9.0
Asia (excluding Chinese Mainland)	3,469,961,193	2,482,979,665	28.4	-17.5	-1.3	-11.7
North America	2,205,954,534	1,717,614,143	22.1	8.7	1.3	+5.6
South America	963,140,369	854,282,718	11.3	-7.4	40.3	-30.2
Europe	3,416,405,499	2,988,874,732	12.5	118.9	133.9	-5.6
Mainland China (export sales)	697,069,989	349,377,373	49.9	5.0	22.5	-7.2
Africa	761,455,510	513,591,812	32.6	-49.5	-54.1	+6.8
Oceania	352,779,360	311,809,525	11.6	-33.6	-26.1	-9.0

Notes to the main business by sectors, products and regions

1: The amount listed in “Chinese Mainland (export sales)” in “Main business by regions” was the main operation income from the export sales of this Company to the overseas subsidiaries or the related parties of the Company and then sales to the related projects of the domestic customers.

2: The Company expanded the business in Europe in this year, resulting in the corresponding rise in operating revenue.

(2) Analysis table of cost-volume-profit relationship

☐ Applicable ☒ Not Applicable

(3) Cost analysis table

Unit: Yuan

By products

Product	Items of cost structure	Amount in the current period	Proportion in total cost in the current period (%)	Amount in the same period of the last year	Proportion of the one in the same period of the last year in total costs (%)	Year-on-year change (%)	Notes
Port machinery	Raw material cost, labor cost and production cost	13,240,912,286	64.8	11,405,896,707	63.6	16.1	Normal operating fluctuations
Heavy-duty equipment	Raw material cost, labor cost and production cost	1,218,182,031	6	2,608,895,653	14.5	-53.3	Normal operating fluctuations
Engineering construction projects	Raw material cost, labor cost and production cost	2,428,961,159	11.9	1,455,633,864	8.1	66.9	Normal operating fluctuations
Steel structure and related income	Raw material cost, labor cost and production cost	2,571,473,994	12.6	1,656,155,935	9.2	55.3	Normal operating fluctuations
Marine transport and others	Raw material cost, labor cost and production cost	959,513,561	4.7	813,493,342	4.5	17.9	Normal operating fluctuations

Other information about cost analysis

None.



(4) Particulars about main customers and suppliers

√ Applicable ☐ Not Applicable

The sales volume of Top 5 customers was RMB 3.81165 billion, accounting for 16% of total annual sales volume; the sales volume of the related parties in that of Top 5 customers was RMB 1.44365 billion, accounting for 6% of total annual sales volume.

The purchase amount of Top 5 suppliers was RMB 3.68803 billion, accounting for 14% of total annual purchase amount; the purchase of the related parties in that of Top 5 suppliers was RMB 1.55912 billion, accounting for 6% of total annual purchase amount.

Other notes

None.

3. Expenses√ Applicable ☐ Not Applicable

The research and development expenditures of the Company in 2019 was RMB 887,096,178, representing a year-on-year increase of 31.89%. The increase was mainly caused by the increase in the expenses for the research and development projects of the Company.

4. Investment in R&D

(1) Detail table of investment in R&D

√ Applicable ☐ Not Applicable

Unit: Yuan

Current expensed investment in R&D	887,096,178
Current capitalized investment in R&D	26,086,662
Total investment in R&D	913,182,840
Proportion of total investment in R&D in operating revenue(%)	3.71
Number of R&D employees in the Company	1,695
Proportion of number of R&D employees in the total employees of the Company (%)	19.48
Proportion of capitalized investment in R&D (%)	2.86

(2) Explanation

☐ Applicable ☒ Not Applicable**5. Cash flow**√ Applicable ☐ Not Applicable

The net cash flow from operating activities was RMB 1.290 billion, mainly caused by the increase in payment for goods and project funds received from the sales of goods/rendering of labor services; The net cash flow from the investment activities was RMB -1.547 billion, mainly caused by the decrease in cash payment for purchase and construction of fixed assets of the Company. The net cash flow from the financing activities was RMB 142 million, mainly caused by the increase in the bank borrowings by the Company.

2 Explanation for the significant changes in profits due to non-main business☐ Applicable ☒ Not Applicable**3 Analysis of assets and liabilities**√ Applicable ☐ Not Applicable

1. Assets and liabilities

Unit: Yuan

Item	Amount at the end of the current period	Proportion of the amount at the end of the current period in total assets (%)	Amount at the end of the previous period	Proportion of the amount at the end of the previous period in the total assets (%)	Year-on-year change (%)	Notes
Financial assets held for trading	1,739,792,062	2.34	-	0.00	100.00%	
Financial assets measured at fair value through the current profit or loss	-	0.00	52,920,084	0.07	-100.00	
Notes receivable	5,650,000	0.01	189,371,105	0.27	-97.02	
Receivables financing	406,408,604	0.55	-	0.00	100.00%	
Advances to suppliers	935,878,777	1.26	1,681,187,715	2.38	-44.33	
Non-current assets maturing within one year	1,313,203,581	1.76	894,638,424	1.27	46.79	
Non-current assets	720,183,574	0.97	1,152,476,439	1.63	-37.51	
Available-for-sale financial assets	-	0.00	1,214,533,554	1.72	-100.00	
Other equity instrument investment	61,981,268	0.08	-	0.00	100.00	
Construction in progress	4,380,489,888	5.89	3,050,468,292	4.32	43.60	
Short-term borrowings	22,001,319,380	29.57	16,554,687,487	23.45	32.90	
Advances from customers	822,987,986	1.11	494,744,374	0.70	66.35	
Non-current liabilities maturing within one year	7,287,484,513	9.79	4,209,532,510	5.96	73.12	
Long-term borrowings	8,413,339,986	11.31	15,097,725,259	21.39	-44.27	
Other non-current liabilities	376,626,821	0.51	288,474,696	0.41	30.56	

Other notes

The changes in the financial assets held for trading were mainly caused by the implementation of the new financial instrument standards by the Company and reclassification of financial assets.

The decrease in financial assets measured at fair value through the current profit or loss was mainly caused by the expiration of the forward foreign exchange contract purchased by the Company.

The decrease in the notes receivable was mainly caused by the implementation of the new financial instrument standards by the Company and reclassification of financial assets.

The increase in the receivables financing was mainly caused by the implementation of the new financial instrument standards by the Company and reclassification of financial assets.

The changes in the advances to suppliers were mainly caused by the increase in the carry-forward of advances to suppliers upon the arrival of the productive materials purchased by the Company.

The increase in the non-current assets maturing within one year was mainly caused by the increase in the long-term receivables maturing within one year.

The decrease in other current assets was mainly caused by the decrease in the deductible VAT input tax of the Company.

The decrease in the available-for-sale financial assets was mainly caused by the implementation of the new financial instrument standards by the Company and reclassification of financial assets.

The increase in the other equity instrument investment was mainly caused by the implementation of the new financial instrument standards by the Company and reclassification of financial assets.

The increase in the construction in progress was mainly caused by the increase in the large machinery and engineering equipment in progress.



The increase in short-term borrowings was mainly caused by the increase in the short-term current fund loan required by the production of the Company.

The increase in the advances from customers was mainly caused by the increase in the payment for goods received in advances from customers.

The increase in the non-current liabilities maturing within one year was mainly caused by the increase in the long-term bank borrowings maturing within one year.

The decrease in the long-term borrowings was mainly caused by the increase in the long-term borrowings maturing within one year.

The increase in the other non-current liabilities was mainly caused by the increase in the output tax to be carried forward.

2. Particulars about main restricted assets by the end of the reporting period

☒ Applicable ☐ Not Applicable

Item	Book value at the end of the period	Reason for restriction
Monetary funds	242,272,475	Special fund, letter of guarantee from the bank and guarantee fund for L/C collected from the overseas projects and deposited in the overseas supervision account
Fixed assets	5,694,247,285	Collateral for loan
Long-term receivables	4,482,230,928	Hypothecation for loan
Total	10,418,750,688	/

3. Other information

☐ Applicable ☒ Not Applicable

4 Analysis of operational information of the industry

☒ Applicable ☐ Not Applicable

The value of the newly concluded contracts by the Company on the port machinery was USD 2.96 billion, with a year-on-year increase of 11.61%. The value of the newly concluded contracts on marine engineering products and steel structure was USD 1.463 billion, with a year-on-year increase of 62.02%, among which the one on steel structure was USD 697 million. The value of the newly concluded contracts on investment business was RMB 2.037 billion, with a year-on-year increase of 5.05%.

In the port machinery industry, the increase in market demand for traditional new equipment has slowed down. Businesses such as the construction of automated terminals, after-sales maintenance and renovation of existing equipment have become new bright spots in the market. With the official commercialization of 5G technology, cutting-edge technologies such as 5G, artificial intelligence and big data will accelerate the transformation and upgrading of the port and shipping industry.

In the offshore industry, as the country attaches more importance to the development of the marine economy, the demand for offshore supporting services such as energy exploitation, transportation, and installation will increase to a certain extent, but the trend of international oil prices still brings uncertainty to the recovery time of the offshore industry.

The steel structure industry benefited from the increase in investment in infrastructure, and the overall situation of the industry is more optimistic. However, due to the low access threshold, the competition is fiercer, and the efficiency needs to be further improved.

The investment industry continues to be optimized, driving the entire industry chain to a new development track. Domestic investment in industries such as manufacturing, infrastructure, and green energy has entered a stage of high-quality development. For a long period of time in the future, funds will continue to be biased towards the common benefit of supply and demand, advanced manufacturing and livelihood construction with multiplier effects, infrastructure construction, and other fields.

For emerging industries, the exploration and application of 5G and digital technologies will continue to empower manufacturing. The reconstruction of old communities, the construction of prefabricated buildings, and the construction of smart cities are in line with the needs of the times and present strong development potential. With the support of national policies, the integrated development industry has gradually optimized its market environment, gradually consolidated its industrial foundation and integrated its content.

5 Analysis of investment

1. Overall analysis of external equity investment

☒ Applicable ☐ Not Applicable

Investment amount by the end of reporting period	4,644,773,553
Changes in investment amount (RMB)	654,438,239
Investment amount in the same period of the last year	3,990,335,314
Change in investment amount (%)	16.40

On January 9, 2019, the fourth meeting of the seventh Board of Directors of the Company deliberated and approved the Proposal on the Subscription of Non-Public Issuance of A Shares by COSCO SHIPPING HOLDINGS, and the Company subscribed 111,111,111A shares issued in a non-public manner by COSCO SHIPPING HOLDINGS with the self-owned fund amounting to RMB 419,999,999.58. During the reporting period, the Company has completed the subscription of A-shares issued in a non-public manner by COSCO SHIPPING HOLDINGS.

(1) Significant equity investment

☐ Applicable ☒ Not Applicable

(2) Significant non-equity investment

☐ Applicable ☒ Not Applicable

(3) Financial assets measured at fair value

☒ Applicable ☐ Not Applicable

Stock code	Stock abbreviation	Initial investment cost	Initial shareholding ratio (%)	Final shareholding ratio (%)	Book value at the end of the period	Profit or loss in reporting period	Changes in owners' equity during the reporting period	Accounting subject	Source of shares
03969	CRSC	617,854,000	1.40	1.40	479,560,537	-112,212,511	-112,212,511	Financial assets held for trading	Purchase on market
06198	Qingdao Port	308,515,588	1.59	1.59	510,671,771	33,958,518	33,958,518	Financial assets held for trading	Purchase on market
300095	Huawu Stock	11,071,606	5.88	5.88	132,211,332	30,048,031	30,048,031	Financial assets held for trading	Contribution
601919	COSCO SHIPPING HOLDINGS	420,000,000	-	0.91	585,555,555	165,555,556	165,555,556	Financial assets held for trading	Subscription

Stock equity held in financial enterprises

Object name	Initial investment cost	Initial shareholding ratio (%)	Final shareholding ratio (%)	Book value at the end of the period	Profit or loss in reporting period	Changes in owners' equity during the reporting period	Accounting subject	Source of shares
Shenwan Hongyuan	200,000	<0.01	<0.01	1,119,345	229,553	229,553	Financial assets held for trading	Subscription

6 Sales of significant assets and equities

☐ Applicable ☒ Not Applicable

7 Analysis of the primary holding companies and the joint-stock companies

☒ Applicable ☐ Not Applicable

Company Name	Main product or services	Registered capital	Assets size	Net profit/(loss)
Shanghai Zhenhua Heavy Industries Group (Nantong) Transmitter Co., Ltd.	Construction and installation of large-scale port equipment, engineering vessels, offshore heavy equipment, mechanical equipment, gear box for wind power generation equipment; large-sized reverse branch, transmission mechanism, dynamic positioning, large-sized anchor windlass, offshore oil platform lifting device and components; design and manufacturing of the accessories.	591,102,663	1,454,550,119	47,393,360
Nanjing Ninggao New Channel Construction Co., Ltd	Engaged in the construction, investment and management of Nanjing-Gaochun new channel project.	100,000,000	573,330,814	33,186,360
Tianhe Mechanical Equipment Manufacturing Co., Ltd of CCCC	System integration design, R&D and manufacturing of tunnel boring machine with the diameter of over 6m; system integration design, R&D and manufacturing of tunnel boring machine (TBM) with the diameter of over 5m; design, R&D and manufacturing of marine machinery and parts, cranes and parts, bridges and high damping bracket for buildings; sales of self-produced products. Whole sales and import & export business of marine machinery and parts, cranes and parts, bridges and high damping bracket for buildings (if no commodity controlled by the national trade, designed quota and license is involved, the related national rules will prevail); installation, maintenance, leasing, consulting, technical services for its self-produced products (foreign capital proportion is less than 25%) (as for the items requiring the approval, carry out the business activities after obtaining the approval from the authorities)	681,627,100	5,116,525,525	71,810,934
Shanghai Zhenhua Shipping Co., Ltd	Operation of international offshore sea transportation; ordinary cargo liner traffic in the middle and lower reaches of Yangtze River; transportation of port machinery.	120,000,000	1,741,180,746	-63,701,126
Shanghai Zhenhua Port Machinery (Hong Kong) Co., Ltd.	Design, manufacturing and sales of port machinery, engineering vessel, steel structure and other parts	HKD 50,000,000	14,248,751,060	-231,684,714
Shanghai Zhenhua Heavy Industries Port Machinery General Equipment Co., Ltd.	Sales of port loading and unloading machine, bulk cargo and container machine, port engineering vessels (including floating engineering crane), material handling mechanical products and parts, sales and technical services, installation and maintenance, technical consultation of all types of machine and equipment, key parts of the raw materials and accessories equipment.	2,184,730,000	2,843,353,791	-7,940,921
Nantong Zhenhua Heavy Equipment Manufacturing Co., Ltd.	Installation of heavy port equipment, engineering vessels, heavy metal structure and its parts; manufacturing and installation of gear box, container yard crane, super heavy-duty bridge steel structure, heavy marine machinery equipment; leasing of cranes; specialized contracting of steel structures etc.	1,154,936,900	3,732,350,208	3,240,217
ZPMC Qidong Marine Engineering Co., Ltd.	Machinery manufacturing	303,000,000	2,014,831,008	-142,837,846

Company Name	Main product or services	Registered capital	Assets size	Net profit/(loss)
Shanghai Zhenhua Ocean Engineering Service Co., Ltd	Agency of international land transport, air transport, ocean shipping and domestic freight; sales of large-scale port equipment, engineering vessel equipment and marine materials at home and abroad; construction of ocean engineering and leasing of engineering vessels; import and export of goods and technologies, transit trade, trade between enterprises and trade agency within the free trade zone.	100,000,000	675,537,033	5,468,768
Zhenhua Pufeng Wind Energy (HongKong) Co., Ltd.	Installation of offshore wind turbine	USD 16,326,531	645,570	-7,434,259
CCCC Financial Leasing Co., Ltd.	Finance lease	5,000,000,000	41,279,094,102	386,156,164
China Communications construction USA. Inc	Construction of port, waterway, highway and bridge.	USD 50,000,000	253,126,692	-8,972,397
CCCC Estate Yixing Co., Ltd.	Real estate development	900,000,000	1,537,005,529	-2,269,490
Jiangsu Longyuan Zhenhua Marine Engineering Co., Ltd	Fabrication and installation of steel structure; construction of the foundation for offshore wind power facilities, installation and maintenance of equipment; construction and maintenance of submarine cable system, construction of marine engineering; installation and maintenance of equipment and leasing of equipment.	260,000,000	2,693,210,398	33,230,880
Greenland Heavylift (Hongkong) Limited	Marine transport	USD 91,975,158	2,244,921,836	-18,416,656

8 Particulars about structured entities controlled by the Company

☐ Applicable ☒ Not Applicable

III. Discussion and analysis of the future development of the Company

1 Industrial structure and trend

☒ Applicable ☐ Not Applicable

The demand for port machine products remained stable; the overall profitability of upstream shipping companies from the recent situation is conducive to the long-term development of the terminal industry; the development of automation and intelligent technologies will continue to empower terminals and lead the future development of global terminals. Driven by the upsizing trend of container shipping, the shore bridge heightening market will continue to grow; due to the superposition of various factors such as port group integration, terminal re-planning, equipment re-maintenance and re-manufacturing, the equipment relocation market will also maintain a large growth space. Due to the continued fluctuations in international crude oil prices, the development of offshore oil and gas projects and related equipment demands remain to be seen. It is still a common phenomenon in the industry to obtain steel structure orders depending on the general contracting of the project. Large, heavy and special steel structures with high-tech added value are still the direction of efforts for steel structure enterprises to improve the industry competitiveness. With the deep development of green renewable energy, offshore wind power is expected to become the first choice for clean energy in a certain period in the future. As an important basic equipment for the construction of wind farms, offshore wind power installation vessels have broad development space. The integration of the Yangtze River Delta, the development of emerging regional markets such as the Guangdong-Hong Kong-Macao Greater Bay Area, Xiong'an, Hainan and Fujian, and the launch of some major engineering projects have placed higher demands on the investment capabilities of enterprises.

The livelihood consumption such as elevator installation, three-dimensional garage products, smart logistics, marine ranch industry and other fields has vast market space. In the future, the digital economy model will benefit from the improvement of the network scale effect, realize the rapid optimal allocation and regeneration of resources, and further form an economic form of high-quality development. The development of the digital industry will face greater opportunities for development.

2 Development strategy of the Company

√ Applicable □ Not Applicable

By taking “equipment manufacturing” as the entity, “capital operation” and “Internet” as two wings, it aims to build “Flag + Flagship” of Chinese national industry. “One Entity with Two Wings” strategy is a new strategy for transformation and upgrade of the Company after objectively analyzing the development stage and orientation of the Company, based on national and industrial development trend at present and in future, around “Industry 4.0” and “Made in China 2025”, by firmly seizing the development opportunities of the reform of state-owned enterprises “Double Hundred Action”, in combination with the development features of equipment manufacturing industry. “Capital operation” will help the Company to extend the industrial chain of the port machine business and create the whole industrial chain of marine heavy industry and offshore wind power; help the Company and the customers as well as the partners to form a community of a shared future with the capital as the tie. The digitized transformation and upgrade of the Company under “Internet” can accelerate the upgrade of the information system in an all-round way and create the cloud platform through the top information-oriented design of the Company to offer more convenient, efficient, intelligent and integrated service to the global customers. Meanwhile, by using 5G technology as a carrier, we continue to enrich the concept of “Internet” and use smart port construction as a breakthrough to further expand the rich connotation of “+ 5G” and apply 5G technology to various fields such as strategy, design, manufacturing, products, services, etc. to promote the quality revolution, efficiency revolution, power revolution of the Company.

3 Operation plan

√ Applicable □ Not applicable

Guided by the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, the Company fully implemented spirit of the 19th National Congress of the Communist Party of China, the second plenary session of the 19th Central Committee of the Communist Party of China, the third plenary session of the 19th Central Committee of the Communist Party of China and the fourth plenary session of the 19th Central Committee of the Communist Party of China, and the spirit of the Central Economic Working Conference and the meeting of leaders of central enterprises, stayed close to its striving goal of becoming the excellent company worldwide with the international competitiveness and continuing to build the “Flag + Flagship” of China’s national industry, followed the general principle of making progress while working to keep performance stable, and persisted to the new development concept and the strategy of “One Body Two Wings”, focused on improving the company development quality and capacity level, continued to deepen reform as the main force, promoted the green, high-quality development, and comprehensively carried out reform, development and stability, to guarantee the steady, sustained and healthy development of all tasks of the Company.

The Company will try its best to expand the business related to the port machinery market and continue to increase the development and promotion of the market of automated terminals. It will seize the market opportunities in “the Belt and Road” countries, intensify the promotion of domestic accessories for port machinery products, and increase the market share of autonomic electric cabinet and gear box. It will continue to fill the gap in the product chain of port machinery, and expand the market for port machinery mobile machines, such as the straddle carrier, front-facing cranes, reach stacker and forklift. Through the integration of resources, the Company will improve user experience, and expand the Company’s full life cycle service market rapidly and steadily. The Company will fully support and expand the port machinery renovation, relocation and other value-added service markets; fully support the unified sales of spare parts and accessories, to quickly form the competitive force of the Company’s port machinery services.

For ocean engineering, the Company will continue to reduce inventory and improve profitability simultaneously, do a good job in contract performance, risk prevention and benefit improvement regarding the leased drilling platforms. It strives to make breakthrough in ocean engineering EPC; continue to consolidate the research and development capabilities of traditional engineering ships and promote the market-driving competitiveness via the competitiveness of ocean engineering technology; for steel structure business, the fine steel structure manufacturing and EPC are necessary, where the correlated market should be formed, together with the prefabricated building business developed by the Company, to improve the diversity and profitability of steel structure products; bring into play the integrated advantages of advanced ocean engineering and transportation equipment in different levels and types to vigorously expand the ocean engineering EPC, including transportation, installation, operation & maintenance and disassembly; form the joint force of different units of offshore wind power business, and consolidate offshore wind power equipment and construction advantages to strive to improve the profitability thereof; focus on the Company’s internal and external markets, continue to consolidate and expand the traditional port machinery electronic control market, and put effort into business development, including automatic tire cranes, remote renovation, and shore power for ships; strive to increase the market share of mechanical and electrical EPC; do a good

job in the intelligent manufacturing business projects under construction, and steadily improve the Company's intelligent manufacturing level; actively explore investment opportunities related to the main business, promote the construction of "Zhenhua incubator for mass entrepreneurship and innovation" through innovation, and give full play to the leading force of capital operation.

Aim at the huge development opportunity of the country's strong support for intelligent parking, accelerate the implementation of projects through technological innovation and business model innovation, and take intelligent parking as the starting point and breakthrough of the layout of intelligent industry, letting them continue to expand into areas such as intelligent logistics and intelligent ocean, to promote the implementation of projects of different intelligence scenarios; strengthen the cooperation with the government, universities and industry institutions, make effort to promote the renovation of old residential areas, campus security and other livelihood projects; give full play to and accumulate the Company's internal and external advantages in participating in the construction of marine ranchings, accelerate and expand the development of breeding equipment market, and accelerate the design and implementation of business models; attach great importance to the digital economy, accelerate the digital transformation and upgrading of Zhenhua, accelerate the cultivation of the digital industry, and turn data, flows and platform value into cash.

The Company will focus on national strategic opportunities such as the coordinated development of the Beijing-Tianjin-Hebei region, the integrated development of the Yangtze river delta, the construction of Yangtze river economic belt, Guangdong-Hong Kong-Macao Greater Bay area, Xiong'an New Area, Hainan Pilot Free Trade Zone, Northeast Fujian and Fuzhou on the sea, and make systematic plans for the development of strategic regional markets. Give full play to the Company's strong operating strength in overseas regions, integrate the industrial chain advantages, and actively develop the overseas project EPC market.

4 Potential risks

☒Applicable ☐Not applicable

Market risk: the growth force of the world economy is weakened, the increase in the international trade slows down, the trade friction between China and USA and the challenges from the deglobalization trend on the global economy impose some uncertainties on the development of the Company. The market competition of the container port machinery is still fierce, the ocean engineering industry is slightly resuscitative, but the sign of reverse turnaround and upgrade is not so remarkable. Other new businesses are still in the infant stage.

Countermeasures: the Company will study and determine the current political and economic situation in depth, highly concern the market change and carry out the benchmarking management like the high quality companies in the same industry, deepen the reform, tamp the basic management, enhance the risk resistivity, optimize and adjust the market and business structure, seek for increment from the strategic opportunity, business expansion, internal and external cooperation, investment, acquisition and overseas projects, accelerate the structural readjustment and resources integration and accelerate the sustainable development of the enterprise through the transformation and upgrade.

Financial risk: it mainly includes exchange rate risk and credit risk.

Countermeasures: Lock in the forward exchange rate through rational planning, control exchange rate risks, gradually reduce the foreign exchange liabilities, pay attention to the research on policies and strategies of foreign exchange risk management, closely concern the changes in exchange rates, regularly analyze the trend of exchange rate, strictly conduct the approval procedure related to the transaction of the financial derivatives, do well in statistics of the products, currencies and exchange rates, further tamp the basic work of the foreign exchange management and reduce the Company's exchange rate risk. By arranging favorable settlement terms in the contract (If a contract linked to the RMB exchange rate is signed, settlement of exchange should be done as soon as possible as the proportion of advance payment increases.), or control and lock in the exchange rate risks with proper financial instruments or means.

As to credit risk, reduce raw material reserves, cut down the capital expenditure, adjust the Company's debt structure in many ways (such as medium-term notes, short-term financing bond, perpetual bond), strengthen the collection of the accounts receivable, reduce the amount of bank debt step by step and reduce the business risks of the enterprise.

5 Others

☐Applicable ☒Not applicable

IV. Explanation for non-disclosure in accordance with the accounting standard due to being not applicable to the provisions of the standard or state secret and business secrete and other special reasons

☐Applicable ☒Not applicable

Section V | Important Events

I. Proposal for profit distribution of ordinary shares or convention of capital reserves into bonus shares

1 Formulation, implementation or adjustment of cash dividend distribution policies

☒Applicable ☐Not applicable

According to the requirements of the Circular on Further Implementation of Relevant Matters Concerning Cash Dividend Distribution of Listed Companies (ZJF [2012] No. 37) issued by the CSRC, as proposed by the 10th meeting of the Company's fifth session of Board held on August 21, 2012, amendments were made to the Articles of Association of the Company concerning profit distribution and cash dividends policy, and as a result, the dividend distribution standard and proportion became clearer, related decision making process and mechanism were compete, and the minority shareholders' legal rights and interests were fully protected, giving them the opportunity to fully express their views and demands.

2 The Company's plan or proposal for profit distribution of ordinary shares, plan or proposal for the convention of capital reserves into bonus shares in recent 3 years (including the reporting period)

Unit: Yuan Currency: RMB

Year for dividend distribution	Bonus shares for every 10 shares (share)	Dividend for every 10 shares (Yuan) (tax included)	Shares converted for every 10 shares (share)	Amount of cash dividend (tax included)	Net profit attributable to the ordinary shareholders of the listed company in the consolidated statement in the year for dividend distribution	Ratio of the net profit attributable to the ordinary shareholders of the listed Company in the consolidated statements (%)
2019	0	0.5	0	263,417,675	514,930,143	51.16
2018	0	0.5	0	263,417,675	443,005,092	59.46
2017	0	0.5	2	219,514,729	300,195,422	73.12

3 Shares repurchased by offer in cash and included in cash dividends

☐Applicable ☒Not applicable

4 If the profit is positive in the reporting period and the profit of the parent company available for distribution to the ordinary shareholders is positive but the Company does not represent the plan or proposal for profit distribution of ordinary shares in cash, the Company shall disclose in detail the reasons and the purpose and use plan of the undistributed profit

☐Applicable ☒Not applicable

II. Fulfillment of commitments

1 Commitments of the actual controller, shareholders, related parties, acquirer, companies of the Company in the reporting period or ongoing at the period-end

☐Applicable ☒Not applicable

2 If there is earnings forecast for the assets or projects of the Company and the reporting period is still in the earnings forecast period, the Company shall explain whether the asset or project reaches the original earnings forecast and give the reasons

☐Reached ☐Failing to reach ☒Not applicable

3 Fulfillment of commitments on the performance and its impacts on goodwill impairment test☐Applicable ☒Not applicable**III. Fund occupation and progress in returning scheme during the reporting period**☐Applicable ☒Not applicable**IV. Explanation of the Company for Accounting Firm's "auditors' report with nonstandard opinions"**☐Applicable ☒Not applicable**V. Analysis and explanation of the Company of the causes and the impacts of the major changes in accounting policies and accounting estimates or correction of significant accounting errors****1 Analysis and explanation of the Company on the causes and the impacts of the changes in accounting policies and accounting estimates**☒Applicable ☐Not applicable

See "V.41 Changes in significant accounting policies and accounting estimates in Section XI" for details.

2 Analysis and explanation of the cause of correction of significant accounting errors and their impacts by the Company☐Applicable ☒Not applicable**3 Communication with former CPA firm**☐Applicable ☒Not applicable**4 Other description**☐Applicable ☒Not applicable**VI. Engagement and dismissal of the public accounting firm**

Unit: Yuan Currency: RMB

		Now engaging
Name of the domestic accounting firm	Ernst & Young LLP. (Special General Partnership)	
Remuneration of domestic accounting firm	4,700,000	
Audit term of the domestic accounting firm	4	

	Name	Remuneration
Accounting firm performing internal control audit	Ernst & Young LLP. (Special General Partnership)	450,000

Particulars about the engagement and dismissal of the accounting firm

☐Applicable ☒Not applicable

Particulars about reappointment of the accounting firm in the auditing period

☐Applicable ☒Not applicable**VII. Risk of suspension of the listing****1 Cause for shares suspended from listing**☐Applicable ☒Not applicable

**2 Countermeasures to be taken by the Company**☐Applicable ☒Not applicable**VIII. Termination of the listing and its reasons**☐Applicable ☒Not applicable**IX. Events related to bankruptcy and reorganization**☐Applicable ☒Not applicable**X. Major lawsuit and arbitration issues**☒Existence of major lawsuit and arbitration in the year ☐No major lawsuit or arbitration in the year**1 Lawsuit and arbitration already disclosed in provisional announcement, without follow-up progress**☐Applicable ☒Not applicable**2 Lawsuit and arbitration not disclosed in provisional announcement, or with follow-up progress**☒Applicable ☐Not applicable

Unit: Yuan Currency: RMB

In the reporting period:

Plaintiff (applicant)	Defendant (respondent)	Party bearing joint liabilities	Type of lawsuit and arbitration	Background of the lawsuit (arbitration)	Amount involved in lawsuit (arbitration)	Estimated liabilities and amount caused by lawsuit (arbitration) or not	Progress in lawsuit (arbitration)	Results of the lawsuit (arbitration) and impacts	Execution of adjudication of lawsuit (arbitration)
Shanghai Zhenhua Heavy Industries Co., Ltd. and ZPMC Qidong Marine Engineering Co., Ltd.	Nantong Huafu Port Co., Ltd, Li Aidong, and Zhao Xiaohua	None	Lawsuit	At the end of February 2014, the Company completed the acquisition of the former Jiangsu Daoda Ocean Engineering Co., Ltd through capital increase and held 67% of the shares. At the same time, it was agreed that the losses of the company, was borne by the former shareholders including Nantong Huafu Port Co., Ltd, Li Aidong and Zhao Xiaohua before February 28, 2014. During the subsequent business process, it was found that the former Daoda Company untruthfully disclosed some matters of lawsuit or debts, resulting in a series of losses of the Company. Through the related audit and readjustment etc., it was deemed that the loss of RMB 368.7222 million Yuan should be in borne in the former shareholders and the lawsuit was prosecuted again after an inconclusive press for payment.	368,722.000.00	0	The case is still pending	Not yet judged	Not yet judged

3 Other description☐Applicable ☒Not applicable**XI. Punishment to the listed Company and its directors, supervisors, senior executives, controlling shareholder, actual controller and acquirer and the rectification**☐Applicable ☒Not applicable**XII. Particulars about the credit conditions of the Company and its controlling shareholder and the actual controller during the reporting period**☐Applicable ☒Not applicable**XIII. The Company's equity incentive plan, employee stock ownership plan or other incentives to the employees and their impacts**

1 Related incentives disclosed in provisional announcement, without progress or change in follow-up implementation

☐Applicable ☒Not applicable

2 Incentives not disclosed in provisional announcement or with follow-up progress

Equity incentive

☐Applicable ☒Not applicable

Other description

☐Applicable ☒Not applicable

Information about employee stock ownership plan

☐Applicable ☒Not applicable

Other incentive measures

☐Applicable ☒Not applicable

XIV. Material related transactions

1 Related transactions relevant to routine business

1. Events disclosed in provisional announcement, without progress or changes in follow-up implementation

☐Applicable ☒Not applicable

2. Events disclosed in the provisional announcement, with progress or changes in follow-up implementation

☐Applicable ☒Not applicable

3. Events not disclosed in provisional announcements

☒Applicable ☐Not applicable

Unit: Yuan Currency: RMB

Related party	Relationship	Type of related transaction	Content of related transaction	Pricing principle of related transaction	Price of related transaction	Amount of related transaction	Proportion in the amount of similar transactions (%)	Settlement mode of associated transaction	Market price	Reason for great differences between the bargain price and market price
China Road & Bridge Corporation	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	1,678,140,641	1,678,140,641	0.07	Monetary fund	1,678,140,641	/
CCCC Financial Leasing Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	667,073,687	667,073,687	0.03	Monetary fund	667,073,687	/
CCCC Second Harbor Engineering Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	337,523,772	337,523,772	0.01	Monetary fund	337,523,772	/
Jiangsu Longyuan Zhenhua Marine Engineering Co., Ltd.	Joint venture	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	248,918,845	248,918,845	0.01	Monetary fund	248,918,845	/
China Communications Construction Company Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	231,935,329	231,935,329	0.01	Monetary fund	231,935,329	/
CCCC Second Highway Engineering Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	230,557,910	230,557,910	0.01	Monetary fund	230,557,910	/
CCCC First Highway Engineering Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	126,158,585	126,158,585	0.01	Monetary fund	126,158,585	/
CCCC Electrical and Mechanical Engineering Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	124,928,355	124,928,355	0.01	Monetary fund	124,928,355	/
CCCC Third Harbor Engineering Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	113,127,045	113,127,045	0	Monetary fund	113,127,045	/
Road & Bridge International Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	95,683,938	95,683,938	0	Monetary fund	95,683,938	/
China Harbor Engineering Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	45,102,497	45,102,497	0	Monetary fund	45,102,497	/
CCCC Third Highway Engineering Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	30,678,385	30,678,385	0	Monetary fund	30,678,385	/



Related party	Relationship	Type of related transaction	Content of related transaction	Pricing principle of related transaction	Price of related transaction	Amount of related transaction	Proportion in the amount of similar transactions (%)	Settlement mode of associated transaction	Market price	Reason for great differences between the bargain price and market price
Installation Engineering Co., Ltd. of CCCC First Harbor Engineering Co. Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	28,657,101	28,657,101	0	Monetary fund	28,657,101	/
CCCC - SHEC Third Highway Engineering Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	26,395,514	26,395,514	0	Monetary fund	26,395,514	/
CCCC Tianjin Dredging Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	21,822,759	21,822,759	0	Monetary fund	21,822,759	/
CCCC Marine Engineering & Technology Research Center Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	8,345,339	8,345,339	0	Monetary fund	8,345,339	/
Hong Kong Marine Construction Limited	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	7,992,047	7,992,047	0	Monetary fund	7,992,047	/
CCCC Fourth Highway Engineering Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	7,874,250	7,874,250	0	Monetary fund	7,874,250	/
No.3 Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	7,230,066	7,230,066	0	Monetary fund	7,230,066	/
CCCC First Harbor Engineering Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	6,829,633	6,829,633	0	Monetary fund	6,829,633	/
CCCC Tunnel Engineering Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	6,135,411	6,135,411	0	Monetary fund	6,135,411	/
No.4 Engineering Co., Ltd. of CCCC Second Harbor Engineering Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	6,037,290	6,037,290	0	Monetary fund	6,037,290	/
CCCC Tianjin Dredging Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	4,716,981	4,716,981	0	Monetary fund	4,716,981	/
China Communications 2nd Navigational Bureau 3rd Engineering Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	3,750,000	3,750,000	0	Monetary fund	3,750,000	/
Shanghai Communications Construction Contracting Co., Ltd.	Holding subsidiary of parent company	Selling goods/ other inflows	Project income/ lease of assets	Pricing based on market price	12,236	12,236	0	Monetary fund	12,236	/
No.2 Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	1,559,123,096	1,559,123,096	0.08	Monetary fund	1,559,123,096	/
CCCC Fourth Highway Engineering Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	326,099,884	326,099,884	0.02	Monetary fund	326,099,884	/
No.2 Engineering Co., Ltd. of CCCC Fourth Harbor Engineering Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	166,442,076	166,442,076	0.01	Monetary fund	166,442,076	/
CCCC Third Harbor Engineering Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	138,044,572	138,044,572	0.01	Monetary fund	138,044,572	/
Xing An Ji Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	126,919,874	126,919,874	0.01	Monetary fund	126,919,874	/
CCCC Third Highway Engineering Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	102,954,724	102,954,724	0.01	Monetary fund	102,954,724	/
CCCC Second Harbor Engineering Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	44,626,778	44,626,778	0	Monetary fund	44,626,778	/
CCCC Water Transportation Planning and Design Institute Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	44,003,688	44,003,688	0	Monetary fund	44,003,688	/
China Communications 2nd Navigational Bureau 3rd Engineering Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	37,974,356	37,974,356	0	Monetary fund	37,974,356	/
CCCC - SHEC Second Highway Engineering Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	32,728,018	32,728,018	0	Monetary fund	32,728,018	/
ZPMC Southeast Asia Pte. Ltd	Associated company	Receipt of services	Consigned processing for the Company	Pricing based on market price	31,842,242	31,842,242	0	Monetary fund	31,842,242	/
CCCC Tianjin Dredging Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	30,385,226	30,385,226	0	Monetary fund	30,385,226	/

Related party	Relationship	Type of related transaction	Content of related transaction	Pricing principle of related transaction	Price of related transaction	Amount of related transaction	Proportion in the amount of similar transactions (%)	Settlement mode of associated transaction	Market price	Reason for great differences between the bargain price and market price
CCCC Shanghai Dredging Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	27,320,344	27,320,344	0	Monetary fund	27,320,344	/
China Communications Materials & Equipment Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	17,482,045	17,482,045	0	Monetary fund	17,482,045	/
CCCC Second Highway Consultants Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	12,744,480	12,744,480	0	Monetary fund	12,744,480	/
China Road & Bridge Corporation	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	9,772,546	9,772,546	0	Monetary fund	9,772,546	/
ZPMC Mediterranean Liman Makinalari Ticaret Anonim Sirketi	Joint venture	Receipt of services	Consigned processing for the Company	Pricing based on market price	9,022,814	9,022,814	0	Monetary fund	9,022,814	/
Installation Engineering Co., Ltd. of CCCC First Harbor Engineering Co. Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	7,202,999	7,202,999	0	Monetary fund	7,202,999	/
China Communications Construction Company Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	6,970,318	6,970,318	0	Monetary fund	6,970,318	/
CCCC Shanghai Equipment Engineering Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	4,533,910	4,533,910	0	Monetary fund	4,533,910	/
Shanghai Communications Construction Contracting Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	3,843,677	3,843,677	0	Monetary fund	3,843,677	/
CCCC Highway Bridges National Engineering Research Centre Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	2,449,541	2,449,541	0	Monetary fund	2,449,541	/
CCCC Marine Engineering & Technology Research Center Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	1,599,377	1,599,377	0	Monetary fund	1,599,377	/
CCCC First Highway Consultants Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	1,153,073	1,153,073	0	Monetary fund	1,153,073	/
Shanghai China Communications Water Transportation Design & Research Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	1,008,394	1,008,394	0	Monetary fund	1,008,394	/
CCCC Third Harbor Consultants Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	400,000	400,000	0	Monetary fund	400,000	/
CCCC (Zhoushan) Dredging Engineering Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	350,748	350,748	0	Monetary fund	350,748	/
No. Three Engineering Co., Ltd. of CCCC First Highway Engineering Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	343,394	343,394	0	Monetary fund	343,394	/
CCCC First Harbor Consultants Co., Ltd.	Holding subsidiary of parent company	Receipt of services	Consigned processing for the Company	Pricing based on market price	128,440	128,440	0	Monetary fund	128,440	/
CCCC Fourth Harbor Engineering Co., Ltd.	Holding subsidiary	Receipt of services	Consigned processing for the Company	Pricing based on market price	86,849	86,849	0	Monetary fund	86,849	/
CCCC Shanghai Equipment Engineering Co., Ltd.	Holding subsidiary of parent company	Purchase of goods	Providing materials for the Company	Pricing based on market price	51,424,063	51,424,063	0.00	Monetary fund	51,424,063	/
ZPMC Changzhou Coatings Co., Ltd.	Associated company	Purchase of goods	Providing materials for the Company	Pricing based on market price	145,138,516	145,138,516	0.01	Monetary fund	145,138,516	/
CCCC Tianjin Industry and Trade Co., Ltd.	Holding subsidiary of parent company	Purchase of goods	Providing materials for the Company	Pricing based on market price	1,669,824	1,669,824	0.00	Monetary fund	1,669,824	/
Chuwa Bussan Co., Ltd.	Holding subsidiary of parent company	Purchase of goods	Providing materials for the Company	Pricing based on market price	36,202,211	36,202,211	0	Monetary fund	36,202,211	/
CCCC Tianjin Harbor Consultants Co., Ltd.	Holding subsidiary of parent company	Purchase of goods	Providing materials for the Company	Pricing based on market price	9,951,061	9,951,061	0	Monetary fund	9,951,061	/
Shanghai Jiangnan Industrial Co., Ltd.	Holding subsidiary of parent company	Purchase of goods	Providing materials for the Company	Pricing based on market price	9,429,667	9,429,667	0	Monetary fund	9,429,667	/
CCCC Tianjin Dredging Co., Ltd.	Holding subsidiary of parent company	Purchase of goods	Providing materials for the Company	Pricing based on market price	5,475,264	5,475,264	0	Monetary fund	5,475,264	/



Related party	Relationship	Type of related transaction	Content of related transaction	Pricing principle of related transaction	Price of related transaction	Amount of related transaction	Proportion in the amount of similar transactions (%)	Settlement mode of associated transaction	Market price	Reason for great differences between the bargain price and market price
CCCC North Industrial Co., Ltd.	Holding subsidiary of parent company	Purchase of goods	Providing materials for the Company	Pricing based on market price	3,841,523	3,841,523	0	Monetary fund	3,841,523	/
CCCC Marine Engineering & Technology Research Center Co., Ltd.	Holding subsidiary of parent company	Purchase of goods	Providing materials for the Company	Pricing based on market price	2,451,616	2,451,616	0	Monetary fund	2,451,616	/
CNPC & CCCC Petroleum Sales Co., Ltd.	Holding subsidiary of parent company	Purchase of goods	Providing materials for the Company	Pricing based on market price	1,475,121	1,475,121	0	Monetary fund	1,475,121	/
China Communications Materials & Equipment Co., Ltd.	Holding subsidiary of parent company	Purchase of goods	Providing materials for the Company	Pricing based on market price	380,531	380,531	0	Monetary fund	380,531	/
CCCC Third Harbor Consultants Co., Ltd.	Holding subsidiary of parent company	Purchase of goods	Providing materials for the Company	Pricing based on market price	353,982	353,982	0	Monetary fund	353,982	/
CCCC Shanghai Channel Equipment Industry Co., Ltd.	Holding subsidiary of parent company	Purchase of goods	Providing materials for the Company	Pricing based on market price	320,806	320,806	0	Monetary fund	320,806	/
China Road & Bridge Corporation	Holding subsidiary of parent company	Purchase of goods	Providing materials for the Company	Pricing based on market price	64,214	64,214	0	Monetary fund	64,214	/
Total				/	/	7,081,363,498	0.31	/	/	/
Details of large amount of sales returns				None						
Explanation for related transactions				The Proposal on Estimating Routine Related Transactions for Years 2019-2021 was approved upon deliberation at the first provisional general meeting in 2019 of the Company. In 2019, the amount of the annual related transactions in the normal business between the Company and its subsidiaries and China Communications Construction Co., Ltd. and its subsidiaries did not exceed RMB 8.3 billion. The Annual General Meeting had authorized the Company's management to handle the relevant specific matters.						

2 Related transactions arising from acquisition or offering of assets or stock equity

1. Events disclosed in provisional announcement, without progress or changes in follow-up implementation

☐Applicable ☒Not applicable

2. Events disclosed in the provisional announcement, with progress or changes in follow-up implementation

☐Applicable ☒Not applicable

3. Events not disclosed in provisional announcements

☐Applicable ☒Not applicable

4. Where agreed performance is involved, the performance achievement during the reporting period should be disclosed

☐Applicable ☒Not applicable

3 Material related transactions with joint external investments

1. Events disclosed in provisional announcement, without progress or changes in follow-up implementation

☐Applicable ☒Not applicable

2. Events disclosed in the provisional announcement, with progress or changes in follow-up implementation

☐Applicable ☒Not applicable

3. Events not disclosed in provisional announcements

☐Applicable ☒Not applicable

4 Current associated rights of credit and liabilities

1. Events disclosed in provisional announcement, without progress or changes in follow-up implementation

☐Applicable ☒Not applicable

2. Events disclosed in the provisional announcement, with progress or changes in follow-up implementation

□Applicable √Not applicable

3. Events not disclosed in provisional announcements

□Applicable √Not applicable

5 Others

□Applicable √Not applicable

XV. Material contracts and their performance**1 Trusteeship, contracting and leasing matters****1. Trusteeship**

□Applicable √Not applicable

2. Contracting

□Applicable √Not applicable

3. Leasing

√Applicable □Not applicable

Unit: Yuan Currency: RMB

Name of lessor	Name of lessee	Leased assets	Amount involved in leased assets	Starting date of leasing	Termination date of leasing	Income from leasing	Basis for determining income from leasing	Impacts of income from leasing on the Company	Related transaction or not	Relationship
The Company	Shanghai Zhenlong Asset Management Co., Ltd. and other companies	Lease of houses	251,529,199.83	2012/8/10 August 10, 2012	2025/7/9 July 9, 2025	44,347,607.62	Agreed	44,347,607.62	No	Other

Leasing explanation

None

2 Guarantee

√Applicable □Not applicable

Unit: Yuan Currency: RMB

External guarantee of the Company (excluding guarantee to the subsidiaries)													
Guarantor	Relation between the guarantor and the listed company	Guaranteed party	Guaranteed amount	Date of guarantee (signing date of agreement)	Starting date of guarantee	Due date of guarantee	Type of guarantee	Fulfillment of the guarantee or not	Overdue or not	Amount of overdue guarantee	Counter guarantee or not	Guarantee by the related party or not	Relationship
Total amount of guarantee incurred during the reporting period (excluding guarantee to the subsidiaries)													
Total balance of guarantee at the end of the reporting period (A) (excluding guarantee to the subsidiaries)													
Guarantee of the Company and its subsidiaries to the subsidiaries													
Total amount of guarantee to the subsidiaries incurred during the reporting period					-1,048,320,819								
Total balance of guarantee to the subsidiaries at the end of the reporting period (B)					2,051,665,981								



Total amount of guarantee of the Company (including guarantee to the subsidiaries)	
Total amount of guarantee (A+B)	2,051,665,981
Proportion of total amount of guarantee in the net assets of the Company (%)	11.05
Including:	
Amount of guarantee to the shareholders, the actual controller and related parties (C)	
Amount of debt guarantee directly or indirectly provided to the guaranteed party with the asset-liability ratio over 70% (D)	1,252,227,900
Amount of guarantee exceeding 50% of net assets (E)	
Total guarantee amount of the above three items (C+D+E)	1,252,227,900
Explanation for the joint and several repayment liabilities for the undue guarantee	
Description of guarantee	The Proposal for Providing Financing Guarantee to the Subsidiary Shanghai Zhenhua Port Machinery (Hong Kong) Co., Ltd. Was approved upon deliberation by the Company at the 1st provisional general meeting for 2008 held in September 22, 2008, which agreed to provide the financial support to the subsidiary in Hong Kong and provided the guarantee with the upper limit of RMB 500 million for the loan it applied for through the bank. Guarantees provided by the Company to subsidiaries during the reporting period refer to the guarantees to subsidiaries in Hong Kong. Other guarantee matters were approved upon deliberation at the 30th meeting of the 5th Board of Directors.

3 Consigned cash assets management

1. Consigned financing

(1) General information of consigned financing

☐Applicable ☒Not applicable

Other information

☐Applicable ☒Not applicable

(2) Information on individual consigned financing

☐Applicable ☒Not applicable

Other information

☐Applicable ☒Not applicable

(3) Provision for impairment of consigned financing

☐Applicable ☒Not applicable

2. Consigned loans

(1) General information of consigned loans

☐Applicable ☒Not applicable

Other information

☐Applicable ☒Not applicable

(2) Individual consigned loans

☐Applicable ☒Not applicable

Other information

☐Applicable ☒Not applicable

(3) Provision for impairment of consigned loans

☐Applicable ☒Not applicable

3. Other information

☐Applicable ☒Not applicable

4 Other material contracts

☐Applicable ☒Not applicable

XVI. Particulars about other important events

☐Applicable ☒Not applicable

XVII. Particulars about actively performing social responsibilities**1 Poverty alleviation of the listed company**

☒Applicable ☐Not applicable

1. Targeted poverty alleviation program

☒Applicable ☐Not applicable

According to the requirements of the Decision of the Central Committee of the Communist Party of China and the State Council on Winning the Battle Against Poverty, in order to implement the enterprise social responsibility, the Company, under the general plan of CCCC, actively carried out the targeted poverty alleviation, and formulated the partner assistance plan in Tue Town, Yunnan Province.

2. Summary of annual targeted poverty alleviation

☒Applicable ☐Not applicable

Since 2019, taking the principle of "Poverty Alleviation after Education" as the main working concept, the Company centralized the resource to build the library and reading rooms for Tue Town Center Primary School, provided education and teaching materials, facilities, equipment, and prepared the "Student Grant Plan" for over ten students in Majimi Village, by which the local education resource lack was improved. In addition to education, the Company carried out the poverty alleviation through consumption and employment there, and participated in the free construction project of Nujiang Dukou Bridge, helping the local infrastructure construction.

The Company carried out a series of assistance work, receiving favorable reviews from Tue Town Government. Tue Town Committee of the PCP and Tue Town People's Government issued the Decision on Commending the Winner of 2019 Tue Town Poverty Alleviation Award, and the Company won the title of "Poverty Alleviation Star Enterprise".

3. Effectiveness of targeted poverty alleviation

☐Applicable ☒Not applicable

4. Subsequent targeted poverty alleviation program

☒Applicable ☐Not applicable

(1) Do a good job in poverty alleviation investigation to have the comprehensive understanding of the poverty alleviation demand in Tue Town, and make the targeted poverty alleviation program.

(2) Carry out a series of educational poverty alleviation with own funds. As the relocation of Tue Dam, local kindergartens and secondary schools badly need materials, facilities and equipment, the Company will try the best give assistance, including providing internal classroom facilities and outdoor facilities to kindergartens, and drinking water device (water dispenser with purification and hot water) to local secondary schools.

(3) Introduce assistance funds to cultivate a batch of local grass-roots cadres and technical personnel in Yunnan.

(4) Focus on the poverty alleviation through consumption, make plans for buying agricultural products, sales assistance of agricultural products and other work, and implement the same based on the actual situation.

2 Fulfillment of social responsibility

☒Applicable ☐Not applicable

The Company actively bears the social responsibility, enhances the responsibility management to create the benefit for shareholders, upgrades the operation quality to create the high quality products for users, responds to the "Belt and Road" initiative and "Made in China 2025 Strategy" with the actual action, implements the development strategy with equipment manufacturing as the center and capital operation and Internet+ as two wings.



In addition to the traditional dominant plates such as port machinery, ocean engineering, system EPC and ocean transportation of heavy cargoes, the Company also developed the intelligent industry, livelihood consumption, integrated development and digital industry, to make contribution to the development of entity economy and the construction of the well-off society.

Adhering to the concept of "open development and all-win harmony", the Company speeded up the pace of "going global", actively promoted the layout of overseas regional centers, and built Terminexus digital intelligent platform, to provide faster and more efficient services to global users.

Every year, the Company may hold the forum on intelligent solutions of wharf to discuss the development plan with the global professionals. The Company made full use of the platform of China International Import Expo to achieve mutual benefit and common development with global enterprises.

The Company paid more attention to the green and sustainable development, actively invested in the research and development of green products, promoted the "change from oil into electricity" technology of dock equipment, and optimized the environmental protection properties of existing equipment; built intelligent terminals to achieve "zero emission" from terminals and provided equipment support for the development of clean energy such as solar and wind power. The Company further increased the investment in environmental protection, improved the existing production equipment and facilities, and innovate the green production process; strengthened the long-term mechanism for green environmental protection management, created the environmental protection culture with vitality, set up the special training for environmental protection, enhance the environmental protection awareness of the staff, and laid a green foundation for promoting the high-quality development of the Company.

The Company always adhered to the principle of "people-oriented", strengthen the humanistic care for employees, built a career development platform for employees; strengthened the communication with the community where the Company is located through activities such as party building and association building; released the annual report and Social Responsibility Report as required to show the development trend of the enterprise to related parties; carried out the targeted poverty alleviation by building the library and reading rooms for Tue Town Primary School in Yunnan Province, helping solve problems such as the lack of local educational resources. At the same time, the Company actively promoted poverty alleviation in education and consumption.

3 Environmental Information

1. Information about environmental protection of the Company and its subsidiaries as the key pollutant discharge units published by environmental protection department

√Applicable ☐Not applicable

(1) Pollutant discharge

√Applicable ☐Not applicable

The pollutants discharged at the main production base of the Company in Changxing Island include: wastewater, waste gas, noise and solid waste, for which the pollutant discharging license has been obtained.

Wastewater: the majority of domestic wastewater and a little wastewater from production. There are 3 discharge outlets for wastewater, which can be discharged after the disposal in Changxing Wastewater Disposal Plant.

Waste gas: mainly including coating waste gas, welding dust and boiler waste gas, which can be discharged after the standard disposal in relevant waste gas disposal facilities. There are 89 discharge outlets for waste gas.

Solid waste: mainly including the common solid waste, such as scrap steel from the steel plate processing, canteen waste oil and domestic refuse; hazardous waste such as waste mineral oil and waste emulsion from machining; paint waste, waste packaging from painting operations. Those pollutants have been disposed of by qualified units upon entrustment.

Noise: mainly from cutting, painting, machine tools and fans. There are 14 noise monitoring outlets.

Implementing standards: the Comprehensive Standards for Wastewater Discharge in Shanghai Municipality (DB31/199-2018) for wastewater discharge; the Standard for Air Pollutant Discharge in Shanghai Municipality (DB31/933-2015) for waste gas discharge; the Standards for Factory Boundary Noise Discharge of Industrial Enterprises (GB12348-2008) for factory boundary noise.

(2) Construction and operation of pollution control facilities

√Applicable ☐Not applicable

The Company takes the necessary protective measures for the collection and treatment of the main contaminants and has installed the corresponding monitoring equipment.

Wastewater: install on-line monitoring equipment at the wastewater outlet to monitor factors such as pH, flow rate, COD and ammonia nitrogen, and entrust qualified entities for operation and maintenance; check existing pipelines, and add domestic sewage treatment facilities and initial rainwater collection ponds, etc.

Exhaust gas: conduct pre-treatment and adopt cloth bag/cartridge dust removal equipment in sand blasting workshop; adopt activated carbon adsorption - nitrogen gas desorption - condensation recovery process treatment equipment in painting workshop, spray and build temporary shed outside, add mobile paint mixing room, adopt water-based paint replacement process for pre-treatment production line, transform VOCs end treatment device; adopt alkali spray and water spray treatment devices for acid mist and galvanizing exhaust gas in galvanizing workshop; install mobile smoke and dust treatment device for welding in steel structure workshop, and add new multiple treatment device outdoor. Fully utilize the purification effect of distributed collection and processing system, clamping type local high negative pressure dust removal system, blowing and suction type dust removal system, removable welding fume processor and grinding dust removal system. Regularly replace the adsorption and filtration materials of various treatment devices, perfect the equipment operation and maintenance ledger and strengthen daily management.

Noise: adopt the measures for construction sound insulation; add sound insulation to reduce the environmental impact of staggered production.

Solid waste: all solid and hazardous wastes are handled by qualified entities. It is required to newly build solid waste warehouses, arranged for management by dedicated personnel, and perfect identification of hazardous waste signs and ledger, etc.

(3) Environmental impact assessment(EIA) of construction project and other administrative licenses for environmental protection

☒Applicable ☐Not applicable

The related construction projects in Changxing Base, Nantong, Qidong and other places belonging to the Company have obtained EIA, and in 2019, Changxing Branch completed the EIA work for the reconstruction of 4# dangerous goods terminal and the independent acceptance of the comprehensive workshop project. Nantong Branch and Qidong Marine Engineering Co., Ltd. completed the completion and acceptance of the project. Some of the pending acceptance and pending EIA projects are undergoing relevant procedures in accordance with the requirements of government departments.

(4) Emergency proposal for environmental accident

☒Applicable ☐Not applicable

The Company's major production entities have signed and issued emergency plans for environmental emergencies, and have completed filing with their local government regulatory authorities in accordance with environmental requirements.

(5) Self-monitoring scheme for environment

☒Applicable ☐Not applicable

The Company has formulated an annual environmental self-monitoring program and is currently equipped with an online monitoring system for wastewater, exhaust gas and plant boundary noise, and has commissioned a third party to carry out self-monitoring of wastewater, exhaust gas, noise, groundwater and soil according to the scheme requirements.

(6) Other environmental information to be disclosed

☒Applicable ☐Not applicable

In August 2019, the Central Ecological and Environmental Protection Inspectorate Group announced the environmental protection problems of the Company's Changxing Base as a typical case, in response to the above situation, the Company attaches great importance to the upper and lower, set up the rectification work leading group and working group in the first time, all staff seriously and deeply reflect the problem, resolve to make a rectification, organize a comprehensive self-examination and self-correction work, formulate the comprehensive planning rectification program for the Company's problems, scientifically formulate the rectification measures, define the rectification plans and programs, to ensure that the rectification responsibility of the people are in place, and the rectification work is comprehensive and thorough.

The Company will learn from the example, take environmental protection reform as an opportunity, deeply study and implement Xi Jinping's idea of ecological civilization, firmly establish the concept of green development, enhance the environmental protection awareness of all staff, establish and perfect the long-term mechanism of environmental protection work, and continuously promote the company to the path of green and high-quality development.



2. Particulars about the environmental protection of the companies other than those defined as key pollutant-discharge entities

☒Applicable ☐Not applicable

The main pollutants of the Company other than the key emission entities such as Nantong Transmission, subordinate to the Company: wastewater, exhaust gas, solid waste, noise, etc. Discharge mode: the wastewater was discharged up to the standard after treatment and some units have set up sewage treatment facilities; the atmospheric pollutants such as the waste gas, fume and VOCs were discharged in the manner of organized discharge; it is required to progressively renovate spraying exhaust gas treatment facilities and workshop dust removal devices, etc., the solid wastes and the hazardous wastes were handed over to the qualified entities for treatment; plant boundary noise was discharged up to the standard. According to the prepared sudden environmental emergency plan, various entities improved the configuration of emergency rescue equipment and facilities, carried out emergency rescue technical training and practical exercises on a regular basis, and effectively improved the emergency disposal capacity, in combination with the actual situation of various entities.

3. Description of the reasons for failing to disclose the environmental information by the companies other than the key pollutant discharge entities

☐Applicable ☒Not applicable

4. Description of the follow-up progress and changes in the contents of environmental information disclosed during the reporting period

☐Applicable ☒Not applicable

(IV) Other notes

☐Applicable ☒Not applicable

XVIII. Information about convertible corporate bonds

☐Applicable ☒Not applicable"

Section VI | Changes in Ordinary shares and Shareholders' Situation

I. Changes in ordinary shares capital

1 Table of changes in ordinary shares

1. Table of changes in ordinary shares

The total number of shares of the Company's ordinary shares and the structure of its share capital remained unchanged during the reporting period.

2. Notes to changes in ordinary shares

☐ Applicable ☒ Not applicable

3. Effect of changes in ordinary shares on financial indicators such as earnings per share and net asset per share for the latest year and period (if any)

☐ Applicable ☒ Not applicable

4. Other contents that the Company deems necessary to be disclosed or required to be disclosed by the securities regulatory authority

☐ Applicable ☒ Not applicable

2 Changes in shares with restrictive conditions for sales

☐ Applicable ☒ Not applicable

II. Issuance and listing of securities

1 Securities issuance by the reporting period

☐ Applicable ☒ Not applicable

Particulars about the issuance of securities during the reporting period (for bonds of different interest rates within the duration, please state them respectively)

☐ Applicable ☒ Not applicable

2 Changes in total ordinary shares of the Company and the shareholder structure, as well as the assets and liabilities

☐ Applicable ☒ Not applicable

3 Existing internal employee ownership

☐ Applicable ☒ Not applicable

III. Shareholders and actual controller

1 Total number of shareholders

Total of ordinary shareholders by the end of the reporting period	233,460
Total of ordinary shareholders by the end of the month previous to the disclosure date of annual report	231,134

2 Table of the shares held by Top 10 shareholders, Top 10 holders of marketable shares (or shareholders without trading limited conditions) by the end of reporting period

Unit: share

Shares held by Top 10 shareholders							
Name of shareholder (in full)	Changes in the reporting period	Number of shares held at the end of the period	Ratio (%)	Number of shares with trading limited conditions held	Pledge or freezing condition		Nature of shareholder
					Share status	Number of shares	
CCCCG (HK) Holding Limited	0	916,755,840	17.401	0	NA	0	Overseas legal person
China Communications Construction Company Ltd.	0	855,542,044	16.239	0	NA	0	State-owned legal person
China Communications Construction Group Co., Ltd.	0	663,223,375	12.589	0	NA	0	State-owned legal person
Central Huijin Asset Management Co., Ltd.	0	89,378,640	1.70		Unknown		Unknown
China Securities Finance Corporation Limited	0	82,269,868	1.56		Unknown		Unknown
Bosera Fund - Agricultural Bank of China - Bosera China Securities Financial Assets Management Plan	0	19,855,920	0.38		Unknown		Unknown
E FUND Management- Agricultural Bank of China - E FUND Management China Securities Financial Assets Management Plan	0	19,855,920	0.38		Unknown		Unknown
Dacheng Fund- Agricultural Bank of China - Dacheng China Securities Financial Asset Management Plan	0	19,855,920	0.38		Unknown		Unknown
Harvest Fund - Agricultural Bank of China - Harvest CSI Asset Management Plan	0	19,855,920	0.38		Unknown		Unknown
GF Fund- Agricultural Bank of China - GF China Securities Financial Assets Management Plan	0	19,855,920	0.38		Unknown		Unknown
Lombarda China Fund- Agricultural Bank of China - Lombarda China Fund China Securities Financial Assets Management Plan	0	19,855,920	0.38		Unknown		Unknown
China Asset Management- Agricultural Bank of China - China Asset Management China Securities Financial Assets Management Plan	0	19,855,920	0.38		Unknown		Unknown
Yinhua Fund- Agricultural Bank of China - Yinhua China Securities Financial Asset Management Plan	0	19,855,920	0.38		Unknown		Unknown
China Southern Asset Management- Agricultural Bank of China - China Southern Asset Management China Securities Financial Asset Management Plan	0	19,855,920	0.38		Unknown		Unknown
ICBC Credit Suisse Fund- Agricultural Bank of China - ICBC Credit Suisse China Securities Financial Asset Management Plan	0	19,855,920	0.38		Unknown		Unknown
Shareholdings of top 10 shareholders without trading limited conditions							
Name of shareholder	Number of non- restrictive circulation shares held		Type and number of shares				
			Category	Quantity			
CCCCG (HK) Holding Limited	916,755,840		Foreign shares listed domestically				

Shareholdings of top 10 shareholders without trading limited conditions

Name of shareholder	Number of non-restrictive circulation shares held	Type and number of shares	
		Category	Quantity
China Communications Construction Company Ltd.	855,542,044	RMB ordinary shares	
China Communications Construction Group Co., Ltd.	663,223,375	RMB ordinary shares	
Central Huijin Asset Management Co., Ltd.	89,378,640	RMB ordinary shares	
China Securities Finance Corporation Limited	82,269,868	RMB ordinary shares	
Bosera Fund - Agricultural Bank of China - Bosera China Securities Financial Assets Management Plan	19,855,920	RMB ordinary shares	
E FUND Management- Agricultural Bank of China - E FUND Management China Securities Financial Assets Management Plan	19,855,920	RMB ordinary shares	
Dacheng Fund- Agricultural Bank of China - Dacheng China Securities Financial Asset Management Plan	19,855,920	RMB ordinary shares	
Harvest Fund - Agricultural Bank of China - Harvest CSI Asset Management Plan	19,855,920	RMB ordinary shares	
GF Fund- Agricultural Bank of China - GF China Securities Financial Assets Management Plan	19,855,920	RMB ordinary shares	
Lombarda China Fund- Agricultural Bank of China - Lombarda China Fund China Securities Financial Assets Management Plan	19,855,920	RMB ordinary shares	
China Asset Management- Agricultural Bank of China - China Asset Management China Securities Financial Assets Management Plan	19,855,920	RMB ordinary shares	
Yinhua Fund- Agricultural Bank of China - Yinhua China Securities Financial Asset Management Plan	19,855,920	RMB ordinary shares	
China Southern Asset Management- Agricultural Bank of China - China Southern Asset Management China Securities Financial Asset Management Plan	19,855,920	RMB ordinary shares	
ICBC Credit Suisse Fund- Agricultural Bank of China - ICBC Credit Suisse China Securities Financial Assets Management Plan	19,855,920	RMB ordinary shares	
Notes to the related relation or consistent actions of the above-mentioned shareholders	Among the above top 10 shareholders, CCCG (HK) Holding Limited, China Communications Construction Group Co., Ltd. and China Communications Construction Company Ltd. are related companies. It was unknown to the Company whether there was related relation or concerted actor specified in the Management Method on Information Disclosure for Shareholding Change of the Shareholders of Listed Companies.		
Explanation on preferred stock holders with recovered voting rights and number of stocks held by them			

Shareholding quantity of top ten shareholders with sales restriction and the sales restriction

☐ Applicable ☒ Not applicable

3 Strategic investors or legal persons becoming the top 10 shareholders due to placement of new shares

☐ Applicable ☒ Not applicable

IV. Controlling shareholders and actual controllers

1 Controlling shareholder

**1. Legal person**

√Applicable □Not applicable

Name	China Communications Construction Group Co., Ltd.
Company principal or legal representative	Liu Qitao
Date of Establishment	December 8, 2005
Main business	Construction of overseas projects and international bidding projects at home; general contracting for construction of various special ships, leasing and maintenance of special ship and construction machines; offshore towage and professional services related to the ocean engineering; technical consultant services regarding the ship and the supporting port equipment; engaging in the general contracting of construction projects for ports, channels, highways and bridges both home and abroad (including technical and economic consultation of engineering, feasibility study, survey, design, construction, supervision, procurement and supply for related complete set of equipment or materials, and equipment installation); undertaking the general contracting of the construction of industrial and civil works, railway, metallurgy, petrochemical, tunnel, power, mine, water conservancy, and municipal works; import and export business; real estate development and property management; investment and management of transportation, hotel and tourism industries.
Equities of other domestic and overseas public companies during the reporting period	CCCCG holds 57.96% of the stock equity of CCCC (601800.SH) and it is the controlling shareholder. CCCC holds 100% of the stock equity of CCCC Real Estate Group Co., Ltd.; CCCC Real Estate Group Co., Ltd holds 100% of the stock equity of Zhongzhu Real Estate Development Co., Ltd. Zhongzhu Real Estate Development Co., Ltd holds 53.32% of the stock equity of CCCC Real Estate Co., Ltd (name used before: Chongqing Industries, Zhongfang Real Estate) (000726.SZ) and it is the controlling shareholder. CCCC and its controlling subsidiaries totally hold 28.91% of the stock equity of Greentown Holding Co., Ltd (03900.HK) and are the controlling shareholders. CCCC and its subsidiaries hold 29.99% of the stock equity of Shanghai Zhenhua Heavy Industries Co., Ltd (600320.SH) and are the controlling shareholder.
Notes to other circumstances	

2. Natural persons

□ Applicable √Not applicable

3. Particulars about no controlling shareholder in the Company

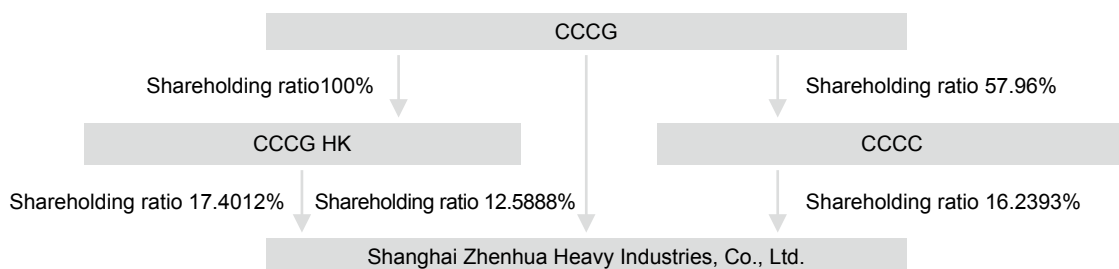
□ Applicable √Not applicable

4. Index and date of change in the controlling shareholder during the reporting period

□ Applicable √Not applicable

5. Chart for the property and controlling relationships between the company and the controlling shareholders

√Applicable □Not applicable



2 Actual controller**1. Legal person**

☐ Applicable ☒ Not applicable

2. Natural person

☐ Applicable ☒ Not applicable

3. Particulars about no actual controller in the Company

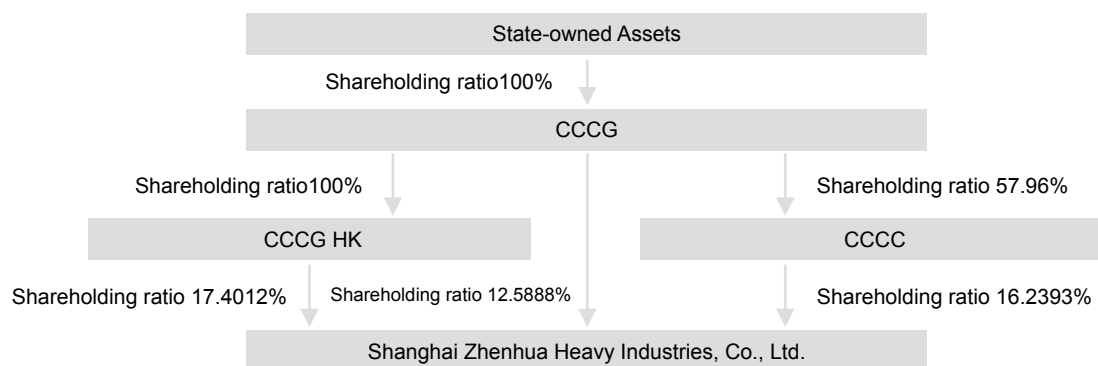
☐ Applicable ☒ Not applicable

4. Index and date of change in the actual controller during the reporting period

☐ Applicable ☒ Not applicable

5. Block diagram of ownership and control relation between the Company and the actual controller

☒ Applicable ☐ Not applicable

**6. Control over the Company by the actual controller via trust or other ways of assets management**

☐ Applicable ☒ Not applicable

3 Other information about Controlling shareholders and actual controllers

☐ Applicable ☒ Not applicable

V. Other legal person shareholder holding more than 10%

☐ Applicable ☒ Not applicable

VI. Particulars about restriction on reduction in shares held

☐ Applicable ☒ Not applicable



Section VII | Preferred Shares

☐Applicable ☒Not applicable

Section VIII | Directors, Supervisors, Senior Executives and Employees

I. Shareholding variation and remuneration

1 Changes in shares held by current and resigned directors, supervisors and senior executives during the reporting period and their remunerations

√Applicable □Not applicable

Unit: share

Name	Post (Note)	Sex	Age	Starting date of tenure	Expiry date of tenure	Number of shares held at the beginning of year	Number of shares held at the end of the year	Change in shares in the year	Reason of change	Total remuneration before tax from the Company during the reporting period (RMB'0,000)	Remuneration from the related party of the Company or not
Zhu Lianyu	Chairman of the Board, Secretary of Party Committee	Male	50	June 26, 2018	June 25, 2021	427,200	427,200	0		78.26	No
Huang Qingfeng	Director, President, vice secretary of Party Committee	Male	45	June 26, 2018	June 25, 2021	0	0	0		78.26	No
Zhang Hongwen	Director	Male	60	June 26, 2018	June 25, 2021	0	0	0		0	Yes
Liu Qizhong	Director, vice president	Male	56	June 26, 2018	June 25, 2021	0	0	0		62.61	No
Dai Wenkai	Director, vice president	Male	53	June 26, 2018	June 25, 2021	0	0	0		62.61	No
Zhu Xiaohuai	Director, CFO	Male	51	June 26, 2018	June 25, 2021	0	0	0		62.61	No
Zhao Zhanbo	Independent director	Male	44	June 26, 2018	June 25, 2021	0	0	0		12	No
Ji Linhong	Independent director	Male	58	June 26, 2018	June 25, 2021	0	0	0		12	No
Bai Yunxia	Independent director	Female	47	June 26, 2018	June 25, 2021	0	0	0		12	No
Yang Jun	Independent director	Male	63	June 26, 2018	June 25, 2021	0	0	0		12	No
Zhang Hua	Independent director	Male	47	May 28, 2019	June 25, 2021	0	0	0		7	No
Sheng Leiming	Independent director	Male	50	May 28, 2019	June 25, 2021	0	0	0		7	No
Wang Cheng	Supervisor, vice secretary of Party Committee, Secretary of Committee for Discipline Inspection, chairman of labor union	Male	47	June 26, 2018	June 25, 2021	0	0	0		62.61	No
Zhang Minghai	Supervisor	Male	58	June 26, 2018	June 25, 2021	24,311	24,311	0		70.06	No



Name	Post (Note)	Sex	Age	Starting date of tenure	Expiry date of tenure	Number of shares held at the beginning of year	Number of shares held at the end of the year	Change in shares in the year	Reason of change	Total remuneration before tax from the Company during the reporting period (RMB'0,000)	Remuneration from the related party of the Company or not
Xiang Xudong	Supervisor	Male	44	June 26, 2018	June 25, 2021	0	0	0		60.51	No
Liu Jianbo	Vice president	Male	57	August 22, 2018	June 25, 2021	0	0	0		62.61	No
Zhou Qi	Vice president	Male	48	August 22, 2018	June 25, 2021	0	0	0		62.61	No
Chen Bin	Vice president	Male	46	August 22, 2018	June 25, 2021	107,328	107,328	0		57.58	No
Shan Jianguo	Vice president	Male	56	August 22, 2018	June 25, 2021	0	0	0		62.61	No
Zhang Jian	Vice president	Male	51	August 22, 2018	June 25, 2021	0	0	0		62.61	No
Fei Guo	Chief Engineer	Male	58	August 22, 2018	June 25, 2021	0	0	0		62.61	No
Li Ruixiang	Chief economist	Male	45	August 22, 2018	June 25, 2021	0	0	0		62.61	No
Sun Li	Chief legal counsel and secretary of the board	Male	48	August 22, 2018	June 25, 2021	0	0	0		62.61	No
Yan Yunfu	Former director or chief engineer	Male	61	June 26, 2018	December 11, 2019	0	0	0		62.61	No
Ling He	Original independent director	Male	68	June 26, 2018	March 8, 2019	0	0	0		3	No
Total	/	/	/	/	/	558,839	558,839	0	/	1,160.99	/

Name	Main working experiences
Zhu Lianyu	Born in 1970, male, Ph.D., professor-level senior engineer. He began his career in September 1992 and successively served as the engineer, equipment leader of overseas projects, vice chief of Marine Machine Department, manager of Enterprise Development Department of CCCC First Harbor Engineering Co., Ltd; the general manager of CCCC International Shipping Co., Ltd and the vice general manager of the Equipment Manufacturing Marine Heavy Industry Department of China Communications Construction Co., Ltd. Now, he is the Chairman of the Board and Secretary of Party Committee of the Company.
Huang Qingfeng	Born in 1975, male, EMBA, senior engineer. He began his career in July 1996 and successively served as the chief of quality inspection department, vice director of quality inspection No.2 department, vice general manager of quality inspection companies, vice general manager of after-sales service department, general manager of quality inspection company; vice director of off-shore office, vice director or vice of quality safety office, director of product service center and assistant president of the Company; vice president of the Company since December 2014. Now, he is the director, president and Secretary of Party Committee of the Company.
Zhang Hongwen	Born in 1960, male, undergraduate, senior engineer; engaged in work in August 1983. He successively served as the vice general manager of Overseas Division and manager of Integrated Department of Zhonggong Group, vice general manager of Engineering Management Department and Operation & Management Department of China Communications Construction Co., Ltd, vice general manager and general manager of Capital Construction Department (Dredging Department) and the executive general manager and general manager of Port Dredging Business Department of CCCC, as well as the director, executive general manager, temporary member of the Party committee and non-executive director of CCCC Dredging (Group) Co., Ltd. Now, he is the general manager of CCCC Equipment Manufacturing & Marine Heavy Industry Department and the director of the Company.
Liu Qizhong	Born in 1964, male, undergraduate, senior economist. He successively served as the manager of Operating Department and the vice president of the Company, and serves as the director of the Company since March 2004. Now, he is the director, vice president and Party committee standing member of and chief compliance officer of the Company.
Dai Wenkai	Born in 1967, male, master of physics, EMBA, senior engineer. He began his career in March 1993 and successively served as the project director, vice manager, vice chief economist and chief economist, director of operation management office and vice president of the Company. Now, his is the director, vice president and Party committee standing member of the Company.

Name	Main working experiences
Zhu Xiaohuai	Born in 1969, male, master of MBA, senior accountant. He began his career in July 1991 and successively served as the vice section manager of Financial Division of CCCC Shanghai Dredging Co., Ltd, vice director of Budget and Finance Department, vice manager (in charge of the work) or manager of Finance Department, and member of commission for disciplinary inspection of CCCC Shanghai Dredging Co., Ltd, and the director, chief accountant and Party committee standing member of CCCC Shanghai Dredging Co. Ltd. Now, he served as the director, CFO and Party committee standing member of the Company.
Zhao Zhanbo	Born in 1976, Male, Ph. D. He had served as a teacher in School of Software, Peking University since 2005 and now he is a professor. He is mainly engaged in the research in Internet business model innovation and corporate development strategy. Now he acts as the independent director of the Company.
Ji Linhong	Born in 1962, Male, Ph. D. He successively served as the assistant and the lecturer of Department of Precision Instrument of Tsinghua University; assistant professor of Department of Precision Engineering of Faculty of Engineering of the University of Tokyo, the Postdoctoral Researcher in Ministry of Education, Culture, Sports, Science and Technology of Japan. He had acted as vice director of Department of Precision Instrument of Tsinghua University, vice director of Department of Mechanical Engineering of Tsinghua University, director of Design Engineering Research Institute of Tsinghua University, director of Experiment & Teaching Center of Mechanical Engineering, and vice director of State Key Lab of Tribology, Tsinghua University and so on. Now he serves as a professor and a doctoral tutor in Department of Mechanical Engineering, Tsinghua University. He is mainly engaged in digitalized design and system optimization of complicated mechanical system and the intelligent and biological mechanical design. Now he acts as the independent director of the Company.
Yang Jun	Born in 1957, male, master degree. He successively served as intermediate and senior court judge of Shanghai Court, president and member of the judicial committee member, Property Trade Operation Director of Shanghai United Property Rights Exchange. Now he is the assistant president of Shanghai United Property Rights Exchange, general manager of Beijing HQ, director of Financial Property Rights Trade Center, arbitrator of China International Economic and Trade Arbitration Commission, Shanghai International Economic and Trade Arbitration Commission, arbitrator of Shanghai Arbitration Commission, Shanghai Financial Arbitration Court, expert of China domain name dispute resolution center, director of Intellectual Property Association of China Law Society, director of Company Law Research Society of Shanghai Law Society, director of Shanghai Patent/Trademark/Copyright Association, and the independent director of the Company. Now he acts as the independent director of the Company.
Bai Yunxia	Born in October 1973, female, Ph. D from Xiamen University, post-doctor in accounting of Guanghua School of Management, Peking University, professor of accounting, doctoral tutor, engaged in work in 1995. She successively served as the assistant engineer of Kaiyuan Group under Xi'an Jiaotong University, lecturer of School of Economics and Management of Tongji University, research scholar of CKGSB. Now, she acts as the director of Department of Accounting, School of Economics and Management, Tongji University and the research scholar of Investment Center of CKGSB. Now he acts as the independent director of the Company.
Zhang Hua	Born in 1973, Male, Ph.D. Economics, associate professor of finance. He successively served as a researcher, lecturer, assistant professor and associate professor at China Europe International Business School. Now he acts as the independent director of the Company.
Sheng Leiming	Born in 1970, male, doctor of laws, senior lawyer. He successively served as a lawyer assistant and lawyer in Shanghai Foreign Trade Law Firm, a teacher of civil and commercial law in East China University of Political Science and Law, a senior partner and chief lawyer of Shanghai Zhongmao Law Firm, and co-chairman, senior partner and lawyer in the head office management committee of Guantao Law Firm. Now he acts as the independent director of the Company.
Wang Cheng	Born in 1973, male, master of engineering, senior political worker. He successively served as the vice secretary or secretary of league committee, and vice secretary or secretary of Party Branch of No. 2 Engineering Co., Ltd of CCCC Third Harbor Engineering Co., Ltd; vice director and director of Organization Department of CCCC Third Harbor Engineering Co., Ltd; secretary of the Party Committee and vice general manager of No. 2 Engineering Co., Ltd of CCCC Third Harbor Engineering Co., Ltd; chairman of board of supervisors, vice secretary of the Party Committee, secretary of Committee for Discipline Inspection and chairman of labor union of CCCC Third Harbor Engineering Co., Ltd. Now he serves as the vice secretary of the Party Committee, secretary of Commission for Disciplinary Inspection, chairman of labor union and chairman of board of supervisors of the Company.
Zhang Minghai	Born in 1962, male, undergraduate, professor-level senior engineer. He successively served as the engineer of Technology Division of Shanghai Port Machinery Plant; mechanical office designer, vice manager and vice chief engineer of Shanghai Zhenhua Heavy Industries Co., Ltd., general manager of Shore Bridge No.1 Company of Mechanical Office, and general manager of Land-based Heavy Industry Co., Ltd. Now, he is the supervisor and chief of the Company, designer and vice general manager of ZPMC Port Machinery Group or vice dean of ZPMC Land-based Heavy Industry Research & Design Institute.
Xiang Xudong	Born in 1976, male, undergraduate, senior engineer. He successively served as the vice director and vice manager of Quality Department, and general manager of ZPMC Inspection Co., Ltd. Currently, he is the staff representative supervisor of the board of supervisors, vice general manager of ZPMC Port Machinery Group, and the secretary of the party committee and executive vice general manager of Changxing Branch.
Liu Jianbo	Born in 1963, male, undergraduate, senior engineer. He successively served as the engineer at technological office of Shanghai Port Machinery Plant; assistant director in engineering technology department of Shanghai Container Dock Co. Ltd., project director of ship operation department and chief engineer of engineering department of Shanghai ZPMC, and vice general manager of and vice general manager of ZPMC Changxing Base. Currently, he is the vice president and Party committee standing member of the Company.
Zhou Qi	Born in 1972, male, EMBA, professor-level senior engineer. He successively served as the technician, manager and vice general engineer, general manager and chief engineer of the Electric Appliance Office of the Company. Currently, he is the vice president and Party committee standing member of the Company.



Name	Main working experiences
Chen Bin	Born in 1974, male, EMBA, senior engineer. He successively served as the project quality leader of Quality Control Division, vice manager of tire crane office of quality control division, manager of quality control division, vice general manager and general manager of quality inspection company, vice director and vice chief engineer of quality safety office, manager of quality safety division, supervisor of the Company, and vice president of the Company, etc. Currently, he is the vice president and safety director of the Company.
Shan Jianguo	Born in 1964, male, undergraduate, senior engineer. He successively served as the technician in Shanghai Port Machinery Manufacturing Plant, served as the engineer and chief engineer of ZPMC Machinery Office, general manager and vice chief engineer of No.4 design office of design company, vice director and director of ZPMC Machinery Office, manager of budget assessment department and the dean of ZPMC Land-based Heavy Industry Research & Design Institute. Currently, he is the vice president of the Company.
Zhang Jian	Born in 1969, male, MBA, senior engineer. He successively served as the technician, production planner and assistant director of No. 2 Panel beater of Shanghai Port Machinery Manufacturing Plant, director of gearbox branch of Shanghai Port Machinery Manufacturing Plant, vice director and member of the Party committee of Shanghai Port Machinery Manufacturing Plant, vice general manager of Shanghai Port Machinery Heavy Industry Co., Ltd, general manager and president assistant of ZPMC Operation Office. Currently, he is the vice president of the Company.
Fei Guo	Born in 1962, male, EMBA, professor-level senior engineer. He successively served as the engineer of Shanghai Port Machinery Plant, electrical engineer of director of No. 5 electrical office, vice chief engineer, chief engineer, director of Development Office and executive director of ZPMC Electric Department. Currently, he is now the chief engineer of the Company.
Li Ruixiang	Born in 1975, male, undergraduate, senior economist. He successively served as the director of technical process department and trainee manager of Manufacturing Department and manager of Quality Assurance Department of Zhangjiagang Base of Shanghai Port Machinery Plant; project leader, office manager, vice director of Quality Safety Office, vice general manager and general manager of mechanical supporting base, secretary of Party Branch, vice chief economist, general manager of budget assessment department, general manager and assistant president of material and equipment procurement department of ZPMC quality inspection companies. Currently, he is now the chief economist of the Company.
Sun Li	Born in 1972, male, EMBA, senior engineer. He successively served as the project leader and vice manager of operation department, vice director of operation office and director of off-shore office, general manager assistant and president and director of the Company. He is now the chief legal counsel of and secretary of the board of the Company.
Yan Yunfu	Born in 1959, male, EMBA, professor-level senior engineer. He successively served as the vice chief of technical department, manager of mechanical design department, vice chief engineer, chief engineer and vice president of the Company, president of Land Heavy Industry Equipment Design Institute, and director of the Company since 2004. He used to be the director, chief engineer and Party committee standing member of the Company.
Ling He	Born in 1952, male, professor. He successively served as the senior editor (senior professional title) of Liberation Daily, director of Shanghai Journalists Association, and director of Shanghai Institute of Essays. He successively served as the member, assistant chief editor, director of Editing Department of the democratic and legal magazine agency, vice director and director of Comment Department of Liberation Daily, main editor of Liberation Daily, and chief editor of Liberty Forum; and obtained the awards as one of the first National 100 Journalists, China News First Prize for three times, and Shanghai News First Prize for 15 times. Now he used to be the independent director of the Company.

Notes to other circumstances

☐ Applicable ☒ Not applicable**2 Equity incentives awarded to the directors and senior executives during the reporting period**☐ Applicable ☒ Not applicable**II. Incumbency of current and resigned directors, supervisors and senior executives during the reporting period****1 Position at the shareholder entity**☒ Applicable ☐ Not applicable

Name of in-service staff	Name of shareholding entity	Position	Starting date of tenure	Expiration date of tenure
Zhang Hongwen	China Communications Construction Company Ltd.	General manager of equipment manufacturing and marine heavy industry division	January 4, 2018	

Statement of the position held in shareholding entity

2 Statement of the position held in other entities

√Applicable □Not applicable

Name of in-service staff	Name of other entities	Position held in other entities	Starting date of tenure	Expiration date of tenure
Zhao Zhanbo	School of Software, Peking University	Professor		
Ji Linhong	Department of Mechanical Engineering, Tsinghua University	Professor and doctoral supervisor		
Linghe	Jiefang Daily, Shanghai Journalists Association, Shanghai Essays Society.	Senior editor (Senior professional title), director		
Yang Jun	Shanghai United Assets and Equity Exchange, Financial Assets Exchange, Shanghai International Economic and Trade Arbitration Commission, Shanghai Arbitration Commission, Shanghai Court of Financial Arbitration, Chinese Domain Name Dispute Settlement Center, Intellectual Property Association of China Law Society, Company Law Association of Shanghai Law Society, Shanghai Patent/Trademark/Copyright Association.	Assistant president, general manager, director, arbitrator, expert, director		
Bai Yunxia	School of Economics and Management of Tongji University, Investment Centre of Cheung Kong Graduate School of Business	Director of Accounting Department, research scholar		
Zhang Hua	China Europe International Business School	Researcher, lecturer, assistant professor and associate professor		
Sheng Leiming	Shanghai Foreign Trade Law Firm, East China University of Political Science and Law, Shanghai Zhongmao Law Firm, Guantao Law Firm.	Senior partners, lawyers, teachers, etc.		

Statement of the position held in other entities

III. Remuneration of directors, supervisors and senior executives

√Applicable □Not applicable

Decision-making process for the remuneration of directors, supervisors and senior executives	In accordance with the regulations of Articles of Association, the remuneration of directors and supervisors are subject to the general meeting of shareholders and the remuneration of the senior executives are assessed and approved by the chairman and president.
Basis for deciding the remuneration of remuneration of directors, supervisors and senior executives	The basic salary plus performance bonus are assessed in combination with the quantitative index of production and operation, etc..
Actual payout of remuneration for directors, supervisors and senior executives	All in-service and resigned director, supervisor and senior executives are paid by the Company within the reporting period.
Total remuneration actually obtained by all directors, supervisors and senior executives at the end of reporting period	RMB 11,609,900.00

IV. Change in directors, supervisors and senior executives

√Applicable □Not applicable

Name	Post	Change	Reason of change
Yan Yunfu	Director or Chief Engineer	Resigned	Individual reason
Sheng Leiming	Independent director	Elected	Job demand
Zhang Hua	Independent director	Elected	Job demand
Ling He	Independent director	Resigned	Individual reason

**V. Punishments by securities regulatory authority in recent three years**

☐ Applicable ☒ Not applicable

VI. Particulars about the employees in the parent company and the main subsidiaries**1 Particulars about employees**

Number of in-service employees of the parent company	3,172
Number of in-service employees of the main subsidiaries	5,529
Total of in-service employees	8,701
Number of retired employees required to be paid by the parent company and its major subsidiaries	
Specialties	
Category	Number of staff
Production staff	3,290
Sales staff	280
Technical staff	4,195
Financial staff	154
Administrative staff	782
Total	8,701
Education background	
Education level	Number (person)
Doctor	23
Master	710
Undergraduate	4,133
Junior College	2,028
Technical secondary school	594
High school and below	1,213
Total	8,701

2 Remuneration policies

☒ Applicable ☐ Not applicable

In line with the Company's development strategy, it continuously perfected the remuneration distribution incentive system, perfected the performance assessment system and established and improved the performance assessment system based on the different properties and characteristics of each entity and division; promoted the salary incentive system closely linking the performance distribution with the unit or division performance, value contribution, industrial characteristics, growth phase and similar factors, and comprehensively linking the staff performance with position duty and value contribution, and thus initially established the distribution mode integrating with the market.

3 Training plan

☒ Applicable ☐ Not applicable

In line with the Company's development strategy, the Company gradually established a rigid staff training system with systematic, directional and continuous features. The Company sets up all-staff annual educational and training plan and implements it according to the plan to improve the business skill level and professional quality of staff at various levels.

4 Labor outsourcing

☒ Applicable ☐ Not applicable

Total of labor outsourcing hours	7,550,208 hours
Total of labor outsourcing remuneration	RMB 319,180,200.00

VII. Others

☐ Applicable ☒ Not applicable

Section IX | Corporate governance

I. Related information about corporate governance

☒Applicable ☐Not applicable

During the reporting period, the Company strictly followed the regulations specified in the Company law, Securities Law, Stock Listing Rules, Articles of Association and the legal requirements of China Securities Regulatory Commission to standardize the Company's daily operation, further established and improved the internal control system, improved the internal control management and corporate governance structure, strengthened the insider information management, strengthened the information disclosure, continuously improved the company governance, made efforts to improve the construction of legal person governance structure, and gradually established a modern enterprise system, earnestly protected the legal rights and interests of the Company and all the shareholders, ensuring the sustainable and stable development.

After self-inspection, the staffs who know the insider information didn't trade the stocks of the company before major price information is disclosed. There is no difference between the company governance and the regulations of China Securities Regulatory Commission.

Whether there is important difference between corporate governance and the requirements of relevant regulations of China Securities Regulatory Commission; if any, please give the reason.

☐Applicable ☒Not applicable

II. Brief introduction to the general meeting of shareholders

Session of meeting	Convening date	Query index of the website specified for publishing resolutions	Date of disclosure for publishing resolutions
General Meeting of Shareholders in 2018	May 28, 2019	www.sse.com.cn Enter the stock code to search	May 29, 2019
The first interim general meeting of shareholders held in 2019	December 27, 2019	www.sse.com.cn Enter the stock code to search	December 28, 2019

Particulars about the general meeting of shareholders

☐Applicable ☒Not applicable

III. Duty performance of directors

1 Attendance of the directors at the board meetings and the general meeting of shareholders

Director Name	Independent director or not	Attendance at Board Meetings						Attendance at the general meeting of shareholders
		Times of meetings should be attended in this year	Times of personal attendance	Times of attendance by telecommunication	Times of attendance through a proxy	Times of absence	Personal absence for two consecutive times	Times of attendance in the general meeting of shareholders
Zhu Lianyu	No	9	9	8	0	0	No	2
Huang Qingfeng	No	9	9	8	0	0	No	2
Zhang Hongwen	No	9	9	8	0	0	No	1
Liu Qizhong	No	9	9	8	0	0	No	1
Dai Wenkai	No	9	9	8	0	0	No	1
Zhu Xiaohuai	No	9	9	8	0	0	No	2
Yan Yunfu	No	8	8	7	0	0	No	0
Zhao Zhanbo	Yes	9	9	8	0	0	No	1



Director Name	Independent director or not	Attendance at Board Meetings						Attendance at the general meeting of shareholders
		Times of meetings should be attended in this year	Times of personal attendance	Times of attendance by telecommunication	Times of attendance through a proxy	Times of absence	Personal absence for two consecutive times	Times of attendance in the general meeting of shareholders
Ji Linhong	Yes	9	9	8	0	0	No	1
Bai Yunxia	Yes	9	9	8	0	0	No	2
Yang Jun	Yes	9	9	8	0	0	No	2
Zhang Hua	Yes	4	4	4	0	0	No	1
Sheng Leiming	Yes	4	4	4	0	0	No	1
Ling He	Yes	2	2	2	0	0	No	0

Explanations for personal absence from the meeting for two consecutive times

☐ Applicable ☒ Not applicable

Times of the board meetings convened in current year	9
Including: times of on-site meetings	1
Times of meetings convened through telecommunication	8
Times of meetings convened on-site and through telecommunication	0

2 Objections from independent directors against related issues of the Company

☐ Applicable ☒ Not applicable

3 Others

☐ Applicable ☒ Not applicable

IV. As for the important suggestions and advices raised by the special interest committees under the Board of Directors while performing their duties in the reporting period, where there is any objection, the details shall be disclosed

☐ Applicable ☒ Not applicable

V. Description of the risks found by the board of supervisors

☐ Applicable ☒ Not applicable

VI. Particulars about the inability of the Company and its controlling shareholders to guarantee the independence and keep independent operation capacity with regard to business, personnel, assets, institution, finance, etc.

☐ Applicable ☒ Not applicable

Where there is horizontal competition, the corresponding solutions, job schedule and follow-up work plan of the Company

☐ Applicable ☒ Not applicable

VII. Establishment and implementation of the assessment mechanism and incentive mechanism for senior executives during the reporting period

☒ Applicable ☐ Not applicable

The Company appoints the directors, supervisors and senior executives in accordance with the provisions of Company

Law and the Articles of Association, has built up a preliminary cultivation, selection, supervision, assessment, reward and punishment, constraint system for the Company's senior executives suitable for the actual situation. The Company formulated corresponding administrative methods for senior executives. According to the production and development need of the Company, the senior executives are appointed, resigned and assessed following the principles of "being from top to bottom integrating the virtue and talent", and are subject to annual appraisal by the Company according to the due diligence and job performance. The Company will gradually improve the existing performance evaluation system and salary system, promote medium and long term incentive system for all senior executives and the core technical personnel of the Company, to continue to stimulate the enthusiasm of the senior executives, to create new achievements, and to ensure the benefit maximization and standard operation of the Company.

VIII. Disclosure of self-evaluation report on internal control or not

☒Applicable ☐Not applicable

Ernst & Young LLP (special general partnership), engaged by the Company, had audited the effectiveness of the internal control of the financial statement as of December 31, 2019 and issued a standard internal control audit report with clean opinion (see the attachment to the announcement for details).

Description of the important deficiencies in internal control during the reporting period

☐ Applicable ☒Not applicable

IX. Particulars about the audit report on internal control

☒Applicable ☐Not applicable

Ernst & Young LLP (special general partnership), engaged by the Company, had audited the effectiveness of the internal control of the financial statement as of December 31, 2019 and issued a standard internal control audit report with clean opinion (see the attachment to the announcement for details).

Audit report on internal control disclosed or not: Yes

X. Others

☐ Applicable ☒Not applicable

Section X | Related Information on Corporate Bonds

☐Applicable ☒Not applicable



Section XI | Financial Report

I. Auditors' report

√Applicable □Not applicable

Auditors' Report

Ernst & Young (2020) SZ No.61249778_B01

Shanghai Zhenhua Heavy Industries Co., Ltd.

All shareholders of Shanghai Zhenhua Heavy Industries Co., Ltd.:

I. Opinion

We have audited the financial statements of Shanghai Zhenhua Heavy Industries Co., Ltd. (hereinafter referred to as the "Company"), which comprise the consolidated balance sheet and the Company's balance sheet as at December 31, 2019, the consolidated income statement and the Company's income statement, the consolidated statement of changes in shareholders' equity and the Company's statement of changes in owners' equity and the consolidated statement of cash flows and the Company's statement of cash flows for the year then ended as well as the notes to the financial statements.

In our opinion, the financial statements of the Company attached are prepared, in all material respects, in accordance with the Accounting Standards for Business Enterprises, and fairly present the consolidated financial position and the Company's financial position as at December 31, 2019 and the consolidated operating results and cash flows and the Company's operating results and cash flows for the year then ended.

II. Basis for Our Opinions

We conducted our audit in accordance with Chinese Certified Public Accountants Auditing Standards. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of this auditors' report. According to the Code of Ethics for Certified Public Accountants of China, we are independent of the Company, and we have fulfilled other responsibilities in the aspect of code of ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

III. Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the current period. The response to these matters is based on the overall audit of the financial statements and the formation of audit opinions. We do not express our opinions on these matters separately. The following description of how our audit addressed the key audit matter is also against this background.

We have fulfilled the responsibilities stated in "Responsibilities of Certified Public Accountant for Auditing of Financial Statement" in this report, including the responsibilities related to these key auditing matters. Correspondingly, our auditing work includes the implementation of the auditing procedure designed for dealing with the great misstatement risks of the financial statement to be evaluated. The results from the implementation of the auditing procedure by us, including the procedure to be implemented for the following key auditing matters, offers a foundation for releasing the auditing opinions of the financial statements.

Key Audit Matters:	How our audit addressed the key audit matter:
1. Inventory depreciation reserves Shanghai Zhenhua Heavy Industries Co., Ltd. and its subsidiaries ("Group") are mainly engaged in manufacturing the port container crane; in addition, they are also engaged in the manufacture of bulk handling machine, offshore heavy-duty machine and large-sized steel structure. Its inventories mainly include engineering raw materials, outsourcing parts and components, products in the process and inventory goods. Since the production cycle of the products of this group is relatively long, the net realizable value of the related inventory may fluctuate with the change in the market demand, resulting in the inventory depreciation risks. The Group sets aside the inventory depreciation reserves according to the balance of the inventory cost and the net realizable value. The net realizable value is determined as per the estimated selling price of the inventory minus the cost, the estimated selling expenses and the related taxes that may occur in the completion on the assumption that the management layer adopts a certain estimate and hypothesis in determining the net realizable value. In case of difference between the actual figure and the originally estimated figure, the related balance will affect the book value of the inventory and the depreciation loss in the estimated fluctuation. As of December 31, 2019, in the consolidated financial statements, the balance of inventories was RMB 9.28 billion and the reserve for inventory depreciation was RMB 720 million; in the financial statements of the Company, the balance of inventories was RMB 9.37 billion and the reserve for inventory depreciation was RMB 760 million. The accounting policy and other disclosures regarding the inventory are stated in Note III (11), Note III (30) and Note V (9) of the financial statement.	Our procedure mainly included knowing and testing the validity of the control related to the provision of inventory depreciation reserves and the method of calculating the net realizable value of the Group. We also implemented the related auditing procedures over the inventory such as supervision of inventory to verify whether the Group had marked the inventory with slow turnover and defectives and taken into full account in provision of inventory depreciation reserves. In addition, we obtained the computation sheet of provision of inventory depreciation reserves on December 31, 2019 from the Group, rechecked the calculation method. As to the key elements taken into consideration by the Group in calculating the net realizable value, including the estimated selling price, the cost that may occur till completion, the estimated selling expenses and the related taxes, we evaluated the hypothesis and the estimates through analyzing the related historical data and comparing the after-date data. We also tested the calculation of the provision amount of the inventory depreciation reserves.
2. Provision for bad debts of accounts receivable The accounts receivable of the Group is mainly from the business contract on port machine and ocean engineering manufacturing. Since it involves large contracted value, long construction period, relatively complicated technical parameters, the implementation of the contract may be affected by the periodicity of the economic environment. The accounts receivable of the Group has certain risk in the recovery in case of any dispute in contract or we evaluated the accounting estimate relating to the stagnant industry. As from January 1, 2019, the Group adopted the new financial instrument standards. The provisions for bad debts of accounts receivable are recognized on the basis of estimated credit losses, involving major judgment and estimates. The management of the Group analyzed the financial position of counter parties, guarantee acquired for accounts receivable, historical repayment records of accounts receivable, as well as the credit rating and future economic situations of counter parties for evaluating the credit risk of accounts receivable. As of December 31, 2019, in the consolidated financial statements, the balance of accounts receivable was RMB 6.64 billion and the provision for bad debts of accounts receivable was RMB 1.68 billion; in the financial statements of the Company, the balance of accounts receivable was RMB 12.78 billion and the provision for bad debts of accounts receivable was RMB 1.59 billion. The accounting policy and other disclosures regarding the provision for bad debts of accounts receivable are stated in Note III (8), Note III (30), Note V (5) and Note XII (1) of the financial statements.	We evaluated the accounting estimate relating to the depreciation reserves, such as the financial status and credit rating of the counterpart; checked the account age of accounts receivable and historical repayment record and evaluated whether the financial problems of the counter party had effects on the recovery of the accounts receivable; we checked the related supporting documents for the selected samples and the account age of the accounts receivable; reviewed the after-date recovery of the accounts receivable and rechecked the related evidences of the accounts receivable that could not be recovered and was written off (if any).

Key Audit Matters	How our audit report addressed this key audit matter:
3.Recognition of income from construction contract	
Most of the income of the Group comes from the one of the construction contracts on the large-sized port equipment, heavy equipment, steel structure and construction projects customized by the customer. The Group adopts the percentage of completion method to calculate the income of the construction contracts. As to the large-sized port equipment, its completion schedule is determined according to the corresponding percentage of completion of the confirmation node of the income achieved by the construction contract at the end of period. As to the heavy equipment and construction period, its completion schedule is determined according to the percentage of the accumulative contract cost in the expected total contract cost. As to the fabrication of the steel structure, its completion schedule is determined according to the percentage of the accumulatively completed processing tonnage in the expected total processing tonnage. The above-mentioned methods involve the use of the major judgment and estimate of the management, including the achieved node, expected total contract cost, total contract income and expected contract loss. In addition, the income, cost and realizable gross profit of the contract may change with the actual conditions, resulting in important differences in the initial estimate of the Group. The accounting policy and other disclosures regarding the recognition of income from construction contract are stated in Note III (12), Note III (30), Note V (10), Note V (46) and Note XII (4) of the financial statements.	We evaluated and tested the internal control for accounting the contract cost, contract income, achieved node and recognition and for calculating the flow of completion schedule. We got the important contracts to verify the total contract income and review the important contract clauses. Through selecting the samples, we verified whether the contract cost that occurred conformed to the certification. We implemented the cutoff check procedure to validate the cost was confirmed in the proper accounting period; as to the large-sized port equipment, through sampling, we got the certification for the achieved node and made the sampling for field observation. We evaluated the judgment and estimate of the total contract cost and total processing amount made by the management. We made sampling to calculate and check the income determined by the occurred contract cost and the expected total contract cost again. In addition, we implemented the analysis- oriented recheck procedure against the gross profit of the key construction contract of the Group.

IV. Other Information

The management of Shanghai Zhenhua Heavy Industries Co., Ltd. shall be responsible for other information. The other information comprises information of the annual report, but excludes the financial statements and our auditors' report.

Our opinion on the financial statements does not cover the other information, and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditors' report, we conclude that there is a material misstatement of this other information, we are required to report that fact. In this regard, we have nothing to report.

V. Responsibilities of the Management and Those Charged with Governance for the Financial Statements

The Management is responsible for preparing the financial statements in accordance with the requirements of Accounting Standards for Business Enterprises to achieve a fair presentation, and for designing, implementing and maintaining internal control that is necessary to ensure that the financial statements are free from material misstatements, whether due to frauds or errors.

In preparing the financial statements, the Management is responsible for assessing the Company's going-concern ability, disclosing the matters related to going concern (if applicable) and using the going-concern assumption, unless the Management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

VI. Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the audit standards

will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

During the process of an audit conducted in accordance with audit standards, we exercise professional judgment and maintain professional scepticism throughout the audit. Meanwhile, we also implement the following work:

(1) Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

(2) Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances.

(3) Evaluate the appropriateness of accounting policies used by and the reasonableness of accounting estimates and related disclosures made by the management.

(4) Conclude on the appropriateness of the Management's use of the going concern basis of accounting.

Based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ability of Shanghai Zhenhua Heavy Industries Co., Ltd. to continue as a going concern.

If we conclude that a material uncertainty exists, we are required to, in our auditors' report, draw attention of the users of statements to the related disclosures in the financial statements; if such disclosures are inadequate, we should modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report.

However, future events or conditions may cause Shanghai Zhenhua Heavy Industries Co., Ltd. to cease to continue as a going concern.

(5) Evaluate the overall presentation, structure and content (including the disclosures) of the financial statements, and evaluate whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

(6) Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit, and bear full responsibility for our audit opinion.

We communicate with those charged with governance regarding the planned scope and timing of the audit, significant audit findings and other matters, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them in regard to all relationships and other matters that may reasonably be thought to affect our independence, and related safeguards (if applicable).

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Ernst & Young LLP.
(Special General Partnership)

Certified Public Accountant of China: Liu Wei
(Engagement Partner)

Certified Public Accountant of China: Gu Cheng Li

Beijing, China

March 31, 2020



II. Financial Report

Consolidated Balance Sheet as As at December 31, 2019

Prepared by: Shanghai Zhenhua Heavy Industries Co., Ltd.

Unity: Yuan Currency: RMB

Assets	Note V	As at December 31, 2019	As at December 31, 2018
Current assets			
Monetary funds	1	3,310,297,451	3,697,338,708
Financial assets held for trading	2	1,739,792,062	-
Financial assets measured at fair value through the current profit or loss	3	-	52,920,084
Notes receivable	4	5,650,000	189,371,105
Accounts receivable	5	4,966,175,528	5,032,548,741
Receivables financing	6	406,408,604	-
Advances to suppliers	7	935,878,777	1,681,187,715
Other receivables	8	1,176,561,508	1,149,035,349
Inventories	9	8,561,251,580	8,803,035,942
Outstanding payments for construction completed	10	12,434,158,624	12,054,580,392
Non-current assets maturing within one year	11	1,313,203,581	894,638,424
Other current assets	12	720,183,574	1,152,476,439
Total current assets		35,569,561,289	34,707,132,899
Non-current assets			
Available-for-sale financial assets	13	-	1,214,533,554
Long-term receivables	14	5,227,728,420	5,188,341,089
Long-term equity investments	15	2,873,673,745	2,775,801,760
Other equity instrument investment	16	61,981,268	-
Investment properties	17	418,425,533	436,760,631
Fixed assets	18	21,454,967,299	18,654,732,030
Construction in progress	19	4,380,489,888	3,050,468,292
Intangible assets	20	3,506,541,366	3,588,412,732
Goodwill	21	268,434,934	266,591,462
Long-term deferred expenses	22	1,444,636	5,112,664
Deferred income tax assets	23	486,197,635	539,684,925
Other non-current assets	24	161,337,287	170,792,589
Total non-current assets		38,841,222,011	35,891,231,728
Total assets		74,410,783,300	70,598,364,627
Liabilities and Shareholders' Equity	Note V	As at December 31, 2019	As at December 31, 2018
Current liabilities			
Short-term borrowings	26	22,001,319,380	16,554,687,487
Financial liabilities held for trading	27	7,312,741	-
Notes payable	28	3,420,945,451	2,732,404,222
Accounts payable	29	7,869,378,365	7,036,869,701
Advances from customers	30	822,987,986	494,744,374

Consolidated Balance Sheet (Continued) as As at December 31, 2019

Prepared by: Shanghai Zhenhua Heavy Industries Co., Ltd.

Unity: Yuan Currency: RMB

Liabilities and Shareholders' Equity	Note V	As at December 31, 2019	As at December 31, 2018
Amount settled for uncompleted work	10	1,679,950,879	1,989,560,887
Employee compensation payable	31	329,978,281	310,112,327
Taxes and surcharges payable	32	144,506,742	164,964,681
Other payables	33	711,389,996	1,098,580,447
Non-current liabilities maturing within one year	34	7,287,484,513	4,209,532,510
Total current liabilities		44,275,254,334	34,591,456,636
Non-current liabilities			
Long-term borrowings	35	8,413,339,986	15,097,725,259
Long-term payables	36	1,741,945,636	1,967,461,119
Estimated liabilities	37	484,000,772	439,052,683
Deferred income	38	458,722,579	469,296,220
Deferred income tax liabilities	23	89,856,727	132,401,282
Other non-current liabilities	39	376,626,821	288,474,696
Total non-current liabilities		11,564,492,521	18,394,411,259
Total liabilities		55,839,746,855	52,985,867,895
Shareholders' equity			
Share capital	40	5,268,353,501	5,268,353,501
Capital reserves	41	4,834,854,332	4,648,919,658
Other comprehensive income	42	23,530,451	223,853,860
Special reserves	43	3,615,638	3,019,173
Surplus reserves	44	1,761,198,709	1,696,762,554
Undistributed profits	45	3,651,851,383	3,344,953,206
Total equity attributable to shareholders of the parent company		15,543,404,014	15,185,861,952
Minority equity		3,027,632,431	2,426,634,780
Total shareholders' equity		18,571,036,445	17,612,496,732
Total liabilities and shareholders' equity		74,410,783,300	70,598,364,627

The accompanying notes form an integral part of these financial statements.

Legal Representative:

Accounting principal:

Head of the Accounting
Department:



Consolidated Income Statement Year 2019

Prepared by: Shanghai Zhenhua Heavy Industries Co., Ltd.

Unity: Yuan Currency: RMB

	Note V	Year 2019	Year 2018
Operating revenue	46	24,595,587,883	21,812,389,644
Less: operating costs	46	20,590,531,322	18,082,285,752
Taxes and surcharges	47	108,028,681	116,279,994
Selling and distribution expenses	48	122,517,036	115,541,161
General and administrative expenses	49	1,095,131,287	1,142,337,348
Research and development expenditures	50	887,096,178	672,614,073
Financial expenses	51	1,496,586,414	1,522,264,813
Including: interest expenses		1,702,292,369	1,603,062,758
Interest income		331,452,183	332,607,896
Plus: other income	52	88,459,588	112,065,705
Investment income	53	174,600,552	116,030,979
Including: income from investment in associates and joint ventures		110,724,316	96,886,332
Income from changes in fair value	54	88,019,844	44,481,806
Losses from credit impairment	55	(38,761,593)	-
Losses from asset impairment / reversal	56	(52,494,284)	12,576,222
Income from disposal of assets	57	49,091,913	155,557,716
Operating profits		604,612,985	601,778,931
Plus: non-operating revenue	58	16,462,710	12,102,280
Less: non-operating expenses	59	30,203,498	76,825,324
Total profits		590,872,197	537,055,887
Less: income tax expenses	61	93,750,584	143,213,448
Net profit		497,121,613	393,842,439
Net profit from continued operation		497,121,613	393,842,439
Classified by ownership			
Net profit attributable to shareholders of the parent company		514,930,143	443,005,092
Minority interest income		(17,808,530)	(49,162,653)
Other comprehensive income of tax		22,021,165	(30,764,830)
Other comprehensive income, net of tax, attributable to owners of the parent company	42	15,806,812	(50,039,118)
Other comprehensive income that can not be reclassified into profit or loss			
Changes in fair value of other equity instrument investments		5,656,529	-

Consolidated Income Statement (Continued) Year 2019

Prepared by: Shanghai Zhenhua Heavy Industries Co., Ltd.

Unity: Yuan Currency: RMB

	Note V	Year 2019	Year 2018
Other comprehensive income that will be reclassified into profit or loss			
Other comprehensive income that can be transferred to profit or loss under the equity method	15	(2,004,706)	(4,655,831)
Changes in fair value of available-for-sale financial assets	13	-	(76,002,428)
Differences arising from translation of foreign-currency financial statements		12,154,989	30,619,141
Other comprehensive income, net of tax attributable to minority shareholders	42	6,214,353	19,274,288
Total comprehensive income		519,142,778	363,077,609
Including:			
Total comprehensive income attributable to shareholders of the parent company		530,736,955	392,965,974
Total comprehensive income attributable to minority shareholders		(11,594,177)	(29,888,365)
Earnings per share	62		
Basic earnings per share		0.10	0.08
Diluted earnings per share		0.10	0.08

Legal Representative:

Accounting principal:

Head of the Accounting
Department:



Consolidated Statement of Changes in Shareholders' Equity Year 2019

Prepared by: Shanghai Zhenhua Heavy Industries Co., Ltd.

Unity: Yuan Currency: RMB

For the Year Ended December 31, 2019

Equity attributable to the shareholders of the parent company									
	Share capital	Capital reserves	Other comprehensive income	Special reserves	Surplus reserves	Undistributed profits	Sub-total	Minority equity	Total shareholders' equity
I. Balance at the end of the current year	5,268,353,501	4,648,919,658	223,853,860	3,019,173	1,696,762,554	3,344,953,206	15,185,861,952	2,426,634,780	17,612,496,732
Plus: Adjustments for changes in accounting policies	-	-	(216,130,221)	-	-	119,821,864	(96,308,357)	(9,011,824)	(105,320,181)
II. Balance at the beginning of the current year	5,268,353,501	4,648,919,658	7,723,639	3,019,173	1,696,762,554	3,464,775,070	15,089,553,595	2,417,622,956	17,507,176,551
III. Increase/decrease in the current year									
(I) Total comprehensive income	-	-	15,806,812	-	-	514,930,143	530,736,955	(11,594,177)	519,142,778
(II) Capital contributed or reduced by shareholders									
1. Investments received by subsidiaries from minority shareholders	-	185,934,674	-	-	-	-	185,934,674	622,315,326	808,250,000
(III) Profit distribution									
1. Withdrawal of surplus reserves	-	-	-	-	64,436,155	(64,436,155)	-	-	-
2. Profit distributed to shareholders	-	-	-	-	-	(263,417,675)	(263,417,675)	(973,150)	(264,390,825)
(IV) Special reserves									
1. Amount withdrawn in the current year	-	-	-	71,228,319	-	-	71,228,319	4,507,523	75,735,842
2. Amount used in the current year	-	-	-	(70,631,854)	-	-	(70,631,854)	(4,246,047)	(74,877,901)
IV. Balance at the end of the current year	5,268,353,501	4,834,854,332	23,530,451	3,615,638	1,761,198,709	3,651,851,383	15,543,404,014	3,027,632,431	18,571,036,445
For the Year Ended December 31, 2018									
I. Balance at the beginning of the current year	4,390,294,584	5,526,978,575	273,892,978	1,914,832	1,618,543,971	3,199,681,426	15,011,306,366	1,817,314,295	16,828,620,661
II. Increase/decrease in the current year									
(I) Total comprehensive income	-	-	(50,039,118)	-	-	443,005,092	392,965,974	(29,888,365)	363,077,609
(II) Capital contributed or reduced by shareholders									
1. Investments received by subsidiaries from minority shareholders	-	-	-	-	-	-	-	640,453,310	640,453,310
(III) Profit distribution									
1. Withdrawal of surplus reserves	-	-	-	-	78,218,583	(78,218,583)	-	-	-
2. Profit distributed to shareholders	-	-	-	-	-	(219,514,729)	(219,514,729)	(1,481,438)	(220,996,167)
(IV) Internal carry-forward of equity									
1. Conversion of capital reserves into paid-in capital	878,058,917	(878,058,917)	-	-	-	-	-	-	-
(V) Special reserves									
1. Amount withdrawn in the current year	-	-	-	40,081,847	-	-	40,081,847	4,422,690	44,504,537
2. Amount used in the current year	-	-	-	(38,977,506)	-	-	(38,977,506)	(4,185,712)	(43,163,218)
III. Balance at the end of the current year	5,268,353,501	4,648,919,658	223,853,860	3,019,173	1,696,762,554	3,344,953,206	15,185,861,952	2,426,634,780	17,612,496,732

Legal Representative:

Accounting principal:

Head of the Accounting
Department:

Consolidated Statement of Cash Flows Year 2019

Prepared by: Shanghai Zhenhua Heavy Industries Co., Ltd.

Unity: Yuan Currency: RMB

	Note V	Year 2019	Year 2018
I. Cash flows from operating activities			
Cash received from sale of goods and rendering of services		23,025,755,641	20,116,019,149
Refunds of taxes and surcharges received		1,271,698,523	327,889,433
Cash received from other operating activities	63	329,767,258	380,058,325
Sub-total of cash inflows from operating activities		24,627,221,422	20,823,966,907
Cash paid for goods purchased and services received		19,942,201,097	17,045,009,084
Cash paid to and on behalf of employees		2,190,735,091	2,128,181,027
Cash paid for taxes and surcharges		296,562,379	399,974,649
Cash paid for other operating activities		907,509,746	696,858,168
Sub-total of cash outflows from operating activities		23,337,008,313	20,270,022,928
Net cash flows from operating activities	64(1)	1,290,213,109	553,943,979
II. Cash flows from the investing activities			
Cash received from disinvestment		50,000,000	-
Cash received from returns on investments		73,626,236	65,672,231
Net cash received from disposal of fixed assets, intangible assets and other long-term assets		283,066,093	367,198,136
Cash received from other investing activities	63	267,388,460	302,041,173
Sub-total of cash inflows from investing activities		674,080,789	734,911,540
Cash paid to acquire and construct fixed assets, intangible assets and other long-term assets		1,735,742,239	3,105,409,114
Cash paid for investments		485,500,000	408,962,976
Sub-total of cash outflows from investing activities		2,221,242,239	3,514,372,090
Net cash flows from the investing activities		(1,547,161,450)	(2,779,460,550)
III. Cash flows from financing activities			
Cash from absorption of investments		808,250,000	194,345,310
Including: cash received by subsidiaries from investments by minority shareholders		808,250,000	194,345,310
Cash received from borrowings		31,773,610,203	34,277,959,026
Cash received from other financing activities	63	819,334,975	1,284,314,355

**Consolidated Statement of Cash Flows (Continued) Year 2019**

Prepared by: Shanghai Zhenhua Heavy Industries Co., Ltd.

Unity: Yuan Currency: RMB

	Note V	Year 2019	Year 2018
Sub-total of cash inflows from financing activities		33,401,195,178	35,756,618,691
Cash paid for debt repayments		29,962,425,560	33,134,286,292
Cash paid for distribution of dividends and profits or payment of interest		2,053,070,224	1,828,486,604
Including: dividends and profits paid to minority shareholders by subsidiaries		973,150	1,481,438
Cash paid for other financing activities	63	1,243,765,574	1,202,299,585
Sub-total of cash outflows from financing activities		33,259,261,358	36,165,072,481
Net cash flows from financing activities		141,933,820	(408,453,790)
IV. Effect of fluctuation in exchange rate on cash and cash equivalents		34,052,125	109,110,732
V. Net decrease in cash and cash equivalents		(80,962,396)	(2,524,859,629)
Plus: beginning balance of cash and cash equivalents		3,148,987,372	5,673,847,001
VI. Ending balance of cash and cash equivalents	64(3)	3,068,024,976	3,148,987,372

Legal Representative:

Accounting principal:

Head of the Accounting
Department:

Balance Sheet As at December 31, 2019

Prepared by: Shanghai Zhenhua Heavy Industries Co., Ltd.

Unity: Yuan Currency: RMB

Assets	Note XII	As at December 31, 2019	As at December 31, 2018
Current assets			
Monetary funds		2,009,711,462	2,459,295,919
Financial assets held for trading		717,766,887	-
Financial assets measured at fair value through the current profit or loss		-	44,481,806
Notes receivable		5,650,000	75,801,953
Accounts receivable	1	11,188,977,446	7,136,766,887
Receivables financing		372,373,708	-
Advances to suppliers		2,516,366,730	2,268,577,972
Other receivables	2	7,850,320,715	13,955,146,640
Inventories		8,605,357,557	7,658,200,294
Outstanding payments for construction completed		7,399,709,689	7,476,738,206
Non-current assets maturing within one year		16,068,800	16,068,800
Other current assets		242,069,645	683,547,950
Total current assets		40,924,372,639	41,774,626,427
Non-current assets			
Available-for-sale financial assets		-	145,157,462
Long-term receivables		349,516,318	368,585,118
Long-term equity investments	3	8,748,485,729	8,636,018,724
Other equity instrument investment		61,981,268	-
Investment properties		418,425,533	436,760,631
Fixed assets		4,484,852,694	4,819,571,556
Construction in progress		352,334,608	308,737,034
Intangible assets		1,537,053,308	1,571,347,557
Deferred income tax assets		461,638,248	510,532,925
Total non-current assets		16,414,287,706	16,796,711,007
Total assets		57,338,660,345	58,571,337,434
Liabilities and owners' equity	Note XII	As at December 31, 2019	As at December 31, 2018
Current liabilities			
Short-term borrowings		16,511,846,099	12,958,295,349
Notes payable		4,115,677,123	2,533,542,476
Accounts payable		4,097,874,390	6,326,807,559
Advances from customers		490,409,652	370,660,873
Amount settled for uncompleted work		2,053,025,876	2,390,332,471

**Balance Sheet (Continued) As at December 31, 2019**

Prepared by: Shanghai Zhenhua Heavy Industries Co., Ltd.

Unity: Yuan Currency: RMB

Liabilities and owners' equity	Note XII	As at December 31, 2019	As at December 31, 2018
Employee compensation payable		312,443,598	294,662,685
Taxes and surcharges payable		24,536,759	22,636,402
Other payables		1,223,412,212	1,508,889,581
Non-current liabilities maturing within one year		5,454,698,322	2,820,655,037
Total current liabilities		34,283,924,031	29,226,482,433
Non-current liabilities			
Long-term borrowings		6,446,433,319	12,922,319,986
Long-term payables		-	182,174,839
Estimated liabilities		470,724,247	422,869,949
Deferred income		329,345,661	336,941,770
Other non-current liabilities		21,272,925	9,783,043
Total non-current liabilities		7,267,776,152	13,874,089,587
Total liabilities		41,551,700,183	43,100,572,020
Shareholders' equity			
Share capital		5,268,353,501	5,268,353,501
Capital reserves		4,914,468,683	4,914,468,683
Other comprehensive income		8,348,107	71,258,509
Surplus reserves		1,760,690,436	1,696,254,281
Undistributed profits		3,835,099,435	3,520,430,440
Total shareholders' equity		15,786,960,162	15,470,765,414
Total liabilities and owners' equity		57,338,660,345	58,571,337,434

Legal Representative:

Accounting principal:

Head of the Accounting
Department:

Income Statement Year 2019

Prepared by: Shanghai Zhenhua Heavy Industries Co., Ltd.

Unity: Yuan Currency: RMB

	Note XII	Year 2019	Year 2018
Operating revenue	4	25,040,304,430	19,386,688,004
Less: operating costs	4	22,072,761,466	16,282,345,726
Taxes and surcharges		46,993,017	49,472,269
Selling and distribution expenses		95,598,294	84,713,588
General and administrative expenses		443,039,394	523,147,247
Research and development expenditures		733,613,874	557,762,997
Financial expenses		1,196,403,287	1,259,434,698
Including: interest expenses		1,287,736,007	1,282,879,956
Interest income		25,417,765	32,752,024
Plus: other income		66,222,311	71,471,982
Investment income	5	107,761,737	101,099,249
Including: income from investment in associates and joint ventures		106,972,779	100,431,517
Income from changes in fair value		151,121,780	44,481,806
Losses from credit impairment		(16,036,863)	-
Losses from asset impairment / reversal		(59,200,823)	25,476,619
Income from disposal of assets		4,536,497	69,575,485
Operating profits		706,299,737	941,916,620
Plus: non-operating revenue		5,369,991	4,014,476
Less: non-operating expenses		6,293,977	72,568,075
Total profits		705,375,751	873,363,021
Less: income tax expenses		61,014,198	91,177,196
Net profit		644,361,553	782,185,825
Net profit from continued operation		644,361,553	782,185,825
Other comprehensive income of tax		4,035,024	(69,006,208)
Other comprehensive income that can not be reclassified into profit or loss			
Changes in fair value of other equity instrument		5,656,529	-
Other comprehensive income that will be reclassified into profit or loss			
Other comprehensive income that can be transferred to profit or loss under the equity method		(2,004,706)	(4,655,831)
Changes in fair value of available-for-sale financial assets		-	(65,270,999)
Differences arising from translation of foreign-currency financial statements		383,201	920,622
Total comprehensive income		648,396,577	713,179,617

Legal Representative:

Accounting principal:

Head of the Accounting
Department:



Statement of Changes in Shareholders' Equity Year 2019

Prepared by: Shanghai Zhenhua Heavy Industries Co., Ltd.

Unity: Yuan Currency: RMB

For the Year Ended December 31, 2019

	Share capital	Capital reserves	Other comprehensive income	Special reserves	Surplus reserves	Undistributed profits	Total shareholders' equity
I. Balance at the end of the last year	5,268,353,501	4,914,468,683	71,258,509	-	1,696,254,281	3,520,430,440	15,470,765,414
Plus: Adjustments for changes in accounting policies	-	-	(66,945,426)	-	-	(1,838,728)	(68,784,154)
II. Balance at the beginning of the current year	5,268,353,501	4,914,468,683	4,313,083	-	1,696,254,281	3,518,591,712	15,401,981,260
III. Increase/decrease in the current year							
(I) Total comprehensive income	-	-	4,035,024	-	-	644,361,553	648,396,577
(II) Profit distribution							
1. Withdrawal of surplus reserves					64,436,155	(64,436,155)	-
2. Profit distributed to owners	-	-	-	-		(263,417,675)	(263,417,675)
(III) Special reserves							
1. Amount withdrawn in the current year	-	-	-	43,399,676	-	-	43,399,676
2. Amount used in the current year	-	-	-	(43,399,676)	-	-	(43,399,676)
IV. Balance at the end of the current year	5,268,353,501	4,914,468,683	8,348,107	-	1,760,690,436	3,835,099,435	15,786,960,162

For the Year Ended December 31, 2018

I. Balance at the beginning of the current year	4,390,294,584	5,792,527,600	140,264,717	-	1,618,035,698	3,035,977,927	14,977,100,526
II. Increase/decrease in the current year							
(I) Total comprehensive income	-	-	(69,006,208)	-	-	782,185,825	713,179,617
(II) Profit distribution							
1. Withdrawal of surplus reserves	-	-	-	-	78,218,583	(78,218,583)	-
2. Profit distributed to owners	-	-	-	-	-	(219,514,729)	(219,514,729)
(III) Internal carry-forward of shareholders' equity							
1. Conversion of capital reserves into paid-in capital	878,058,917	(878,058,917)	-	-	-	-	-
(IV) Special reserves							
1. Amount withdrawn in the current year	-	-	-	15,614,116	-	-	15,614,116
2. Amount used in the current year	-	-	-	(15,614,116)	-	-	(15,614,116)
III. Balance at the end of the current year	5,268,353,501	4,914,468,683	71,258,509	-	1,696,254,281	3,520,430,440	15,470,765,414

Legal Representative:

Accounting principal:

Head of the Accounting
Department:

Statement of Cash Flows Year 2019

Prepared by: Shanghai Zhenhua Heavy Industries Co., Ltd.

Unity: Yuan Currency: RMB

	Note XII	Year 2019	Year 2018
I. Cash flows from operating activities			
Cash received from sale of goods and rendering of services		20,652,573,566	19,289,270,419
Refunds of taxes and surcharges received		1,240,029,186	291,302,010
Cash received from other operating activities		311,770,463	377,616,135
Sub-total of cash inflows from operating activities		22,204,373,215	19,958,188,564
Cash paid for goods purchased and services received		17,781,170,677	17,744,386,344
Cash paid to and on behalf of employees		1,045,121,920	1,035,785,352
Cash paid for taxes and surcharges		74,252,976	100,888,209
Cash paid for other operating activities		694,695,689	438,838,219
Sub-total of cash outflows from operating activities		19,595,241,262	19,319,898,124
Net cash flows from operating activities	6	2,609,131,953	638,290,440
II. Cash flows from the investing activities			
Cash received from disinvestment		579,983	998,000,000
Cash received from returns on investments		10,538,958	47,195,316
Net cash received from disposal of fixed assets, intangible assets and other long-term assets		59,069,806	179,932,134
Cash received from other investing activities		9,674,112	34,930,409
Sub-total of cash inflows from investing activities		79,862,859	1,260,057,859
Cash paid to acquire and construct fixed assets, intangible assets and other long-term assets		121,396,662	135,206,982
Cash paid for investments		453,354,150	661,904,450
Sub-total of cash outflows from investing activities		574,750,812	797,111,432
Cash flows from the investing activities Net amount		(494,887,953)	462,946,427
III. Cash flows from financing activities			
Cash received from borrowings		23,196,312,114	29,304,939,364
Sub-total of cash inflows from financing activities		23,196,312,114	29,304,939,364
Cash paid for debt repayments		23,435,344,092	29,914,416,598
Cash paid for distribution of dividends and profits or payment of interest		1,641,001,571	1,501,107,415
Cash paid for other financing activities		407,455,030	407,455,030
Sub-total of cash outflows from financing activities		25,483,800,693	31,822,979,043
Net cash flows from financing activities		(2,287,488,579)	(2,518,039,679)
IV. Effect of fluctuation in exchange rate on cash and cash equivalents		12,864,249	45,951,367
V. Net decrease in cash and cash equivalents		(160,380,330)	(1,370,851,445)
Plus: beginning balance of cash and cash equivalents		1,930,451,140	3,301,302,585
VI. Ending balance of cash and cash equivalents	6	1,770,070,810	1,930,451,140

Legal Representative:

Accounting principal:

Head of the Accounting
Department:



I. Company profile

Shanghai Zhenhua Heavy Industries Co., Ltd. (hereinafter referred to as “the Company”) is a joint-stock company limited established on September 8, 1997 through restructuring Shanghai Zhenhua Port Machinery Company Limited (hereinafter referred to as “Zhenhua Company”). Both the place of registration place and the address of the headquarters are in Shanghai City, P. R. China.

As approved by ZWFZ (1997) No.42 Document issued by the Securities Commission under the State Council, the Company issued 100 million domestically-listed shares held by the foreign investors (B-share) from July 15, 1997 till July 17, 1997. The B-shares were listed for trading at Shanghai Stock Exchange on Aug. 5, 1997.

As approved by ZJFXZ (2000) No. 200 Document of China Securities Regulatory Commission, the Company additionally issued of 88 million common shares (RMB denominated) (A-share) held by the domestic investors in December 2000. The A-shares were listed for trading at Shanghai Stock Exchange on Dec 21, 2000.

As approved by ZJFXZ (2004) No.165 Document of China Securities Regulatory Commission, the Company additionally issued 114,280,000 A-shares held by the domestic investors on December 23, 2004. The additionally issued A-shares were listed at Shanghai Stock Exchange respectively for trading on December 31, 2004 and January 31, 2005.

As approved by ZJFXZ (2007) No. 346 Document of China Securities Regulatory Commission, the Company additionally issued 125,515,000 A-shares held by the domestic investors on October 15, 2007. The additionally issued A-shares were listed at Shanghai Stock Exchange for trading on October 23, 2007 and January 23, 2008 respectively.

As approved by ZJXKZ (2009) No.71 Document of China Securities Regulatory Commission, the Company privately placed 169,794,680 A-shares on Sept. 22, 2008 to its controller China Communications Construction Co., Ltd. (hereinafter referred to as “China Communications Corporation”). A-shares privately placed were the tradable shares with limited trading conditions. From Mar. 20, 2012 on, the term of trading limitation expired for above-mentioned A-shares which were listed at Shanghai Stock Exchange for trading.

By December 31, 2019, after all issuances of the shares and bonus shares distributed in the past year, the total shares of the Company amounted to 5,268,353,501 shares, par value per share was RMB 1. The share capital totaled up to RMB 5,268,353,501.

On December 18, 2005, China Road and Bridge Construction Group General Company and the Company's former controlling shareholder China Harbor Construction (Group) General Company were merged into China Communications Construction (Group) Co. Ltd after restructuring (hereafter referred to as “CCCC”). In accordance with the Official Reply to Overall Reorganization and Overseas-listed and Domestically-listed Share of China Communications Construction Co. Ltd. (GZGG [2006] No.1063 Document) by State-owned Assets Supervision and Administration Commission of the State Council on Aug. 16, 2006, the reorganization proposal of China Communications Construction (Group) Co., Ltd approved in the Official Reply to the Issues Concerning Management of State-owned Stock Equity of China Communications Construction Co. Ltd. (GZCQ [2006] No.1072 Document) on Sept. 30, 2006 and the Official Reply to Approval of China Communications Construction Co. Ltd.'s Announcement of Purchase Report of Road and Bridge Construction Co. Ltd. and Shanghai Zhenhua Port Machinery (Group) Co. Ltd. and Exemption of Their Obligations for Purchase by Offer (ZJGSZ [2006] No. 227 Document), CCCC solely initiated the incorporation of China Communications Construction Co. Ltd. and invested the stock equity of the Company held into the newly incorporated China Communications Co., Ltd. With the completion of reorganization, China Communications Co., Ltd thus became the controlling shareholder of the Company.

In 2016, the Company was granted the Uniform Social Credit Code of 91310000607206953D.

On July 18, 2017, the board of directors of China Communications Construction Co., Ltd. discussed and approved the Proposal for Transfer of Some Shares of Shanghai Zhenhua Heavy Industries (Group) Co., Ltd by Agreement and Associated Transaction and agreed to transfer totally 1,316,649,346 shares of this Company held by it to CCCC and CCCC (Hong Kong) Holdings Co., Ltd. (hereinafter referred to as “CCCC Hong Kong”), accounting for 29.990% of the total shares of this Company, after that, China Communications Construction Co., Ltd. held 16.239% of the stock equity of this Company. The transfer and registration of shares was accomplished on December 27, 2017. On the date of the transfer of shares, CCCC directly held 552,686,146 A-shares of this Company (accounting for 12.589% of the total shares of this Company), indirectly held 763,963,200 B-shares of this Company through CCCC (Hong Kong) (accounting for 17.401% of the total shares of the Company) and held 712,951,703 A-shares of this Company through China Communications Construction Co., Ltd. (accounting for 16.239% of the total shares of this Company), as a result, it became the controlling shareholder of the Company.

The Company and its subsidiaries (hereinafter collectively referred to as “the Group”) was mainly engaged in design, construction, installation and contracting of large-sized port handling system and equipment, offshore heavy-duty equipment, engineering machinery, engineering vessel and large-sized metal structural members and their parts and components; repair

of vessel; leasing of self-produced crane, sales of the self-produced products; international shipment by available special transportation vessel and specialized contracting for steel structure engineering.

The financial statements have been approved by the resolution of the Board of Directors of the Company on March 31, 2020.

The scope of the consolidated financial statements is confirmed based on the control. Please refer to Notes VII.1 for the annual changes in the current year and the main subsidiaries included in the scope of consolidation.

II. Basis of preparation for financial statements

The financial statements are prepared on the basis of the Accounting Standards for Business Enterprise– Basic Standards issued by the Ministry of Finance and the subsequently issued and revised specific accounting principles, guidelines, explanations and other related regulations (hereinafter collectively referred to as “Accounting Standards for Business Enterprise”).

The financial statements of the Company have been presented on a going concern basis.

As of December 31, 2019, the current liabilities of the Group were about RMB 8.7 billion beyond the current assets. At the time of preparing the financial statements for the current year, in view of the facts that the Group has obtained the bank credit line and the financing record and it has established good cooperation relationship with all banks and financial institutions with good operation status, the Board of Directors of the Company believes that, the Group may continue acquiring sufficient financing sources and operating cash flows to guarantee the funds required for operation, repayment of expired debts and capital expenditures. Therefore, the Board of Directors of the Company firmly believes to prepare the annual financial statements for the current year on a basis of going-concern.

While preparing the financial statements, except for some financial instruments, the valuation principle of historical cost shall be adopted. If the assets are impaired, the provision for impairment is made in accordance with relevant provisions.

III. Principal accounting policies and accounting estimates

The Company determines the specific accounting policies and accounting estimates based on actual production and operation characteristics, which are mainly reflected in the provision for bad debts receivable, inventory valuation methods, business accounting of construction contracts, depreciation of fixed assets, amortization of intangible assets, measurement model of investment properties and income recognition and measurement and so on.

1 Statement on compliance with the Accounting Standards for Business Enterprises

The financial statements meet the requirements of the Accounting Standards for Business Enterprises, and truly and completely reflect the financial position of the Company and the Group as at December 31, 2019, and the operating results and cash flows for the year then ended.

2 Accounting period

The Group adopts calendar year as the accounting year, which commences on January from the 1, and ends on December 31 of each year.

3 Functional currency

RMB is the recording currency of the Group and also the currency used in the financial statements. Unless otherwise specified, the financial statements are presented in RMB.

The subsidiaries, joint ventures and associates under the Group shall, on the basis of the main economic environment in which they operate, decide their own recording currency, and convert them into RMB when preparing financial statements.

4 Business combinations

Business combinations are classified into business combination under common control and business combination not under common control.

Business combination under common control

The business combination under common control is a business combination in which all of the combining enterprises are ultimately controlled by the same party or the same parties both before and after the business combination and on which the control is not temporary. In a business combination under common control, the party which obtains control of other combining enterprise on the combination date is the absorbing party, the other combining enterprise is the combined party. The combination date refers to the date on which the combining party actually obtains control on the combined party.

The assets and liabilities that the combining party obtains in a business combination under common control (including the goodwill formed by the acquisition of the combined party by the ultimate controlling party), are subject to the corresponding accounting treatment in accordance with the carrying amount in the financial statements of the ultimate controlling party on the combination date. The difference between the carrying amount of the net assets obtained from the combination and the carrying amount of the consideration paid (or total par value of the shares issued) for the combination is treated as an adjustment to capital premium in the capital reserves and the capital reserves carried out under the former system. If the capital premium is not sufficient to absorb the difference, the remaining balance is adjusted against retained earnings.

Business combination not under common control

The business combination not under common control is a business combination in which all of the combining enterprises are not controlled by the same party or the same parties before and after the combination. As for the business combination not under the same control, the party which obtains the control of other combining enterprises on the acquisition date is the acquirer, and the other combining enterprises is the acquiree. The acquisition date refers to the date on which the acquirer actually obtains control on the acquiree.

The identifiable assets, liabilities and contingent liabilities obtained of the acquiree in the business combination not under common control shall be measured at fair value on the acquisition date.

The positive balance between the sum of the fair value of the combined consideration paid (or fair value of the issued equity securities) and the fair value of the held stock equity of the acquiree before the acquisition date and the fair value of the identifiable net assets obtained in the combination from the acquiree is confirmed as goodwill, and shall be accounted for subsequent measurement after subtracting the accumulated impairment losses from the cost. If the sum of the fair value of the combined consideration paid (or fair value of the issued equity securities) and the fair value of the held stock equity of the acquiree before the acquisition date is smaller than the fair value of the identifiable net assets of the acquiree obtained in the combination, firstly recheck the measurement of the fair value of the identifiable assets, liabilities and contingent liabilities obtained from the acquiree, and the fair value of the combined consideration paid (or fair value of the issued equity securities), and the fair value of the held stock equity of the acquiree before the acquisition date, after that, if the sum the fair value of the combined consideration paid (or fair value of the issued equity securities) and the fair value of the held stock equity of the acquiree before the acquisition date is still smaller than the fair value of the identifiable net assets obtained in combination from the acquiree, the balance shall be included in the current profit or loss.

5 Consolidated financial statements

The consolidation scope of consolidated financial statements is determined on the basis of control, covering the financial statements of the Company and all the subsidiaries. A subsidiary is a subject which is controlled by the Company (including the enterprise, the separable part of the invested entity, and the structural entity controlled by the Company).

When preparing the consolidated financial statements, the subsidiary adopts the accounting period and the accounting policies consistent with the Company. Assets, liabilities, equity, income, expenses and cash flows arising from all transactions between the Group's internal companies are fully offset at the time of combination.

If the current losses borne by the minority shareholders of the subsidiary exceed the shares held by the minority shareholders in the initial shareholders' equity of the subsidiary, the balance still offsets the minority's equity.

For the subsidiaries acquired in business combination not under common control, the operating results and the cash flows of the acquiree shall be included in the consolidated financial statements on the date of acquisition of control till the termination of control. When preparing the consolidated financial statements, the financial statements of subsidiaries shall be adjusted based on the fair value of various identifiable assets, liabilities and contingent liability confirmed on the acquisition date.

For the subsidiaries acquired in business combination under common control, the operating results and the cash flows of the combined party shall be included in the consolidated financial statements at the beginning of the combination period. When preparing the consolidated financial statements, relevant items of the previous financial statements shall be adjusted and the reporting entity formed after the consolidation is regarded as existed since the ultimate controlling party begins to implement control.

If changes in the relevant facts and circumstances lead to changes in one or more control elements, the Group will re-evaluate whether or not the investee is controlled.

6 Cash and cash equivalents

Cash is the Group's cash on hand and the deposits that can be readily drawn on demand. Cash equivalents are short-

term, highly liquid investments held by the Group that are readily convertible to known amount of cash and which are subject to an insignificant risk of changes in value.

7 Foreign currency transactions and transaction of financial statements denominated in foreign currency

In the case of a foreign currency transaction, the Group translates the amount of foreign currency into the amount of the recording currency.

At the time of initial confirmation, the amount of foreign currency transaction shall be translated into the amount of the recording currency at the spot rate of the transaction date. On the date of balance sheet, the currency exchange rate of the currency denominated items shall be translated at the spot rate on the date of balance sheet. The transaction difference of settlement and monetary items arising therefrom, in addition to the difference arising from foreign currency special borrowing relating to the assets of which the purchase and construction conform to the capitalized conditions, which shall be handled in accordance with the principle of capitalization of borrowing costs, shall be included in the current profit or loss. The foreign currency non-monetary items calculated on historical cost basis are still translated at spot rate on the date of transaction, not changing the amount of its recording currency. The foreign currency non-monetary items measured at fair value shall be translated at the spot rate on fair value determination date, and the difference arising therefrom shall be included in the current profit or loss or other comprehensive income according to the nature of the non-monetary items.

In the case of overseas business, the Group translates its recording currency into RMB in preparing the financial statements: for assets/liabilities in the balance sheet, spot exchange rate on the date of balance sheet is used for translation. As for the items under the shareholders' equity, except for those under "undistributed profits", other items are translated using the spot exchange rate at the time of occurrence; the income and expense items in the income statement shall be translated at the spot exchange rate of the transaction. The conversion difference of foreign currency statements arising from above translation shall be recognized as other comprehensive income. When disposing overseas operations, other comprehensive income related to the overseas operation shall be transferred into the current profits and losses, partial disposal shall be calculated according to the proportion of disposal.

Foreign currency cash flows shall be translated at the spot exchange rate on the day of occurrence of the cash flow. Cash flow from overseas subsidiaries is translated at the spot exchange rate on the day of occurrence of the cash flow.

Effect of changes in exchange rate on cash amount is shown separately in the cash flow statements as an adjustment item.

8 Financial instruments (Applicable as of January 1, 2019)

Financial instrument is the contract that forms the financial assets of an enterprise and the financial liabilities or equity instruments of the other entities.

Recognition and de-recognition of financial instruments

The Group recognizes a financial asset or financial liability when becoming a party to a financial instrument contract.

Once the following conditions are satisfied, the Group will de-recognize financial assets (or part of financial assets or of a portfolio of similar financial assets), i.e. writing off from its account and balance sheet:

(1) The right to receive cash flows from financial assets expires;

(2) The right to receive the cash flow from financial asset has been transferred, or have assumed the obligation in the "pass-through agreement" to pay the collected cash flow timely to the third party in full; and (a) has transferred substantially almost all the risks and rewards of ownership of the financial asset, or (b) although does not transfer or retain substantially nearly all of the risks and rewards of ownership of the financial asset, but has given up the control over the financial asset.

In the event that the liability of a financial liability has been fulfilled, cancelled or expired, the financial liabilities shall be de-recognized. If the existing financial liability is replaced by the same creditor with another financial liabilities of virtually entirely different terms, or the terms of the existing liabilities are almost entirely modified substantially, such substitutions or modifications will be handled as the derecognition of the original liability and the recognition of new liabilities, and the difference will be included in current profit or loss.

In case of trading financial assets in the conventional way, such financial assets will be recognized and de-recognized on the trading day. Trading financial assets in the conventional way refers to collecting or delivering financial assets within the time limit prescribed in the law or the prevailing practice in accordance with the terms and conditions of the contract. Trading day is the date on which the Group commits to buy or sell financial assets.

Classification and measurement of financial assets

At the initial recognition, the Group's financial assets, based on the Group's management model of financial assets and

the contract cash flow characteristics of financial assets, are classified as financial assets measured at fair value through the current profit or loss, financial assets measured at amortized cost, and financial assets measured at fair value through the other comprehensive income.

Financial assets are measured at fair value at initial recognition, while the accounts receivable or notes receivable arising from sales of goods or rendering of services, excluding the significant financing composition or the financial composition for over one year, are initially measured at the transaction price.

For financial assets measured at fair value through the current profit or loss, relevant transaction costs are directly included in the current profit or loss, while the transaction costs relevant to other financial assets are included in the initial recognition amount.

The subsequent measurement of financial assets depends on the classification thereof:

Investment in debt instruments measured at cost

Financial assets simultaneously meet the following conditions are classified as the financial assets measured at amortized cost: the management model of such financial assets aims at the collection of contract cash flows; according to the terms in the contract for such financial assets, the cash flows generating on the special date are paid at the interest for the principal and the unpaid principal. Such financial assets are recognized as interest income by the effective rate method, and the gains or losses from the derecognition, modification or impairment thereof are in the current profit or loss.

Investment in equity instruments measured at fair value through the other comprehensive income

The Group irrevocably chooses to designate some non-trading equity instruments as the financial assets measured at fair value through the other comprehensive income, and only include the relevant dividends revenue (except for that partially recovered as the investment cost) in the current profit or loss, and the subsequent changes in fair values in the other comprehensive income, without the provision for impairment. At derecognition of financial assets, the accumulated gains or losses previously included in other comprehensive income are transferred from the other comprehensive income to the retained earnings.

Financial assets measured at fair value through the current profit or loss

The financial assets other than the financial assets measured at amortized cost and the financial assets measured at fair value through the other comprehensive income are classified as the financial assets measured at fair value through the other comprehensive income. For such financial assets, the subsequent measurement is made at fair value, and changes in fair value are included in the current profit or loss.

Classification and measurement of financial liabilities

At the initial recognition, the Group's financial liabilities are classified as: financial liabilities measured at fair value through the current profit or loss, and other financial liabilities. For financial liabilities measured at fair value through the current profit or loss, relevant transaction costs are directly included in the current profit or loss, while the transaction costs relevant to other financial liabilities are included in the initial recognition amount.

The subsequent measurement of financial liabilities depends on the classification thereof:

Financial liabilities measured at fair value through the current profit or loss

Financial liabilities measured at fair value through the current profit or loss include the trading financial liabilities (including the derivative instruments belonging to financial liabilities), and the financial liabilities measured at fair value through the current profit or loss. The subsequent measurement of the trading financial liabilities (including the derivative instruments belonging to financial liabilities) is made at fair value, and changes in fair value are included in the current profit or loss. For the financial liabilities measured at fair value through the current profit or loss, the subsequent measurement is made at fair value, and the changes in fair value are included in the current profit or loss except that the changes in fair value caused by the changes in the Group's credit risks are included in the other comprehensive income; if including the changes in fair value caused by the changes in the Group's credit risks in the other comprehensive income may cause or exacerbate the accounting mismatch in profit or loss, the Group will include all changes in fair value (including the amounts affected by the changes in the Group's credit risks) in the current profit or loss.

Other financial liabilities

The subsequent measurement of such financial liabilities is made at amortized cost by the effective rate method.

Impairment of financial instruments

Based on the expected credit losses, the Group makes the provision for impairment and recognizes the loss provisions for the financial assets measured amortized cost and the investment in debt instruments measured at fair value through the other comprehensive income.

For the receivables excluding significant financing component, the Group measures the loss provision based on the amount equivalent to the expected credit loss over the whole duration by the simplified measurement method.

Except for the above financial assets subject to the simplified measurement method, on each balance sheet date, the Group makes assessment on whether the credit risk in financial assets has had significant increase after the initial recognition. If the credit risk does not significantly increase after the initial recognition, standing at the first level, the Group will measure the loss provision based on the amount of expected credit loss within the future 12 months, and calculate the interest income based on the book balance at the effective interest rate; if the credit risk has significantly increased after the initial recognition without any credit impairment, standing at the second level, the Group will measure the loss provision based on the amount equivalent to the expected credit loss over the whole duration; in case of any credit impairment after the initial recognition, standing at the third level, the Group will measure the loss provision based on the amount of expected credit loss over the whole duration, and calculate the interest income based on the amortized cost at the effective interest rate. For financial instruments only with relatively low credit risk on the balance sheet date, the Group assumes that such credit risk does not significantly increase after the initial recognition.

The Group evaluates the expected credit loss of financial instruments individually and by portfolio. After taking the credit risk characteristics of different customers into account, the Group evaluated the expected credit loss on accounts receivable by the aging portfolio.

For the Group's disclosure of the judgment standards for significant increase of credit risk, definition of assets with credit impairment and assumption of the measurement of expected credit loss, see Note VIII (3) for details.

When the Group ceases to expect reasonably the contract cash flows of financial assets which can be recovered in whole or in part, the Group will directly write off the book balance of such financial assets.

Derivative financial instruments

The Group carries out the exchange rate risk hedging by using derivative financial instruments, such as the forward exchange contract and the foreign exchange option contract. Derivative financial instruments are initially measured at their fair values on date of signing relevant derivative transaction contracts and subsequently measured at their fair values. Derivative financial instrument with positive fair value is recognized as an asset, and that with negative fair value is recognized as a liability.

Gains or losses from changes in fair values of derivative instruments are directly included in the in current profit or loss, unless they are related to the hedging accounting.

Financial instrument offset

Financial assets and financial liabilities are presented in the balance sheet at the net amount after mutual offset when the following conditions are met simultaneously: possess the legal right to offset the recognized amount and such right is currently executable; intend to settle at net amount, or cash such financial assets or liquidate such financial liabilities.

Financial guarantee contracts

A financial guarantee contract refers to the contract where the issuer shall pay the specific amount to the contract holder suffering losses when the specific debtor fails to repay debts according to the financial guarantee clauses. The financial guarantee contracts are measured at fair value at initial recognition. Financial guarantee contracts other than those the financial liabilities measured at fair value through the current profit or loss are subsequently measured at the higher between the amount of expected credit loss reserve determined on the balance sheet date and the balance of the initially recognized amount deducting the accumulated amortization amount determined in the revenue recognition principle.

Transfer of financial assets

If the Group has transferred nearly all the risks and rewards associated with the ownership of financial assets to the transferee, such financial assets will be de-recognized; if the Group retains nearly all the risks and rewards associated with the ownership of financial assets, such financial assets will continuously recognized.

If the Group neither transfers nor retains nearly all the risks and rewards associated with the ownership of the financial assets, the following treatments will be adopted based on different circumstances: if the Group has given up its control over the financial assets, the financial assets will be derecognized, and the assets and liabilities arising therefrom will be recognized; if the Group does not give up its control over the financial assets, the financial assets will be recognized to the extent of its continuing involvement in the transferred financial assets, while relevant liabilities are recognized accordingly.

9 Financial instruments (applicable to year 2018)

Financial instrument is the contract that forms the financial assets of an enterprise and the financial liabilities or equity instruments of the other entities.

Recognition and de-recognition of financial instruments

The Group recognizes a financial asset or financial liability when becoming a party to a financial instrument contract.

Once the following conditions are satisfied, the Group will de-recognize financial assets (or part of financial assets or of a portfolio of similar financial assets), i.e. writing off from its account and balance sheet:

- (1) The right to receive cash flows from financial assets expires;
- (2) The right to receive the cash flow from financial asset has been transferred, or have assumed the obligation in the “pass-through agreement” to pay the collected cash flow timely to the third party in full; and (a) has transferred substantially almost all the risks and rewards of ownership of the financial asset, or (b) although does not transfer or retain substantially nearly all of the risks and rewards of ownership of the financial asset, but has given up the control over the financial asset.

In the event that the liability of a financial liability has been fulfilled, cancelled or expired, the financial liabilities shall be de-recognized. If the existing financial liability is replaced by the same creditor with another financial liabilities of virtually entirely different terms, or the terms of the existing liabilities are almost entirely modified substantially, such substitutions or modifications will be handled as the derecognition of the original liability and the recognition of new liabilities, and the difference will be included in current profit or loss.

In case of trading financial assets in the conventional way, such financial assets will be recognized and de-recognized on the trading day. Trading financial assets in the conventional way refers to collecting or delivering financial assets within the time limit prescribed in the law or the prevailing practice in accordance with the terms and conditions of the contract. Trading day is the date on which the Group commits to buy or sell financial assets.

Classification and measurement of financial assets

At the initial recognition, the Group's financial assets are classified as: financial assets measured at fair value through the current profit or loss, loans and other receivables, and available-for-sale financial assets. Financial assets are measured at fair value at initial recognition. For financial assets measured at fair value through the current profit or loss, relevant transaction costs are directly included in the current profit or loss, while the transaction costs relevant to other financial assets are included in the initial recognition amount.

The subsequent measurement of financial assets depends on the classification thereof:

Financial assets measured at fair value through the current profit or loss

Financial assets measured at fair value through current profit or loss include the trading financial assets and financial assets designated to be measured at fair value through current profit or loss in initial recognition. Trading financial assets refer to the financial assets meeting one of the following conditions: they are acquired for the purpose of sales in the near future; they belong to a part of the portfolio of identifiable financial instruments under centralized management, and there is an objective evidence that the enterprise has managed the portfolio in a short-term profiting manner recently; they belong to derivative instruments, except for the derivative instruments which are designated and with effective hedging instrument, belong to the financial guarantee contracts, and relate to the investments in equity instruments which have no quotation in the active market and of which fair values cannot be measured reliably and must be settled through the delivery of such equity instruments. For such financial assets, the subsequent measurement is made at fair value, and all profit or loss realized and not realized are included in the current profit or loss. Dividends or interest income from the financial assets measured at fair value through the current profit or loss is included in the current profit or loss.

At the initial recognition, financial assets meeting one of the following conditions may be designated as the financial liabilities measured at fair value through the current profit or loss:

- (1) Such designation can eliminate or obviously reduce the inconsistencies in recognition and measurement of relevant profit or loss that are caused due to different measurement bases of financial assets;
- (2) The formal written document of risk management or investment strategies has clearly stated that such financial asset portfolio is managed, evaluated and reported to key management personnel based on the fair values.
- (3) The mixed instruments with one or more embedded derivative instrument(s) are covered, unless the embedded derivative instrument has no significant impact on the cash flows of the mixed instruments, or it is obvious that the embedded derivative instrument should not be split out from relevant mixed instrument.
- (4) The mixed instruments with embedded derivative instruments which need to be split out but cannot be separately measured at acquisition or on the subsequent balance sheet date are covered.

Equity instrument investments which have no quoted prices in the active market and of which fair values cannot be measured reliably may not be designated as the financial assets measured at fair value through the current profit or loss.

Financial assets classified as the financial assets measured at fair value through the current profit or loss at the initial recognition cannot be reclassified as other financial assets, while other financial assets also cannot be reclassified as the financial assets measured at fair value through the current profit or loss.

According to the above conditions, such financial assets of the Group mainly include the forward exchange contracts.

Loans and receivables

Loans and receivables refer to non-derivative financial assets without quoted price in the active market and with fixed or determinable recovery amount. Such financial assets are subsequently measured at amortized cost by the effective rate method, and the gains or losses from the amortization or impairment thereof are included in the current profit or loss.

Available-for-sale financial assets

Available-for-sale financial assets refer to non-derivative financial assets designated to be available-for-sale at the initial recognition, and the financial assets other than the above-mentioned financial assets. Such financial assets are subsequently measured at fair value. The discount or premium thereof is amortized by the effective rate method and recognized as the interest income or expenses. Except that the impairment loss or the exchange difference of foreign-currency monetary financial assets is included in the current profit or loss, the changes in fair values of available-for-sale financial assets are recognized as the other comprehensive income until the derecognition or impairment of such financial assets, and the accumulated gains or losses are included in the current profit or loss. Dividends or interest income relevant to available-for-sale financial assets is included in the current profit or loss.

The equity instrument investment which has no quoted price in the active market and of which fair value cannot be measured reliably is measured at cost.

Classification and measurement of financial liabilities

At the initial recognition, the Group's financial liabilities are classified as other financial liabilities. The transaction costs relevant to the other financial liabilities are included in the initially recognized amount, and the other financial liabilities are subsequently measured at amortized cost by the effective rate method.

Financial instrument offset

Financial assets and financial liabilities are presented in the balance sheet at the net amount after mutual offset when the following conditions are met simultaneously: possess the legal right to offset the recognized amount and such right is currently executable; intend to settle at net amount, or cash such financial assets or liquidate such financial liabilities.

Financial guarantee contracts

Financial guarantee contracts refer to contracts where the guarantor and the debtor agree that the guarantor shall perform obligations or assume liability as agreed when the debtor fails to perform obligations. Financial guarantee contracts are measured at fair value at initial recognition. After the initial recognition, financial guarantee contracts not belonging to the financial liabilities designated to be measured at fair value through the current profit or loss are subsequently measured at the higher between the determined amount of the current best estimate required to be paid for performing relevant current obligations on the balance sheet date and the balance of the initially recognized amount deducting the accumulated amortization amount determined in the revenue recognition principle.

Derivative financial instruments

The Group carries out exchange rate risk hedging by using derivative financial instruments, such as the forward exchange contract. Derivative financial instruments are initially measured at their fair values on date of signing relevant derivative transaction contracts and subsequently measured at their fair values. Derivative financial instrument with positive fair value is recognized as an asset, and that with negative fair value is recognized as a liability. However, the derivative financial instrument, linking up with the equity instrument which has not quoted price in the active market and of which fair value cannot be measured reliably, and subject to the settlement through the delivery of such equity instrument, is measured at cost.

Except that the effective hedging portion of cash flow hedging is included in the other comprehensive income and transferred out and included in the current profit or loss when the hedging items affect the profit or loss, the gains or losses from the changes in fair values of derivative instruments are directly included in the current profit or loss.

Impairment of financial assets

The Group checks the book values of financial assets on the balance sheet date. If there is objective evidence that any financial asset has been impaired, the provision for impairment will be made. Objective evidence indicating the impairment of financial assets refers to the matters that occurred after initial recognition of such financial assets and have an impact, which can be measured reliably by the Group, on the estimated future cash flows of such financial assets. Objective evidence indicating the impairment of financial assets includes serious financial difficulty encountered by the issuer or debtor, the violation of the debtor against contract terms (such as default or delay in payment of interest or repayment of principle), the situation that the debtor is likely to go into liquidation or be subject to other financial restructuring, and the public date revealing that the estimated future cash flows have decreased and can be measured.

Financial assets measured at amortized cost

At impairment, the book value of such financial assets will be written down to the present value of estimated future cash

flows through the provision items (excluding the future credit loss which has not incurred), and the written-down amount is included in the current profit or loss. The present value of estimated future cash flows is determined via discount at the original actual interest rate of such financial assets (i.e. Actual interest rate determined at the initial recognition), with the consideration of the value of relevant guaranty. After the impairment, the interest income is recognized at the discount rate which is used for the discount of future cash flows at the determination of impairment loss. For loans and receivables, if there is no realistic expectation for future recovery and all guaranties have been realized or transferred to the Group, the loans and receivables as well as relevant provision for impairment will be written off.

The financial assets with individually significant amount are subject to the separate impairment test. If there is any objective evidence indicating that the financial assets have been impaired, the impairment loss will be recognized and included in the current profit or loss. The financial assets with individually insignificant amount are included in the portfolio of financial assets with similar credit risk characteristics for impairment test or are subject to the separate impairment test. Financial assets without impairment upon the separate test (including individual financial assets with significant and insignificant amount) shall be included in financial assets portfolio which similar credit risk characteristics to conduct the impairment test again. The individual financial asset with impairment loss recognized upon the separate test does not be included in the portfolio of financial assets with similar credit risk characteristics for impairment test.

After the Group recognizes the impairment losses of financial assets measured at amortized cost, if there is any objective evidence showing that the value of such financial assets has been recovered and it relates objectively to the event occurred after the recognition of the losses, the originally recognized impairment loss will be reversed and included in the current profit or loss. However, the book value upon the reversal shall not exceed the amortized cost of such financial assets on the reversal date under the assumption that no provision for impairment is made.

Available-for-sale financial assets

If there is any objective evidence indicating that such financial assets have been impaired, the accumulated loss originally included in the other comprehensive income and arising from the decline of fair value will be transferred out and included in the current profit or loss. Such transferred-out accumulated loss refers to the balance of the initial acquisition cost of the available-for-sale financial assets deducting the recovered principal and amortized amount, the current fair value and the impairment loss originally included in the profit or loss.

The objective evidence indicating that the investment in available-for-sale equity instruments have impaired includes the serious or non-temporary decline of fair value.

The “serious” degree is determined based on how the fair value is lower than the cost, while the “non-temporary” degree is determined based on how long the fair value is lower than the cost. In case of the objective evidence of impairment, the transferred-out accumulated loss refers to the balance of the acquisition cost deducting the current fair value and the impairment loss originally included in the profit or loss. Impairment loss from the investment in available-for-sale equity instruments does not be reversed through the profit or loss. The increase in fair value after the impairment is directly recognized in the other comprehensive income.

In determining the “serious” or “non-temporary” degree, relevant judgment should be made. The Group makes the judgment based on how or how long the fair value is lower than the cost, in combination with other factors.

The investment in available-for-sale debt instruments is assessed by the identical method for the financial assets measured at amortized cost. However, the transferred-out accumulated loss refers to the balance of amortized cost deducting the current fair value and the impairment loss originally included in the profit or loss. After the impairment, the interest income is recognized at the discount rate which is used for the discount of future cash flows at the determination of impairment loss.

For available-for-sale debt instruments whose impairment losses have been recognized, if their fair values rise in the subsequent accounting period and such rise is objectively related to the matters occurring after the recognition of such impairment losses, the previously recognized impairment losses may be reversed and included in the current profit or loss.

Financial assets measured at cost

Where there is objective evidence showing that such financial assets are impaired, the difference between its book value and the present value determined through the discount of the current market yield for similar financial assets to future cash flow should be recognized as impairment loss, and included in the current profit or loss. Once the impairment loss is recognized, it cannot be reversed.

Transfer of financial assets

If the Group has transferred nearly all the risks and rewards associated with the ownership of financial assets to the transferee, such financial assets will be de-recognized; if the Group retains nearly all the risks and rewards associated with the ownership of financial assets, such financial assets will continuously recognized.

If the Group neither transfers nor retains nearly all the risks and rewards associated with the ownership of the financial assets, the following treatments will be adopted based on different circumstances: if the Group has given up its control over the financial assets, the financial assets will be derecognized, and the assets and liabilities arising therefrom will be recognized; if the Group does not give up its control over the financial assets, the financial assets will be recognized to the extent of its continuing involvement in the transferred financial assets, while relevant liabilities are recognized accordingly.

If the financial assets are continuously involved in by through the financial guarantee provided to the transferred financial assets, the assets arising from the continuous involvement will be recognized at the book value of the financial assets or the financial guarantee amount, whichever is lower. The financial guarantee amount refers the maximum amount required to be repaid among all considerations received.

10 Receivables (applicable to year 2018)

The Company's receivables include accounts receivable, other receivables and others. The accounts receivable arising from the Group's external sales of goods or rendering of services are initially recognized at the fair value of the contract or agreement price receivable from the purchaser.

(a) Accounts receivable

Accounts receivable with individually significant amount and individual provision for bad debts

Accounts receivable with individually significant amount are subject to the separate impairment test. When there is objective evidence showing that the Group will be incapable of recovering accounts receivable in accordance with the original terms of receivables, the provision for bad debts will be made.

Judgment standard for individually significant amount:	Top five receivables of non-related parties.
Provision method for accounts receivable with individually significant amount and individual provision for bad debts:	provision for bad debts is made at the difference between the present value of estimated future cash flows of accounts receivable and the book value of the same.
Reason for individual provision for bad debts:	There is objective evidence showing that the Group will be incapable of recovering accounts receivable in accordance with the original terms of receivables.
Method for the provision for bad debts:	The provision for bad debts will be made at the difference between the present value of estimated future cash flows of receivables and the book value of the same.

Accounts receivable with provision for bad debts made by portfolio with credit risk characteristics

For receivables with individually insignificant amount, classified in several portfolios by the credit risk characteristics together with receivables not impaired after a separate test, the provision for bad debts to be made is recognized based on the actual loss ratio of the portfolio of other receivables with credit risk characteristics identical or similar thereto in the previous year, and in combination with the current situation.

Basis for determining the credit risk portfolio:	Portfolio 1 Accounts receivable of related parties Portfolio 2 Accounts receivable of non-related parties
Method for the provision for bad debts made by the credit risk portfolio:	Portfolio 1 Except that there is objective evidence showing that the Group will be incapable of recovering accounts receivable in accordance value original terms of receivables, no provision for bad debts of accounts receivable of related parties will be made. Portfolio 2 Aging analysis method

In portfolio 2, the proportions of provision under the aging analysis method are stated as follows:

Aging	Proportion of provision
Within 6 months	-
7 months - 12 months	1%
1 - 2years	15%
2 - 3 years	30%



Aging	Proportion of provision
3 - 4 years	50%
4 - 5 years	75%
Over 5 years	100%

(b) Other receivables

Other receivables with individually significant amount and individual provision for bad debts

Other receivables with individually significant amount are subject to the separate impairment test. When there is objective evidence showing that the Group will be incapable of recovering other receivables in accordance with the original terms of receivables, the provision for bad debts will be made.

Judgment standard for individually significant amount:	Top five receivables of non-related parties.
The provision for bad debts of other receivables with individually significant amount and individual provision for bad debts is:	made at the difference between the present value of the estimated future cash flows of other receivables and the book value of the same.

Other receivables with individually insignificant amount and individual provision for bad debts

Reason for individual provision for bad debts:	There is objective evidence showing that the Group will be incapable of recovering other receivables in accordance with the original terms of other receivables.
Method for the provision for bad debts:	The provision for bad debts will be made at the difference between the present value of estimated future cash flows of other receivables and the book value of the same.

Other receivables with provision for bad debts made by portfolio

For other receivables with individually insignificant amount, classified in several portfolios by the credit risk characteristics together with other receivables not impaired after a separate test, the provision for bad debts to be made is recognized based on the actual loss ratio of the portfolio of other receivables with credit risk characteristics identical or similar thereto in the previous year, and in combination with the current situation.

Basis for determining the credit risk portfolio:	Portfolio 1 Margin (Excluding the quality margin) Portfolio 2 Employee personal loan or imprest Portfolio 3 Others receivables in other natures
Method for the provision for bad debts made by the credit risk portfolio:	Portfolio 1 Except that there is objective evidence showing that the Group will be incapable of recovering other receivables in accordance value original terms of other receivables, no provision for bad debts of margin will be made. Portfolio 2 Except that there is objective evidence showing that the Group will be incapable of recovering other receivables in accordance value original terms of other receivables, no provision for bad debts of employee personal loan or reserve funds will be made. Portfolio 3 Aging analysis method

In portfolio 3, the proportions of provision under the aging analysis method are stated as follows:

Aging	Proportion of provision
Within 6 months	-
7 months - 12 months	1%
1 - 2 years	15%
2 - 3 years	30%

Aging	Proportion of provision
3 - 4 years	50%
4 - 5 years	75%
Over 5 years	100%

11 Inventories

Inventories include the raw materials, outsourcing components and parts, goods in process, and stock commodities.

Inventories are initially measured at the cost. The inventory cost includes the procurement cost, processing cost and other cost. The actual cost of inventory in transit is determined by the weighted average method. Revolving materials include low-cost consumables and packing materials, in which low-cost consumables are amortized by the multiple amortization method, while packing materials are amortized by the one-off write-off method.

Perpetual inventory system is adopted for inventories.

On the balance sheet date, the inventory is measured at its cost or its net realizable value, whichever is lower; if the cost is higher than the net realizable value, the provision for inventory depreciation will be made and included in the current profit or loss. If the previous factor for the provision for inventory depreciation has been eliminated, resulting that the net realizable value of the inventory is higher than the cost of the same, the amount written down will be reversed in the amount of provision for inventory depreciation originally made, and the reversed amount will be included in the current profit or loss.

The net realizable value, in the routine activities, refers to amount of the estimated selling price of inventory minus the estimated cost to completion, estimated selling expense and relevant taxes and surcharges. At the time of making the provision for inventory depreciation, the provision for depreciation of raw materials is made by category, and that of goods in process and stock commodities is made by each single inventory item.

12 Construction contract

For large port equipment, heavy equipment and steel products as well as construction projects customized for customers, as the commencement dates and the completion dates are usually in different accounting years, the Group accounts for their revenue and costs by the construction contract.

(a) If the outcome of a construction contract can be estimated reliably, the revenue and cost of such construction contract will be recognized on the balance sheet date based on the progress of completion by the percentage-of-completion method. The outcome of a construction contract can be estimated reliably means that the economic benefit relevant to the contract is likely to flow in the Group, and the actually incurred contract cost can be clearly distinguished and reliably measured; for fixed price contracts, the following conditions should be also met: The total contract revenue can be reliably measured, and the progress of completion and the cost to complete the contract can be reliably determined. Total contract revenue includes the initial cost specified in the contract and the revenue from contract change, claim and award. The Group determines the progress of contract completion by the following ways:

(i) For large port equipment, the progress of completion is determined at the percentage of completion corresponding to the time-point for recognizing the revenue of the construction contract at the end of the period. The Group has determined the following three revenue recognition time-points:

Time-point 1: The manufacturing of main steel structure has been completed and set upright;

Time-point 2: The product manufacturing, installation and preliminary debugging have been completed, the factory qualification certificates for products have been issued, the bill of loading has been obtained, and the product delivery has been prepared;

Time-point 3: The products have been delivered to the purchaser upon the purchaser's inspection, and the delivery certificate issued by the purchaser has been obtained.

The Group analyzes construction contracts completed in the previous year by the category of product, and determines the percentage of completion to recognized at each revenue recognition time-point, based on the proportion of the cost at the each revenue recognition time-point mentioned above in the total actual cost, and takes such percentage of completion as that to be recognized at each revenue recognition time-point in the current period.

(ii) For heavy equipment and construction projects, the completion of completion is determined based on the proportion of the contract cost accumulated incurred in the total estimated contract costs. The accumulated incurred contract cost does not include the relevant contract costs in the future activities.

(iii) For steel structure manufacturing, the progress of completion is determined based on the proportion of the accumulatively completed processing tonnage in the total estimated processing tonnage.

(b) If the outcome of an individual construction contract cannot be estimated reliably, the treatment will be taken separately in following situations:

(i) If the contract cost is recoverable, it will be recognized based on the actual contract cost recoverable as the contract expense in the period when such cost is incurred.

(ii) If the contract cost is not recoverable, it will be recognized as contract expense when it is incurred, without contract revenue recognition.

(c) If the total estimated contract cost is more than the total estimated contract revenue, the estimated loss will be immediately recognized as the current profit or loss.

(d) For the contract price by installment, the settled price is presented, and will be reversed based on relevant accumulated incurred cost and the accumulated recognized gross profit after the settlement of construction contract. On the balance sheet date, the difference between the sum of the accumulated incurred cost and the accumulated recognized gross profit and the settled price (the former is larger) is presented as the completed but not settled construction payment in the current assets; in case the latter is larger, such difference will be presented as the settled but not completed construction payment in the current liabilities.

13 Long-term equity investments

Long-term equity investments include the equity investments in subsidiaries, joint ventures and associates.

Long-term equity investments are initially measured at the initial investment cost. The initial investment cost of a long-term equity investment acquired through the business combination under common control is recognized at book value of owners' equity acquired from the combinee on the combination date in the consolidated financial statements of the ultimate controller; the difference between the initial investment cost and the book value of the combination consideration is used to adjust the capital reserves (if the capital reserves are insufficient to offset, the retained earnings will be offset); for the other comprehensive income before the combination date, at the disposal of such investment, the accounting treatment identical to that for the direct treatment of relevant assets or liabilities by the investee is adopted; the shareholders' equity recognized on account of the change in other shareholders' equity of the investee other than net profit or loss, other comprehensive income and profit distribution is transferred in the current profit or loss at the disposal of such investment; in which, after such disposal, if such investment is still the long-term equity investment, it will be carried forward in proportion; if it is converted into the financial instrument, it will be carried forward in full.

The initial investment cost of a long-term equity investment acquired through business combination not under common control is recognized at the combination cost (if the business combination not under common control is realized through several transactions by step, the sum of the book value of the equity investment of the acquiree held before the acquisition date and the cost of investment newly added on the acquisition date is recognized as the initial investment cost), and the combination cost includes the asset paid by the acquiree, liability incurred or borne by the acquiree, and the fair values of issued equity securities; for the other comprehensive income held before the acquisition date and recognized due to the accounting under equity method, at the disposal of such investment, the accounting treatment identical to that for the direct treatment of relevant assets or liabilities by the investee is adopted; the shareholders' equity recognized on account of the change in other shareholders' equity of the investee other than net profit or loss, other comprehensive income and profit distribution is transferred in the current profit or loss at the disposal of such investment; in which, after such disposal, if such investment is still the long-term equity investment, it will be carried forward in proportion; if it is converted into the financial instrument, it will be carried forward in full. The accumulated changes in fair values of the equity investments held before the acquisition date, which was included in the other comprehensive income as the financial instruments, are fully transferred in the retained earnings (from 2019) or the current profit or loss (before 2019), on the accounting at cost. For long-term equity investments acquired not through business combination, their initial investment costs are determined by the following ways: if the long-term equity investment is acquired through cash payment, the initial investment cost will be the sum of the acquisition price actually paid and the costs, taxes and other necessary costs, which are directly relevant to the long-term equity investment; if the long-term equity investment is acquired by issuing equity securities, the initial investment cost will be the fair value of the equity securities issued.

The long-term equity investments where the Company could control the investee shall be accounted in individual financial statements of the Company under the cost method. Control means the power owned over the investee and enjoys the variable return through participating in activities related to the investee, and has the ability to affect its return by using the power over the investee.

Under the cost method, long-term equity investments are valued at initial investment cost. The Company shall increase or recover the investment to adjust the cost of long-term equity investments. Cash dividends or profits declared and distributed by the investee should be recognized as investment income in the current period.

If the Group has joint control over or significant influence on the investees, long-term equity investments are accounted for with the equity method. Joint control refers to the control shared over an arrangement in accordance with the relevant stipulations, and the decision-making of related activities of the arrangement should not be made before the party sharing the control right agrees the same. Significant influence refers to the power to participate in making decisions on the financial and operating policies of the investee, but not the power to control, or jointly control, the formulation of such policies with other parties.

For long-term equity investments measured under the equity method, if the initial investment costs are higher than the investor's attributable share of the fair value of the investee's identifiable net assets, the initial costs of the long-term equity investments shall be recognized; if the initial investment costs are lower than the investor's attributable share of the fair value of the investee's identifiable net assets, the difference shall be recognized in current profit and loss and at the same time the adjustment will be made to the initial costs of the long-term equity investments.

Where the equity method is adopted, after the long-term equity investments are acquired, the Company shall, according to the shares of net profit and loss and other comprehensive income realized by the investee which the Company shall enjoy or bear, recognize the profit and loss on the investments and other comprehensive income and adjust the book value of the long-term equity investments. When recognizing the share of net profit or loss of the investee that the Group shall enjoy, based on fair value of various identifiable assets and others of the investee on acquisition and according to accounting policies and accounting periods of the Group, the Group shall write off the part of incomes from internal transactions with associates and joint ventures which are attributable to the investor according to the shareholding ratio (but the loss from internal transactions is the asset impairment loss, its total amount shall be recognized) and then recognize the profit and loss on investments on such basis, except those assets investments or sale constitute business. The Group shall, in the light of the profits or cash dividends that the investee declares to distribute, calculate the part it should share and reduce the book value of the long-term equity investment correspondingly. Recognition of the net loss in the investee shall be within the limit that the book value of long-term equity investments and other long-term interests which substantially form the net investment in the investee are reduced to zero, unless the Group is obliged to bear extraneous losses; For other changes in shareholder's equity of the investee excluding net losses or profits, other comprehensive income or profit distribution, the book value of long-term equity investments will be adjusted and included in shareholder's equity.

For disposal of long-term equity investments, the difference between the book value and the actual price shall be included in the current investment income. For long-term equity investments recognized under equity method, when the equity method is no longer adopted due to the disposal, accounting treatment should be made for other comprehensive income previously recognized under the equity method by using the same basis for the investee to directly dispose the relevant assets or liabilities. Shareholder's equity recognized from the investee's changes in other shareholder's equity other than net profit or loss, other comprehensive income and profit distribution should all transferred to the current profits or losses.

14 Investment properties

Investment properties refer to properties that are held for the purposes of earning rental income, capital appreciation, or some combination thereof, including land use rights and buildings that have been leased out.

The investment property shall be initially measured at cost. Subsequent expenses related to investment properties, if the economic benefits associated are likely to flow in and its cost can be measured reliably, should be recorded in the cost of investment property. Otherwise, such subsequent expenses should be included in current profits or losses upon occurrence.

The subsequent measurement of an investment property shall be conducted by the Group under the cost method, and the land use right and buildings shall be amortized and depreciated according to the expected useful life and net residual rate of the investment property. The expected useful lives, net residual value rate and annual depreciation (amortization) rate of the investment properties are as follows:

	Expected useful lives	Expected net residual value rate	Annual depreciation(amortization) rate
Buildings	30 years	0%	3.3%
Land use rights	Land useful lives	0%	Determined according to the expected net residual value and useful life for the land useful lives

The Group shall review estimated useful lives, estimated net residual value and depreciation (amortization) methods of the investment properties at the end of each year and shall make adjustment when necessary.

When an investment property is changed for self-use, upon change, the investment property shall be converted into fixed assets or intangible assets. When the self-use property is changed to earn rentals or for capital appreciation, upon change, fixed assets or intangible assets shall be converted into investment properties. When there is a conversion, the book value before the conversion shall be regarded as the book value after the conversion.

15 Fixed assets

Fixed assets will only be recognized when the economic benefits relating to the fixed assets may flow into the Group and the costs of the fixed assets can be measured reliably. If the subsequent disbursements relevant to a fixed asset meet the recognition conditions, they shall be recorded in the cost of fixed asset, and the book value of the replaced part shall be derecognized; otherwise, they shall be recorded in the current profits and losses.

Fixed assets are initially measured at cost. The costs of externally acquired fixed assets comprise their purchase prices, related taxes and surcharges and any attributable expenditure incurred to prepare the asset for its intended use.

Except for the fixed assets form by using withdrawn safe production costs, the provisions for the depreciation of fixed assets are made by straight-line method, and the useful lives, expected net salvage value and annual depreciation rates of various fixed assets are as follows:

	Useful lives	Estimated net residual value rate	Annual depreciation rate
Buildings and constructions	20-40 years	0%	2.5%-5%
Mechanical equipment	3-20 years	0%	5%-33.3%
Office and electronic equipment	3-5 years	0%	20%-33.3%
Transportation facilities (excluding ship)	5 years	0%	20%
Ship	10-30 years	5%/10%	3%-9.5%

The fixed assets acquired under financing leases adopt the same depreciation policies for the provision for the depreciation of leased assets as those of its own fixed assets. Where it can be reasonably certain that the Company will obtain ownership of the leased asset at the expiry of the lease term, the leased assets are depreciated over the useful life; where it cannot be reasonably certain that the Company can obtain ownership of the leased asset at the end of the lease term, the leased assets are depreciated at the shorter of the lease term and the use life of the leased assets.

The Group shall review useful lives, estimated net residual value and depreciation methods of the fixed assets at the end of each year and shall make adjustment when necessary.

16 Construction in progress

The Group recognizes the cost of the construction in progress at the actually incurred expenditures, including all types of necessary expenditures incurred during the construction period, the capitalized borrowing costs incurred prior to the time when the construction is brought to the expected conditions for use and other relevant costs.

The construction in progress is converted into fixed assets after it reaches the expected conditions for use.

17 Borrowing costs

Borrowing costs refer to the interest and other relevant costs of the Company due to borrowings, including the interest of borrowings, the amortization of discount or premium, auxiliary expenses, exchange differences incurred by foreign currency borrowings, etc.

The Group capitalizes the borrowing costs of acquisition or construction or production which may directly belong to assets that are eligible for capitalization; and other borrowing costs are included in the current profit or loss. Assets eligible for capitalization refer to fixed assets, investment property, inventories and other assets which may reach their intended use or sale status only after long-time acquisition and construction or production activities.

The borrowing costs shall not be capitalized unless they simultaneously meet the following requirements:

- (1) The asset disbursements have already incurred;
- (2) The borrowing costs have already incurred; and

(3) Purchase, construction or manufacturing activities that are necessary to prepare the asset for its intended use or sale have already started.

Capitalization of borrowing costs should cease when the acquired and constructed or produced assets eligible for capitalization have reached the working condition for their intended use or sale. The borrowing costs incurred thereafter shall be included in the current profit or loss.

During the period of capitalization, the capitalized amount on interest of each accounting period shall be determined in accordance with the following provisions:

(1) The interest of special borrowings to be capitalized should be determined according to the actually incurred interest expenses in the current period less the interest income on deposits or the investment income;

(2) The interest of general borrowings to be capitalized should be calculated by multiplying the weighted average of asset disbursements of the part of accumulated asset disbursements exceeding special borrowings by the weighted average rate of used general borrowings.

If the acquisition and construction or production activities of assets eligible for capitalization are abnormally interrupted due to the matters other than necessary procedures for such assets to reach the working conditions for its intended use or sale and such circumstance lasts for more than three months, the capitalization of borrowing costs should be suspended. Borrowing costs incurred during the interruption are recognized as the current profit or loss and continue to be capitalized until the acquisition, construction or production of the asset restarts.

18 Intangible assets

Intangible assets will be recognized only when relevant economic benefits may well flow into the Group and the costs of intangible assets can be measured reliably, and initially measured at costs. However, if the fair value of the intangible assets acquired in the business combination not under common control can be reliably measured, it should be recognized as intangible assets and measured at fair value separately. When the Company reconstructs its corporate system, for the intangible assets invested by the shareholders of the state-owned shares, the evaluation value confirmed by the state-owned assets management department shall be served as the book value.

The useful life of an intangible asset is determined based on the period during which it can bring economic benefits to the Group. If the said period cannot be predicted, it will be recognized as an intangible asset with indefinite useful life.

The useful lives of all kinds of intangible assets are determined as follows:

	Useful life
Land use right	Land useful lives
Software use fees	5 years
Proprietary technology	10 years

The land use rights acquired by the Group are usually accounted as intangible assets. For the plants and other buildings developed and constructed by the Company, relevant land use rights and constructions shall be respectively accounted as intangible assets and fixed assets. For externally purchased land and buildings, the related payments are distributed in the land use right and buildings; those difficult to be distributed shall be all handled as fixed assets.

For the intangible assets with limited useful life, their amount shall be amortized at the straight-line method over its useful life. The Group will reexamine the useful lives and amortization method of intangible assets with limited useful lives, and make adjustments when necessary at the end of each year.

The Group's expenditures for its internal research and development projects are classified into research expenditures and development expenditures. The expenditures in research phase will be included in the current profit or loss on occurrence. The development expenditures will be capitalized only when all of the following conditions are satisfied simultaneously: It is feasible technically to finish intangible assets for use or sale; It is intended to finish and use or sell the intangible assets; The usefulness of methods for intangible assets to generate economic benefits shall be proved, including being able to prove that there is a potential market for the products manufactured by applying the intangible assets or there is a potential market for the intangible assets itself or the intangible assets will be used internally; It is able to finish the development of the intangible assets, and able to use or sell the intangible assets, with the support of sufficient technologies, financial resources and other resources; and the expenditures attributable to the intangible asset during its development phase can be measured reliably. Development expenditures that do not meet the above conditions are included in the current profit or loss on occurrence.

19 Asset impairment

The Group recognizes the asset impairment under the following methods except for inventories, deferred income tax and financial assets:

The Group shall, on the balance sheet date, make a judgment on whether there is any indication that the assets may impair. If such indication does exist, the Group shall estimate the recoverable amount and carry out an impairment test. Impairment tests for goodwill caused by business combination shall be conducted at the end of every year whether they have signs of impairment or not. Impairment tests for intangible assets not reaching usable condition shall be conducted every year.

The recoverable amounts of assets are the higher of their fair values less costs to sell and the present values of the future cash flows expected to be derived from the assets. The Group shall, on the basis of single item assets, estimate the recoverable amount. Where it is difficult to do so, it shall determine the recoverable amount of the group assets on the basis of the asset group to which the asset belongs. The recognition of an asset group shall base on whether the main cash inflow generated from the asset group is independent of those generated from other assets or other group assets.

Where the recoverable amount of an asset or an asset group is lower than its book value, the book value of the asset or asset group shall be written down to their recoverable amounts. The write-downs are recorded into the current profit or loss and the provision for asset impairment are made accordingly at the same time.

When the Company makes an impairment test of goodwill, it shall, as of the purchasing day, apportion the book value of the goodwill formed by business combination to the relevant asset groups by a reasonable method. Where it is difficult to do so, it shall be apportioned to the relevant portfolio of asset groups. The related asset group or combination of asset groups shall be the asset group or combination of asset groups that can benefit from the synergy effect of business combination, and shall be smaller than the reporting segments as determined by the Group.

When making an impairment test on the relevant asset groups or combination of asset groups containing goodwill, if any indication shows that the asset groups or combinations of asset groups related to the goodwill may be impaired, the Group shall first conduct an impairment test on the asset groups or combinations of asset groups not containing goodwill, calculate the recoverable amount and recognize the corresponding impairment loss. Then, the Group shall conduct an impairment test on the asset groups or asset groups portfolio containing goodwill, and compare it book value and recoverable amount: if the recoverable amount is lower than book value, the amount of impairment losses should be firstly used to deduct book value of goodwill allocated to the asset group or the asset group portfolio, and then deduct book value of other assets according to the proportion of the book value of other assets other than the goodwill in the asset group or the asset group portfolio.

Once the loss of assets impairment is recognized, it is not allowed to be reversed even if the value can be recovered in subsequent period.

20 Long-term deferred expenses

Long-term deferred expenses shall be amortized at the straight-line method, and the amortization period is set out as follows:

	Amortization period
Improvement of fixed assets acquired	Expected beneficial period under the operating lease

21 Employee compensation

Employee compensations refer to multiform remuneration or compensation offered of the Group in order to get services provided by its employees or sever the labor relation. Employee compensation mainly includes short-term employee compensation, post-employment benefits, dismissal benefits and other long-term employee benefits. The welfare provided by the Company to employees' spouses, children, dependents, family dependants of the deceased employee and other beneficial owners also belong to employee compensation.

Short-term compensation

During the accounting period of an employee' providing services, the short-term compensation actually incurred is recognized as liabilities and includes them in the current profit or loss or the related asset costs.

Post-employment benefits (defined contribution plans)

The employees of the Group participated in the endowment insurance and unemployment insurance managed by the local government, and also participated in the enterprise annuity, and the corresponding expenses were included in the relevant asset costs or the current profit or loss when incurred.

22 Estimated liabilities

Except for contingent consideration and contingent liabilities assumed in business combination not under the same control, when the obligations related to contingencies meet the following conditions, the Group recognizes them as estimated liabilities:

- (1) This obligation is a present obligation of the Group;
- (2) The performance of such obligation is likely to result in outflow of economic benefits from the Group;
- (3) The amount of the obligation can be measured reliably.

The estimated liabilities are initially measured as the best estimate of expenses required for the performance of relevant present obligations by considering comprehensively the risks with respect to contingencies, uncertainties and the time value of money. On each balance sheet date, the Group shall review the book value of estimated liabilities. The Company shall make corresponding adjustments to reflect the current best estimate if there is any conclusive evidence indicating that such book value cannot reflect the current best estimate.

23 Revenue

Revenue shall be recognized when related benefits are likely to flow into the Group, the amount can be reliably calculated, and the following conditions are met synchronously.

(a) Revenue from sales of large-scale port equipment, ocean heavy equipment, product of steel structure and construction project is recognized by the percentage-of-completion method. Please refer to Note III. 12.

(b) Revenue from ship transportation is recognized at the completion of the voyage.

(c) Income is recognized at the time of delivery for the sale of spare goods or parts and other materials.

(d) The interest income is recognized based on the time and effective interest rate for others to use the monetary funds of the Group.

(e) The revenue from operating lease is recognized in each period under the straight-line method during the lease term.

(f) Activities under the construction and transfer of contracts usually include construction and transfer. With respect to the construction projects for which the Group is responsible, during the construction period, in accordance with principals of the construction contract, when the outcome can be reliably estimated, the construction contract revenue is measured at the fair value of the consideration receivable, with long-term receivables recognized at the same time and offset upon receipt of payment of the project owner.

24 Government grants

Government grants shall be recognized only if the Company is able to comply with the conditions for the government grants, and is likely to receive the government grants. If a government grant is a monetary asset, it shall be measured at the amount received or receivable. If a government grant is a non-monetary asset, it shall be measured at its fair value; and if its fair value cannot be obtained in a reliable way, it shall be measured at a nominal amount.

If the government grants shall be used for the construction or the generation in otherwise of the long-term assets as required by the government documents, they are the assets-related government grants; If government documents have no relevant provisions, and such government grants are based on the condition of the construction or the generation in otherwise of the long-term assets judged on the basis of basic conditions required for obtaining such government grants, they shall be deemed as the assets-related government grants, other government grants in addition to the said ones shall be deemed as the income-related government grants.

Income-related government grants which are used to compensate for relevant costs or losses in subsequent periods will be recognized as deferred income, and will be included in the current profit or loss or be used to write off relevant costs in the period when relevant costs or losses are recognized.

If assets-related government grants are recognized as deferred income, they shall be included in profit or loss by stages by a reasonable and systematic method within the useful lives of relevant assets. (However, the government grants measured at nominal amounts are directly included in the current profit or loss); if the relevant assets are sold, transferred, scrapped or damaged before the end of their useful lives, the undistributed balance of relevant deferred income is transferred to the profit or loss from the current period of asset disposal.

25 Income tax

Income tax includes the income tax of the current period and deferred income tax. Except that the adjusted goodwill arising from business combination or the deferred income tax related to transactions or events directly recognized in

shareholder's equity shall be included in shareholder's equity, other current income tax and deferred income tax shall be included in current profit and loss as income tax expenses.

The current income tax liabilities or assets incurred in the current period or prior periods shall be measured by the Group in light of the expected payable or refundable amount of income taxes according to the tax law.

Deferred income tax is accrued under the balance sheet liability method by the Group based on the temporary difference between book value of assets and liabilities on the balance sheet date and tax base, as well as the balance between the book value of items which have not been recognized as assets or liabilities but the tax base can be determined according to the tax law and the tax base.

Taxable temporary differences are recognized as deferred income tax liabilities, except that

(1) Taxable temporary differences are generated in the following transactions: the initial recognition of goodwill, or the initial recognition of assets or liabilities arising from transactions with the following characteristics: the transaction is not a business combination and will not affect accounting profits, nor affect the taxable income or deductible losses when the transaction occurs.

(2) For taxable temporary differences related to the investments in subsidiaries, joint ventures and associates, the time for the reversal of the taxable temporary differences can be controlled and the taxable temporary differences are likely not to be reversed in the foreseeable future.

For deductible temporary differences, deductible losses and tax credits that can be carried forward to subsequent periods, deferred tax assets arising therefrom are recognized to the extent that future taxable income will be probable to be available against the deductible temporary differences, deductible losses and tax credits, unless the deductible temporary differences arise from the following transactions:

(1) The deductible temporary difference is generated in the following transaction: the transaction is not a business combination and it will affect neither accounting profits nor the taxable income (or deductible losses) when occurred.

(2) For the deductible temporary differences arising from investments in subsidiaries, associates and joint ventures, the deferred income tax assets will be accordingly recognized when meeting the following conditions at the same time: the temporary differences may be reversed in the foreseeable future and they can be used to offset the taxable income of deductible temporary differences in the future.

On the balance sheet date, the Company shall measure deferred income tax assets and deferred income tax liabilities at the applicable tax rate during the period for expected recovery of assets or settlement of liabilities and reflect the impacts of the income tax by means of expected recovery of assets or settlement of liabilities on the balance sheet date.

On the balance sheet date, the Group reviews the book value of deferred income-tax assets. If it is unlikely to obtain sufficient taxable income to offset the benefit of the deferred income-tax assets, the book value of the deferred income-tax assets will be written down. On the balance sheet date, the Group re-evaluates unrecognized deferred income tax assets, and deferred income tax assets are recognized to the extent that it is likely to obtain sufficient taxable income for all or part of the deferred income tax assets to be reversed.

Deferred income tax assets and deferred income tax liabilities meeting the following conditions simultaneously will be presented by net amount after offset: when the Company has the statutory right to balance current income tax assets and current income tax liabilities with net amounts, and deferred income tax assets and deferred income tax liabilities are related to the income tax which are imposed on the same taxpayer by the same tax collection authority or on different taxpayers, but, in each important future period in connection with the reversal of deferred income tax assets and liabilities, the involved taxpayer intends to settle the current income tax assets and liabilities on a net amount basis, or obtain assets at the time of discharging liabilities.

26 Lease

Lease under which all the risks and rewards related to the ownership of assets are materially transferred is recognized as financing lease, with the rest as operating lease.

As the lessee of operating lease

Rental payment for operating lease in each stage during the rental period should be included into related asset costs or the current profit or loss by the straight-line method.

As a lessor of operating lease

Rental income from the operating lease in each stage during the lease term should be recognized as the current profit or loss by the straight-line method.

As the lessee of finance lease

At the commencement of the lease term, assets acquired under finance lease shall be recorded at the lower of their fair

values and the present values of the minimum lease payments, and the Company shall recognize the book value of long-term payables at the minimum lease payments, and shall record the differences between book value of the leased assets and the long-term payables as unrecognized finance charges, which are amortized at the effective interest method in each stage during the lease term. The contingent rental is included in the current profits or losses when actually occurring.

Leaseback

Leaseback for financing purposes will be treated as a whole, which is accounted by mortgage loan, on the condition that asset sale is related to lease transaction and can be repurchased when the lease term expires, that is to say, the accounting treatment shall be conducted as per mortgage loan.

27 Profit distribution

The Company's cash dividends are recognized as liabilities after approval at the general meeting.

28 Work safety expenses

The Company withdraws the work safety expenses according to provisions, includes them in the cost of related products or the current profit or loss, and includes them in special reserves at the same time. The costs are handled separately depending on whether they form fixed assets: when withdrawn work safety expenses are used within the prescribed range and belong to expenses, such costs shall be directly deducted from special reserves; where a fixed asset is formed, the expenses incurred through collection are recognized as the fixed asset when it is ready for its intended use, and the equivalent special reserve is written off and the equivalent accumulated depreciation is confirmed.

29 Fair value measurement

The Group measures the derivative financial instruments and equity instrument investment at fair value on each balance sheet date. Fair value is the price received from sales of an asset or paid for transfer of a liability by a market participant in an orderly transaction on the measurement date. The Group measures the relevant assets or liabilities at fair value, assuming that the sale of assets or transfer of liabilities is orderly carried out in the main market of the relevant assets or liabilities. Where there is no main market, the Group should assume that the transaction is carried out in the most advantageous market related to the assets or liabilities. The main market (or the most advantageous market) is the trading market that can be entered by the Company on the measurement date. The Group adopts the assumption used for realizing its utmost economic benefit when the market participants price the asset or liability.

When the Company measures non-financial assets at fair value, it should consider a market participant's ability to generate economic benefit by using the asset or by selling it to another market participant who will use the asset in its highest and best use.

When the Group uses the valuation techniques, it has considered the valuation techniques that are applicable in the current situation and are supported by enough available data and other information. The Company gives priority to the observable inputs when using valuation techniques, and those unobservable inputs are used only under the circumstance when it is impossible or unobservable inputs to obtain relevant observable inputs.

For assets and liabilities measured at or disclosed by their fair value in the financial statements, the level of the measurement result of fair value shall subject to the lowest level which the input having great significance to the entire measurement of fair value belongs to: Level 1 inputs refer to quoted prices (unadjusted) in active markets for identical assets or liabilities available on the measurement date; Level 2 inputs refer to inputs that are directly or indirectly observable for the assets or liabilities other than Level 1 inputs; Level 3 inputs refer to unobservable inputs of the relevant assets or liabilities.

On each balance sheet date, the Group reevaluates the assets and liabilities continuously measured at fair value and recognized in the financial statements in order to determine whether there is a conversion among the levels of fair value measurement.

30 Significant accounting judgment and estimate

The preparation of financial statements requires the management to make judgments, estimates and assumptions. These judgments, estimates and assumptions will affect the reported amounts and disclosures of income, expenses, assets and liabilities, and the disclosure of contingent liabilities on the balance sheet date. The results from the uncertainties of these assumptions and estimates may lead to significant adjustments to the book amount of assets or liabilities that are affected in the future.

Uncertainty of estimation

The following are other key sources of the uncertainty of the key assumptions and estimates in the future on the balance sheet date, which may lead to major adjustments in the book value of the assets and liabilities of next fiscal year.

Construction contracts

For customized production of large port equipment, heavy equipment, steel structure product and construction project, because the commencement and completion dates usually in different fiscal years, the Group shall use construction contract calculate the revenue and cost. During the course of the project, the Group shall continuously review and revise the expected total cost of the construction contract based on the situation of actual cost of the construction contract and the actual cost of the similar products in the reference, so that the expected total cost of the contract is approximate to its final actual cost. If there is a discrepancy between the actual total cost and the expected total cost of contracts in the future, the discrepancy will affect the cost confirmed by the Group this year.

At the same time, the Group management regularly performs impairment testing on construction contracts. If the estimated total contract costs exceed the total contract revenue, the provisions for estimated contract losses will be made accordingly. Changes of the expected total cost due to the above continuous review and revision may affect the book value of the construction completed amount not closed/construction uncompleted amount closed and impairment losses during the estimated changes.

Impairment of financial instruments

The Group adopts the expected credit loss model to assess the impairment of financial instruments. The application of the expected credit loss model requires significant judgments and estimates. It must consider all reasonable and evidence-based information, including forward-looking information. In making such judgments and estimates, the Group infers expected changes in debtors' credit risk based on historical repayment data combined with economic policies, macroeconomic indicators, industry risks and other factors. Different estimates may affect the provision for impairment, and the amount of impairment that has been provided may be not equal to the actual amount of future impairment losses.

Inventory impairments

The management shall estimate the net realizable value of inventories in time so as to estimate the provision for depreciation of inventories. If any event or circumstance changes, it is necessary to use the estimate to make the provision for depreciation of inventories if the inventory is not likely to realize the relevant value. If the expected amount is different from the original estimate, the relevant difference will affect the book value of the inventories and the impairment loss during the estimated change.

Impairment of non-current assets other than financial assets (other than goodwill)

On the balance sheet date, the Group judges whether there are any signs of possible impairment of non-current assets other than financial assets. Non-current assets other than financial assets are tested for impairment when there is an indication showing that their book amounts are irrecoverable. When the book value of an asset or asset group is higher than the recoverable amount, that is, the higher of the net amount from fair value less the disposal expense and the present value of the estimated future cash flow, it indicates that the impairment occurred. The net amount after the fair value minus the disposal expenses is determined by reference to the sales agreement price of similar assets in the fair trade or the observable market price, minus the incremental cost directly attributable to the disposal of the asset. When estimating the present value of future cash flows, management must estimate the expected future cash flows of the asset or asset group and select an appropriate discount rate to determine the present value of future cash flows.

Impairment of goodwill

The Group tests whether the goodwill is impaired at least annually. This requires an estimate of the present value of the future cash flows of the asset group or combination of asset groups to which goodwill is allocated. When estimating the present value of future cash flows, the Group needs to estimate the cash flow generated by future asset groups or combination of asset groups, and select the appropriate discount rate to determine the present value of future cash flows. See Note V (21) for details.

Fair value of unlisted equity investments

The valuation of unlisted equity investments is an estimated future cash flow discounted at the current discount rate of other financial instruments with similar contract terms and risk characteristics. This requires the Group to estimate the expected future cash flow, credit risk, fluctuation and discount rate; therefore, there is some uncertainty.

31 Changes in accounting policies and accounting estimates

Changes in accounting policies

New Standards for Financial Instruments

The Ministry of Finance promulgated the revised Accounting Standards for Business Enterprises No.22 - Recognition and Measurement of Financial Instruments, the Accounting Standards for Business Enterprises No.23 - Transfer of Financial Assets, the Accounting Standards for Business Enterprises No.24 - Hedge and the Accounting Standards for Business Enterprises No.37 - Presentation of Financial Instruments (hereinafter referred to as "New Standards for Financial Instruments") in 2017. The Group has carried out accounting treatment in accordance with the New Standards for Financial Instruments from January 1, 2019. According to the convergence provisions, the information for comparable periods is not adjusted. The difference between the implementation of the new standards and the implementation of existing standards on the first day will be used for retrospective adjustment of the undistributed profits or other comprehensive income as at January 1, 2019.

The New Standards for Financial Instruments changed the classification and measurement of financial assets, and identified three main measurement categories: measurement subject to amortized cost; measurement subject to fair value through other comprehensive income; measurement subject to fair value through current profit or loss. The Company needs to consider its business model and the contractual cash flow characteristics of financial assets to make the above classification. Equity instrument investments need to be measured at fair value and their changes should be included in the current profit or loss, but equity instrument investments not held for trading may be irrevocably designated as financial assets measured at fair value through other comprehensive income at initial recognition.

The New Standards for Financial Instruments require that the impairment measurement of financial assets will be changed from the incurred loss model to the expected credit loss model, which is applicable to financial assets measured at amortized cost, financial assets measured at fair value through other comprehensive income, as well as loan commitments and financial guarantee contracts.

The Group endorses or discounts some of its banker's acceptance bills in its daily fund management, and the business model for managing the aforementioned notes receivable is both to collect contractual cash flows and to sell such notes receivable, therefore the Group reclassifies such notes receivable as financial assets measured at fair value through other comprehensive income and reported as receivables financing after January 1, 2019.

The Group classifies the equity investments of listed companies held by it as the available-for-sale financial assets measured at fair value before January 1, 2019. As of January 1, 2019, the Group classifies such equity investments into the financial assets measured at fair value through profit or loss, presented as the financial assets held for trading.

Before January 1, 2019, the Group classifies the equity investment of unlisted companies held by it as the available-for-sale financial assets measured at cost, which are held in the long term for strategic purpose. As of January 1, 2019, the Group designated some of its held equity investments as financial assets measured at fair value through other comprehensive income, and presented them into other equity instrument investments.

On the first implementation date, the comparison on results of which financial asset is classified and measured in accordance with the recognition and measurement standards of financial instruments before and after the revision is listed as follows:

The Group

	Recognition and measurement standards of financial instruments before the revision		Recognition and measurement standards of financial instruments after the revision	
	Category of measurement	Book value	Category of measurement	Book value
Notes receivable	Amortized cost (Loans and receivables)	189,371,105	measured at fair value through other comprehensive income	162,148,105
			Amortized cost	27,223,000
Equity investment	Measured at fair value through other comprehensive income (Available-for-sale assets)	1,171,539,394	Measured at fair value through the current profit or loss (Requirements for principles)	1,171,539,394
Equity investment	Measured at costs(Available-for-sale assets)	42,994,160	Measured at fair value through other comprehensive income (designated)	55,326,529
Equity instrument investments	Measured at fair value through current profit or loss	8,438,278	Measured at fair value through current profit or loss	8,438,278
Derivative financial instruments	Measured at fair value through current profit or loss	44,481,806	Measured at fair value through current profit or loss	44,481,806

On the first implementation date, the comparison on results of which financial asset is classified and measured in accordance with the recognition and measurement standards of financial instruments before and after the revision is listed as follows:

The Company

	Recognition and measurement standards of financial instruments before the revision		Recognition and measurement standards of financial instruments after the revision	
	Category of measurement	Book value	Category of measurement	Book value
Notes receivable	Amortized cost (Loans and receivables)	75,801,953	Measured at fair value through other comprehensive income	75,801,953
Equity investment	Measured at fair value through other comprehensive income (Available-for-sale assets)	102,163,302	Measured at fair value through the current profit or loss (Requirements for principles)	102,163,302
Equity investment	Measured at costs (Available-for-sale assets)	42,994,160	Measured at fair value through other comprehensive income (designated)	55,326,529
Derivative financial instruments	Measured at fair value through current profit or loss	44,481,806	Measured at fair value through current profit or loss	44,481,806

On the first implementation date, the original book value of the financial asset is adjusted to the adjustment table of new book value of the financial asset classified in accordance with the revised recognition and measurement standard of financial instruments:

	Book value under the Old Standards for Financial Instruments	Reclassification	Remeasurement	Book value under the New Standards for Financial Instruments
	As at December 31, 2018			As at January 1, 2019
Financial asset measured at amortized cost				
Notes receivable				
Balance under the Old Standards for Financial Instruments	189,371,105			
Less: amount transferred to be measured at fair value through other comprehensive income (New Standards for Financial Instruments)		162,148,105		
Balance under New Standards for Financial Instruments				27,223,000
Accounts receivable				
Balance under the Old Standards for Financial Instruments	5,032,548,741			
Remeasurement: provision for expected credit losses			(111,908,301)	
Balance under New Standards for Financial Instruments				4,920,640,440
Other receivables				
Balance under the Old Standards for Financial Instruments	1,149,035,349			

	Book value under the Old Standards for Financial Instruments	Reclassification	Remeasurement	Book value under the New Standards for Financial Instruments
	As at December 31, 2018			As at January 1, 2019
Remeasurement: provision for expected credit losses			(1,497,196)	
Balance under New Standards for Financial Instruments				1,147,538,153
Available-for-sale financial assets				
Balance under the Old Standards for Financial Instruments	1,214,533,554			
Less: amount transferred to be measured at fair value through other comprehensive income-equity instruments (New Standards for Financial Instruments)		42,994,160		
Less: amount transferred to be measured at fair value through the current profit or loss (New Standards for Financial Instruments)		1,171,539,394		
Balance under New Standards for Financial Instruments				-
Total	7,585,488,749	1,376,681,659	(113,405,497)	6,095,401,593

On the date of first implementation, the amount as at December 31, 2018 of the original provision for impairment of financial assets was adjusted to a new adjustment table of loss provision of the financial asset classified in accordance with the revised New Standards for Financial Instruments:

Category of measurement	Provision for loss under the Old Standards for Financial Instruments	Remeasurement	Provision for loss under the New Standards for Financial Instruments
Accounts receivable	1,529,308,221	111,908,301	1,641,216,522
Other receivables	234,115,521	1,497,196	235,612,717
	1,763,423,742	113,405,497	1,876,829,239

In addition, the Group's significant associate, CCCC Financial Leasing Co., Ltd., implemented the New Standards for Financial Instruments and re-measure the provision for loss of RMB 51,750,784, and the Group accordingly adjusted the beginning undistributed profit of RMB 15,525,235 at 30% of its shareholding.

Changes in presentation methods of financial statements

In 2019, the Ministry of Finance promulgated the Circular on Issuing the Amended General Corporate Financial Statement Templates for Year 2019 (CK[2019] No.6) and the Circular on Revising and Issuing the Consolidated Financial Statement Templates (2019 Version) (CK[2019] No.16), in the balance sheet, the "notes receivable and accounts receivable" are separately presented as "notes receivable" and "accounts receivable", while the "notes payable and accounts payable" are separately presented as "notes payable" and "accounts payable", and the Group conducts retroactive adjustments over the comparison data. The change of accounting policy has no effect on the consolidated and the Company's net profit and owner's equity. In addition, with the implementation of the New Standards for Financial Instruments this year, in accordance with the requirements of the Circular on the Revision of the Format for the Issuance of General Corporate Financial Statements for Year 2019 (CK [2019] No.6), "interest receivable" in the item "other receivables" was changed to the interest due and receivable on the relevant financial instruments but not yet received on the balance sheet date, and "interest payable" in the item "other payables" was changed to the interest due and payable on the relevant financial instruments

but not yet paid on the balance sheet date, without retroactively adjusting the comparative data in accordance with the convergence provisions of the New Standards for Financial Instruments.

The major impact of retrospective adjustments caused by the above changes in accounting policies on the financial statements is as follows:

The Group

	Before the accounting policy changes	Changes in accounting policies		After the accounting policy changes
	Balance as at December 31, 2018	Impact of New Standards for Financial Instruments	Impact of changes in presentation methods of other financial statements	Balance as at January 1, 2019
Financial assets measured at fair value through the current profit or loss	52,920,084	(52,920,084)	-	-
Financial assets held for trading	-	1,224,459,478	-	1,224,459,478
Notes receivable and accounts receivable	5,221,919,846	(162,148,105)	(5,059,771,741)	-
Notes receivable	-	-	27,223,000	27,223,000
Accounts receivable	-	(111,908,301)	5,032,548,741	4,920,640,440
Receivables financing	-	162,148,105	-	162,148,105
Other receivables	1,149,035,349	(1,497,196)	-	1,147,538,153
Available-for-sale financial assets	1,214,533,554	(1,214,533,554)	-	-
Other equity instruments	-	55,326,529	-	55,326,529
Long-term equity investments	2,775,801,760	(15,525,235)	-	2,760,276,525
Deferred income tax assets	539,684,925	11,278,182	-	550,963,107
Notes payable and accounts payable	(9,769,273,923)	-	9,769,273,923	-
Notes payable	-	-	(2,732,404,222)	(2,732,404,222)
Accounts payable	-	-	(7,036,869,701)	(7,036,869,701)
Other comprehensive income	(223,853,860)	216,130,221	-	(7,723,639)
Undistributed profits	(3,344,953,206)	(119,821,864)	-	(3,464,775,070)
Minority equity	(2,426,634,780)	9,011,824	-	(2,417,622,956)

The Company

	Before the accounting policy changes	Changes in accounting policies		After the accounting policy changes
	Balance as at December 31, 2018	Impact of New Standards for Financial Instruments	Impact of changes in presentation methods of other financial statements	Balance as at January 1, 2019
Financial assets measured at fair value through the current profit or loss	44,481,806	(44,481,806)	-	-
Financial assets held for trading	-	146,645,109	-	146,645,109
Notes receivable and accounts receivable	7,212,568,840	(75,801,953)	(7,136,766,887)	-
Accounts receivable	-	(74,767,027)	7,136,766,887	7,061,999,860

	Before the accounting policy changes	Changes in accounting policies		After the accounting policy changes
	Balance as at December 31, 2018	Impact of New Standards for Financial Instruments	Impact of changes in presentation methods of other financial statements	Balance as at January 1, 2019
Receivables financing	-	75,801,953	-	75,801,953
Other receivables	13,955,146,640	(222,894)	-	13,954,923,746
Available-for-sale financial assets	145,157,462	(145,157,462)	-	-
Other equity instruments	-	55,326,529	-	55,326,529
Long-term equity investments	8,636,018,724	(15,525,235)	-	8,620,493,489
Deferred income tax assets	510,532,925	9,398,632	-	519,931,557
Notes payable and accounts payable	(8,860,350,035)	-	8,860,350,035	-
Notes payable	-	-	(2,533,542,476)	(2,533,542,476)
Accounts payable	-	-	(6,326,807,559)	(6,326,807,559)
Other comprehensive income	(71,258,509)	66,945,426	-	(4,313,083)
Undistributed profits	(3,520,430,440)	1,838,728	-	(3,518,591,712)

IV. Taxation

1 Major tax types and tax rates

Tax	Taxation basis	Tax rate
VAT	-	VAT is applicable to the sales of the Group's products, among which the taxable income from the sales of the products in domestic market is subject to the output tax as per 16% before April 1, 2019 and 13% from April 1, 2019 on; The products for export adopt the method of "tax exemption, tax deduction and tax reimbursement" and the applicable tax rate is 13% (before April 1, 2019: 16%, 15% and 13%). The Group's income from the marine transport is applicable to VAT, and the output tax is calculated as per 10% of the taxable income before April 1, 2019 and 9% from April 1, 2019 on; the income from leasing of the equipment is applicable to VAT and the output tax is calculated as per 16% of the taxable income before April 1, 2019 and 13% from April 1, 2019 on; the income from the sales of the equipment is applicable to the simple collection measures of VAT and the tax rate is subject to the reduced tax rate of 2%; the Group's income from the leasing of the housing is applicable to the simple collection measures of VAT and the tax rate is 5%; the item "B-T" is applicable to VAT and the output tax on the taxable income is collected at 10% before April 1, 2019 and 9% from April 1, 2019 on. The above output tax shall calculate and pay VAT after deducting the amount of input tax deductible, except for the applicable VAT's simple collection method.
Urban maintenance and construction tax and education surtax	-	should be calculated and paid according to 7% and 3% of the actual turnover tax paid.
Enterprise income tax	-	is calculated and paid in accordance with the Enterprise Income Tax Law of People's Republic of China (hereinafter referred to as the "Income Tax Law"). In accordance with relevant regulations in the Administrative Measures for Certification of New and High Technology Enterprises (GKFH [2016] No.32), the Guidelines for the Administration of Qualification Accreditation of High-tech Enterprises (GKFH [2016] No.195), and the Circular on Announcing the Recognition List of the Second Batch of High-tech Enterprises of Shanghai in 2017, the Company was awarded the High-tech Enterprise Certificate (Certificate Number: GR201831002345) with the valid term of 3 years. The Company actually applied the enterprise income tax rate of 15% this year (2018: 15%).

Enterprise income tax rates applicable to the Company and holding subsidiaries are as follows:

	Registration place	Year 2019 Applicable tax rate	Year 2018 Applicable tax rate
the Company	Pudong New Area, Shanghai	15%	15%
Shanghai Zhenhua Port Machinery Heavy Industries Co., Ltd.	Chongming District, Shanghai	25%	25%
Shanghai Zhenhua Port Machinery (Hong Kong) Co., Ltd. (Remark 1)	Hong Kong	16.5%	16.5%
Shanghai Zhenhua Shipping Co., Ltd.	Pudong New Area, Shanghai	25%	25%
Nantong Zhenhua Heavy Equipment Manufacturing Co., Ltd.	Nantong, Jiangsu Province	25%	25%
Shanghai Zhenhua Heavy Industries Group (Nantong) Transmitter Co., Ltd. (Remark 2)	Nantong, Jiangsu Province	15%	15%
ZPMC Electric Co., Ltd. (Remark 2)	Pudong New Area, Shanghai	15%	15%
Jiangyin Zhenhua Port Machinery Steel Structure Manufacturing Co., Ltd.	Jiangyin, Jiangsu Province	25%	25%
ZPMC Steel Structure Co., Ltd. (Remark 3)	Pudong New Area, Shanghai	Canceled	25%
Shanghai Zhenhua Ocean Engineering Service Co., Ltd.	Yangshan, Shanghai Bonded Port Area	25%	25%
ZPMC Machinery Equipment Services Co., Ltd.	Pudong New Area, Shanghai	25%	25%
Shanghai Zhenhua Heavy Industries Port Machinery General Equipment Co., Ltd.	Pudong New Area, Shanghai	25%	25%
Shanghai Port Machinery Heavy Industries Co., Ltd.	Pudong New Area, Shanghai	25%	25%
ZPMC Zhangjiagang Port Machinery Co., Ltd.	Port Area, Jingang Town, Jiangsu Province	25%	25%
ZPMC Qidong Marine Engineering Co., Ltd.	Nantong, Jiangsu Province	25%	25%
Jiahua Shipping Co., Ltd. (Remark 1)	Hong Kong	16.5%	16.5%
Zhenhua Pufeng Wind Energy (HongKong) Co., Ltd.	Hong Kong	16.5%	16.5%
Tianhe Mechanical Equipment Manufacturing Co., Ltd of CCCC (Remark 2)	Changshu, Jiangsu Province	15%	15%
Fujian CCCC Qianda Heavy Industries Co., Ltd. (Remark 3)	Fuzhou, Fujian Province	Canceled	25%
Nanjing Ninggao New Channel Construction Co., Ltd.	Nanjing, Jiangsu Province	25%	25%
CCCC Investment & Development Qidong Co., Ltd.	Nantong, Jiangsu Province	25%	25%
CCCC Liyang Urban Investment and Construction Co., Ltd.	Liyang, Jiangsu Province	25%	25%
CCCC (Huai'an) Construction Development Co., Ltd.	Huai'an, Jiangsu Province	25%	25%
CCCC Zhenjiang Investment Construction Management Development Co., Ltd.	Zhenjiang, Jiangsu Province	25%	25%
CCCC Rudong Construction Development Co., Ltd.	Nantong, Jiangsu Province	25%	25%
ZPMC Netherlands Coöperatie U.A.	Rotterdam, Netherlands	20%	20%
ZPMC Netherlands B.V.	Rotterdam, Netherlands	20%	20%

	Registration place	Year 2019 Applicable tax rate	Year 2018 Applicable tax rate
Verspannen B.V.	Rotterdam, Netherlands	20%	20%
ZPMC Espana S.L.	Los Valios, Spain	28%	28%
ZPMC GmbH Hamburg	Hamburg, Germany	32.28%	32.28%
ZPMC Lanka Company (Private) Limited	Colombo, Sri Lanka	17.50%	17.50%
ZPMC North America Inc.	Delaware, USA	15%	15%
ZPMC Korea Co., Ltd.	Busan, Korea	20%	20%
ZPMC Engineering Africa (Pty) Ltd.	KwaZulu-Natal, Republic of South Africa	28%	28%
ZPMC Engineering (India) Private Limited	Maharashtra, India	30%	30%
ZPMC Southeast Asia Holding Pte. Ltd.	Singapore	17%	17%
ZPMC Engineering (Malaysia) Sdn. Bhd.	Malaysia	20%	20%
ZPMC Australia Company (Pty) Ltd.	State of New South Wales Australia	30%	30%
ZPMC Brazil Serviço Portuários LTDA	Rio de Janeiro, Brazil	25%	25%
ZPMC Limited Liability Company	Moscow, Russia	20%	20%
ZPMC NA East Coast Inc.	Delaware, USA	15%	15%
ZPMC Middle East FZE	Dubai, UAE	0%	0%
ZPMC UK LD	Cardiff, UK	20%	20%
Greenland Heavylift (Hong Kong) Limited (Remark 1)	Hong Kong	16.5%	16.5%
GPO Grace Limited	Marshall Islands	0%	0%
GPO Amethyst Limited	Marshall Islands	0%	0%
GPO Grace Limited	Marshall Islands	0%	0%
GPO Sapphire Limited	Marshall Islands	0%	0%
GPO Emerald Limited	Marshall Islands	0%	0%
GPO Heavylift Limited	Cayman Island	0%	0%
GPO Heavylift AS	Oslo, Norway	0%	0%
GPO Heavylift Pte Ltd	Singapore	17%	17%
ZPMC Latin America Holding Corporation	Panama	25%	25%
Terminexus Co., Ltd.	Hong Kong	16.5%	16.5%
CCCC Yongjia Construction Development Co., Ltd.	Wenzhou, Zhejiang Province	25%	25%
CCCC Zhenhua Lujian Technology (Ningbo) Co., Ltd.	Ningbo, Zhejiang Province	25%	25%
ZPMC Hotel Co., Ltd.	Pudong New Area, Shanghai	25%	25%
Xiong'an Zhenhua Co., Ltd.	Baoding, Hebei Province	25%	Not Applicable
ZPMC Fuzhou Offshore Construction Co., Ltd.	Fuzhou, Fujian Province	25%	Not Applicable
CCCC (Dongming) Investment and Construction Co., Ltd.	Heze, Shandong Province	25%	Not Applicable

Remark 1: Shanghai Zhenhua Port Machinery (Hong Kong) Co., Ltd., Jiahua Shipping Co., Ltd. and Greenland Heavylift (Hong Kong) Limited are the limited liability companies registered in Hong Kong, China. According to the taxation regulations of Hong Kong, the actual applicable income tax rate for such companies is 16.5% (2018: 16.5%).

Remark 2: Shanghai Zhenhua Heavy Industries Group (Nantong) Heavy Gear Reducer Co., Ltd won the Hi-tech Enterprise Certificate (No. GR201732001352) in 2017, with the valid term of 3 years. Shanghai Zhenhua Heavy Industries Electric Co., Ltd was recognized as a hi-tech enterprise in November, 2017 and won the Hi-tech Enterprise Certificate (No.: GR201831003143) with the valid term of 3 years. CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd. was recognized as hi-tech enterprise in August, 2015 and won the Hi-tech Enterprise Certificate (No. GR201832001451) after reexamination in 2018, with the valid term of 3 years. In accordance with relevant provisions in Article 28 of the Income Tax Law, the actually applicable enterprise income tax rate for these companies in this year was 15% (2018: 15%).

Remark 3: Fujian CCCC Qinda Heavy Industries Co., Ltd. and Shanghai ZPMC Steel Structure Co., Ltd. had been canceled in this year and the applicable income tax rate was 25% (2017: 25%) before cancellation.

V. Notes to the main items of the consolidated financial statements

1 Monetary funds

	Year 2019	Year 2018
Cash on hand	1,469,655	1,569,455
Bank deposits	3,066,555,321	3,147,417,917
Other monetary funds	242,272,475	548,351,336
	3,310,297,451	3,697,338,708

As at December 31, 2019, the other monetary funds, including the restricted deposit of RMB 242,272,475 (as at December 31, 2018: RMB 548,351,336), were the money appropriated that was collected from the overseas projects and deposited in the overseas regulatory accounts and the cash deposit deposited for application to the bank for the letter of credit and letter of guarantee.

As at December 31, 2019,, the overseas monetary fund deposited by the Group was RMB 888,185,684 (Dec, 31, 2018: RMB 998,711,134).

As at December 31, 2019, the bank deposits were current deposits. The interest income from current deposits are calculated as per the interest rate of the current deposits.

2 Financial assets held for trading

		Year 2019
Financial assets measured at fair value through the current profit or loss		
Equity instrument investment	(i)	8,438,278
Investments in shares of listed companies	(ii)	1,709,118,540
Derivative financial assets	(iii)	22,235,244
		1,739,792,062

(i) As at December 31, 2019, the financial assets held for trading - equity instrument investment held by the Group refers to the fair value of the right obtained at the of acquiring Greenland Heavylift (Hong Kong) Limited to purchase 1% of its equity of at the price of USD 1.

(ii) as at December 31, 2019, the listed company share investments held by the Group include 5.9% equity of Jiangxi Huawu Brake Co., Ltd., 1.59% equity of Qingdao Port International Co., Ltd., 1.40% equity of CRSC, 0.91% equity of COSCO Shipping Holdings Co., Ltd. and 0.001% equity of Shenwan Hongyuan Group Co., Ltd.

(iii) As at December 31, 2019, the financial assets held for trading-derivative financial assets held by the Company were the exchange option contracts, which was signed but not yet due by and between the Group and the banks, and could change EUR and GBP with RMB.

The contract will fall due from March 6, 2020 to July 16, 2020. The gains or losses from the evaluation of the fair value of the above-mentioned foreign exchange option contracts at the end of the year was the amount confirmed by the trading banks.

3 Financial assets measured at fair value through the current profit or loss (only applicable in 2018)

		Year 2018
Financial assets measured at fair value through the current profit or loss		
Equity instrument investment	(i)	8,438,278
Derivative financial assets	(ii)	44,481,806
		52,920,084

(i) As at December 31, 2018, the financial assets held for trading - equity instrument investment held by the Company refers to the fair value of the right obtained at the of acquiring Greenland Heavylift (Hong Kong) Limited to purchase 1% of its equity of at the price of USD 1.

(ii) As at December 31, 2018, the financial assets held for trading-derivative financial assets held by the Company were the forward exchange contracts, which was signed by and between the Company and the banks, was not due and could change USD with Ruble. The contract will fall due from Jan. 15, 2019 to Oct. 15, 2019. The evaluation of the fair value of the above-mentioned forward foreign exchange contracts at the end of the year was the amount confirmed by the trading banks.

4 Notes receivable

	Year 2019	Year 2018
Bank acceptance bill	-	162,148,105
Commercial acceptance bill	5,650,000	27,223,000
	5,650,000	189,371,105

Among which, the notes receivable that have been pledged are as follows:

	Year 2018
Bank acceptance bill	31,522,267

As at December 31, 2018, RMB 31,522,267 of the notes receivable were pledged to the bank as the pledge guarantee for the new bank acceptance bill.

Notes receivable that had been endorsed or discounted and not matured on the balance sheet date are as follows:

	Year 2018	
	Amount derecognized	Amount not derecognized
Bank acceptance bill	364,908,608	

5 Accounts receivable

Aging analysis of accounts receivable is as follows:

	Year 2019	Year 2018
Within 6 months	3,063,448,478	2,820,815,043
7 - 12 months	677,893,786	1,156,520,162
1- 2 years	723,009,434	617,093,331
2- 3 years	449,964,072	546,723,258
3- 4 years	469,520,662	215,731,038
4- 5 years	193,784,143	106,965,760
Over 5 years	1,066,006,789	1,098,008,370
	6,643,627,364	6,561,856,962
Less: Provision for bad debts of accounts receivable	1,677,451,836	1,529,308,221
	4,966,175,528	5,032,548,741

Changes in the provision for bad debts of accounts receivable are as follows:

	Balance as at December 31, 2018	Adjustments for changes in accounting policies	Balance as at January 1, 2019	Provision in 2019	Reversal in 2019	Balance as at December 31, 2019
Year 2019	1,529,308,221	111,908,301	1,641,216,522	206,632,546	(170,397,232)	1,677,451,836
Year 2018	1,335,401,780	-	1,335,401,780	395,007,065	(201,100,624)	1,529,308,221

	Year 2019			
	Book balance		Provision for bad debts	
	Amount	Proportion (%)	Amount	Proportion of provision (%)
Provision for bad debts accrued on an individual basis	753,396,385	11	591,042,385	78
Accounts receivable with provision for bad debts accrued by credit risk features portfolio	5,890,230,979	89	1,086,409,451	18
	6,643,627,364	100	1,677,451,836	

	Year 2018			
	Book balance		Provision for bad debts	
	Amount	Proportion (%)	Amount	Proportion of provision (%)
Accounts receivables with individually significant amount and individual provision for bad debts	588,585,831	9	440,054,331	75
Accounts receivable with provision for bad debts accrued by credit risk features portfolio				
- Related party	1,400,155,614	21	-	-
- Non-related party	4,447,868,116	68	964,006,489	22
Accounts receivables with individually insignificant amount and individual provision for bad debts	125,247,401	2	125,247,401	100
	6,561,856,962	100	1,529,308,221	

As at December 31, 2019, the accounts receivables with individual provision for bad debts are as follows:

	Book balance	Provision for bad debts	Estimated credit loss ratio %	Reason for provision
Accounts receivable 1	324,708,000	162,354,000	50	Counterparty financial shortage
Accounts receivable 2	182,958,900	182,958,900	100	Contract dispute
Accounts receivable 3	158,184,500	158,184,500	100	Counterparty financial shortage
Accounts receivable 4	27,904,870	27,904,870	100	Contract dispute
Accounts receivable 5	26,911,147	26,911,147	100	Contract dispute
Accounts receivable 6	10,748,869	10,748,869	100	Contract dispute
Accounts receivable 7	7,815,500	7,815,500	100	Contract dispute

	Book balance	Provision for bad debts	Estimated credit loss ratio %	Reason for provision
Accounts receivable 8	7,463,174	7,463,174	100	Contract dispute
Accounts receivable 9	3,582,135	3,582,135	100	Contract dispute
Accounts receivable 10	2,224,013	2,224,013	100	Contract dispute
Accounts receivable 11	895,277	895,277	100	Contract dispute
	753,396,385	591,042,385		

As at December 31, 2018, accounts receivable with individually significant amount and individual provision for bad debts are as follows:

	Book balance	Provision for bad debts	Proportion of provision%	Reason for provision
Accounts receivable 1	297,063,000	148,531,500	50	Contract dispute
Accounts receivable 2	183,703,331	183,703,331	100	Contract dispute
Accounts receivable 3	107,819,500	107,819,500	100	Counterparty financial shortage
	588,585,831	440,054,331		

As at December 31, 2018, accounts receivable with individually insignificant amount and individual provision for bad debts are as follows:

	Book balance	Provision for bad debts	Proportion of provision%	Reason for provision
Accounts receivable 1	50,365,000	50,365,000	100	Counterparty financial shortage
Accounts receivable 2	27,452,868	27,452,868	100	Contract dispute
Accounts receivable 3	14,854,467	14,854,467	100	Contract dispute
Accounts receivable 4	10,792,605	10,792,605	100	Contract dispute
Accounts receivable 5	7,847,300	7,847,300	100	Contract dispute
Accounts receivable 6	7,342,286	7,342,286	100	Contract dispute
Accounts receivable 7	3,524,112	3,524,112	100	Contract dispute
Accounts receivable 8	2,187,988	2,187,988	100	Contract dispute
Accounts receivable 9	880,775	880,775	100	Contract dispute
	125,247,401	125,247,401		

The accounts receivable with provision for bad debts made by the aging analysis method by the Group (2018: accounts receivable of non-related parties) are as follows:

	Year 2019			Year 2018		
	Book balance of estimated default	Estimated creditloss ratio (%)	In the whole duration Expected credit loss	Book balance	Proportion (%)	Provision for bad debts
Within 6 months	3,055,684,559	2	74,664,884	1,801,135,202	-	-
7 - 12 months	669,859,386	2	16,367,846	879,500,972	1	8,795,010
1 - 2 years	602,231,607	13	80,579,861	547,403,660	15	82,110,549
2 - 3 years	449,964,072	20	89,520,636	333,225,101	30	99,967,530
3 - 4 years	246,662,162	29	70,797,046	188,508,451	50	94,254,225



	Year 2019			Year 2018		
	Book balance of estimated default	Estimated creditloss ratio (%)	In the whole duration Expected credit loss	Book balance	Proportion (%)	Provision for bad debts
4 - 5 years	175,572,099	68	119,983,513	76,862,217	75	57,646,662
Over 5 years	690,257,094	92	634,495,665	621,232,513	100	621,232,513
	5,890,230,979		1,086,409,451	4,447,868,116		964,006,489

As at December 31, 2019, top 5 accounts receivable in terms of ending balance presented by debtor summarized and analyzed as follows:

	Balance	Provision for bad debts	Proportion in total balance of accounts receivable %
Total accounts receivable of Top 5 balances	1,305,425,250	367,432,657	20

As at December 31, 2018, top 5 accounts receivable in terms of ending balance presented by debtor summarized and analyzed as follows:

	Balance	Provision for bad debts	Proportion in total balance of accounts receivable %
Total accounts receivable of Top 5 balances	1,214,312,641	450,959,592	19

6 Receivables financing

	Year 2019
Bank acceptance bill	406,408,604

Notes receivable that had been endorsed or discounted and not matured on the balance sheet date are as follows:

	Year 2019	
	Amount derecognized	Amount not derecognized
Bank acceptance bill	738,496,754	

7 Advances to suppliers

Aging analysis of advances to suppliers is as follows:

	Year 2019		Year 2018	
	Book balance	Proportion (%)	Book balance	Proportion (%)
Within 1 year	603,532,662	64	1,438,324,530	86
1- 2 years	267,030,956	29	165,247,645	10
2- 3 years	54,362,644	6	36,491,651	2
Over 3 years	10,952,515	1	41,123,889	2
	935,878,777	100	1,681,187,715	100

As at December 31, 2019, the advances to suppliers of the Company with the aging over one year was RMB 332,346,115 (as at December 31, 2018: RMB 242,863,185), mainly the advances to suppliers for the procurement of imported parts, which has not been yet settled because the purchased imported parts have not yet received.

As at December 31, 2019, top 5 advances to suppliers in terms of ending balance presented by debtor summarized and analyzed as follows:

	Amount	Proportion in total advances to suppliers %
Total advances to suppliers of Top 5 balances	354,954,218	38

As at December 31, 2018, top 5 advances to suppliers in terms of ending balance presented by debtor summarized and analyzed as follows:

	Amount	Proportion in total advances to suppliers %
Total advances to suppliers of Top 5 balances	784,431,874	47

8 Other receivables

	Year 2019	Year 2018
Dividends receivable	1,072,390	-
Other receivables	1,413,628,114	1,383,150,870
	1,414,700,504	1,383,150,870
Less: provision for bad debts	238,138,996	234,115,521
	1,176,561,508	1,149,035,349

Dividends receivable

	Year 2019	Year 2018
CCCC Nanjing Traffic Engineering Management Co., Ltd.	1,072,390	

Other receivables

Aging analysis of other receivables as follows:

	Year 2019	Year 2018
Within 6 months	834,207,637	529,041,752
7 - 12 months	64,478,205	309,480,502
1- 2 years	205,383,218	486,706,719
2- 3 years	283,616,575	38,707,919
3- 4 years	13,234,072	348,759
4- 5 years	326,683	4,178,886
Over 5 years	12,381,724	14,686,333
Sub-total	1,413,628,114	1,383,150,870
Less: Provision for bad debts of other receivables	238,138,996	234,115,521
	1,175,489,118	1,149,035,349

Classification of other receivables by nature is as follows:

	Year 2019	Year 2018
Unpaid taxes receivable	375,987,305	361,289,603
Bid and performance bond	291,599,548	389,218,822
Export rebates	214,352,290	43,627,838
Secured repayment	164,124,678	164,124,678
Advance payment receivable on behalf of the third party	95,480,544	108,068,254
Money on call for product field service	43,035,827	58,832,432
Customs-related security deposit	38,241,878	63,341,536
Lease payment receivable	33,434,668	33,434,668
Staff borrowings receivable	23,557,060	28,506,262
Deposit receivable	2,946,042	5,345,585
Others	130,868,274	127,361,192
	1,413,628,114	1,383,150,870

As at December 31, 2019, the provision for bad debts of other receivables in accordance with 12-month expected credit loss and the expected credit loss in the whole duration is as follows:

	Stage I	Stage II	Stage III	Total
	Expected credit losses in the future 12 months	Expected credit losses for the entire duration	Financial assets with credit impairment (Expected credit losses in the whole duration)	
Beginning balance	-	9,597,790	226,014,927	235,612,717
Provision in the current year	-	828,261	6,235,629	7,063,890
Reversal in the current year	-	(715,144)	(3,822,467)	(4,537,611)
Ending balance	-	9,710,907	228,428,089	238,138,996

Changes in the provision for bad debts of other receivables are as follows:

	Beginning balance	Provision in the current year	Reversal in the current year	Write-off in the current year	Ending balance
Year 2018	377,838,841	6,603,888	(150,327,208)	-	234,115,521

	Year 2018			
	Book balance		Provision for bad debts	
	Amount	Proportion (%)	Amount	Proportion of provision (%)
Accounts receivables with individually significant amount and individual provision for bad debts	218,557,893	16	209,985,645	96
Accounts receivable with provision for bad debts accrued by credit risk features portfolio				
- Security deposit (excluding quality guarantee deposit)	457,905,944	33	-	-
- Employee borrowings and reserve funds	87,338,694	6	-	-
Others	603,319,057	44	8,100,594	1
Accounts receivables with individually insignificant amount and individual provision for bad debts	16,029,282	1	16,029,282	100
	1,383,150,870	100	234,115,521	

As at December 31, 2018, other receivables with individually significant amount and individual provision for bad debts are as follows:

	Book balance	Provision for bad debts	Proportion of provision%	Reason for provision
Other receivables 1	164,124,678	164,124,678	100	Counterparty financial shortage
Other receivables 2	54,433,215	45,860,967	84	Contract dispute
	218,557,893	209,985,645	96	

As at December 31, 2018, other receivables with the provisions for bad debt made by aging analysis method are as follows:

	Year 2018		
	Book balance		Provision for bad debts
	Amount	Proportion (%)	Amount
Within 6 months	592,643,053	-	-
7 - 12 months	1,630,497	1	16,306

	Year 2018		
	Book balance		Provision for bad debts
	Amount	Proportion (%)	Amount
1 - 2 years	790,426	15	118,564
2 - 3 years	110,592	30	33,178
3 - 4 years	348,735	50	174,367
4 to 5 years	150,304	75	112,729
Over 5 years	7,645,450	100	7,645,450
	603,319,057		8,100,594

As at December 31, 2018, other receivables with individually insignificant amount and individual provision for bad debts are as follows:

	Book balance	Provision for bad debts	Proportion of provision%	Reason for provision
Other receivables 1	4,214,642	4,214,642	100	Bankruptcy of the opposite side
Other receivables 2	3,037,042	3,037,042	100	Contract cancellation
Other receivables 3	1,692,765	1,692,765	100	Contract cancellation
Other receivables 4	1,539,600	1,539,600	100	Contract cancellation
Other receivables 5	1,170,282	1,170,282	100	Contract cancellation
Others	4,374,951	4,374,951	100	Contract cancellation
	16,029,282	16,029,282		

As at December 31, 2019, top five other receivables are as follows:

	Ending balance	Proportion in the total balance of other receivables(%)	Nature	Aging	Balance of provision for bad debts at the end of the year
Other receivables 1	164,124,678	12	Secured repayment	2 - 3 years	164,124,678
Other receivables 2	75,500,000	5	Performance bond	1-2 years/ 2-3 years	-
Other receivables 3	54,433,215	4	Advance payment	3 - 4 years	52,096,596
Other receivables 4	48,615,639	3	Performance bond	2 - 3 years	-
Other receivables 5	37,741,878	3	Customs-related security deposit	Within 1 year	-
	380,415,410	27			216,221,274

As at December 31, 2018, top five other receivables are as follows:

	Ending balance	Proportion in the total balance of other receivables(%)	Nature	Aging	Balance of provision for bad debts at the end of the year
Other receivables 1	176,800,000	13	Performance bond	1 - 2 years	-
Other receivables 2	164,124,678	12	Secured repayment	1 - 2 years	164,124,678
Other receivables 3	75,500,000	5	Performance bond	Within 1 year/ 1 - 2 years	-
Other receivables 4	63,341,536	5	Customs-related security deposit	Within 1 year	-
Other receivables 5	54,433,215	4	Advance payment	2 - 3 years	45,860,967
	534,199,429	39			209,985,645

9 Inventories

	Year 2019			Year 2018		
	Book balance	Provision for depreciation	Book value	Book balance	Provision for depreciation	Book value
Raw materials and outsourced parts and components	3,370,311,931	76,456,971	3,293,854,960	2,834,989,507	98,418,559	2,736,570,948
Goods in process	5,907,300,381	644,261,453	5,263,038,928	7,141,481,861	1,082,734,687	6,058,747,174
Stock commodities	4,357,692	-	4,357,692	7,717,820	-	7,717,820
	9,281,970,004	720,718,424	8,561,251,580	9,984,189,188	1,181,153,246	8,803,035,942

The goods in process of the Group are marine heavy equipment products and spare parts that have been under construction with no sales orders signed.

Changes in the provision for inventory depreciation are as follows:

Year 2019

	Decrease in the current year			
	Amount at the beginning of the current year	Provision in the current year	Reversal or write-off	Ending balance
Raw materials and outsourced parts and components	98,418,559	5,028,021	(26,989,609)	76,456,971
Goods in process	1,082,734,687	162,242,348	(600,715,582)	644,261,453
	1,181,153,246	167,270,369	(627,705,191)	720,718,424

Year 2018

	Decrease in the current year			
	Amount at the beginning of the current year	Provision in the current year	Reversal or write-off	Ending balance
Raw materials and outsourced parts and components	78,519,214	55,128,654	(35,229,309)	98,418,559
Goods in process	1,516,893,869	42,157,991	(476,317,173)	1,082,734,687
Stock commodities	11,153,985	-	(11,153,985)	-
	1,606,567,068	97,286,645	(522,700,467)	1,181,153,246

Provision for inventory depreciation is as follows:

	Specific basis for determination of net realizable values	Reasons for provision for depreciation of inventories reversed or written-off in the current year
Raw materials and outsourced parts and components	Product price fall results in raw materials and outsourced parts and components Difference between the net realizable value and its book value	Value recovery or external sales
Goods in process	Difference between the net realizable value and the book value of goods in process	Value recovery

10 Outstanding payments for construction completed / Amount settled for uncompleted work

Outstanding payments for construction completed

	Year 2019	Year 2018
Accumulatively incurred costs	60,202,923,502	52,716,364,109
Plus: Gross profit accumulatively recognized	7,212,427,731	4,645,085,079

	Year 2019	Year 2018
Less: Accumulative settled payment	54,922,301,010	45,104,303,070
Estimated contract losses accumulatively recognized	58,891,599	202,565,726
	12,434,158,624	12,054,580,392

Amount settled for uncompleted work

	Year 2019	Year 2018
Accumulative settled payment	15,658,827,123	10,482,414,050
Less: Gross profit accumulatively recognized	799,740,462	838,321,038
Accumulatively incurred costs	13,230,003,217	7,719,913,531
Plus: Estimated contract losses accumulatively recognized	50,867,435	65,381,406
	1,679,950,879	1,989,560,887

Estimated contract losses

Year 2019	Beginning balance	Increase in the current year	Decrease in the current year	Ending balance
Outstanding payments for construction completed	202,565,726	96,978,421	(240,652,548)	58,891,599
Amount settled for uncompleted work	65,381,406	52,327,602	(66,841,573)	50,867,435
	267,947,132	149,306,023	(307,494,121)	109,759,034

Year 2018	Beginning balance	Increase in the current year	Decrease in the current year	Ending balance
Outstanding payments for construction completed	167,373,950	211,730,653	(176,538,877)	202,565,726
Amount settled for uncompleted work	122,353,724	66,003,010	(122,975,328)	65,381,406
	289,727,674	277,733,663	(299,514,205)	267,947,132

As at December 31, 2019, the total contract amount of the construction contract still under construction (excluding VAT) was about RMB 28,553,084,908 (as at December 31, 2018: RMB 31,234,014,562).

Total amount of possible penalties for failure to fulfill the obligations as contracted:

	Year 2019	Year 2018
Valid letter of guarantee signed by the bank	11,500,477,841	12,425,695,774
Letter of guarantee not signed by the bank	7,293,181,242	5,601,715,384
	18,793,659,083	18,027,411,158

11 Non-current assets maturing within one year

	Year 2019	Year 2018
ong-term receivables maturing within one year (See Note V (14))	1,313,203,581	894,638,424

12 Other current assets

	Year 2019	Year 2018
Input tax to be deducted	704,526,288	1,145,606,901
Prepaid income tax	15,657,286	6,869,538
	720,183,574	1,152,476,439

13 Available-for-sale financial assets (only applicable in 2018)

	Year 2018		
	Book balance	Provision for impairment	Book value
Available-for-sale equity instruments			
Measured at fair value	1,171,539,394	-	1,171,539,394
Measured at cost	72,994,160	30,000,000	42,994,160
	1,244,533,554	30,000,000	1,214,533,554

Available-for-sale financial assets measured at fair value:

	Year 2018
Cost of available-for-sale equity instruments	937,641,194
Changes in fair value accumulatively included in other comprehensive income	233,898,200
Fair value	1,171,539,394

(i) As at December 31, 2018, the Group held 5.9% of equity of Jiangxi Huawu Brake Co., Ltd., and the investment costs amounted to RMB 11,071,606.

The fair value of the available-for-sale equity instruments shall be determined in accordance with the closing price of the last trading day of the Shenzhen Stock Exchange in the year. As at December 31, 2018, the Company accumulatively recognized the income from the available-for-sale equity instruments amounting to RMB 91,091,695 which would be included in other comprehensive income.

(ii) As at December 31, 2018, the Group held 1.59% of equity of Qingdao Port International Co., Ltd., and the investment costs amounted to RMB 308,515,588.

The fair value of the available-for-sale equity instruments shall be determined in accordance with the closing price of the last trading day of the Stock Exchange of Hong Kong in the year. As at December 31, 2018, the Company accumulatively recognized the income from the available-for-sale equity instruments amounting to RMB 168,197,665 which would be included in other comprehensive income.

(iii) As at December 31, 2018, the Group held 1.40% of equity of CRSC and the investment costs amounted to RMB 617,854,000.

The fair value of the available-for-sale equity instruments shall be determined in accordance with the closing price of the last trading day of the Stock Exchange of Hong Kong in the year. As at December 31, 2018, the Company accumulatively recognized the losses from the available-for-sale equity instruments amounting to RMB 26,080,952 which would be included in other comprehensive income.

(iv) As at December 31, 2018, the Group held 1.59% of equity of Shenwan Hongyuan Group Co., Ltd. The investment costs amounted to RMB 200,000, and the shareholding ratio was less than 0.01%.

The fair value of the available-for-sale equity instruments shall be determined in accordance with the closing price of the last trading day of the Shenzhen Stock Exchange in the year. As at December 31, 2018, the Company accumulatively recognized the income from the available-for-sale equity instruments amounting to RMB 689,792 which would be included in other comprehensive income.

Available-for-sale financial assets measured at cost:

Year 2018

	Book balance					
	At the beginning of the year	Increase in the current year	Decrease in the current year	At the end of the year	Shareholding ratio (%)	Cash dividends in the current year
21st Century Science and Technology Investment Co., Ltd.	30,000,000	-	-	30,000,000	8.96	-
CCCC Highway Bridges National Engineering Research Centre Co., Ltd.	13,000,000	-	-	13,000,000	10	-

	Book balance					
	At the beginning of the year	Increase in the current year	Decrease in the current year	At the end of the year	Shareholding ratio (%)	Cash dividends in the current year
CCCC National Engineering Research Center of Dredging Technology and Equipment Co., Ltd.	6,400,000	-	-	6,400,000	3.2	-
Shanghai Zhenhua Gangkou Machine (Group) Longchang Lifting Equipment Co., Ltd.	800,000	-	-	800,000	10	-
Shanghai Zhenhua Port Machinery (Group) Shenyang Elevator Co., Ltd.	1,500,000	-	-	1,500,000	10	-
ZMPC Ningbo Transmission Machinery Co., Ltd.	1,296,000	-	-	1,296,000	10	-
Hunan Fengri Power & Electric Co., Ltd.	19,998,160	-	-	19,998,160	6.38	-
	72,994,160	-	-	72,994,160		-
Available-for-sale equity instruments - Provision for impairment						
21st Century Science and Technology Investment Co., Ltd.	(30,000,000)	-	-	(30,000,000)		-
	42,994,160	-	-	42,994,160		-

The available-for-sale financial assets measured at cost are mainly non-listed equity investments held by the Group. These investments have no active market quotes and their fair value estimates vary widely. The various probabilities used to determine fair value estimates cannot be reasonably determined. Therefore, the fair value cannot be measured reliably. The Group has no plans to dispose of these investments.

14 Long-term receivables

	Year 2019	Year 2018
Receivables from "Building – Transfer" project		
- Principal	6,140,109,748	5,742,499,069
- Interest receivable	349,937,720	273,527,110
Accounts receivable from the projects of collection of payment by installment	50,884,533	66,953,334
	6,540,932,001	6,082,979,513
Less: Long-term receivables maturing within one year (Note V(11))	1,313,203,581	894,638,424
	5,227,728,420	5,188,341,089

As at December 31, 2019, the account receivable from "Building – Transfer" project was the principal invested in above "Building– Transfer" project by the Group, and the amount of interest receivable was the financing return recognized based on the contract.

As at December 31, 2019, the long-term accounts receivable were RMB 4,482,230,928 (as at December 31, 2018: RMB 3,850,867,673), which had been pledged to the bank as the guarantee for the long-term borrowings of RMB 1,420,127,942 (as at December 31, 2018: Long-term borrowings of RMB 1,549,240,000). Please refer to Note VII (35(ii)).

Aging analysis of long-term receivable is as follows:

	Year 2019	Year 2018
Within 1 year	1,189,304,357	1,660,580,813
1- 2 years	1,633,251,803	2,057,388,738
2- 3 years	1,996,302,110	1,829,854,335
Over 3 years	1,722,073,731	535,155,627



	Year 2019	Year 2018
Sub-total	6,540,932,001	6,082,979,513
Less: Long-term receivables maturing within one year	1,313,203,581	894,638,424
	5,227,728,420	5,188,341,089

15 Long-term equity investments

	Year 2019	Year 2018
Joint ventures	312,812,059	287,691,938
Associates	2,560,861,686	2,488,109,822
	2,873,673,745	2,775,801,760

Joint ventures:
Year 2019

	Increase/decrease in the current year						
	Beginning balance	Additional investment	Reduced investment	Profit or loss on investments under the equity method	Cash dividends declared to be distributed	Ending balance	Provision for impairment at the end of the year
Jiangsu Longyuan Zhenhua Marine Engineering Co., Ltd	244,265,213	-	-	16,615,440	-	260,880,653	-
CCCC Tianhe Xi'an Equipment Manufacturing Co., Ltd.	37,905,482	-	-	(1,735,203)	-	36,170,279	-
ZPMC Mediterranean Liman Makinalari Ticaret Anonim Sirketi	4,774,543	-	-	(1,039,354)	-	3,735,189	-
ZPMC-OTL MARINE CONTRACTOR LIMITED (iv)	-	-	-	-	-	-	-
Zhenhua Marine Energy (HK) Co., Ltd. (i)	-	-	-	-	-	-	-
Cranetech Global Sdn. Bnd.(ii)	746,700	-	-	-	-	746,700	-
CCCC Nanjing Traffic Engineering Management Co., Ltd. (v)	-	9,000,000	-	3,351,628	(1,072,390)	11,279,238	-
	287,691,938	9,000,000	-	17,192,511	(1,072,390)	312,812,059	-

Year 2018

	Increase/decrease in the current year					
	Beginning balance	Additional investment	Reduced investment	Profit or loss on investments under the equity method	Ending balance	Provision for impairment at the end of the year
Jiangsu Longyuan Zhenhua Marine Engineering Co., Ltd	231,309,282	-	-	12,955,931	244,265,213	-
CCCC Tianhe Xi'an Equipment Manufacturing Co., Ltd.	29,820,347	10,000,000	-	(1,914,865)	37,905,482	-
ZPMC Mediterranean Liman Makinalari Ticaret Anonim Sirketi	3,775,146	-	-	999,397	4,774,543	-
ZPMC-OTL MARINE CONTRACTOR LIMITED	2,976,740	-	-	(2,976,740)	-	-
Zhenhua Marine Energy (HK) Co., Ltd. (i)	-	-	-	-	-	-

	Increase/decrease in the current year					
	Beginning balance	Additional investment	Reduced investment	Profit or loss on investments under the equity method	Ending balance	Provision for impairment at the end of the year
Cranetech Global Sdn. Bnd.(ii)	629,241	-	-	117,459	746,700	-
	268,510,756	10,000,000	-	9,181,182	287,691,938	-

(i) On May 5, 2014, the subsidiary of the Company and the partner invested to establish Zhenhua Marine Energy (Hong Kong) Co., Ltd (Zhenhua Marine Energy). The registered capital is USD 5,969,998. The subsidiary of the Company contributed USD 3,044,699 with the shareholding ratio of 51%. Zhenhua Marine Energy focused on the vessel transportation business. Based on the regulations of the shareholder agreement, the important events of such company shall be agreed by at least 75% shareholders via voting. Hence, the Group has no control right but jointly controls Zhenhua Marine Energy together with the partner.

(ii) On July 30, 2015, the subsidiary of the Company and the partner jointly invested to establish Cranetech Global Sdn. Bhd. The registered capital is MYR 1,000,000; the subsidiary of the Company contributed MYR 499,999 with the shareholding ratio of 49.99%. The company focused on the spare parts sales. Based on the regulations of the shareholder agreement, the important events of the company shall be agreed by both parties. Therefore, the Group controls the company together with the partner.

(iii) On May 5, 2017, the subsidiary of the Company and the partner jointly invested and established CCCC Tianhe Xi'an Equipment Manufacturing Co., Ltd. The registered capital of the company is RMB 300 million. The subsidiary of the Company contributed RMB 3 million with the shareholding ratio of 50%. The company is mainly engaged in the machinery manufacturing business of shield machine. Based on the regulations of the shareholder agreement, the important events of the company shall be agreed by both parties. Therefore, the Group controls the company together with the partner.

(iv) On November 22, 2017, the Company sold 20% equity of its former subsidiary ZPMC-OTL MARINE CONTRACTOR LIMITED at the price of USD 400,000. After change, the registered capital of the company was USD 2,000,000, and the shareholding ratio was 50%. The company is mainly engaged in shipping business. Based on the regulations of the shareholder agreement, the important events of the company shall be agreed by both parties. Therefore, the Group controls the company together with the partner.

(v) In August 2016, the subsidiary of the Company and the partner invested and established CCCC Nanjing Traffic Engineering Management Co., Ltd. The registered capital was RMB 50,000,000 and the shareholding ratio was 45%. The subsidiary of the Company contributed RMB 9,000,000 in CCCC Nanjing Traffic Engineering Management Co., Ltd. according to the subscription ratio. Based on the regulations of the shareholder agreement, the important events of the company shall be agreed by both parties. Therefore, the Group controls the company together with the partner.

Associates:

Year 2019

	Increase/decrease in the current year								
	Balance at the end of the last year	Changes in accounting policies	Beginning balance	Additional investment	Profit or loss on investments under the equity method	Adjustment to other comprehensive income	Cash dividends declared to be distributed	Ending balance	Provision for impairment at the end of the year
CCCC Financial Leasing Co., Ltd.(Formerly known as: CCCC Financial LeasingCo., Ltd.) (i)	1,721,445,354	(15,525,235)	1,705,920,119	-	89,222,324	310,435	(9,750,000)	1,785,702,878	-
CCCC Estate Yixing Co., Ltd.	180,652,673	-	180,652,673	-	3,007,868	-	-	183,660,541	-
CCCC South American Regional Company SARL (ii)	191,064,983	-	191,064,983	-	(1,127,404)	(3,258,739)	-	186,678,840	-
China Communications Construction USA Inc.(iii)	61,722,121	-	61,722,121	-	(1,945,770)	943,598	-	60,719,949	-
CCCC Marine Engineering & Technology Research Center Co., Ltd.	16,252,274	-	16,252,274	-	478,530	-	-	16,730,804	-
ZPMC Changzhou Coatings Co., Ltd.	16,115,277	-	16,115,277	-	1,520,000	-	-	17,635,277	-



	Increase/decrease in the current year								
	Balance at the end of the last year	Changes in accounting policies	Beginning balance	Additional investment	Profit or loss on investments under the equity method	Adjustment to other comprehensive income	Cash dividends declared to be distributed	Ending balance	Provision for impairment at the end of the year
ZPMC Southeast Asia Pte. Ltd	1,401,639	-	1,401,639	-	268,683	-	-	1,670,322	-
CCCC Yancheng Construction and Development Co., Ltd. (iv)	289,380,523	-	289,380,523	-	385,719	-	-	289,766,242	-
Suzhou Chuanglian Electric Drive Co., Ltd.	10,074,978	-	10,074,978	-	1,866,429	-	-	11,941,407	-
Shanghai Ocean Engineering Equipment Manufacturing Innovation Center Co., Ltd. (v)	-	-	-	6,500,000	(144,574)	-	-	6,355,426	-
	2,488,109,822	(15,525,235)	2,472,584,587	6,500,000	93,531,805	(2,004,706)	(9,750,000)	2,560,861,686	-

Year 2018

	Increase/decrease in the current year						
	Beginning balance	Increase in investment	Profit or loss on investments under the equity method	Adjustment to other comprehensive income	Cash dividends declared to be distributed	Ending balance	Provision for impairment at the end of the year
CCCC Financial Leasing Co., Ltd. (i)	1,678,550,583	-	87,246,932	647,839	(45,000,000)	1,721,445,354	-
CCCC Estate Yixing Co., Ltd.	178,099,707	-	2,552,966	-	-	180,652,673	-
CCCC South American Regional Company SARL (ii)	96,195,387	99,912,976	3,288,529	(8,331,909)	-	191,064,983	-
China Communications Construction USA Inc. (iii)	67,230,450	-	(8,536,568)	3,028,239	-	61,722,121	-
CCCC Marine Engineering & Technology Research Center Co., Ltd.	15,849,544	-	402,730	-	-	16,252,274	-
ZPMC Changzhou Coatings Co., Ltd.	15,786,438	-	1,191,077	-	(862,238)	16,115,277	-
ZPMC Southeast Asia Pte. Ltd	247,656	-	1,153,983	-	-	1,401,639	-
CCCC Yancheng Construction and Development Co. Ltd. (iv)	-	289,050,000	330,523	-	-	289,380,523	-
Suzhou Chuanglian Electric Drive Co., Ltd.	-	10,000,000	74,978	-	-	10,074,978	-
	2,051,959,765	398,962,976	87,705,150	(4,655,831)	(45,862,238)	2,488,109,822	-

(i) On May 31, 2016, the Company and other shareholders increased the capital amounting to RMB 420,000,000 to CCCC Financial Leasing Co., Ltd. in the same proportion. After the capital increase, the investment costs of the Company to CCCC Financial Leasing Co., Ltd. Increased to RMB 1,500,000,000 with the unchanged shareholding ratio of 30%.

(ii) On December 15, 2016, the Company invested USD 16,480,000 (equivalent to RMB 114,321,760) to purchase the shares of CCCC South American Regional Company SARL. The registered capital was USD 103,000,000. The Company held 16% of the equity. The company was mainly engaged in port construction business. Based on the related regulations of the Articles of Association of such company, the Company had the right to designate one director to that company and implement significant impact to that company. On October 31, 2018, the Company increased the capital to CCCC South American Regional Company SARL by USD 14,489,171, equivalent to RMB 99,912,976. After the capital increase, the investment costs in CCCC South American Regional Company SARL by the Company increased to RMB 214,234,736 and the shareholding ratio of the Company was changed to 17%.

(iii) On October 8, 2015, the Company invested to establish China Communications Construction USA Inc. The

registered capital is USD 50,000,000, USD 12,000,000 of which was contributed by the Company, equivalent to RMB 76,206,000. The shareholding ratio of the Company is 24%. The company is mainly engaged in port construction business.

(iv) On October 16, 2018, the Company invested in CCCC Yancheng Construction & Development Co., Ltd to purchase its shares.

The registered capital of the company was RMB 1,156,200,000. The Company contributed RMB 289,050,000 with the shareholding ratio of 25%. The company was mainly engaged in the engineering construction.

(v) On September 10, 2019, the Company invested RMB 6,500,000 in Shanghai Ocean Engineering Equipment Manufacturing Innovation Center Co., Ltd. to purchase its shares. The registered capital of the company was RMB 72,500,000. The shareholding ratio of the Company was 8.97%. The company was mainly engaged in the marine engineering technological development business.

16 Other equity instrument investment (only applicable in 2019)

	Cost	Changes in fair value accumulatively included in other comprehensive income	Fair value	Dividend income in the current year		Reasons for financial assets designated to be measured at fair value through other comprehensive income
				Equity instruments derecognized in the current year	Equity instruments still held	
Hunan Fengri Power & Electric Co., Ltd.	19,998,160	4,350,529	24,348,689	-	-	Strategic investment, long-term holding
CCCC Highway Bridges National Engineering Research Centre Co., Ltd.	13,000,000	4,649,136	17,649,136	-	-	Strategic investment, long-term holding
CCCC National Engineering Research Center of Dredging Technology and Equipment Co., Ltd.	6,400,000	2,605,378	9,005,378	-	-	Strategic investment, long-term holding
Shanghai Zhenhua Port Machinery (Group) Shenyang Elevator Co., Ltd.	1,500,000	1,365,664	2,865,664	-	-	Strategic investment, long-term holding
ZMPC Ningbo Transmission Machinery Co., Ltd.	1,296,000	5,945,610	7,241,610	-	-	Strategic investment, long-term holding
Shanghai Zhenhua Gangkou Machine (Group) Longchang Lifting Equipment Co., Ltd.	800,000	70,791	870,791	-	-	Strategic investment, long-term holding
21st Century Science and Technology Investment Co., Ltd.	30,000,000	(30,000,000)	-	-	-	Strategic investment, long-term holding
Total	72,994,160	(11,012,892)	61,981,268	-	-	

17 Investment properties

The Company carries out subsequent measurement of investment properties by using the cost method:
Year 2019

	Buildings and constructions	Land use right	Total
Original price			
Beginning and ending balance	397,820,689	209,845,794	607,666,483
Accumulative depreciation and amortization			
Beginning balance	110,093,612	60,812,240	170,905,852
Provision	12,964,303	5,370,795	18,335,098
Ending balance	123,057,915	66,183,035	189,240,950
Book value			
At the end of the year	274,762,774	143,662,759	418,425,533
At the beginning of the year	287,727,077	149,033,554	436,760,631



Year 2018

	Buildings and constructions	Land use right	Total
Original price			
Beginning and ending balance	397,820,689	209,845,794	607,666,483
Accumulative depreciation and amortization			
Beginning balance	97,115,184	55,487,576	152,602,760
Provision	12,978,428	5,324,664	18,303,092
Ending balance	110,093,612	60,812,240	170,905,852
Book value			
At the end of the year	287,727,077	149,033,554	436,760,631
At the beginning of the year	300,705,505	154,358,218	455,063,723

18 Fixed assets

Year 2019

	Buildings and constructions	Machinery equipment	Office and electronic equipment	Transportation facilities (Excluding ship)	Ship	Total
Original price						
Beginning balance	11,666,113,438	8,134,429,365	257,492,955	265,571,677	11,123,157,720	31,446,765,155
Purchase	6,113,383	222,848,057	25,019,759	6,054,717	747,381,300	1,007,417,216
Transferred from construction in progress and others (Remark 1)	78,745,281	304,777,449	1,132,595	-	2,787,417,629	3,172,072,954
Disposal or scrapping	(181,654,286)	(231,168,045)	(12,856,990)	(13,249,200)	(715,398,559)	(1,154,327,080)
Fluctuation in foreign exchange rate	-	-	-	-	51,543,620	51,543,620
Ending balance	11,569,317,816	8,430,886,826	270,788,319	258,377,194	13,994,101,710	34,523,471,865
Accumulated depreciation						
Beginning balance	3,787,393,562	5,410,248,288	198,187,739	182,976,636	3,213,226,900	12,792,033,125
Provision	376,129,271	351,691,736	21,727,679	12,631,898	446,913,960	1,209,094,544
Disposal or scrapping	(125,189,584)	(222,422,246)	(11,984,376)	(11,316,395)	(567,531,735)	(938,444,336)
Fluctuation in foreign exchange rate	-	-	-	-	5,821,233	5,821,233
Ending balance	4,038,333,249	5,539,517,778	207,931,042	184,292,139	3,098,430,358	13,068,504,566
Book value						
At the end of the year	7,530,984,567	2,891,369,048	62,857,277	74,085,055	10,895,671,352	21,454,967,299
At the beginning of the year	7,878,719,876	2,724,181,077	59,305,216	82,595,041	7,909,930,820	18,654,732,030

Other transfer-in in this year were mainly caused by the drilling platforms and floating cranes originally planned for sale
Year 2018

	Buildings and constructions	Machinery equipment	Office and electronic equipment	Transportation facilities (Excluding vessels)	Ship	Total
Original price						
Beginning balance	11,675,835,741	7,061,236,685	248,048,072	274,791,263	10,251,529,286	29,511,441,047
Purchase	3,081,123	32,097,069	14,560,576	7,843,184	698,371,763	755,953,715
Transferred from construction in progress	100,290,651	1,195,139,530	756,662	-	637,802,141	1,933,988,984
Business combination not under common control	-	-	144,128	-	-	144,128
Disposal or scrapping	(113,094,077)	(154,043,919)	(6,016,483)	(17,062,770)	(507,983,782)	(798,201,031)
Fluctuation in foreign exchange rate	-	-	-	-	43,438,312	43,438,312
Ending balance	11,666,113,438	8,134,429,365	257,492,955	265,571,677	11,123,157,720	31,446,765,155

	Buildings and constructions	Machinery equipment	Office and electronic equipment	Transportation facilities (Excluding vessels)	Ship	Total
Accumulated depreciation						
Beginning balance	3,487,513,540	5,152,968,939	184,766,115	186,449,320	3,164,391,522	12,176,089,436
Provision	375,689,195	402,382,995	18,622,519	13,590,086	467,117,212	1,277,402,007
Disposal or scrapping	(75,809,173)	(145,103,646)	(5,200,895)	(17,062,770)	(413,261,783)	(656,438,267)
Fluctuation in foreign exchange rate		-	-	-	(5,020,051)	(5,020,051)
Ending balance	3,787,393,562	5,410,248,288	198,187,739	182,976,636	3,213,226,900	12,792,033,125
Book value						
At the end of the year	7,878,719,876	2,724,181,077	59,305,216	82,595,041	7,909,930,820	18,654,732,030
At the beginning of the year	8,188,322,201	1,908,267,746	63,281,957	88,341,943	7,087,137,764	17,335,351,611

As at December 31, 2019, the following fixed assets were taken as loan mortgage:

	Original price	Book value	Borrowings	
			Nature	Amount
Machinery equipment	1,387,867,681	255,113,376	Long-term payables	89,262,318
Vessel	6,634,000,717	5,439,133,909	Long-term payables	2,161,280,894
	8,021,868,398	5,694,247,285		2,250,543,212

As at December 31, 2018, the following fixed assets were taken as loan mortgage:

	Original price	Book value	Nature	Amount
Machinery equipment	1,398,297,681	329,796,189	Long-term payables	258,565,211
Vessel	5,847,522,360	4,940,559,588	Long-term payables	2,420,668,918
	7,245,820,041	5,270,355,777		2,679,234,129

As at December 31, 2019 and December 31, 2018, the book values of fixed assets for operating lease were as follows:

	Year 2019	Year 2018
Machinery equipment	783,490,756	734,607,031
Vessel	1,622,945,798	1,695,800,485
	2,406,436,554	2,430,407,516

As at December 31, 2019, the fixed assets with pending certificate of title were as follows:

	Book value	Reasons for pending certificate of title
Buildings and constructions	891,790,853	The handling of relevant formalities is still in process.

19 Construction in progress

	Year 2019			Year 2018		
	Book balance	Provision for impairment	Book value	Book balance	Provision for impairment	Book value
Infrastructure construction of Nantong Base	98,623,383	-	98,623,383	97,628,960	-	97,628,960
Infrastructure construction of Changxing Base	80,973,129	-	80,973,129	45,615,124	-	45,615,124
Large machinery and engineering equipment of the base under construction	4,052,729,743	-	4,052,729,743	2,815,026,280	-	2,815,026,280
Office building and ancillary facilities	29,401	-	29,401	16,131,833	-	16,131,833

	Year 2019			Year 2018		
	Book balance	Provision for impairment	Book value	Book balance	Provision for impairment	Book value
Shield machine parts project	28,416,002	-	28,416,002	10,284,487	-	10,284,487
Infrastructure construction of Nanhui Base	3,061,744	-	3,061,744	3,893,442	-	3,893,442
Large mechanical reconstruction and upgrading project	116,656,486	-	116,656,486	61,888,166	-	61,888,166
	4,380,489,888	-	4,380,489,888	3,050,468,292	-	3,050,468,292

Changes of major construction in progress in 2019 are as follows:

	Budget	Beginning balance	Increase in the current year	Transferred into fixed assets in the current year (Note V(18))	Transferred into intangible assets in the current year (Note V(20))	Ending balance
Infrastructure construction of Nantong Base	7,817,201,771	97,628,960	59,231,059	(58,236,636)	-	98,623,383
Infrastructure construction of Changxing Base	8,678,930,500	45,615,124	47,326,206	(7,750,995)	(4,217,206)	80,973,129
Large machinery and engineering equipment of the base under construction	9,995,547,158	2,815,026,280	1,503,381,406	(265,677,943)	-	4,052,729,743
Office building and ancillary facilities	34,798,370	16,131,833	13,666,537	(29,768,969)	-	29,401
Shield machine parts project	140,796,531	10,284,487	18,759,512	(627,997)	-	28,416,002
Infrastructure construction of Nanhui Base	531,736,425	3,893,442	4,421,617	(5,253,315)	-	3,061,744
Large mechanical reconstruction and upgrading	1,200,868,710	61,888,166	82,078,369	(27,310,049)	-	116,656,486
	28,399,879,465	3,050,468,292	1,728,864,706	(394,625,904)	(4,217,206)	4,380,489,888

Changes of major construction in progress in 2018 are as follows:

	Budget	Beginning balance	Increase in the current year	Transferred into fixed assets in the current year (Note V(18))	Transferred into intangible assets in the current year (Note V(20))	Ending balance
Infrastructure construction of Nantong Base	7,745,549,471	53,508,755	62,113,177	(17,992,972)	-	97,628,960
Infrastructure construction of Changxing Base	8,645,540,000	30,242,212	35,225,697	(18,888,804)	(963,981)	45,615,124
Large machinery and engineering equipment of the base under construction	9,086,660,631	1,123,208,028	2,955,472,032	(1,263,653,780)	-	2,815,026,280
Office building and ancillary facilities	23,500,000	-	16,131,833	-	-	16,131,833
Shield machine parts project	130,587,500	74,507,300	8,494,856	(72,717,669)	-	10,284,487
Infrastructure construction of Nanhui Base	504,500,000	3,893,442	443,966	(443,966)	-	3,893,442
Large mechanical reconstruction and upgrading	830,025,368	603,786,272	18,393,687	(560,291,793)	-	61,888,166
	26,966,362,970	1,889,146,009	3,096,275,248	(1,933,988,984)	(963,981)	3,050,468,292

Changes of major construction in progress in 2019 are as follows:

	Proportion of project investments in budget %	Work progress (Remark 1) %	Cumulative amount of interest capitalized	Including: capitalization of the interest in the current year	Capitalization rate for the interest in the current year	Fund source
Infrastructure construction of Nantong Base	84	84	-	-	-	Self-owned funds
Infrastructure construction of Changxing Base	83	83	23,531,836	-	-	Self-owned funds, Bank loan
Large machinery and engineering equipment of the base under construction	86	86	159,838,010	44,551,183	3.82	Self-owned funds, Bank loan
Office building and ancillary facilities	99	99	-	-	-	Self-owned funds
Shield machine parts project	86	86	5,762,616	-	-	Self-owned funds, Bank loan
Infrastructure construction of Nanhui Base	87	87	-	-	-	Self-owned funds
Large mechanical reconstruction and upgrading	67	67	-	-	-	Self-owned funds
			189,132,462	44,551,183		

Changes of major construction in progress in 2018 are as follows:

	Proportion of project investments in budget %	Work progress (Remark 1) %	Accumulated capitalization amount of interest	Including: capitalization of the interest in the current year	Capitalization rate for the interest of the current year %	Fund source
Infrastructure construction of Nantong Base	84	84	-	-	-	Self-owned funds
Infrastructure construction of Changxing Base	83	83	23,531,836	-	-	Self-owned funds, Bank loan
Large machinery and engineering equipment of the base under construction	78	78	115,286,827	18,794,122	3.82	Self-owned funds, Bank loan
Office building and ancillary facilities	90	90	-	-	-	Self-owned funds
Shield machine parts project	79	79	5,762,616	-	-	Self-owned funds, Bank loan
Infrastructure construction of Nanhui Base	91	91	-	-	-	Self-owned funds
Large mechanical reconstruction and upgrading	87	87	-	-	-	Self-owned funds
			144,581,279	18,794,122		

Remark 1: The project progress is estimated on the basis of budget and cumulative investment.

20 Intangible assets

Year 2019

	Land use right	Software use fee	Proprietary technology	Total
Original price				
Beginning balance	4,297,078,828	57,979,691	65,201,810	4,420,260,329

	Land use right	Software use fee	Proprietary technology	Total
Transferred from construction in progress	-	4,217,206	-	4,217,206
Purchase	-	13,466,870	94,361	13,561,231
Sale and scrapping	-	(44,156)	-	(44,156)
Ending balance	4,297,078,828	75,619,611	65,296,171	4,437,994,610
Accumulated amortization				
Beginning balance	729,735,380	45,772,078	56,340,139	831,847,597
Provision	88,358,463	5,509,026	5,773,471	99,640,960
Reversal	-	(35,313)	-	(35,313)
Ending balance	818,093,843	51,245,791	62,113,610	931,453,244
Book value				
At the end of the year	3,478,984,985	24,373,820	3,182,561	3,506,541,366
At the beginning of the year	3,567,343,448	12,207,613	8,861,671	3,588,412,732

Year 2018

	Land use right	Software use fee	Proprietary technology	Total
Original price				
Beginning balance	4,297,078,828	55,046,834	65,201,810	4,417,327,472
Transferred from construction in progress	-	963,981	-	963,981
Purchase	-	1,968,876	-	1,968,876
Ending balance	4,297,078,828	57,979,691	65,201,810	4,420,260,329
Accumulated amortization				
Beginning balance	642,231,145	42,451,672	49,479,047	734,161,864
Provision	87,504,235	3,320,406	6,861,092	97,685,733
Ending balance	729,735,380	45,772,078	56,340,139	831,847,597
Book value				
At the end of the year	3,567,343,448	12,207,613	8,861,671	3,588,412,732
At the beginning of the year	3,654,847,683	12,595,162	15,722,763	3,683,165,608

In 2019, total technology research and development expenses of the Group amounted to RMB 887,096,178 (2018: RMB 672,614,073) (Please refer to Note V (50) for details). These technology research and development expenses are not capitalized. As at December 31, 2019 and December 31, 2018, the intangible assets excluded any capitalized technology research and development expenses.

21 Goodwill

Year 2019

	Beginning balance	Increase in the current year (Remark 1)	Decrease in the current year	Ending balance
ZPMC Qidong Marine Engineering Co., Ltd.	149,212,956	-	-	149,212,956
Verspannen B.V.	5,412,807	-	-	5,412,807
Greenland Heavylift (Hong Kong) Limited	111,965,699	1,843,472	-	113,809,171
	266,591,462	1,843,472	-	268,434,934

Year 2018

	Beginning balance	Increase in the current year	Decrease in the current year	Ending balance
ZPMC Qidong Marine Engineering Co.,Ltd.	149,212,956	-	-	149,212,956
Verspannen B.V.	5,412,807	-	-	5,412,807
Greenland Heavylift (Hong Kong) Limited	110,562,702	1,402,997	-	111,965,699
	265,188,465	1,402,997	-	266,591,462

Remark 1: The increase in the current year was caused by the translation differences of foreign currency statement.

As at December 31, 2019, the Group had no provision for the impairment of goodwill. When the impairment test is conducted, the book value of goodwill is amortized to the asset group portfolio expected to benefit from the synergistic effect of business combination.

The goodwill acquired through business combination has been distributed to the following asset groups for impairment test:

- Heavy equipment asset group
- Semi-submerged ship transport assets group of Greenland Heavylift (Hongkong) Limited (GHHL)

Heavy equipment asset group

The recoverable amount of heavy equipment asset group is measured based on the five-year budget approved by the management and shall be measured with cash flow forecast method. Cash flow over 5-year period shall be calculated based on the estimated growth rate.

The main assumptions of the future cash flow discount method:

Growth rate during forecast period	12.50%-15.43%
Perpetual growth rate	3%
Gross profit rate	17.43%-17.97%
Discount rate	11%

GHHL semi-submerged ship transport assets group

The recoverable amount of GHHL semi-submerged ship transport assets group combination is determined based on the expected future cash flow of the asset group, and the expected future cash flow is determined according to the cash flow forecast based on the transport service contract revenue expected to be obtained within the service life of vessel.

The main assumptions of the future cash flow discount method:

Number of customized short-distance and long-distance transport service contracts expected to be obtained	3 / year / vessel
Vessel utilization rate of general charter party	65%
Charter rate of general charter party	USD 65,000/ day
Discount rate	11%

The distributions of the book value of goodwill to asset groups are as follows:

	Heavy equipment asset group		GHHL semi-submerged ship transport assets group		Total	
	Year 2019	Year 2018	Year 2019	Year 2018	Year 2019	Year 2018
Book amount of goodwill	154,625,763	154,625,763	113,809,171	111,965,699	268,434,934	266,591,462

The perpetual growth rate adopted by management does not exceed the industry's long-term average growth rate. Based on the historical experience and the forecasts of market development, the management determines the budget gross profit rate and adopts the pretax interest rate which can reflect the specific risk of relevant asset group portfolio as the discount rate. The above assumptions are used to analyze the recoverable amount of the asset group portfolio.

22 Long-term deferred expenses

Year 2019

	Beginning balance	Increase in the current year	Amortization in the current year	Other decreases	Ending balance
Improvement expenditure of fixed assets under operating lease	5,112,664	-	(3,668,028)	-	1,444,636

Year 2018

	Beginning balance	Increase in the current year	Amortization in the current year	Other decreases	Ending balance
Improvement expenditure of fixed assets under operating lease	7,764,501	1,654,070	(4,305,907)	-	5,112,664

23 Deferred income tax assets/liabilities

Deferred income tax assets before offsetting:

	Year 2019		Year 2018	
	Deductible temporary differences	Deferred income tax assets	Deductible temporary differences	Deferred income tax assets
Provision for impairment of assets	2,668,138,888	402,758,006	3,164,854,396	477,266,865
Unrealized profits of internal transactions	60,082,114	12,012,332	110,927,560	17,314,143
Estimated liabilities	470,724,247	70,608,637	424,901,994	63,735,299
Wages and salaries unpaid	28,462,182	4,269,327	27,975,207	4,196,281
Interest unpaid	37,098,343	5,564,751	90,106,459	13,515,968
Deferred income	63,738,135	9,560,720	73,819,776	11,072,966
Deductible losses	384,592,112	57,688,817	-	-
Changes in fair value of financial liabilities held for trading	7,312,741	1,096,911	-	-
	3,720,148,762	563,559,501	3,892,585,392	587,101,522

Deferred income tax liabilities before offsetting:

	Year 2019		Year 2018	
	Taxable temporary differences	Deferred income tax liabilities	Taxable temporary differences	Deferred income tax liabilities
Depreciation of fixed assets	535,071,991	88,286,880	692,627,602	114,283,553
Change from fair value of financial assets measured at fair value through current profit or loss	-	-	44,481,806	6,672,271
Changes in fair value of financial assets held for trading	373,507,095	57,055,388	-	-
Changes in fair value of available-for-sale financial assets	-	-	233,898,200	37,285,461
Changes in fair value of other equity instrument	18,987,108	2,848,066	-	-
Asset evaluation increment from business combination not under common control	126,855,063	19,028,259	143,843,959	21,576,594
	1,054,421,257	167,218,593	1,114,851,567	179,817,879

Deferred income tax assets and deferred income tax liabilities presented by net amount after offset as follows:

	Year 2019		Year 2018	
	Offset amount	Balance after offset	Offset amount	Balance after offset
Deferred income tax assets	77,361,866	486,197,635	47,416,597	539,684,925
Deferred income tax liabilities	77,361,866	89,856,727	47,416,597	132,401,282

Deductible temporary differences and deductible losses from the unrecognized deferred income tax assets are presented as follows:

	Year 2019	Year 2018
Deductible temporary differences	222,990,045	203,797,399
Deductible losses	1,671,758,752	1,627,279,485
	1,894,748,797	1,831,076,884

The deductible losses on the unrecognized deferred income tax assets will become due or reversed in the following years:

	Year 2019	Year 2018
Year 2019	-	304,056,031
Year 2020	368,426,916	368,426,916
Year 2021	99,087,307	105,576,931
Year 2022	252,840,194	272,388,360
Year 2023	576,831,247	576,831,247
Year 2024	374,573,088	-
	1,671,758,752	1,627,279,485

24 Other non-current assets

	Year 2019	Year 2018
Advance payment for vessels	132,563,749	142,126,354
Advance payment for office buildings	28,773,538	28,666,235
	161,337,287	170,792,589

25 Provision for impairment of assets

Year 2019

	Beginning balance	Adjustments for changes in accounting policies	Balance at the beginning of the current year	Provision in the current year	Decrease in the current year		Ending balance
					Reversal	Write-off	
Provision for bad debts	1,763,423,742	113,405,497	1,876,829,239	213,696,436	(174,934,843)	-	1,915,590,832
Including: accounts receivable	1,529,308,221	111,908,301	1,641,216,522	206,632,546	(170,397,232)	-	1,677,451,836
Other receivables	234,115,521	1,497,196	235,612,717	7,063,890	(4,537,611)	-	238,138,996
Estimated contract losses	267,947,132	-	267,947,132	149,306,023	(25,192,263)	(282,301,858)	109,759,034
Provision for inventory depreciation	1,181,153,246	-	1,181,153,246	167,270,369	(238,889,845)	(388,815,346)	720,718,424
Provision for impairment of available-for-sale	30,000,000	(30,000,000)	-	-	-	-	-
	3,242,524,120	83,405,497	3,325,929,617	530,272,828	(439,016,951)	(671,117,204)	2,746,068,290

Year 2018

	Beginning balance	Provision in the current year	Decrease in the current year		Ending balance
			Reversal	Write-off	
Provision for bad debts	1,713,240,621	401,610,953	(351,427,832)	-	1,763,423,742
Including: accounts receivable	1,335,401,780	395,007,065	(201,100,624)	-	1,529,308,221
Other receivables	377,838,841	6,603,888	(150,327,208)	-	234,115,521
Estimated contract losses	289,727,674	277,733,663	(23,164,190)	(276,350,015)	267,947,132
Provision for inventory depreciation	1,606,567,068	97,286,645	(414,615,461)	(108,085,006)	1,181,153,246
Provision for impairment of available-for-sale financial assets	30,000,000	-	-	-	30,000,000
	3,639,535,363	776,631,261	(789,207,483)	(384,435,021)	3,242,524,120

26 Short-term borrowings

	Year 2019	Year 2018
Fiduciary borrowings	20,638,025,709	15,295,290,287
Guaranteed borrowings (i)	1,363,293,671	1,259,397,200
	22,001,319,380	16,554,687,487

As at December 31, 2019, the annual interest rate on the aforesaid borrowings ranges from 2.7% to 5.66% (as at December 31, 2018: 2.9% to 5.87%).

(i) As at December 31, 2019, the bank guarantee loan amounting to USD 195,420,669, equivalent to RMB 1,363,293,671 (as at December 31, 2018: USD 163,500,000, equivalent to RMB 1,122,133,200) was the bank loans borrowed by the subsidiary of the Company, which was guaranteed by the letter of guarantee issued by the bank for the Company within the scope of credit.

As at December 31, 2019, the Company had no bank guarantee loan (as at December 31, 2018: USD 20,000,000, equivalent to RMB 137,264,000) with joint and several liability repayment guarantee provided by its subsidiaries.

27 Financial liabilities held for trading

	Year 2019
Financial liabilities measured at fair value through the current profit or loss	
Derivative financial liabilities	7,312,741

As at December 31, 2019, the derivative financial assets held by the Company were the forward exchange contracts, which was signed but not yet due by and between the Company and the banks and could change EUR with RMB. The contract would due from February 7, 2020 to March 6, 2020.

The gains or losses from the evaluation of the fair value of the above-mentioned forward foreign exchange contracts at the end of the year was the amount confirmed by the trading banks.

28 Notes payable

	Year 2019	Year 2018
Bank acceptance bill	3,420,945,451	2,732,404,222

29 Accounts payable

	Year 2019	Year 2018
Payables for material purchase and product manufacturing	7,095,705,902	6,556,698,942
Quality guarantee deposit payable	352,114,025	265,219,012
Equipment and vessel purchase payables	361,370,347	132,468,294
Infrastructure payables	55,685,497	77,821,238
Port charge payable	4,502,594	4,662,215
	7,869,378,365	7,036,869,701

Aging analysis of accounts payable is as follows:

	Year 2019		Year 2018	
	Amount	Proportion in total amount%	Amount	Proportion in total amount%
Within 1 year	6,173,075,498	78	5,178,586,023	74
Over 1 year	1,696,302,867	22	1,858,283,678	26
	7,869,378,365	100	7,036,869,701	100

As at December 31, 2019, the accounts payable aging over 1 year were mainly the payables for imported parts, which had not been taken for final settlement.

30 Advances from customers

	Year 2019	Year 2018
Advances from customers for goods	653,848,400	447,761,752
Advances for lease payment	169,139,586	46,982,622
	822,987,986	494,744,374

Aging analysis of advances from customers is as follows:

	Year 2019		Year 2018	
	Amount	Proportion in total amount%	Amount	Proportion in total amount%
Within 1 year	728,030,570	88	436,464,764	88
Over 1 year	94,957,416	12	58,279,610	12
	822,987,986	100	494,744,374	100

As at December 31, 2019, the advances from customers with the aging over 1 year mainly included the unsettled sales payments of spare parts for products.

31 Employee compensation payable

	Year 2019	Year 2018
Short-term compensation	329,928,711	309,129,844
Post-employment benefits (defined contribution plans)	49,570	982,483
	329,978,281	310,112,327

Short-term compensation is as follows:

Year 2019

	Beginning balance	Increase in the current year	Decrease in the current year	Ending balance
Salaries, bonuses, allowances and subsidies	273,102,597	1,527,933,232	(1,507,309,211)	293,726,618
Employee welfare	34,988	64,266,078	(64,285,529)	15,537
Social insurance premium	549,697	133,124,633	(133,643,741)	30,589
Including: medical insurance premium	452,960	114,399,535	(114,826,701)	25,794
Work-related injury insurance premium	56,430	6,564,269	(6,618,581)	2,118
Maternity insurance premium	40,307	12,160,829	(12,198,459)	2,677
Housing provident funds	488,787	137,294,524	(137,762,772)	20,539
Union expenditures and employee education expenses	34,953,775	29,084,499	(27,902,846)	36,135,428
Other short-term compensation	-	14,311,220	(14,311,220)	-
	309,129,844	1,906,014,186	(1,885,215,319)	329,928,711

Year 2018

	Beginning balance	Increase in the current year	Decrease in the current year	Ending balance
Salaries, bonuses, allowances and subsidies	237,081,631	1,504,565,034	(1,468,544,068)	273,102,597
Employee welfare	-	60,344,342	(60,309,354)	34,988
Social insurance premium	554,452	121,121,387	(121,126,142)	549,697
Including: medical insurance premium	445,494	103,465,704	(103,458,238)	452,960
Work-related injury insurance premium	69,338	7,133,651	(7,146,559)	56,430
Maternity insurance premium	39,620	10,522,032	(10,521,345)	40,307
Housing provident funds	479,386	124,837,764	(124,828,363)	488,787
Union expenditures and employee education expenses	34,541,033	31,831,526	(31,418,784)	34,953,775
Other short-term compensation	110,358	10,562,699	(10,673,057)	-
	272,766,860	1,853,262,752	(1,816,899,768)	309,129,844

Defined contribution plans are as follows:

Year 2019

	Beginning balance	Increase in the current year	Decrease in the current year	Ending balance
Basic endowment insurance premium	957,289	216,613,632	(217,522,781)	48,140
Supplementary endowment insurance premium	-	87,850,814	(87,850,814)	-
Unemployment insurance premium	25,194	5,587,230	(5,610,994)	1,430
	982,483	310,051,676	(310,984,589)	49,570

Year 2018

	Beginning balance	Increase in the current year	Decrease in the current year	Ending balance
Basic endowment insurance premium	941,529	221,794,310	(221,778,550)	957,289
Supplementary endowment insurance premium	-	81,248,762	(81,248,762)	-
Unemployment insurance premium	24,818	5,258,521	(5,258,145)	25,194
	966,347	308,301,593	(308,285,457)	982,483

32 Taxes and surcharges payable

	Year 2019	Year 2018
VAT	19,182,496	43,724,528
Enterprise income tax	84,488,181	81,219,652
Individual income tax	14,648,581	9,390,756
Urban maintenance and construction tax	445,032	1,912,715
Education surtax	381,574	1,624,991
Others	25,360,878	27,092,039
	144,506,742	164,964,681

33 Other payables

	Year 2019	Year 2018
Interest payable	-	114,397,903
Dividends payable	31,701,965	31,701,965
Other payables	679,688,031	952,480,579
	711,389,996	1,098,580,447

Interest payable

	Year 2019	Year 2018
Interest on borrowings	-	114,397,903

Dividends payable

	Year 2019	Year 2018
CCCC Tianjin Dredging Co., Ltd.	25,079,494	25,079,494
Chuwa Bussan Co. Ltd.	6,269,873	6,269,873
Hong Kong Zhenhua Engineering Co., Ltd.	346,005	346,005
Macau Zhenhua Harbour Construction Co., Ltd.	6,593	6,593
	31,701,965	31,701,965

As at December 31, 2019, the reason for the dividend payable with the aging over 1 year amounting to RMB 31,701,965 (as at December 31, 2018: RMB 31,701,965) was that the shareholders of the Company had not requested for actual payment by the Group.

Other payables

	Year 2019	Year 2018
Engineering deposit and quality guarantee deposit	227,040,148	206,589,722
Investment section payable to CCCC (i)	100,971,833	100,971,833
Amounts due to related parties	77,381,454	184,440,322
Special payables	16,971,821	146,470,013
Contract advance payment to be returned	-	129,540,880
Others	257,322,775	184,467,809
	679,688,031	952,480,579

(i) The Group completed the cancellation of a subsidiary in 2011. RMB 25,971,833 in the balance was the investment liquidation fund payable by the Group and attributable to CCCC who was another shareholder of the subsidiary; meanwhile, the Group completed the merger and acquisition of the subsidiary of CCCC under the common control in 2015, and RMB 75,000,000 in the balance was the purchase fund payable by the Group to CCCC.

Aging analysis of other payables is as follows:

	Year 2019		Year 2018	
	Amount	Proportion %	Amount	Proportion %
Within 1 year	501,239,668	74	703,845,813	74
Over 1 year	178,448,363	26	248,634,766	26
	679,688,031	100	952,480,579	100

As at December 31, 2019, the other payables with the aging over 1 year were mainly the investment section payable to CCCC, payable deposit and quality guarantee deposit collected from outsourcing engineering team and payables to related party.

34 Non-current liabilities maturing within one year

	Year 2019	Year 2018
Long-term borrowings maturing within one year (See Note V (35))	6,533,318,585	3,258,154,392
Long-term receivables maturing within one year (See Note V (36))	754,165,928	951,378,118
	7,287,484,513	4,209,532,510

35 Long-term borrowings

	Year 2019	Year 2018
Fiduciary borrowings	9,837,007,595	14,274,414,371
Guaranteed borrowings (i)	3,689,523,034	2,532,225,280
Pledged borrowings (ii)	1,420,127,942	1,549,240,000
	14,946,658,571	18,355,879,651
Less: Long-term borrowings maturing within one year		
Fiduciary borrowings	(2,966,074,277)	(2,833,064,392)
Guaranteed borrowings	(3,219,523,034)	-
Pledged borrowings	(347,721,274)	(425,090,000)
	(6,533,318,585)	(3,258,154,392)
	8,413,339,986	15,097,725,259

As at December 31, 2019, the annual interest rate on the aforesaid borrowings ranges from 2.95% to 5.46% (as at December 31, 2018: 3.90% to 5.13%).

(i) As at December 31, 2019, the bank guarantee loan amounting to USD 50,518,682, equivalent to RMB 352,428,432 (as at December 31, 2018: USD 50,400,000, equivalent to RMB 345,905,280), was the bank loan borrowed by the Company's subsidiary Shanghai Zhenhua Port Machinery (Hong Kong) Co., Ltd. and the guarantee was provided by the Company. The interest shall be paid quarterly and the principal shall be repaid on Aug. 13, 2020.

As at December 31, 2019, the bank guarantee loan amounting to USD 195,459,188, equivalent to RMB 1,363,562,387 (as at December 31, 2018: USD 100,000,000, equivalent to RMB 686,320,000), was the bank loan borrowed by the Company. The Company's subsidiary ZPMC Port Machinery General Equipment Co., Ltd., provided the joint and several liability repayment guarantee. The interest shall be paid quarterly and the principal shall be repaid on November 12, 2020.

As at December 31, 2019, the bank guarantee loan amounting to RMB 1,973,532,215 (as at December 31, 2018: RMB 1,500,000,000), was the bank loan borrowed by the Company. The Company's subsidiary ZPMC Port Machinery General Equipment Co., Ltd., provided the joint and several liability repayment guarantee. The interest shall be paid quarterly. For the principal, RMB 1,503,532,215 shall be repaid on September 10, 2020, and RMB 470,000,000 shall be repaid on November 10, 2021.

(ii) As at December 31, 2019, the total amount of multiple pledged loans amounting to RMB 1,420,127,942 (as at December 31, 2018: RMB 1,549,240,000) took the long-term accounts receivable of the "building-transfer" project of the Group as pledge (Note V (14)).

The interest shall be paid quarterly, and the principal shall be repaid between December 15, 2020 and December 23, 2029 (as at December 31, 2018: the principal shall be repaid between June 30, 2019 and December 31, 2029).

36 Long-term payables

	Year 2019	Year 2018
Leaseback financing fund (i)	2,250,543,212	2,679,234,129
"Building - transfer" project fund (ii)	139,682,457	131,402,483
Project quality guarantee deposit	105,885,895	108,202,625
Less: Leaseback financing fund matured within one year (Note V (34))	(754,165,928)	(951,378,118)
	1,741,945,636	1,967,461,119

(i) As at December 31, 2019, the long-term payables of RMB 2,250,543,212 (December 31, 2018: RMB 2,679,234,129) were obtained from the vessel with the book value of RMB 5,439,133,909 (as at December 31, 2018: RMB 4,940,559,588) and the mechanical equipment with the book value of RMB 255,113,376 (December 31, 2018: RMB 329,796,189) (Note V (18)) in leaseback way from the financial leasing company, with the maturity date from April 11, 2020 to September 24, 2031 (December 31, 2018: from April 11, 2020 to February 24, 2028). The Group will pay the leaseback financing fund on schedule each year to the financial leasing company in accordance with the contract terms. The Group takes the above series of transactions as mortgage loans for accounting treatment.

(ii) The Group and the construction party of "building-transfer" project agreed that part of the project payments would be paid to the construction party after the final acceptance of the "building-transfer" project within a certain term.

37 Estimated liabilities

Year 2019

	Beginning Balance	Increase	Decrease	Ending Balance
Estimated after-sale service cost	434,362,487	289,062,867	(242,082,732)	481,342,622
Product quality guarantee deposit	2,032,046	134,616	(2,166,662)	-
Others	2,658,150	-	-	2,658,150
	439,052,683	289,197,483	(244,249,394)	484,000,772

Year 2018

	Beginning Balance	Increase	Decrease	Ending Balance
Estimated after-sale service cost	376,515,711	285,921,532	(228,074,756)	434,362,487
Product quality guarantee deposit	514,462	1,561,231	(43,647)	2,032,046
Lawsuit compensation	85,200,340	-	(85,200,340)	-
Others	2,658,150	-	-	2,658,150
	464,888,663	287,482,763	(313,318,743)	439,052,683

38 Deferred income

Year 2019

	Beginning Balance	Increase	Decrease	Ending Balance
Government grants	368,795,361	65,081,202	(73,219,850)	360,656,713
Land compensation	100,500,859	-	(2,434,993)	98,065,866
	469,296,220	65,081,202	(75,654,843)	458,722,579

Year 2018

	Beginning Balance	Increase	Decrease	Ending Balance
Government grants	376,238,268	96,133,365	(103,576,272)	368,795,361
Land compensation	102,935,852	-	(2,434,993)	100,500,859
	479,174,120	96,133,365	(106,011,265)	469,296,220



As at December 31, 2019, liability items involved in government grants:

	Beginning Balance	Increase	Amount included in the other income in this year	Other changes	Ending Balance
Hoisting and pipe laying ship R&D project	92,500,000	-	(45,050,000)	-	47,450,000
Automated dock R&D project	28,050,000	9,405,000	-	-	37,455,000
Floating crane R&D project	15,399,400	-	(2,740,400)	-	12,659,000
Comprehensive standardization of intelligent manufacturing of marine engineering equipment	17,000,000	-	(5,300,000)	-	11,700,000
Deep sea drilling ship and auxiliary equipment research project	14,860,000	-	-	-	14,860,000
Unmanned driving technology piercing and intelligent group control system project	-	5,850,000	-	-	5,850,000
Research and demonstration project of crane boom structure and its test with low cost and large bearing capacity at sea	-	16,000,000	-	-	16,000,000
Research and introduction of key technologies for three-dimensional VOCs observation, traceability and near-zero emission	-	1,600,000	-	-	1,600,000
Research and application of key technologies for intelligent maintenance system for automatic container handling equipment	-	3,280,000	-	-	3,280,000
Architecture design and testing tools development of the next generation of intelligent operation platform for automated container terminals	6,410,000	4,800,000	-	-	11,210,000
Intelligent manufacturing workshop for crane box of automated terminal	14,171,796	-	-	-	14,171,796
10,000t semi-submerged ship R&D project	13,066,667	-	(560,000)	-	12,506,667
Transportation emplacement system R&D project	10,000,000	-	-	-	10,000,000
Drilling platform R&D project	9,390,000	-	-	-	9,390,000
Research and development of large-scale underwater robot work-system	8,533,000	-	-	-	8,533,000
Manufacturing process optimization R&D project in marine engineering field	8,000,000	-	-	-	8,000,000
Marine engineering positioning system R&D project	6,085,103	-	(1,612,218)	-	4,472,885
Port outdoor trackless navigation overload project	-	4,070,000	-	-	4,070,000
Intelligent transportation system of Automatic Guided Vehicle (AGV)	16,800,000	-	-	-	16,800,000
Development and industrialization of large deep water crane piping ship	5,572,000	-	-	-	5,572,000
CCCC DCM ship achievement transformation project	807,962	-	(807,962)	-	-
Self-elevating platform central control system	6,190,000	-	-	-	6,190,000
Finishing intelligent production line of special gear shaft for port machinery	2,560,000	-	-	-	2,560,000
Retractable boarding trestle system R&D project	4,448,300	-	-	-	4,448,300
Intelligent equipment for container yard	1,245,000	-	-	-	1,245,000
Collaborative innovation in the industrial chain of core components for high-end marine engineering equipment	2,100,000	-	-	-	2,100,000

	Beginning Balance	Increase	Amount included in the other income in this year	Other changes	Ending Balance
Key technology research project of bottom-supported offshore wind power installation platform	12,400,000	-	-	-	12,400,000
R&D and application demonstration project for the intelligent coating system of the main structure of large port machinery	8,000,000	-	-	-	8,000,000
Others	65,206,133	20,076,202	(11,074,270)	(6,075,000)	68,133,065
	368,795,361	65,081,202	(67,144,850)	(6,075,000)	360,656,713

On December 31, 2018, liability items involved in government grants:

	Beginning Balance	Increase	Amount included in the other income in this year	Other changes	Ending Balance
Hoisting and pipe laying ship R&D project	92,500,000	-	-	-	92,500,000
Submarine pipeline laying R&D project	41,300,500	-	(41,300,500)	-	-
Automated dock R&D project	24,820,000	3,430,000	-	(200,000)	28,050,000
Floating crane R&D project	18,139,800	-	(2,740,400)	-	15,399,400
Comprehensive standardization of intelligent manufacturing of marine engineering equipment	17,000,000	-	-	-	17,000,000
Deep sea drilling ship and auxiliary equipment research project	14,860,000	-	-	-	14,860,000
Drilling package R&D project	14,410,000	-	(8,000,000)	-	6,410,000
Intelligent manufacturing workshop for crane box of automated terminal	14,171,796	-	-	-	14,171,796
10,000t semi-submerged ship R&D project	13,626,667	-	(560,000)	-	13,066,667
Transportation emplacement system R&D project	10,000,000	-	-	-	10,000,000
Drilling platform R&D project	9,390,000	-	-	-	9,390,000
Research and development of large-scale underwater robot work-system	8,533,000	-	-	-	8,533,000
Manufacturing process optimization R&D project in marine engineering field	8,000,000	-	-	-	8,000,000
Marine engineering positioning system R&D project	7,697,321	-	(1,612,218)	-	6,085,103
Intelligent transportation system of Automatic Guided Vehicle (AGV)	6,000,000	10,800,000	-	-	16,800,000
Development and industrialization of large deep water crane piping ship	5,572,000	-	-	-	5,572,000
CCCC DCM ship achievement transformation project	4,031,250	-	(3,223,288)	-	807,962
Self-elevating platform central control system	3,810,000	2,380,000	-	-	6,190,000
Finishing intelligent production line of special gear shaft for port machinery	2,560,000	-	-	-	2,560,000
Retractable boarding trestle system R&D project	2,160,300	2,288,000	-	-	4,448,300
Intelligent equipment for container yard	1,445,000	-	(200,000)	-	1,245,000
Intelligent electric differential traction bridge crane	1,122,900	-	(1,122,900)	-	-
Collaborative innovation in the industrial chain of core components for high-end marine engineering equipment	-	18,900,000	(16,800,000)	-	2,100,000

	Beginning Balance	Increase	Amount included in the other income in this year	Other changes	Ending Balance
Key technology research project of bottom-supported offshore wind power installation platform	-	16,000,000	(3,600,000)	-	12,400,000
R&D and application demonstration project for the intelligent coating system of the main structure of large port machinery	-	8,000,000	-	-	8,000,000
Others	55,087,734	34,335,365	(16,741,963)	(7,475,003)	65,206,133
	376,238,268	96,133,365	(95,901,269)	(7,675,003)	368,795,361

The above government grants are related to income.

Other changes in current year are the R&D subsidies allocated to the partner in accordance with the research and development agreement.

Land compensation refers to the land compensation acquired by a subsidiary of the Company, which shall be amortized over the 50 years' land use term.

39 Other non-current liabilities

	Year 2019	Year 2018
Output tax to be carried forward	376,626,821	288,474,696

On balance sheet date, the revenue of some construction contracts and interest income of "building-transfer" projects of the Company had not reached the time point of the VAT liability. In accordance with the requirements of the Provisions on Accounting Treatment of VAT (CK 2016 No. [22]), the Group reclassified the ending credit balance of the item "Taxes and surcharges payable - Output tax to be carried forward" from "Taxes and surcharges payable" to "Other non-current liabilities" and listed in the balance sheet.

40 Share capital

Year 2019

	Increase/decrease						
	Beginning Balance	New shares issued	Share donation	Conversion of reserves into share	Others	Sub-total	Ending Balance
Shares without restricted conditions							
- Ordinary share in RMB	3,321,997,661	-	-	-	-	-	3,321,997,661
- Foreign invested share domestically listed	1,946,355,840	-	-	-	-	-	1,946,355,840
	5,268,353,501	-	-	-	-	-	5,268,353,501

Year 2018

	Increase/decrease						
	Beginning Balance	New shares issued	Share donation	Conversion of reserves into share	Others	Sub-total	Ending Balance
Shares without restricted conditions							
- Ordinary share in RMB	2,768,331,384	-	-	553,666,277	-	553,666,277	3,321,997,661
- Foreign invested share domestically listed	1,621,963,200	-	-	324,392,640	-	324,392,640	1,946,355,840
	4,390,294,584	-	-	878,058,917	-	878,058,917	5,268,353,501

The increase in share capital in 2018 was caused by the implementation of capital increase and allotment scheme by the Company. Based on the total share capital as at December 31, 2017, 2 shares per 10 shares were transferred to all of the shareholders with the capital reserves.

41 Capital reserves

Year 2019

	Beginning Balance	Increase	Decrease	Ending Balance
Share capital premium	4,537,774,553	-	-	4,537,774,553
Other capital reserves				-
- Business combination under common control	(16,203,111)	-	-	(16,203,111)
- Purchase of minority interest of subsidiaries	(711,345)	-	-	(711,345)
- Absorption of minority shareholders' investments by subsidiaries	-	185,934,674	-	185,934,674
- Transfer-in of capital reserves under the original system	128,059,561	-	-	128,059,561
	4,648,919,658	185,934,674	-	4,834,854,332

Year 2018

	Beginning Balance	Increase	Decrease	Ending Balance
Share capital premium	5,415,833,470	-	(878,058,917)	4,537,774,553
Other capital reserves				-
- Business combination under common control	(16,203,111)	-	-	(16,203,111)
- Purchase of minority interest of subsidiaries	(711,345)	-	-	(711,345)
- Transfer-in of capital reserves under the original system	128,059,561	-	-	128,059,561
	5,526,978,575	-	(878,058,917)	4,648,919,658

42 Other comprehensive income

In the balance sheet, accumulated balance of other comprehensive income attributable to the parent company:

	As at January 1, 2018	Increase/decrease	As at December 31, 2018	Adjustments for changes in accounting policies	As at January 1, 2019	Increase/decrease	As at December 31, 2019
Other comprehensive income that cannot be reclassified into profit or loss							
- Changes in fair value of other equity instrument investments	-	-	-	(19,517,486)	(19,517,486)	5,656,529	(13,860,957)
Other comprehensive income that will be reclassified into profit or loss							
- Other comprehensive income that can be transferred to profit or loss under the equity method	(2,391,155)	(4,655,831)	(7,046,986)	-	(7,046,986)	(2,004,706)	(9,051,692)
- Changes in fair value of available-for-sale financial assets	272,615,163	(76,002,428)	196,612,735	(196,612,735)	-	-	-
- Translation balance of foreign currency financial statements	3,668,970	30,619,141	34,288,111	-	34,288,111	12,154,989	46,443,100
	273,892,978	(50,039,118)	223,853,860	(216,130,221)	7,723,639	15,806,812	23,530,451



Amount of other comprehensive income incurred in the current period in the income statement:

Year 2019

	Pre-tax amount	Less: amount previously included in the other comprehensive income and currently transferred to the profit or loss	Less: income tax	Attributable to the parent company	Attributable to the minority equity
Other comprehensive income that cannot be reclassified into profit or loss					
- Changes in fair value of other equity instrument investments	6,654,739	-	998,210	5,656,529	-
Other comprehensive income that will be reclassified into profit or loss					
- Share in the investees' other comprehensive income that will be reclassified into profit or loss under equity method	(2,004,706)	-	-	(2,004,706)	-
- Translation balance of foreign currency financial statements	18,369,342	-	-	12,154,989	6,214,353
	23,019,375	-	998,210	15,806,812	6,214,353

Year 2018

	Pre-tax amount	Less: amount previously included in the other comprehensive income and currently transferred to the profit or loss	Less: income tax	Attributable to the parent company	Attributable to the minority equity
Other comprehensive income that will be reclassified into profit or loss					
- Share in the investees' other comprehensive income that will be reclassified into profit or loss under equity method	(4,655,831)	-	-	(4,655,831)	-
- Changes in fair value of available-for-sale financial assets	(89,670,351)	-	(13,667,923)	(76,002,428)	-
- Translation balance of foreign currency financial statements	49,893,429	-	-	30,619,141	19,274,288
	(44,432,753)	-	(13,667,923)	(50,039,118)	19,274,288

43 Special reserves

	Beginning Balance	Increase	Decrease	Ending Balance
Work safety expenses	3,019,173	71,228,319	(70,631,854)	3,615,638

According to the relevant requirements of the Administrative Measures for the Withdrawal and Use of Work Safety Expenses, the enterprises engaged in large - scale machinery manufacture and engineering construction shall withdraw the work safety expenses according to the standards. The increase and decrease in current year was the work safety expenses withdrawn and used by the Group for the reporting year in accordance with relevant requirements.

44 Surplus reserves

Year 2019

	Beginning Balance	Increase	Decrease	Ending Balance
Statutory surplus reserves	1,404,383,886	64,436,155	-	1,468,820,041
Discretionary surplus reserves	292,378,668	-	-	292,378,668
	1,696,762,554	64,436,155	-	1,761,198,709

Year 2018

	Beginning Balance	Increase	Decrease	Ending Balance
Statutory surplus reserves	1,326,165,303	78,218,583	-	1,404,383,886
Discretionary surplus reserves	292,378,668	-	-	292,378,668
	1,618,543,971	78,218,583	-	1,696,762,554

In accordance with the Company Law of the People Republic of China, the Company's Article of Association and the resolutions of the Board of Directors, the Company withdrew 10% of its net profit as statutory surplus reserves. When the accumulated amount of statutory surplus reserves reaches 50% or more of the share capital, the Company can stop the withdrawal.

The statutory surplus reserves can be used to compensate loss upon approval, or to increase share capital. The statutory surplus reserves withdrawn by the Company amounted to RMB 64,436,155 in 2019 (2018: RMB 78,218,583).

45 Undistributed profits

	Year 2019	Year 2018
Undistributed profits at the end of the previous year	3,344,953,206	3,199,681,426
Plus: changes in accounting policies	119,821,864	-
Undistributed profits at the beginning of the year after adjustment	3,464,775,070	3,199,681,426
Net profit attributable to shareholders of the parent company	514,930,143	443,005,092
Less: withdrawal of statutory surplus reserves	64,436,155	78,218,583
Distribution of cash dividends of ordinary shares	263,417,675	219,514,729
Undistributed profits at the end of the period	3,651,851,383	3,344,953,206

46 Operating revenue and operating costs

	Year 2019		Year 2018	
	Revenue	Cost	Revenue	Cost
Primary business	24,212,854,752	20,419,043,031	21,581,514,086	17,940,075,501
Other business	382,733,131	171,488,291	230,875,558	142,210,251
	24,595,587,883	20,590,531,322	21,812,389,644	18,082,285,752

Primary business revenue and cost are presented as below

	Year 2019		Year 2018	
	Primary business revenue	Primary business cost	Primary business revenue	Primary business cost
Port machinery	16,458,563,164	13,240,912,286	14,983,974,898	11,405,896,707
Heavy equipment	1,491,597,749	1,218,182,031	2,746,107,406	2,608,895,653
"Building-transfer" project and engineering construction	2,564,145,018	2,428,961,159	1,465,829,799	1,455,633,864
Steel structures and related revenue	2,709,430,977	2,571,473,994	1,558,778,586	1,656,155,935
Vessel shipping and others	989,117,844	959,513,561	826,823,397	813,493,342
	24,212,854,752	20,419,043,031	21,581,514,086	17,940,075,501



Other business revenue and cost are presented as below:

	Year 2019		Year 2018	
	Other business revenue	Other business cost	Other business revenue	Other business cost
Materials expenses	84,343,163	76,180,525	64,386,030	62,947,534
Equipment leasing and others	298,389,968	95,307,766	166,489,528	79,262,717
	382,733,131	171,488,291	230,875,558	142,210,251

47 Taxes and surcharges

	Year 2019	Year 2018
Housing property tax	52,880,028	54,701,491
Land use tax	24,137,152	24,648,393
Stamp duty	16,163,330	14,526,274
Urban maintenance and construction tax	5,291,413	9,113,572
Educational surtax	4,625,393	8,062,514
Others	4,931,365	5,227,750
	108,028,681	116,279,994

48 Selling and distribution expenses

	Year 2019	Year 2018
Employee compensation	74,574,647	64,666,352
Travel expenses	20,877,895	23,270,054
Sales and service fees	6,112,880	3,448,859
Exhibition fees	6,028,717	8,541,412
Advertising and publicity costs	4,381,065	3,966,124
Bidding and tendering expenses	2,028,918	2,087,276
Office expenses	1,854,211	2,186,270
Others	6,658,703	7,374,814
	122,517,036	115,541,161

49 General and administrative expenses

	Year 2019	Year 2018
Employee compensation	574,875,380	569,997,151
Amortization of intangible assets	98,274,728	97,685,733
Travel expenses	79,287,298	54,893,674
Depreciation of fixed assets	78,096,567	72,047,391
Office expenses	66,065,944	75,138,588
Expenses from employment of intermediaries	26,042,989	62,799,747
Management and security fees	23,138,964	21,796,844
Consulting fees	16,504,530	27,249,851
Entertainment expenses	14,982,731	15,774,517
Management and cleaning fees	14,822,114	15,449,059
Insurance expenses	13,347,013	16,063,873
Informatization expenses	12,571,622	28,395,805
Maintenance cost	6,151,691	5,696,924
Others	70,969,716	79,348,191
	1,095,131,287	1,142,337,348

50 Research and development expenses

	Year 2019	Year 2018
Employee compensation	422,157,374	393,654,871
Processing expenses	173,591,786	30,312,011
Depreciation expenses	133,479,779	128,117,342
Materials expenses	97,624,849	87,551,345
Product design expenses	5,968,051	2,553,979
Others	54,274,339	30,424,525
	887,096,178	672,614,073

51 Financial expenses

	Year 2019	Year 2018
Interest expenses	1,746,843,552	1,621,856,880
Less: Capitalized amount of interest	44,551,183	18,794,122
Less: interest income	331,452,183	332,607,896
Exchange losses	15,933,055	195,218,216
Others	109,813,173	56,591,735
	1,496,586,414	1,522,264,813

The capitalized amounts of borrowing costs have been included in the construction in progress.

52 Other income

Government grants relevant to the routine activities:

	Year 2019	Year 2018	Related to assets/income
Fiscal appropriation	68,173,798	92,341,144	Related to income
Technological subsidy	17,850,797	17,289,568	Related to income
Land compensation	2,434,993	2,434,993	Related to income
	88,459,588	112,065,705	

53 Investment income

	Year 2019	Year 2018
Income from long-term equity investment calculated under the equity method (Note V (15))	110,724,316	96,886,332
Investment income from trading financial assets during the holding period	63,766,921	-
Investment income from available-for-sale financial assets during the holding period (Note V (13))	-	19,144,647
Investment income from disposal of trading financial assets	109,315	-
	174,600,552	116,030,979

54 Gains from changes in fair value

	Year 2019	Year 2018
Trading financial assets (Only for year 2019)		
Including: Stock investment of listed companies	117,579,147	-
Derivative financial instruments - Forward exchange contract (Note V (3))	(44,481,806)	-
Derivative financial instruments - Foreign exchange option contract (Note V (2))	22,235,244	-

	Year 2019	Year 2018
Trading financial assets (Only for year 2019)		
Including: Derivative financial instruments - Forward exchange contract (Note V (27))	(7,312,741)	-
Financial assets measured at fair value through the current profit or loss (Only for year 2018)		
Including: Derivative financial instruments - Forward exchange contract (Note V. 3)	-	44,481,806
	88,019,844	44,481,806

55 Losses from credit impairment

	Year 2019
Losses from bad debts of accounts receivable (Note V (25))	36,235,314
Losses from bad debts of other receivables (Note V (25))	2,526,279
	38,761,593

56 Losses from impairment of assets

	Year 2019	Year 2018
Reversal of inventory depreciation (Note V (25))	(71,619,476)	(317,328,816)
Losses from bad debts (Note V (25))	-	50,183,121
Estimated contract losses (Note V (25))	124,113,760	254,569,473
	52,494,284	(12,576,222)

57 Gains from disposal of assets

	Year 2019	Year 2018
Gains from disposal of fixed assets	49,091,913	155,557,716

58 Non-operating revenue

	Year 2019	Year 2018	Included in non-recurring profit or loss in 2019
Government grants irrelevant to the routine activities	4,812,392	2,346,812	4,812,392
Revenue from insurance indemnity	60,000	290,941	60,000
Others	11,590,318	9,464,527	11,590,318
	16,462,710	12,102,280	16,462,710

59 Non-operating expenses

	Year 2019	Year 2018	Included in non-recurring profit or loss in 2019
Lawsuit compensation	21,781,220	70,449,299	21,781,220
Amercement outlay	5,535,000	-	5,535,000
Overdue fine payment	1,213,012	1,471,289	1,213,012
External donations	128,984	330,000	128,984
Others	1,545,282	4,574,736	1,545,282
	30,203,498	76,825,324	30,203,498

60 Classification of expenses by nature

Supplementary information on the classification by nature of the operating costs, selling and distribution expenses, general and administrative expenses, and research and development expenses of the Group is as follows:

	Year 2019	Year 2018
Used raw materials and low-cost consumables	15,704,636,157	13,048,899,660
Employee compensation (Note V (31))	2,216,065,862	2,161,564,345
Depreciation and amortization expenses (Notes V (17), V (18), V (20) and V (22))	1,330,738,630	1,397,696,739
Outsourcing expenses	1,378,775,266	1,193,139,124
Transportation expenses	589,854,221	627,384,537
On-site installation expenses	257,412,249	383,631,253
After-sale cost	240,972,483	219,776,274
Rental fees	218,357,687	185,422,528
Energy cost	216,602,224	218,960,046
Travel expenses	100,165,193	78,163,728
Office expenses	67,920,155	77,324,858
Expenses from employment of intermediaries	26,042,989	62,799,747
Entertainment expenses	14,982,731	15,774,517
Informatization expenses	12,571,622	28,395,805
Bidding and tendering expenses	2,028,918	2,087,276
Other expenses	318,149,436	311,757,897
	22,695,275,823	20,012,778,334

61 Income tax expenses

	Year 2019	Year 2018
Current income tax expenses	72,527,877	102,237,124
Deferred income tax expenses	21,222,707	40,976,324
	93,750,584	143,213,448

The relationship between the income tax expenses and total profits is as follows:

	Year 2019	Year 2018
Total profits	590,872,197	537,055,887
Income tax expenses calculated at applicable tax rate (15%)	88,630,830	80,558,383
Effect of the application of various tax rates by subsidiaries	19,167,841	23,403,438
Profit or loss attributable to joint ventures and associates	(16,608,647)	(14,532,950)
Tax-free income	(9,574,902)	(2,882,946)
Non-deductible expenses	3,223,573	4,068,352
Adjustment to final settlement in previous years	(1,253,554)	7,088,786
Use of deductible losses in previous years	(2,993,542)	(4,034,159)
Effect of unrecognized deductible temporary differences and deductible losses	58,152,734	88,991,848
Additional deduction of technological development expenses	(44,993,749)	(39,447,304)
Income tax expenses calculated at the actual tax rate applicable to the Group	93,750,584	143,213,448

62 Earnings per share

The basic earnings per share is calculated by dividing the current net profit attributable to the common shareholder of the Company by the weighted average of the Company's outstanding ordinary shares.

Calculation of basic earnings per share and diluted earnings per share:

	Year 2019	Year 2018
	RMB / Share	RMB / Share
Consolidated net profit attributable to the common shareholder of the parent company	514,930,143	443,005,092
Weighted average of outstanding ordinary shares	5,268,353,501	5,268,353,501
Basic earnings per share	0.10	0.08

In 2019 and 2018, the Company had no dilutive potential ordinary share, thus, the diluted earnings per share were equal to the basic earnings per share.

63 Notes to items in the statement of cash flows

	Year 2019	Year 2018
Cash received from other operating activities		
Customs deposit recovered	215,598,140	134,438,167
Cash received from government grants and rewards	99,690,746	210,466,281
Employee loan recovered	4,949,202	5,751,095
Cash received from the revenue from fines	7,820,315	5,842,463
Others	1,708,855	23,560,319
	329,767,258	380,058,325
Cash paid for other operating activities		
Customs deposit paid	190,498,482	193,509,947
Expenditures on selling and distribution expenses, general and administrative expenses, and research and development expenses	480,355,112	321,991,460
Financial expenses and handling charges	72,827,220	36,673,878
Subsidy for research and development paid to cooperative units	6,075,000	7,675,003
Others	157,753,932	137,007,880
	907,509,746	696,858,168
Cash received from other investing activities		
Interest income	267,388,460	301,254,856
Others	-	786,317
	267,388,460	302,041,173
Cash received from other financing activities		
Restricted bank deposits recovered	311,887,883	323,466,355
Loan recovered from third parties	507,447,092	960,848,000
	819,334,975	1,284,314,355
Cash paid for other financing activities		
Restricted bank deposits paid	265,853,823	311,887,883
L/G expenditures on overseas loan under domestic guarantee	27,092,719	19,917,857
Related-party loan repaid	864,135,544	803,092,390
Third-party loan repaid	86,683,488	67,401,455
	1,243,765,574	1,202,299,585

64 Supplementary information to the statement of cash flows

(1) Supplementary information to the statement of cash flows

Net profit adjusted to cash flows from operating activities:

	Year 2019	Year 2018
Net profit	497,121,613	393,842,439
Plus: provision for impairment of assets / (Reversal)	52,494,284	(12,576,222)
Provision for loss from credit impairment	38,761,593	-
Depreciation of investment properties and fixed assets	1,227,429,642	1,295,705,099
Intangible assets and long-term deferred expenses	103,308,988	101,991,640
Net amount of gains from disposal of fixed assets and intangible assets	(49,091,913)	(155,557,716)
Gains from changes in fair value	(88,019,844)	(44,481,806)
Financial expenses	1,547,048,645	1,489,952,919
Investment income	(174,600,552)	(116,030,979)
Decrease in deferred income tax assets	66,615,331	78,369,439
Decrease in deferred income tax liabilities	(45,392,624)	(37,393,115)
Increase in inventories	(3,151,985,115)	(1,532,625,209)
(Increase) / Decrease in construction contract payment	(531,000,142)	902,142,450
Decrease / (Increase) in operating receivables	440,854,132	(2,166,466,826)
Increases in operating payables	1,356,072,606	355,967,525
Increase in special reserves	596,465	1,104,341
Net cash flows from operating activities	1,290,213,109	553,943,979

Significant financing activities not involving cash:

	Year 2019	Year 2018
Capitan injection of minority shareholders with discounted engineering material	-	446,108,000

Endorsement transfer of notes:

	Year 2019	Year 2018
Endorsement transfer of bank acceptance bill received from sales of goods and rendering of services	3,777,188,521	3,079,584,191

Net changes in cash and cash equivalents:

	Year 2019	Year 2018
Ending balance of cash	3,068,024,976	3,148,987,372
Less: beginning balance of cash	3,148,987,372	5,673,847,001
Net decrease in cash and cash equivalents	(80,962,396)	(2,524,859,629)

(2) Information on the acquisition or disposal of subsidiaries and other business units

Acquisition of subsidiaries

	Year 2019	Year 2018
Subsidiary acquisition price	-	100,000
Less: cash and cash equivalents acquired from subsidiaries	-	886,316
Net cash received from acquisition of subsidiaries	-	(786,316)

(3) Cash and cash equivalents

	Year 2019	Year 2018
Cash		
Including: cash on hand	1,469,655	1,569,455
Unrestricted bank deposit	3,066,555,321	3,147,417,917
Ending balance of cash and cash equivalents	3,068,024,976	3,148,987,372

65 Assets with restrictions on the ownership or use right

	Year 2019	Year 2018	
Monetary funds (Note V(1))	242,272,475	548,351,336	Remark 1
Fixed assets (Note V (18))	5,694,247,285	5,270,355,777	Remark 2
Long-term receivables (Note V (14))	4,482,230,928	3,850,867,673	Remark 3
	10,418,750,688	9,669,574,786	

Remark 1: As at December 31, 2019, other monetary funds, including the restricted monetary fund of RMB 242,272,475 (as at December 31, 2018: RMB 548,351,336), were the special payment collected for overseas project and deposited in overseas supervision account and the margin deposit deposited by the Group for applying to the bank for letter of credit and bank guarantee.

Remark 2: As at December 31, 2019, the vessel with the book value of RMB 5,439,133,909 (December 31, 2018: RMB 4,940,559,588) and the mechanical equipment with the book value of RMB 255,133,376 (December 31, 2018: RMB 329,796,189) had been used for leaseback with the financial leasing company, with the financing term of 3 - 12 years.

Remark 3: As at December 31, 2019, the long-term receivables of "building-transfer" project of RMB 4,482,230,928 (December 31, 2018: RMB 3,850,867,673) were used as the pledge for obtaining bank loans.

66 Foreign currency monetary items

	Year 2019			Year 2018		
	Original currency	Exchange rate	Converted into RMB	Original currency	Exchange rate	Converted into RMB
Monetary fund						
USD	187,030,148	6.9762	1,304,759,718	230,480,643	6.8632	1,581,834,749
RUB	1,850,471,775	0.1126	208,363,122	4,727,787,201	0.0986	466,159,818
EUR	22,115,994	7.8155	172,847,551	49,058,155	7.8473	384,974,060
MYR	11,680,886	1.6986	19,841,153	-	-	-
KRW	1,883,694,269	0.0060	11,302,166	157,390,367	0.0061	960,081
OMR	606,629	17.8220	10,811,342	606,629	17.4249	10,570,450
HKD	6,566,844	0.8958	5,882,579	65,211,274	0.8762	57,138,118
AUD	1,063,372	4.8843	5,193,828	2,344,848	4.8250	11,313,892
GBP	530,273	9.1501	4,852,051	846,677	8.6762	7,345,939
AED	2,232,579	1.8716	4,178,495	997,605	1.8679	1,863,426
INR	41,131,539	0.0976	4,014,438	33,893,781	0.0980	3,321,591
JPY	58,950,895	0.0641	3,778,752	155,379,837	0.0619	9,618,012
BRL	1,736,079	1.7324	3,007,583	1,119,312	1.7742	1,985,883
SGD	423,818	5.1739	2,192,792	2,569,564	5.0062	12,863,751
LKR	1,924,147	0.0378	72,733	10,851,278	0.0380	412,349
ZAR	65,341	0.4943	32,298	183,062	0.4735	86,680
NZD	625	4.6973	2,936	625	4.5954	2,872
CAD	272	5.3421	1,453	272	5.0381	1,370
			1,761,134,990			2,550,453,041
Accounts receivable						
USD	199,858,740	6.9762	1,394,254,542	202,790,509	6.8632	1,391,791,821
EUR	51,214,638	7.8155	400,268,003	50,839,953	7.8473	398,956,363
SGD	16,774,617	5.1739	86,790,191	18,734,848	5.0062	93,790,396
CAD	4,860,024	5.3421	25,962,734	4,860,024	5.0381	24,485,287
GBP	1,906,839	9.1501	17,447,768	12,015,844	8.6762	104,251,866
ZAR	26,853,604	0.4943	13,273,736	29,070,672	0.4735	13,764,963

	Year 2019			Year 2018		
	Original currency	Exchange rate	Converted into RMB	Original currency	Exchange rate	Converted into RMB
QAR	6,946,721	1.9102	13,269,626	20,257,390	1.8886	38,258,107
SAR	6,132,449	1.8597	11,404,515	6,132,949	1.8287	11,215,324
KRW	1,619,097,005	0.0060	9,714,582	1,402,775,643	0.0061	8,556,931
LKR	175,910,762	0.0378	6,649,427	110,102,442	0.0380	4,183,893
AUD	946,057	4.8843	4,620,826	312,721	4.8250	1,508,879
INR	12,547,995	0.0976	1,224,684	7,711,999	0.0980	755,776
RUB	7,704,734	0.1126	867,553	1,826,988,611	0.0986	180,141,077
HKD	857,920	0.8958	768,525	162,113	0.8762	142,043
BRL	26,188	1.7324	45,368	8,702	1.7742	15,439
MYR	-	1.6986	-	18,313,728	1.6479	30,179,192
			1,986,562,080			2,301,997,357
Other receivables						
RUB	434,924,316	0.1126	48,972,478	36,896,471	0.0986	3,637,992
USD	6,152,092	6.9762	42,918,224	30,261,426	6.8632	207,690,219
EUR	2,681,728	7.8155	20,959,045	12,115,656	7.8473	95,075,187
ZAR	12,000,000	0.4943	5,931,600	387,503	0.4735	183,483
LKR	147,386,227	0.0378	5,571,199	67,576,559	0.0380	2,567,909
AUD	371,983	4.8843	1,816,877	291,278	4.8250	1,405,416
INR	10,674,702	0.0976	1,041,851	3,685,547	0.0980	361,184
HKD	562,294	0.8958	503,703	562,294	0.8762	492,682
KRW	68,820,643	0.0060	412,924	55,130,445	0.0061	336,296
BRL	169,311	1.7324	293,314	150,590	1.7742	267,177
SGD	-	-	-	339,137	5.0062	1,697,788
OMR	-	-	-	5,015	17.4249	87,386
			128,421,215			313,802,719
Accounts payable						
USD	145,950,807	6.9762	1,018,182,020	122,986,455	6.8632	844,080,638
EUR	33,271,115	7.8155	260,030,399	52,054,224	7.8473	408,485,112
SGD	5,664,134	5.1739	29,305,663	1,760,739	5.0062	8,814,612
JPY	134,130,528	0.0641	8,597,767	16,534,523	0.0619	1,023,487
GBP	548,386	9.1501	5,017,787	1,032,925	8.6762	8,961,864
KRW	391,082,860	0.0060	2,346,497	310,011,525	0.0061	1,891,070
INR	20,305,434	0.0976	1,981,810	13,157,480	0.0980	1,289,433
ZAR	3,307,565	0.4943	1,634,929	4,894,947	0.4735	2,317,757
HKD	1,124,619	0.8958	1,007,434	1,028,299	0.8762	900,996
AUD	186,345	4.8843	910,165	30,469	4.8250	147,013
BRL	58,509	1.7324	101,361	27,992	1.7742	49,663
CAD	7,259	5.3421	38,778	22,295	5.0381	112,324
RUB	22,478	0.1126	2,531	9,202	0.0986	907
LKR	-	-	-	2,644,316	0.0380	100,484
			1,329,157,141			1,278,175,360
Other payables						
USD	20,905,589	6.9762	145,841,570	25,833,699	6.8632	177,301,844
EUR	4,303,074	7.8155	33,630,675	2,937,497	7.8473	23,051,421

	Year 2019			Year 2018		
	Original currency	Exchange rate	Converted into RMB	Original currency	Exchange rate	Converted into RMB
SGD	576,277	5.1739	2,981,600	1,131,844	5.0062	5,666,237
LKR	70,614,854	0.0378	2,669,241	78,956,219	0.0380	3,000,336
BRL	371,496	1.7324	643,580	100,246	1.7742	177,856
RUB	3,926,708	0.1126	442,147	55,371,311	0.0986	5,459,611
KRW	25,539,452	0.0060	153,237	8,978,922	0.0061	54,771
HKD	15,000	0.8958	13,437	-	-	-
AUD	532	4.8843	2,598	972	4.8250	4,690
GBP	-	-	-	2,776	8.6762	24,085
			186,378,085			214,740,851
Short-term borrowings						
USD	261,118,082	6.9762	1,821,611,964	482,561,612	6.8632	3,311,916,855
EUR	73,125,397	7.8155	571,511,540	110,711,331	7.8473	868,785,028
JPY	1,356,315,135	0.0641	86,939,800	102,474,480	0.0619	6,343,170
CHF	11,000,000	7.2028	79,230,800	-	-	-
GBP	7,300,000	9.1501	66,795,730	-	-	-
			2,626,089,834			4,187,045,053
Long-term borrowings maturing within one year						
USD	245,400,000	6.9762	1,711,959,480	-	-	-
EUR	22,770,000	7.8155	177,958,935	-	-	-
			1,889,918,415			-
Long-term payables maturing within one year						
USD	79,252,111	6.9762	552,878,577	79,252,111	6.8632	543,923,088
Long-term borrowings						
USD	-	-	-	150,400,000	6.8632	1,032,225,280
EUR	-	-	-	22,770,000	7.8473	178,683,021
		-				1,210,908,301
Long-term payables						
USD	214,501,666	6.9762	1,496,406,522	225,212,900	6.8632	1,545,681,175

VI. Changes in the scope of consolidation

1 Changes in scope of consolidation due to other reasons

On February 2, 2019, the Company established a wholly-owned subsidiary ZPMC Fuzhou Offshore Construction Co., Ltd. via capital contribution in cash of RMB 5,000,000. As at December 31, 2019, the Company has a shareholding ratio of 100% in such subsidiary.

On May 28, 2019, the Company established a wholly-owned subsidiary Xiong'an Zhenhua Co., Ltd. via registration. As at December 31, 2019, the Company has a shareholding ratio of 100% in such subsidiary.

On October 24, 2019, the Company and CCCC Third Highway Engineering Co., Ltd. made a joint investment to establish a holding subsidiary CCCC (Dongming) Investment and Construction Co., Ltd. As at December 31, 2019, the Group has a shareholding ratio of 70% in such subsidiary.

VII. Equity in other entities

1 Equity in subsidiaries

Subsidiaries of the Company:

		Main business place	Registration place	Business nature	Shareholding ratio (%)		Way of acquisition
					Direct	Indirect	
Shanghai Zhenhua Port Machinery Heavy Industry Co., Ltd.		Chongming, Shanghai	Chongming, Shanghai	Machine manufacture	94.76%	-	Establishment by investing
Shanghai Zhenhua Port Machinery (Hong Kong) Co., Ltd.		Hong Kong	Hong Kong	Shipping	100%	-	Establishment by investing
Shanghai Zhenhua Shipping Co., Ltd.		Pudong New Area, Shanghai	Pudong New Area, Shanghai	Shipping	55.00%	-	Establishment by investing
Nantong Zhenhua Heavy Equipment Manufacturing Co., Ltd.		Nantong City, Jiangsu Province	Nantong City, Jiangsu Province	Machine manufacturing	100.00%	-	Establishment by investing
ZPMC Transmission Machinery (Nantong) Co., Ltd.		Nantong City, Jiangsu Province	Nantong City, Jiangsu Province	Machine manufacturing	50.75%	-	Establishment by investing
ZPMC Electric Co., Ltd.		Pudong New Area, Shanghai	Pudong New Area, Shanghai	Electric equipment research and development	100.00%	-	Establishment by investing
Jiangyin Zhenhua Port Machinery Steel Structure Manufacturing Co., Ltd.		Jiangyin City, Jiangsu Province	Jiangyin City, Jiangsu Province	Machine manufacturing	75.00%	25.00%	Establishment by investing
Shanghai Zhenhua Marine Engineering Service Co., Ltd.		Yangshan Bonded Port Area, Shanghai	Yangshan Bonded Port Area, Shanghai	Shipping	100.00%	-	Establishment by investing
ZPMC Machinery Equipment Services Co., Ltd.		Pudong New Area, Shanghai	Pudong New Area, Shanghai	Technical consultancy	100.00%	-	Establishment by investing
ZPMC Netherlands Coöperatie U.A.		Rotterdam, Netherlands	Rotterdam, Netherlands	Trade sales	100.00%	-	Establishment by investing
ZPMC Netherlands B.V.		Rotterdam, Netherlands	Rotterdam, Netherlands	Trade sales	100.00%	-	Establishment by investing
Verspannen B.V.		Rotterdam, Netherlands	Rotterdam, Netherlands	Machine manufacturing	-	100.00%	Business combination not under common control
ZPMC Espana S.L.		Los Barrios, Spain	Los Barrios, Spain	Trade sales	-	100.00%	Establishment by investing
ZPMC GmbH Hamburg		Hamburg, Germany	Hamburg, Germany	Trade sales	100.00%	-	Establishment by investing
ZPMC Lanka Company (Private) Limited		Colombo, Sri Lanka	Colombo, Sri Lanka	Trade sales	70.00%	-	Establishment by investing
ZPMC North America Inc.		Delaware, USA	Delaware, USA	Trade sales	100.00%	-	Establishment by investing
ZPMC Korea Co., Ltd.		Pusan, Korea	Pusan, Korea	Trade sales	70.00%	-	Establishment by investing
ZPMC Engineering Africa (Pty) Ltd.		Kwazulu-Natal Province, Republic of South Africa	Kwazulu-Natal Province, Republic of South Africa	Trade sales	100.00%	-	Establishment by investing
ZPMC Engineering (India) Private Limited		Maharashtra State, India	Maharashtra State, India	Trade sales	100.00%	-	Establishment by investing
ZPMC Southeast Asia Holding Pte. Ltd.		Singapore	Singapore	Trade sales	100.00%	-	Establishment by investing
ZPMC Engineering (Malaysia) Sdn. Bhd.		Malaysia	Malaysia	Trade sales	-	70.00%	Establishment by investing
ZPMC Australia Company (Pty) Ltd.		New South Wales, Australia	New South Wales, Australia	Trade sales	100.00%	-	Establishment by investing
ZPMC Port Machinery General Equipment Co., Ltd.		Pudong New Area, Shanghai	Pudong New Area, Shanghai	Machine manufacturing	100.00%	-	Business combination under common control



		Main business place	Registration place	Business nature	Shareholding ratio (%)		Way of acquisition
					Direct	Indirect	
Shanghai Port Machinery Heavy Industries Co., Ltd.		Pudong New Area, Shanghai	Pudong New Area, Shanghai	Machine manufacturing	-	74.02%	Business combination under common control
ZPMC Zhangjiagang Port Machinery Co., Ltd.		Zhangjiagang City, Jiangsu Province	Zhangjiagang City, Jiangsu Province	Machine manufacturing	90.00%	-	Business combination under common control
Nanjing Ninggao New Channel Construction Co., Ltd.		Nanjing City, Jiangsu Province	Nanjing City, Jiangsu Province	Engineering construction	100.00%	-	Investment
ZPMC Qidong Marine Engineering Co., Ltd.		Nantong City, Jiangsu Province	Nantong City, Jiangsu Province	Machine manufacturing	67.00%	-	Business combination not under common control
Jiahua Shipping Co., Ltd.		Hong Kong	Hong Kong	Shipping	-	70.00%	Establishment by investing
Zhenhua Pufeng Wind Power (Hong Kong) Co., Ltd.		Hong Kong	Hong Kong	Shipping	-	51.00%	Establishment by investing
ZPMC Brazil Serviço Portuários LTDA		Rio DE Janeiro, Brazil	Rio DE Janeiro, Brazil	Trade sales	80.00%	-	Establishment by investing
ZPMC Limited Liability Company		Moscow, Russia	Moscow, Russia	Trade sales	85.00%	-	Establishment by investing
ZPMC NA East Coast Inc.		Virginia	Delaware, USA	Trade sales	-	100.00%	Establishment by investing
CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.	(Remark 1)	Changshu City, Jiangsu Province	Changshu City, Jiangsu Province	Machine manufacturing	32.51%	-	Business combination under common control
CCCC Investment & Development Qidong Co., Ltd.	(Remark 2)	Nantong City, Jiangsu Province	Nantong City, Jiangsu Province	Engineering construction	49.36%	-	Establishment by investing
CCCC Liyang Urban Investment and Construction Co., Ltd.	(Remark 3)	Liyang City, Jiangsu Province	Liyang City, Jiangsu Province	Engineering construction	48.00%	-	Establishment by investing
ZPMC UK LD		Cardiff, UK	Cardiff, UK	Trade sales	100.00%	-	Establishment by investing
ZPMC Middle East Fze		Dubai, UAE	Dubai, UAE	Trade sales	100.00%	-	Establishment by investing
CCCC (Huaian) Construction Development Co., Ltd.		Huaian City, Jiangsu Province	Huaian City, Jiangsu Province	Engineering construction	-	77.01%	Establishment by investing
CCCC Zhenjiang Investment Construction Management Development Co., Ltd.		Zhenjiang City, Jiangsu Province	Zhenjiang City, Jiangsu Province	Engineering construction	70.00%	-	Establishment by investing
CCCC Yongjia Construction Development Co., Ltd.		Wenzhou City, Zhejiang Province	Wenzhou City, Zhejiang Province	Engineering construction	80.00%	-	Establishment by investing
CCCC Zhenhua Lvjian Technology (Ningbo) Co., Ltd.	(Remark 4)	Ningbo City, Zhejiang Province	Ningbo City, Zhejiang Province	Engineering construction	40.00%	-	Establishment by investing
ZPMC Hotel Co., Ltd.		Pudong New Area, Shanghai	Pudong New Area, Shanghai	Hotel and catering	-	100.00%	Business combination not under common control
CCCC Rudong Construction Development Co., Ltd.		Rudong City, Jiangsu Province	Rudong City, Jiangsu Province	Engineering construction	13.96%	52.54%	Establishment by investing
ZPMC Latin America Holding Corporation		Panama	Panama	Trade sales	100.00%	-	Establishment by investing
Terminexus Co., Ltd.		Hong Kong	Hong Kong	Technical consultancy	-	100.00%	Establishment by investing
Greenland Heavylift (Hong Kong) Limited	(Remark 5)	Hong Kong	Hong Kong	Shipping	-	50.00%	Business combination not under common control

		Main business place	Registration place	Business nature	Shareholding ratio (%)		Way of acquisition
					Direct	Indirect	
GPO Grace Limited		Marshall Islands	Marshall Islands	Shipping	-	100.00%	Business combination not under common control
GPO Amethyst Limited		Marshall Islands	Marshall Islands	Shipping	-	100.00%	Business combination not under common control
GPO Sapphire Limited		Marshall Islands	Marshall Islands	Shipping	-	100.00%	Business combination not under common control
GPO Emerald Limited		Marshall Islands	Marshall Islands	Shipping	-	100.00%	Business combination not under common control
GPO Heavylift Limited		Cayman Islands	Cayman Islands	Shipping	-	60.00%	Business combination not under common control
GPO Heavylift AS		Oslo, Norway	Oslo, Norway	Shipping	-	60.00%	Not under common control
GPO Heavylift Pte Ltd		Singapore	Singapore	Shipping	-	100.00%	Business combination not under common control
Xiong'an Zhenhua Co., Ltd.		Baoding City, Hebei Province	Baoding City, Hebei Province	Intelligent service	100.00%	-	Establishment by investing
ZPMC Fuzhou Offshore Construction Co., Ltd.		Fuzhou City, Fujian Province	Fuzhou City, Fujian Province	Maritime engineering construction	100.00%	-	Establishment by investing
CCCC (Dongming) Investment and Construction Co., Ltd.		Heze City, Shandong Province	Heze City, Shandong Province	Engineering construction	70.00%	-	Establishment by investing

Remark 1: The Group obtained 55.98% voting power in the board of shareholders of and 80% voting power in the board of directors of such company (CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.) by the amendment of articles of association of such company, reconstruction of the board of directors thereof and signing the agreement for concerted action with China Communications Corporation (one of the shareholders of CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.). In accordance with the regulations of the articles of association of such company, the Group had obtained the control right thereof, thus, such company was included in the Group's scope of consolidation.

Remark 2: By signing the agreement for concerted action with CCCC Tianjin Dredging Co., Ltd., the Group had obtained 95% voting power in the board of shareholders of and 100% voting power in the board of directors of such company (CCCC Investment & Development Qidong Co., Ltd.). In accordance with the regulations of the articles of association of such company, the Group had obtained the control right thereof, thus, such company was included in the Group's scope of consolidation.

Remark 3: By signing the agreement for concerted action with CCCC Shanghai Dredging Co. Ltd. and CCCC East China Investment Co., Ltd., the Group had obtained 76% voting power in the board of shareholders of and 71% voting power in the board of directors of such company (CCCC Liyang Urban Investment and Construction Co., Ltd.). In accordance with the regulations of the articles of association of such company, the Group had obtained the control rights thereof, thus, such company was included in the Groups' scope of consolidation.

Remark 4: By signing the agreement for concerted action with CCCC Highway Consultants Co. Ltd. and CCCC Equipment Manufacturing Marine Heavy Industry Division, the Group had obtained 50% voting power in the board of shareholders of and 60% voting power of the board of directors of such company (CCCC Zhenhua Lvjian Technology (Ningbo) Co., Ltd.). In accordance with the regulations of the articles of association of such company, the Group had obtained the control right thereof, thus, such company was included in the Group's scope of consolidation.

Remark 5: In accordance with the acquisition agreement, the Group held two of the four seats in the board of directors of such company (Greenland Heavylift (Hong Kong) Limited), including chairman of the board. As required in the articles of association of such company, the chairman of the board has super voting power when the voting of the board is deadlocked.



In addition, Group also has the right to buy 1% equity of such company at USD 1 at any time in the future. Therefore, the Group has the substantial control over such company, and such company was included in the Group's scope of consolidation for the financial statements.

Subsidiaries with significant minority equity:

Year 2019

	Shareholding ratio of minority shareholder %	Capital contributed by minority shareholder	Changes in accounting policies	Profit or loss attributable to the minority shareholder	Dividends paid to minority shareholder	Special reserves withdrawn by minority shareholder	Accumulated minority equity at the end of the year
CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.	67.49	-	(6,011,469)	48,481,428	-	53,477	684,876,399
ZPMC Transmission Machinery (Nantong) Co., Ltd.	49.25	614,065,326	-	-	-	-	614,065,326
CCCC Zhenjiang Investment Construction Management Development Co., Ltd	30.00	-	-	14,514,024	-	-	350,277,452
Greenland Heavylift (Hong Kong) Limited	50.00	-	-	(2,667,244)	(973,150)	-	292,355,846

Year 2018

	Shareholding ratio of minority shareholder %	Capital contributed by minority shareholder	Profit or loss attributable to the minority shareholder	Dividends paid to minority shareholder	Special reserves withdrawn by minority shareholder	Accumulated minority equity at the end of the year
CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.	67.49	-	39,565,707	(635,573)	(413)	642,352,963
CCCC Zhenjiang Investment Construction Management Development Co., Ltd	30.00	-	15,949,306	-	-	335,763,428
Greenland Heavylift (Hong Kong) Limited	50.00	-	(12,996,502)	-	-	295,996,240

The following table presents the main financial information of above subsidiaries. The data refer to amounts of all companies in the Group before mutual offset:

	Year 2019					
	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities
CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.	2,245,394,111	2,871,131,414	5,116,525,525	(3,456,472,738)	(645,270,749)	(4,101,743,487)
CCCC Zhenjiang Investment Construction Management Development Co., Ltd	377,510,693	853,738,541	1,231,249,234	(63,657,726)	-	(63,657,726)
Greenland Heavylift (Hong Kong) Limited	105,658,741	2,139,263,095	2,244,921,836	(429,544,507)	(1,233,274,882)	(1,662,819,389)
ZPMC Transmission Machinery (Nantong) Co., Ltd.	1,061,226,741	393,323,378	1,454,550,119	(207,716,971)	-	(207,716,971)

	Year 2019			
	Operating revenue	Net profit	Total comprehensive income	Cash flows from operating activities
CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.	1,163,944,626	71,810,934	71,810,934	55,406,683

	Year 2019			
	Operating revenue	Net profit	Total comprehensive income	Cash flows from operating activities
CCCC Zhenjiang Investment Construction Management Development Co., Ltd	-	48,380,079	48,380,079	(256,615,368)
Greenland Heavylift (Hong Kong) Limited	245,078,363	(16,628,814)	(7,122,338)	95,869,438
ZPMC Transmission Machinery (Nantong) Co., Ltd.	650,913,183	47,393,360	47,393,360	14,617,991

	Year 2018					
	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities
CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.	2,683,768,533	2,250,708,205	4,934,476,738	(3,405,276,767)	(577,400,904)	(3,982,677,671)
CCCC Zhenjiang Investment Construction Management Development Co., Ltd	114,313,970	1,045,638,449	1,159,952,419	(40,740,990)	-	(40,740,990)
Greenland Heavylift (Hong Kong) Limited	60,153,796	1,436,258,433	1,496,412,229	(87,059,172)	(818,181,971)	(905,241,143)

	Year 2018			
	Operating revenue	Net profit	Total comprehensive income	Cash flows from operating activities
CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.	1,230,112,617	58,624,548	58,624,548	(61,417,339)
CCCC Zhenjiang Investment Construction Management Development Co., Ltd	-	53,164,353	53,164,353	(102,681,078)
Greenland Heavylift (Hong Kong) Limited	106,628,409	(60,006,966)	(49,950,762)	(72,567,613)

2 Equity in joint ventures and associates

	Main business place	Registration place	Business nature	Registered capital	Shareholding ratio		Accounting treatment
					Direct	Indirect	
Joint ventures							
Jiangsu Longyuan Zhenhua Marine Engineering Co., Ltd.	Jiangsu	Nantong, Jiangsu	Marine engineering construction	260,000,000 RMB	50%	-	Equity method
ZPMC Mediterranean Liman Makinalari Ticaret Anonim Sirketi	Istanbul, Turkey	Istanbul, Turkey	Technical service for port equipment	50,000 TRY	50%	-	Equity method
Zhenhua Marine Energy (Hong Kong) Co., Ltd. (Remark 1)	Hong Kong	Hong Kong	Shipping	5,969,99 USD	-	51%	Equity method
Cranetech Global Sdn.Bhd.	Malaysia	Malaysia	Technical service for port equipment	1,000,000 MYR	-	49.99%	Equity method
ZPMC-OTL MARINE CONTRACTOR LIMITED	Hong Kong	Hong Kong	Shipping	2,000,000 USD	-	50%	Equity method
CCCC Tianhe Xi'an Equipment Manufacturing Co., Ltd.	Shaanxi	Xi'an, Shaanxi	Machine manufacture	300,000,000 RMB	-	50%	Equity method
CCCC Nanjing Traffic Engineering Management Co., Ltd.	Nanjing	China	Engineering management	50,000,000 RMB	45%	-	Equity method



	Main business place	Registration place	Business nature	Registered capital	Shareholding ratio		Accounting treatment
					Direct	Indirect	
Associates							
CCCC Marine Engineering & Technology Research Center Co., Ltd.	Shanghai	Pudong New Area, Shanghai	Marine technology development and consulting	60,000,000 RMB	25%	-	Equity method
CCCC Real Estate Yinxing Co., Ltd.	Jiangsu	Wuxi, Jiangsu	Real estate development	900,000,000 RMB	20%	-	Equity method
ZPMC Changzhou Coatings Co., Ltd.	Jiangsu	Changzhou, Jiangsu	Paint manufacture	3,000,000 RMB	20%	-	Equity method
CCCC Financial Leasing Co., Ltd.	Shanghai	Pudong New Area, Shanghai	Finance lease	5,000,000,000 RMB	30%	-	Equity method
CCCC Yancheng Construction and Development Co., Ltd	Jiangsu	Yancheng, Jiangsu	Engineering project construction	1,156,200,000 RMB	25%	-	Equity method
Suzhou Chuanglian Electric Drive Co., Ltd.	Jiangsu	Suzhou, Jiangsu	Electric equipment manufacturing	50,000,000 RMB	20%	-	Equity method
China Communications Construction USA Inc.	United States	United States	Port, channel, highway and bridge construction	50,000,000 USD	24%	-	Equity method
CCCC South American Regional Company SARL (Remark 2)	USA	USA	Port, channel, highway and bridge construction	179,988,158 USD	17%	-	Equity method
ZPMC Southeast Asia Pte.Ltd.	Singapore	Singapore	Trade sales	787,760 USD	-	40%	Equity method
Shanghai Ocean Engineering Equipment Manufacturing Innovation Center Co., Ltd. (Remark 3)	Shanghai	China	Development of ocean engineering technology	72,500,000 RMB	8.97%	-	Equity method

Remark 1: On May 5, 2014, the subsidiary of the Company and the partner established Zhenhua Marine Energy (Hong Kong) Co., Ltd. via joint investment. The registered capital of such company was USD 5,969,998, in which the subsidiary of the Company contributed USD 3,044,699 with the shareholding ratio of 51%. The company mainly engages in shipping. According to the regulations of the company's shareholder agreement, the important events of the company should be agreed via voting by shareholders holding no less than 75% of shares. Therefore, the Group has no control over the company but jointly controls the same with the partner.

Remark 2: On December 15, 2016, the Company contributed USD 16,480,000 (equivalent to RMB 114,321,760) to buy shares of CCCC South American Regional Company SARL. As at December 31, 2019, the registered capital of such company was USD 179,988,158 and the Company held a shareholding ratio of 17% in such company. The company mainly engages in port construction. According to the regulations of the articles of association of such company, the Company has the right to designate one director thereto and to implement significant impact thereon.

Remark 3: On September 10, 2019, the Company contributed RMB 6,500,000 to buy shares of Shanghai Ocean Engineering Equipment Manufacturing Innovation Center Co., Ltd. Such company has a registered capital of RMB 72,500,000, and the Company has a shareholding ratio of 8.97% therein. Such company main engages in the development of ocean engineering technology. According to the regulations of the articles of associations of such company, the Company has the right to designate one director thereon and to implement significant impact thereon.

Main financial information of major associates:

For amounts of associates in the consolidated financial statements, the fair values of identifiable assets and liabilities of associates at the time of acquiring investments and the impact of unified accounting policies have been taken into account.

CCCC Financial Leasing Co., Ltd.	Year 2019	Year 2018
Current assets	19,939,324,543	16,819,852,506
Non-current assets	21,339,769,559	14,386,974,050
Total assets	41,279,094,102	31,206,826,556
Current liabilities	(21,496,787,586)	(14,391,112,371)
Non-current liabilities	(11,265,256,085)	(9,282,803,916)
Total liabilities	(32,762,043,671)	(23,673,916,287)

CCCC Financial Leasing Co., Ltd.	Year 2019	Year 2018
Minority equity	2,564,707,504	1,794,759,090
Shareholders' equity attributable the parent company	5,952,342,927	5,738,151,179
Share of net assets held based on shareholding ratio	1,785,702,878	1,721,445,354
Book values of investments in associates	1,785,702,878	1,721,445,354
Operating revenue	2,052,054,187	1,693,357,297
Financial expenses-interest income	18,917,032	14,581,320
Financial expenses - interest expenses	51,051,246	11,983,472
Income tax expenses	126,731,537	114,094,285
Net profit	386,156,164	351,695,926
Other comprehensive income, net of tax	1,034,782	2,159,463
Total comprehensive income	387,190,946	353,855,387
Total comprehensive income attributable to the parent company	298,442,527	292,982,568
Dividends distributed	32,500,000	150,000,000

Summary of financial information on insignificant joint ventures and associates:
Joint ventures

	Year 2019	Year 2018
Total book value of investment	312,812,059	287,691,938
Total amounts of the following items calculated at shareholding ratio		
Net profit	17,192,511	9,181,182
Other comprehensive income	-	-
Total comprehensive income	17,192,511	9,181,182

Associates

	Year 2019	Year 2018
Total book value of investment	775,158,808	766,664,468
Total amounts of the following items calculated at shareholding ratio		
Net profit	4,309,481	458,218
Other comprehensive income	(2,315,141)	(5,303,670)
Total comprehensive income	1,994,340	(4,845,452)

VIII. Risks related to financial instruments

1 Classification of financial instruments

The book values of various financial instruments on the balance sheet date:

Year 2019

Financial assets

	Financial assets measured at fair value through the current profit or loss		Financial assets measured at amortized cost	Financial assets measured at fair value through the other comprehensive income		Total
	Standard	Designated		Standard	Designated	
Monetary fund	-	-	3,310,297,451	-	-	3,310,297,451
Trading financial assets	1,739,792,062	-	-	-	-	1,739,792,062
Notes receivable	-	-	5,650,000	-	-	5,650,000



	Financial assets measured at fair value through the current profit or loss		Financial assets measured at amortized cost	Financial assets measured at fair value through the other comprehensive income		Total
	Standard	Designated		Standard	Designated	
Receivables financing	-	-	-	406,408,604	-	406,408,604
Accounts receivable	-	-	4,966,175,528	-	-	4,966,175,528
Other receivables	-	-	546,907,645	-	-	546,907,645
Non-current assets maturing within one year	-	-	1,313,203,581	-	-	1,313,203,581
Investment in other equity instruments	-	-	-	-	61,981,268	61,981,268
Long-term receivables	-	-	5,227,728,420	-	-	5,227,728,420
	1,739,792,062	-	15,369,962,625	406,408,604	61,981,268	17,578,144,559

Financial liabilities

	Financial liabilities measured at fair value through the current profit or loss		Financial liabilities measured at amortized cost	Total
	Standard	Designated		
Short-term borrowings	-	-	22,001,319,380	22,001,319,380
Trading financial liabilities	7,312,741	-	-	7,312,741
Notes payable	-	-	3,420,945,451	3,420,945,451
Accounts payable	-	-	7,869,378,365	7,869,378,365
Other payables	-	-	694,418,175	694,418,175
Non-current liabilities maturing within one year	-	-	7,287,484,513	7,287,484,513
Long-term borrowings	-	-	8,413,339,986	8,413,339,986
Long-term payables	-	-	1,741,945,636	1,741,945,636
	7,312,741	-	51,428,831,506	51,436,144,247

Year 2018

Financial assets

	Financial assets measured at fair value through the current profit or loss	Loans and receivables	Available-for-sale financial assets	Total
Monetary fund	-	3,697,338,708	-	3,697,338,708
Financial assets measured at fair value through the current profit or loss	52,920,084	-	-	52,920,084
Notes receivable and accounts receivable	-	5,221,919,846	-	5,221,919,846
Other receivables	-	680,776,372	-	680,776,372
Non-current assets maturing within one year	-	894,638,424	-	894,638,424
Available-for-sale financial assets	-	-	1,214,533,554	1,214,533,554
Long-term receivables	-	5,188,341,089	-	5,188,341,089
	52,920,084	15,683,014,439	1,214,533,554	16,950,468,077

Financial liabilities

	Other financial liabilities
Short-term borrowings	16,554,687,487
Notes payable and accounts payable	9,769,273,923

	Other financial liabilities
Other payables	952,110,434
Non-current liabilities maturing within one year	4,209,532,510
Long-term borrowings	15,097,725,259
Long-term payables	1,967,461,119
	48,550,790,732

2 Transfer of financial assets

Transferred financial assets derecognized as a whole but involved continuously

As at December 31, 2019, the book value of the bank acceptance bill given by the Group upon endorsement to the supplier for accounts payable settlement amounted to RMB738,496,754(December 31, 2018: RMB 364,908,608).

As at December 31, 2019, the maturity term of such bill was 1 - 12 months. In accordance with the relevant provisions of the Negotiable Instruments Law, if the acceptance bank refuses to pay, the bill holder shall be entitled to recourse to the Group ("continue to be involved").The Group considered that it had transferred almost all risks and rewards of such bill, therefore, the aforesaid book value and the book value of relevant settled accounts payable should be derecognized as a whole. The maximum losses and undiscounted cash flows that continue to be involved were equal to the book value. The Group considered that the fair value with continuous involvement was insignificant.

In 2019, the Group failed to recognized relevant gain or loss on the date of transfer of the above financial assets (Year 2018: None).The Group had no income or expense which had been recognized for the current year or accumulatively as it had been derecognized as a whole but continued to be involved in the financial assets. The endorsement of bank acceptance bill receivable happened in this year evenly.

3 Financial instrument risks

Various financial instrument risks the Group faces during the routine activities mainly include the credit risk, liquidity risk and market risk (including the exchange rate risk and interest rate risk). Main financial instruments of the Group include the monetary funds, equity investment, borrowings, notes receivable, accounts receivable, accounts receivable financing, long-term receivables, notes payable and accounts payable.

The Group's overall risk management plan is targeted at the unpredictability of financial market, trying to minimize the potential adverse influence on the Group's financial results.

Credit risk

The Group manages the credit risks by the classification of portfolios. The credit risk is mainly from notes receivable, accounts receivable financing, accounts receivable, other receivables and long-term receivables.

Other financial assets of the Group include monetary funds, trading financial assets and other equity investment instruments, of which credit risks are from the counterpart's default, and the maximum exposure is equal to the book amount of these instruments.

The Group only trade with the authorized third parties in good standing. Credit risks are managed in a centralized manner by customer/counterpart, geographic region and industry. As the Group's customers of accounts receivable and long-term receivables are widely dispersed across sectors and industries, there is no significant credit risk concentration within the Group. The Group did not hold any collateral or other credit enhancements for the balance of accounts receivable and long-term receivables, but did the same for the balance of long-term receivables.

As the counterparts of monetary funds, bank acceptance bill receivable and derivative financial instruments are banks in good standing and having relatively higher credit rating, these financial instruments have low credit risk.

In addition, as for the notes receivable, accounts receivable financing, accounts receivable, other receivables, and long-term accounts receivable, the Group has set relevant policies to control the credit risk exposure. The Group, based on the customers' financial positions, the possibility of obtaining guarantees from the third party, credit records and other factors such as the current market conditions, evaluates the credit qualifications of customers and set the credit period accordingly. The Group will monitor customers' credit records periodically; as for the customers with bad credit records, the Group will take measures, such as requesting a payment in writing, shortening the credit period or canceling the credit term, to ensure that the Group's overall credit risks are within the controllable scope.

Year 2019

Judgment criteria for significant increase in credit risk

On each balance sheet date, the Group will evaluate the credit risks of relevant financial instruments to confirm whether they have had significant increase or not after the initial recognition. On such confirmation, the Group will consider the reasonable and well-founded information which can be obtained without paying unnecessary surcharge or effort, including the information on qualitative and quantitative analysis based on the Group's historical data, external credit risk rating and perspectiveness. Based on the individual financial instrument or portfolio of financial instruments with similar credit risk characteristics, the Group determines the changes in default risk in financial instruments during the estimated duration by comparing the default risks in financial instruments on the balance sheet date with those on the initial recognition date.

In case of one or more quantitative or qualitative standards, the Group will consider that the credit risk of a financial instrument has had significant increase:

(1) The quantitative standard mainly refers to the situation that the reporting date is overdue for certain days.

(2) The qualitative standard mainly refers to the situation that the debtor encounters any significant and adverse operating or financial change, or prepares the list of warning customers.

Definition of assets with credit impairment

In order to determine whether there is credit impairment, the Group adopts a definition standard to keep pace with the internal credit risk management target regarding relevant financial instruments, and takes the quantitative and qualitative indicators into account. The Group mainly considers the following factors on evaluating whether the debtor has had credit impairment:

(1) The issuer or the debtor suffers significant financial difficulties;

(2) The debtor violates any contract, such as default or delay in repayment of interest or principal;

(3) Considering the economic or contractual reasons relevant to the debtor's financial difficulty, the debtor makes concession which it will not make in any other circumstance;

(4) The debtor is likely to go bankrupt or carry out other financial reorganization;

(5) The active market of such financial assets disappears due to the issuer's or the debtor's financial difficulty;

(6) A financial asset is purchased or generated through the substantial discount, and such discount reflects the fact of credit loss.

The credit impairment of financial assets may be caused by several events, not just one event which can be individually identified.

Parameters for the measurement of expected credit loss

Based on the information whether the credit risk has had significant increase or there is credit impairment, the Group makes the provision for impairment of expected credit losses of various assets for 12 months or the entire duration. Key parameters for the measurements of expected credit loss include the probability of default, loss given default and exposure at default. Considering the quantitative analysis on historical statistical data (including the rating of the counterpart, way of guarantee and category of collateral) and prospective information, the Group builds models for probability of default, loss given default and exposure at default.

Relevant definitions:

(1) The probability of default refers to the probability that the debtor may fail to perform the payment obligation within the future 12 months or the entire duration. The Group's probability of default is adjusted based on the credit loss model, adding the prospective information to reflect the debtor's probability of default in the current macroeconomic environment;

(2) The loss given default refers to the expectation made by the Group regarding the degree of loss on default risk exposure. As the type of counterpart, way of recourse and priority as well as collateral may be different, the loss given default may also be different. The loss given default refers to the percentage of the risk exposure loss at default, calculated based on the term of future 12 months or the entire duration;

(3) The exposure at default refers to the amount paid by the Group at default in the future 12 months or the entire remaining duration.

The prospective information is involved in the evaluation on significant change in credit risk and the calculation of expected credit loss. Through the historical data analysis, the Group identifies the key economic indicators affecting the credit risks in various type of business and the expected credit loss.

The impact of these economic indicators on the probability of default and the loss given default is different for different type of business. In such course, the Group makes the reference to the authoritative predictive values, expect these economic indicators based on results of those values, and determine the impact of these economic indicators on the probability of default and the loss given default.

The maximum risk exposure and the year-end classification of credit risk degrees regarding the Group's financial assets are as follows:

	Expected credit loss in future 12 months	Expected credit loss in the entire lifecycle			Total
	Stage I	Stage II	Stage III	Simple method	
Monetary funds	3,310,297,451	-	-	-	3,310,297,451
Notes receivable	5,650,000	-	-	-	5,650,000
Accounts receivable	-	-	-	4,966,175,528	4,966,175,528
Receivables financing	406,408,604	-	-	-	406,408,604
Other receivables	1,097,763,737	78,797,771	-	-	1,176,561,508
Non-current assets maturing within one year	1,313,203,581	-	-	-	1,313,203,581
Long-term receivables	5,227,728,420	-	-	-	5,227,728,420
	11,361,051,793	78,797,771	-	4,966,175,528	16,406,025,092

Year 2018

As at December 31, 2018, analysis on the term of financial assets overdue but not impaired is as follows:

	Total	Not overdue Not impaired	Overdue			
			Within 1 year	1 - 2 years	2 - 3 years	Over 3 years
Monetary funds	3,697,338,708	3,697,338,708	-	-	-	-
Notes receivable	189,371,105	189,371,105	-	-	-	-
Accounts receivable	3,201,290,816	2,699,000,085	153,982,269	120,227,018	102,862,164	125,219,280
Other receivables	1,137,887,691	1,137,887,691	-	-	-	-
Non-current assets maturing within one year	894,638,424	894,638,424	-	-	-	-
Long-term receivables	5,188,341,089	5,188,341,089	-	-	-	-
	14,308,867,833	13,806,577,102	153,982,269	120,227,018	102,862,164	125,219,280

As at December 31, 2018, the accounts receivable not overdue and impaired were relevant to a large number of sporadic customers where there is no default record recently.

As at December 31, 2018, the accounts receivable overdue and impaired were relevant to a large number of individual customers where there are good records on transactions with Group. According to the previous experience, as the financial assets have no significant change in credit quality and are deemed to be recoverable in full, the Group considers that no provision for impairment should be made for such financial assets.

Liquidity risk

Subsidiaries within the Group are responsible for their own cash-flow prospects. The financial section of the head office continues to monitor the short-term and long-term capital demands at the group level after collecting the cash flows prospects of all subsidiaries, to guarantee the sufficient cash reserve and cashable securities. Meanwhile, the financial section of the head office continues to monitor the financial and non-financial indicators prescribed in credit-granting agreements and loan agreements, to ensure that the Group can get sufficient line of credit from major financial institutions, so as to satisfy the short-term and long-term capital demands of all subsidiaries of the Group.

As at December 31, 2019, the various financial liabilities of the Group are listed as follows by due dates based on undiscounted contracted cash flows (including principal and interest):

	Year 2019				
	Within 1 year	1 - 2 years	2 - 5 years	Over 5 years	Total
Short-term borrowings	22,371,944,008	-	-	-	22,371,944,008
Notes payable	3,420,945,451	-	-	-	3,420,945,451
Accounts payable	7,869,378,365	-	-	-	7,869,378,365
Other payables	711,389,996	-	-	-	711,389,996

	Year 2019				
	Within 1 year	1 - 2 years	2 - 5 years	Over 5 years	Total
Non-current liabilities maturing within one year	7,533,454,596	-	-	-	7,533,454,596
Long-term borrowings	-	2,959,780,013	5,249,838,271	879,572,205	9,089,190,489
Long-term payables	-	683,803,609	535,717,708	609,414,984	1,828,936,301
	41,907,112,416	3,643,583,622	5,785,555,979	1,488,987,189	52,825,239,206

As at December 31, 2018, the various financial liabilities of the Group are listed as follows by due dates based on undiscounted contracted cash flows (including principal and interest):

	Year 2018				
	Within 1 year	1 - 2 years	2 - 5 years	Over 5 years	Total
Short-term borrowings	16,831,239,955	-	-	-	16,831,239,955
Notes payable	2,732,404,222	-	-	-	2,732,404,222
Accounts payable	7,036,869,701	-	-	-	7,036,869,701
Other payables	1,098,580,447	-	-	-	1,098,580,447
Non-current liabilities maturing within one year	4,383,617,609	-	-	-	4,383,617,609
Long-term borrowings	-	7,708,456,612	7,771,884,597	509,025,150	15,989,366,359
Long-term payables	-	1,013,791,584	524,739,421	505,113,074	2,043,644,079
	32,082,711,934	8,722,248,196	8,296,624,018	1,014,138,224	50,115,722,372

Market risk

Interest rate risk

The Group's interest rate risk is mainly from such long-term interest-bearing liabilities as long-term bank borrowings and long-term payables. Floating-rate financial liabilities expose the Group to cash flow interest rate risk while fixed-rate financial liabilities expose the Group to fair value interest rate risk. The Group determines the relative proportion of contracts with fixed interest rate and contracts with floating interest rate according to the current market environment. As at December 31, 2019, the Group's long-term interest-bearing liabilities mainly were the floating rate contracts priced in USD, and the fixed rate contracts priced in RMB.

The market interest rate fluctuating risks the Group encounters are mainly relevant to the long-term liabilities where the interest is calculated at the floating interest rate.

The finance department in the headquarters of the Group continues monitoring and controlling the interest rate level of the Group. The increase in interest rate will increase the costs of the new interest-bearing debts and the interest expenses of interest-bearing debts failing to be paid up by the Group and subject to the interest calculation at floating interest rate, and will, significantly and adversely, affect the Group's financial results; the management will control partial interest rate risk based on the newest market situation through the swap contract and other interest rate swap arrangements. In 2018 and 2019, the Group had no interest rate swap arrangement.

The following table shows the sensitivity analysis of the interest rate risk, reflecting the effect of the reasonable and possible changes in the interest rate on net profit or loss (through the impact on loan with floating interest rate) and the net amount of other comprehensive income after tax, based on the assumption of no change in other variables.

Year 2019

	Base pointIncreases / (Decreased)	Net profit or loss Increases / (Decreased)	Other comprehensive income, net of tax Increases / (Decreased)	Total shareholders' equityIncreases / (Decreased)
RMB	100	(58,026,976)	-	(58,026,976)
RMB	(100)	58,026,976	-	58,026,976

Year 2018

	Base pointIncreases / (Decreased)	Net profit or lossIncreases / (Decreased)	Other comprehensive income, net of taxIncreases / (Decreased)	Total shareholders' equityIncreases / (Decreased)
RMB	100	(48,269,201)	-	(48,269,201)
RMB	(100)	48,269,201	-	48,269,201

Exchange rate risk

The Group is exposed to transactional exchange rate risk. Such risks are due to sales or purchases made by the operating entity in currencies other than its functional currency. The Group's main production is within the territory of China, but its sales and purchase is settled in USD. However, there still were foreign exchange risks in the foreign currency assets and liabilities and future foreign currency transactions that have been recognized by the Group (foreign currency assets and liabilities and foreign currency transactions are priced mainly in USD). The finance department of the Headquarters of the Group is responsible for supervising the scale of the Group's foreign currency transactions and foreign currency assets and liabilities to minimize the foreign exchange risks; In the year, the Group adopted forward foreign exchange contract with Ruble to USD to offset the exchange rate risk of sales transactions in Ruble.

The following table is a sensitivity analysis of exchange rate risk, reflecting the assumption that all other variables will remain the same, when the USD exchange rate changes reasonably and possibly, it will affect the net profit or loss (due to the change in fair value of monetary assets and liabilities) and other comprehensive income, net of tax (due to the change in fair value of forward foreign exchange contract).

Year 2019

	USD exchange rate Increase /(decrease)	Net profit or loss Increase /(decrease)	Other comprehensive income, net of tax Increase /(decrease)	Total shareholders' equity Increase /(decrease)
RMB appreciation against USD	1%	40,098,106	-	40,098,106
RMB depreciation against USD	(1)%	(40,098,106)	-	(40,098,106)

Year 2018

	USD exchange rate Increase /(decrease)	Net profit or loss Increase /(decrease)	Other comprehensive income, net of tax Increase /(decrease)	Total shareholders' equity Increase /(decrease)
RMB appreciation against USD	1%	35,226,305	-	35,226,305
RMB depreciation against USD	(1)%	(35,226,305)	-	(35,226,305)

4 Capital management

The Group's objectives of capital management policy are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares, borrow new funds or sell assets to reduce debt.

The total capital of the Group is the shareholders' equity as listed in the consolidated balance sheet. The Group is not subject to external mandatory capital requirements and makes use of the asset-liability ratio to monitor capital. This ratio is calculated by the net debt divided by total capital. The net debt is the total borrowing (including Short-term borrowings listed in the consolidated balance sheet, other non-current liabilities due within one-year, Long-term borrowings, other payables and interest-bearing liabilities in long-term payables) minus cash and cash equivalents. The total capital is the total shareholders' equity plus net debt.

As at December 31, 2019 and December 31, 2018, the liability ratio of the Group is listed as follows:

	Year 2019	Year 2018
Debt ratio	67%	66%

XI. Disclosure of fair value

1 Assets and liabilities measured at the fair value

Year 2019

	Inputs used in the fair value measurement			Total
	With quoted price in the activemarket (Level 1)	Important observable input value (Level 2)	Important unobservable input value (Level 3)	
Continuous measurement at fair value				
Financial assets held for trading				
-Equity instrument investments	-	-	8,438,278	8,438,278
Equity of listed companies	1,709,118,540	-	-	1,709,118,540
-Foreign currency options contract	-	22,235,244	-	22,235,244
Receivables financing	-	-	406,408,604	406,408,604
Investment in other equity instruments	-	-	61,981,268	61,981,268
	1,709,118,540	22,235,244	476,828,150	2,208,181,934
Continuous measurement at fair value				
Financial liabilities held for trading				
-Forward foreign exchange contract	-	7,312,741	-	7,312,741

Year 2018

	Inputs used in the fair value measurement			Total
	With quoted price in the activemarket (Level 1)	Important observable input value (Level 2)	Important unobservable input value (Level 3)	
Financial assets				
Financial assets measured at fair value through current profit or loss				
-Forward foreign exchange contract	-	44,481,806	-	44,481,806
-Equity instrument investments	-	-	8,438,278	8,438,278
Available-for-sale equity instruments	1,171,539,394	-	-	1,171,539,394
	1,171,539,394	44,481,806	8,438,278	1,224,459,478

The Group regards the date when the conversion of levels occurs as the time point of the conversion of all levels. There was no conversion among levels in this year.

Where there is an active market traded for a financial instrument, the Group shall adopt the quoted price in the active market to determine the fair value thereof; where there is no active market traded for a financial instrument, the Group shall adopt value appraisal techniques to determine its fair value. The valuation models used are discounted cash flow model. The input value of valuation techniques mainly includes the risk-free interest rate or forward exchange rate.

Relevant information about the measurement of fair value at level 2 as follows:

	Year 2019		Observable input value	
	Fair value	Valuation technique	Name	Scope
Financial assets held for trading				
- EUR options contract	13,571,924	Cash flow Discounting model	RMB-EUR conversion Forward foreign exchange	7.8518 to 7.9009
- GBP options contract	8,663,320	Cash flow Discounting model	RMB-EUR conversion Forward foreign exchange	9
Financial liabilities held for trading				
- EUR Forward foreign exchange contract	7,312,741	Cash flow Discounting model	RMB-EUR conversion Forward foreign exchange	7.8331 to 7.8518

The significant and unobservable input value of fair value measurement at Level 3 is as follows:

	Year 2019		Unobservable input value	
	Fair value	Valuation technique	Name	Weighted average
Financial assets held for trading -Equity instrument investments	8,438,278	Discounted cash flow mode	Weighted average capital cost	11%
Receivables financing	406,408,604	Discounted cash flow mode	Similar open market Lending rate	4.4%
Investment in other equity instruments	61,981,268	Market comparable company model	Liquidity discount P/B ratio of comparable company	29%1.2

2 Assets and liabilities disclosed at fair value

The financial assets and liabilities measured at amortized cost of the Group mainly include monetary funds, notes receivable and accounts receivable, other receivables, long-term receivables, non-current assets maturing within one-year, short-term borrowings, notes payable, accounts payable, long-term borrowings, and non-current liabilities maturing within one year, etc.

The management has evaluated the monetary funds, accounts receivables, notes payable and accounts payable, and the fair value is equal to the book value due to short remaining term

The long-term receivables of the Group are the receivables with floating rate, and the difference between the book value and fair value is small.

As for the long-term borrowings and long-term payables, the book value shall be determined by the future cash flow specified in the contract after discounting according to the interest rate which has comparable credit rating on the market and provides almost the same cash flow under the same conditions, and the difference between the book value and such fair value is small.

X. Related parties and related party transactions

1 Parent company

	Registration place	Nature of business	Registered capital	Shareholding ratio in the Company (%)	Voting ratio in the Company (%)
China Communications Construction Group Co., Ltd.	Beijing City	Port project contracting and related business	5,855,423,830	46.229	46.229

The final controlling party of the Company is the China Communications Construction Group Co., Ltd.

2 Subsidiaries

For details of subsidiaries, please refer to Note VII (1).

3 Joint ventures and associates

For details of joint ventures and associates, please refer to Note VII (2).

4 Other related parties

	Relationship with related party
China Communications Construction Company Ltd.	Under the control of the same parent company
CCCC INTERNATIONAL SHIPPING CORP.	Under the control of the same parent company
Zhen Hwa Harbour Construction Co., Ltd.	Under the control of the same parent company
Hainan CCCC Fourth Harbor Construction Co., Ltd.	Under the control of the same parent company
Road & Bridge International Co., Ltd.	Under the control of the same parent company
CCCC Nanjing Weisanlu River Tunnel Co., Ltd.	Under the control of the same parent company
Shanghai Jiangtian Industrial Co., Ltd.	Under the control of the same parent company



	Relationship with related party
Shanghai Communications Construction Contracting Co., Ltd.	Under the control of the same parent company
Zhenhua Engineering Co., Ltd.	Under the control of the same parent company
Yueyang Chenglingji New Port Co., Ltd.	Under the control of the same parent company
China Harbour Engineering Co., Ltd.	Under the control of the same parent company
China Communications Materials & Equipment Co., Ltd.	Under the control of the same parent company
China Road & Bridge Corporation	Under the control of the same parent company
Chuwa Bussan Co., Ltd.	Under the control of the same parent company
CCCC Finance Company Ltd.	Under the control of the same parent company
CCCC Second Highway Engineering Co., Ltd.	Under the control of the same parent company
CCCC Second Highway Consultants Co., Ltd.	Under the control of the same parent company
CCCC Second Harbor Engineering Co., Ltd.	Under the control of the same parent company
CCCC Third Highway Engineering Co. Ltd.	Under the control of the same parent company
CCCC Third Harbor Engineering Co., Ltd.	Under the control of the same parent company
CCCC Third Harbor Consultants Co., Ltd.	Under the control of the same parent company
CCCC Fourth Highway Engineering Co., Ltd.	Under the control of the same parent company
CCCC Fourth Harbor Engineering Co., Ltd.	Under the control of the same parent company
CCCC First Harbor Consultants Co., Ltd.	Under the control of the same parent company
Transportation Construction Engineering Branch of CCCC Third Harbor Engineering Co., Ltd.	Under the control of the same parent company
Construction Engineering Branch of CCCC Third Highway Engineering Co. Ltd.	Under the control of the same parent company
CCCC First Highway Engineering Co., Ltd.	Under the control of the same parent company
CCCC First Harbor Engineering Co., Ltd.	Under the control of the same parent company
CCCC First Harbor Consultants Co., Ltd.	Under the control of the same parent company
CCCC - SHEC Second Highway Engineering Co., Ltd.	Under the control of the same parent company
CCCC - SHEC Third Highway Engineering Co., Ltd.	Under the control of the same parent company
CCCC - SHEC Fourth Highway Engineering Co., Ltd.	Under the control of the same parent company
CCCC - SHEC First Highway Engineering Co., Ltd.	Under the control of the same parent company
No.1 Engineering Co., Ltd. of CCCC Second Harbor Engineering Co., Ltd.	Under the control of the same parent company
No.2 Engineering Co., Ltd. of CCCC Second Harbor Engineering Co., Ltd.	Under the control of the same parent company
China Communications 2nd Navigational Bureau 3rd Engineering Co., Ltd.	Under the control of the same parent company
No.4 Engineering Co., Ltd. of CCCC Second Harbor Engineering Co., Ltd.	Under the control of the same parent company
CCCC Highway Bridges National Engineering Research Centre Co., Ltd.	Under the control of the same parent company
CCCC Guangzhou Dredging Co., Ltd.	Under the control of the same parent company
CCCC Marine Construction and Development Co., Ltd.	Under the control of the same parent company
CTTIC Shanghai Co., Ltd.	Under the control of the same parent company
CCCC East China Investment Co., Ltd.	Under the control of the same parent company
CCCC Electrical and Mechanical Engineering Co., Ltd.	Under the control of the same parent company
Road & Bridge South China Engineering Co., Ltd.	Under the control of the same parent company
Road & Bridge International Co., Ltd.	Under the control of the same parent company
CCCC Nanjing Traffic Engineering Management Co., Ltd.	Under the control of the same parent company
No.2 Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	Under the control of the same parent company
No.3 Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	Under the control of the same parent company
Xing An Ji Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	Under the control of the same parent company
CCCC Shanghai Dredging Co., Ltd.	Under the control of the same parent company
CCCC Shanghai Equipment Engineering Co., Ltd.	Under the control of the same parent company
CCCC Dredging (Group) Co., Ltd.	Under the control of the same parent company

	Relationship with related party
CCCC Water Transportation Planning and Design Institute Co., Ltd.	Under the control of the same parent company
No.2 Engineering Co., Ltd. of CCCC Fourth Harbor Engineering Co., Ltd.	Under the control of the same parent company
CCCC Tunnel Engineering Company Limited	Under the control of the same parent company
Binhai Environmental Protection Dredging Co., Ltd. of CCCC Tianjin Dredging Co., Ltd.	Under the control of the same parent company
CCCC Tianjin Port Waterway Prospection & Design Research Institute Co., Ltd.	Under the control of the same parent company
Hainan Industry Co., Ltd. of CCCC Tianjin Dredging Co., Ltd.	Under the control of the same parent company
CCCC - SHEC Electrical Engineering Co., Ltd.	Under the control of the same parent company
Electrification Co., Ltd. of CCCC Tunnel Engineering Company Limited	Under the control of the same parent company
CCCC (Zhoushan) Dredging Co., Ltd.	Under the control of the same parent company
CCCC Tianjin Industry and Trade Co., Ltd.	Under the control of the same parent company
CCCC Tianjin Dredging Co., Ltd.	Under the control of the same parent company
CCCC WuHan Harbour Engineering Design and Research Co., Ltd.	Under the control of the same parent company
The Sixth Engineering Co., Ltd. of CCCC First Highway Engineering Co., Ltd.	Under the control of the same parent company
Installation Engineering Co., Ltd. of CCCC First Harbor Engineering Co. Ltd.	Under the control of the same parent company
CCCC-FHEC Urban Traffic Engineering Co., Ltd.	Under the control of the same parent company
No.2 Engineering Co., Ltd. of CCCC First Harbor Engineering Co., Ltd.	Under the control of the same parent company
No.1 Engineering Co., Ltd. of CCCC First Harbor Engineering Co., Ltd.	Under the control of the same parent company
CCCC Leasing Jiahua No.2 Co. Ltd.	Under the control of the same parent company
CCCC Leasing Jiahua No.1 Co., Ltd.	Under the control of the same parent company
No.Three Engineering Co., Ltd. of CCCC First Highway Engineering Co., Ltd.	Under the control of the same parent company
CCCC First Highway Fifth Engineering Co., Ltd.	Under the control of the same parent company
CCCC Guidu Highway Construction Co., Ltd.	Under the control of the same parent company
CCCC Guangzhou Logistics Co., Ltd.	Under the control of the same parent company
CCCC SHEC Chengdu Urban Construction Engineering Co., Ltd.	Under the control of the same parent company
Hong Kong Marine Construction Limited	Under the control of the same parent company
CCCC-FHEC Bridge and Tunnel Engineering Co., Ltd.	Under the control of the same parent company
CCCC Infrastructure Maintenance Group Co., Ltd.	Under the control of the same parent company
CCCC Yancheng Construction and Development Co., Ltd.	Under the control of the same parent company
CCCC Chengdu Rail Transit Investment and Construction Co., Ltd.	Under the control of the same parent company
CCCC Shanghai Channel Equipment Industry Co., Ltd.	Under the control of the same parent company
Construction Materials Co., Ltd. CCCC Third Harbor Engineering Co., Ltd.	Under the control of the same parent company
CNPC & CCCC Petroleum Sales Co., Ltd.	Under the control of the same parent company
Tianjin Dredging Co., Ltd.	Under the control of the same parent company
Shanghai Zhensha Longfu Machinery Co., Ltd.	Under the control of the same parent company
Road & Bridge East China Engineering Co., Ltd.	Under the control of the same parent company
CCCC National Engineering Research Center of Dredging Technology and Equipment	Under the control of the same parent company
CCCC Xi'an Road Construction Machinery Co., Ltd.	Under the control of the same parent company
CCCC Highway Consultants Co., Ltd.	Under the control of the same parent company
CCCC Financial Leasing Co., Ltd.	Under the control of the same parent company
Friede&Goldman, Llc.	Under the control of the same parent company
Haiwei Engineering Construction Co., Ltd., of FHEC of CCCC	Under the control of the same parent company
CCCC North Industrial Co., Ltd.	Under the control of the same parent company
Shanghai China Communications Water Transportation Design & Research Co., Ltd.	Under the control of the same parent company

	Relationship with related party
CCCC First Highway Consultants Co., Ltd.	Under the control of the same parent company
Wuhan Hangke Logistics Company Limited	Under the control of the same parent company
Xiangtan CCCC Infrastructure Investment and Construction Co., Ltd.	Under the control of the same parent company

5 Main transactions between the Group and its related parties

The Group's transactions with related parties are priced on the basis of mutual agreement and with reference to market prices.

(1) Related-party goods and service transactions

Sales of goods and rendering of labor services or operating lease to related parties

	Year 2019	Year 2018
China Road & Bridge Corporation	1,678,140,641	358,243,636
CCCC Financial Leasing Co., Ltd.	667,073,687	502,962,177
CCCC Second Harbor Engineering Co., Ltd.	337,523,772	101,372,715
Jiangsu Longyuan Zhenhua Marine Engineering Co., Ltd.	248,918,845	151,822,406
China Communications Construction Company Ltd.	231,935,329	89,640,834
CCCC Second Highway Engineering Co., Ltd.	230,557,910	319,093,357
CCCC First Highway Engineering Co., Ltd.	126,158,585	125,052,034
CCCC Electrical and Mechanical Engineering Co., Ltd.	124,928,355	51,393,504
CCCC Third Harbor Engineering Co., Ltd.	113,127,045	110,053,924
Road & Bridge International Co., Ltd.	95,683,938	187,488,462
China Harbour Engineering Co., Ltd.	45,102,497	141,896,122
CCCC Third Highway Engineering Co. Ltd.	30,678,385	22,231,105
Installation Engineering Co., Ltd. of CCCC First Harbor Engineering Co. Ltd.	28,657,101	91,653,393
CCCC - SHEC Third Highway Engineering Co., Ltd.	26,395,514	5,617,718
Tianjin Dredging Co., Ltd.	21,822,759	-
CCCC Marine Engineering & Technology Research Center Co., Ltd.	8,345,339	1,057,048
Hong Kong Marine Construction Limited	7,992,047	6,550,315
CCCC Fourth Highway Engineering Co., Ltd.	7,874,250	7,500,000
No.3 Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	7,230,066	-
CCCC First Harbor Engineering Co., Ltd.	6,829,633	-
CCCC Tunnel Engineering Company Limited	6,135,411	82,647,412
No.4 Engineering Co., Ltd. of CCCC Second Harbor Engineering Co., Ltd.	6,037,290	-
CCCC Tianjin Dredging Co., Ltd.	4,716,981	13,801,887
China Communications 2nd Navigational Bureau 3rd Engineering Co., Ltd.	3,750,000	-
Shanghai Communications Construction Contracting Co., Ltd.	12,236	24,459,644
ZPMC-OTL MARINE CONTRACTOR LIMITED	-	137,098,857
No.1 Engineering Co., Ltd. of CCCC Second Harbor Engineering Co., Ltd.	-	34,589,744
Road & Bridge South China Engineering Co., Ltd	-	30,377,284
CCCC Second Highway Consultants Co., Ltd.	-	19,181,054
Binhai Environmental Protection Dredging Co., Ltd. of CCCC Tianjin Dredging Co., Ltd.	-	16,810,345

	Year 2019	Year 2018
CCCC First Harbor Consultants Co., Ltd.	-	16,524,972
CCCC First Highway Fifth Engineering Co., Ltd.	-	12,905,660
No.Three Engineering Co., Ltd. of CCCC First Highway Engineering Co., Ltd.	-	9,654,872
CCCC - SHEC First Engineering Co., Ltd.	-	7,304,022
No.1 Engineering Co., Ltd. of CCCC First Harbor Engineering Co., Ltd.	-	5,264,957
CCCC Third Harbor Consultants Co., Ltd.	-	5,018,319
CCCC Guangzhou Dredging Co., Ltd.	-	4,664,101
ZPMC Mediterranean Liman Makinalari Ticaret Anonim Sirketi	-	4,262,198
CCCC - SHEC Fourth Highway Engineering Co., Ltd.	-	2,949,470
Friede & Goldman, LLC.	-	2,673,016
Chuwa Bussan Co., Ltd.	-	2,023,654
ZPMC Changzhou Coatings Co., Ltd.	-	1,396,226
CCCC Tianjin Industry and Trade Co., Ltd.	-	674,414
CCCC(Tianjin) Eco-environmental Protection Design & Research Institute Co., Ltd.	-	207,547
CCCC Highway Consultants Co., Ltd.	-	65,517
CCCC Guangzhou Logistics Co., Ltd.	-	56,604
Hainan CCCC Fourth Harbor Construction Co., Ltd.	-	13,248
CCCC - SHEC Second Highway Engineering Co., Ltd.	-	7,727
	4,065,627,616	2,708,261,501

Receipt of labor services from related parties

	Year 2019	Year 2018
No.2 Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	1,559,123,096	435,493,711
CCCC Fourth Highway Engineering Co., Ltd.	326,099,884	180,145,846
No.2 Engineering Co., Ltd. of CCCC Fourth Harbor Engineering Co., Ltd.	166,442,076	58,238,659
CCCC Third Harbor Engineering Co., Ltd.	138,044,572	171,166,061
Xing An Ji Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	126,919,874	-
CCCC Third Highway Engineering Co. Ltd.	102,954,724	26,704,324
CCCC Second Harbor Engineering Co., Ltd.	44,626,778	319,635,901
CCCC Water Transportation Planning and Design Institute Co., Ltd.	44,003,688	9,564,649
China Communications 2nd Navigational Bureau 3rd Engineering Co., Ltd.	37,974,356	13,181,025
CCCC - SHEC Second Highway Engineering Co., Ltd.	32,728,018	51,067,364
ZPMC Southeast Asia Pte. Ltd	31,842,242	-
CCCC Tianjin Dredging Co., Ltd.	30,385,226	119,241,651
CCCC Shanghai Dredging Co., Ltd.	27,320,344	44,255,071
China Communications Materials & Equipment Co., Ltd.	17,482,045	318,966
CCCC Second Highway Consultants Co., Ltd.	12,744,480	22,139,413
China Road & Bridge Corporation	9,772,546	-
ZPMC Mediterranean Liman Makinalari Ticaret Anonim Sirketi	9,022,814	8,502,537



	Year 2019	Year 2018
Installation Engineering Co., Ltd. of CCCC First Harbor Engineering Co. Ltd.	7,202,999	5,974,138
China Communications Construction Company Ltd.	6,970,318	3,701,020
CCCC Shanghai Equipment Engineering Co., Ltd.	4,533,910	31,619,960
Shanghai Communications Construction Contracting Co., Ltd.	3,843,677	1,254,523
CCCC Highway Bridges National Engineering Research Centre Co., Ltd.	2,449,541	-
CCCC Marine Engineering & Technology Research Center Co., Ltd.	1,599,377	3,425,753
CCCC First Highway Consultants Co., Ltd.	1,153,073	-
Shanghai China Communications Water Transportation Design & Research Co., Ltd.	1,008,394	-
CCCC Third Harbor Consultants Co., Ltd.	400,000	85,470
CCCC (Zhoushan) Dredging Co., Ltd.	350,748	-
No.Three Engineering Co., Ltd. of CCCC First Highway Engineering Co., Ltd.	343,394	-
CCCC First Harbor Consultants Co., Ltd.	128,440	26,259,626
CCCC Fourth Harbor Engineering Co., Ltd.	86,849	-
CCCC Electrical and Mechanical Engineering Co., Ltd.	-	183,813,849
CCCC First Harbor Engineering Co., Ltd.	-	24,659,835
CCCC Leasing Jiahua No.2 Co. Ltd.	-	17,399,943
No.1 Engineering Co., Ltd. of CCCC First Harbor Engineering Co., Ltd.	-	16,698,341
CCCC - SHEC Third Highway Engineering Co., Ltd.	-	12,990,744
No.3 Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	-	10,326,479
Chuwa Bussan Co., Ltd.	-	7,063,023
CCCC Tunnel Engineering Company Limited	-	4,536,422
Shanghai Jiangtian Industrial Co., Ltd.	-	2,594,773
	2,747,557,483	1,812,059,077

Purchase of goods from related parties

	Year 2019	Year 2018
ZPMC Changzhou Coatings Co., Ltd.	145,138,516	108,484,161
CCCC Shanghai Equipment Engineering Co., Ltd.	51,424,063	210,238,846
Chuwa Bussan Co., Ltd.	36,202,211	19,663,204
CCCC Tianjin Port Waterway Prospection & Design Research Institute Co., Ltd.	9,951,061	-
Shanghai Jiangtian Industrial Co., Ltd.	9,429,667	65,858,536
CCCC Tianjin Dredging Co., Ltd.	5,475,264	-
CCCC North Industrial Co., Ltd.	3,841,523	-
CCCC Marine Engineering & Technology Research Center Co., Ltd.	2,451,616	-
CCCC Tianjin Industry and Trade Co., Ltd.	1,669,824	-
CNPC & CCCC Petroleum Sales Co., Ltd.	1,475,121	1,487,613
China Communications Materials & Equipment Co., Ltd.	380,531	209,106
CCCC Third Harbor Consultants Co., Ltd.	353,982	-
CCCC Shanghai Channel Equipment Industry Co., Ltd.	320,806	302,564
China Road & Bridge Corporation	64,214	-

	Year 2019	Year 2018
Jiangsu Longyuan Zhenhua Marine Engineering Co., Ltd.	-	10,643,590
CCCC National Engineering Research Center of Dredging Technology and Equipment	-	1,245,211
China Communications Construction Company Ltd.	-	258,621
CCCC Water Transportation Planning and Design Institute Co., Ltd.	-	237,931
	268,178,399	418,629,383

(2) Paying dividends to related parties

	Year 2019	Year 2018
Zhenhua Engineering Co., Ltd.	44,921,036	37,434,197
China Communications Construction Company Ltd.	42,777,102	35,647,585
China Communications Construction Group Co., Ltd.	33,161,169	27,634,307
Zhen Hwa Harbour Construction Co., Ltd.	916,756	763,963
	121,776,063	101,480,052

(3) Deposits in (withdrawal of deposits from) related parties

	Year 2019	Year 2018
CCCC Finance Company Ltd.	433,312,793	(479,100,507)
China Communications Construction Company Ltd.	(3,733,158)	(19,058,644)
	429,579,635	(498,159,151)

(4) Borrowings from related parties

	Year 2019	Year 2018
CCCC Financial Leasing Co., Ltd.	413,361,212	-
CCCC Finance Company Ltd.	50,000,000	350,000,000
	463,361,212	350,000,000

(5) Interest collected from related parties

	Year 2019	Year 2018
China Communications Construction Company Ltd.	2,101,285	341,322
CCCC Finance Company Ltd.	465,261	1,015,732
	2,566,546	1,357,054

(6) Interest paid to related parties

	Year 2019	Year 2018
CCCC Leasing Jiahua No.1 Co., Ltd.	46,946,944	61,347,010
CCCC Financial Leasing Co., Ltd.	26,460,645	27,841,630
CCCC Finance Company Ltd.	18,245,229	26,374,292
CCCC Leasing Jiahua No.2 Co. Ltd.	14,691,723	19,035,746
	106,344,541	134,598,678

(7) Other related party transactions

	Year 2019	Year 2018
Remuneration of key management personnel	11,609,900	11,074,400

The number of key management personnel in the Group for 2019 is 25 (in 2018: 25). Remuneration for new recruits and resigned personnel is based on length of service, while remuneration for others is based on the full year.

6 Commitments between the Group and related parties

The Group's commitments related to related party contracted for but not provided in the balance sheet as at the balance sheet date:

Rendering of services for the Group by related parties	Year 2019	Year 2018
CCCC First Highway Engineering Co., Ltd.	1,386,937,372	449,685,317
CCCC Third Harbor Engineering Co., Ltd.	1,274,486,284	1,150,776,369
CCCC Tianjin Dredging Co., Ltd.	681,997,993	770,500,180
CCCC Fourth Highway Engineering Co., Ltd.	338,361,768	544,767,057
No.1 Engineering Co., Ltd. of CCCC First Harbor Engineering Co., Ltd.	56,568,996	56,568,996
CCCC Shanghai Dredging Co., Ltd.	45,932,122	73,170,956
CCCC Tunnel Engineering Company Limited	158,070	158,070
CCCC Second Highway Consultants Co., Ltd.	-	1,766,362
	3,784,442,605	3,047,393,307

Lease assets to related parties	Year 2019	Year 2018
Zhenhua Marine Energy (Hong Kong) Co., Ltd.	891,356,781	1,206,719,318

Standby leasing agreement signed with the related parties

On December 16, 2015, the Company signed ship rental standby agreement with CCCC Leasing Jiahua No.1 Co., Ltd and CCCC Leasing Jiahua No.2 Co., Ltd (collectively referred to as "CCCC Jiahua"), with the rental term from March 5, 2016 to December 5, 2021. The contract would come into effect when the ship rental agreement signed by the subsidiary of the Company and CCCC Jiahua couldn't be performed normally. As at December 31, 2019, the maximum payment amount of the contract was RMB 390,667,201 (as at December 31, 2018: RMB 509,837,715).

Sales of goods and rendering of labor services or lease to related parties

	Year 2019	Year 2018
China Road & Bridge Corporation	830,028,535	1,594,741,615
CCCC Second Highway Engineering Co., Ltd.	182,569,664	7,482,377
China Communications Construction Company Ltd.	153,839,131	431,794,106
CCCC Financial Leasing Co., Ltd.	54,987,809	520,893,238
CCCC Second Harbor Engineering Co., Ltd.	53,549,590	333,337,005
CCCC Electrical and Mechanical Engineering Co., Ltd.	35,920,354	22,754,735
China Harbour Engineering Co., Ltd.	22,547,495	85,809,151
Friede & Goldman, LLC.	21,714,704	19,160,384
Jiangsu Longyuan Zhenhua Marine Engineering Co., Ltd.	15,936,240	6,361,922
CCCC Third Harbor Engineering Co., Ltd.	5,470,566	26,223,595
CCCC First Harbor Engineering Co., Ltd.	1,795,091	215,550,525
China Communications 2nd Navigational Bureau 3rd Engineering Co., Ltd.	14,538	14,538
Road & Bridge International Co., Ltd.	-	46,506,516
CCCC Tunnel Engineering Company Limited	-	22,489,719
No. Three Engineering Co., Ltd. of CCCC First Highway Engineering Co., Ltd.	-	7,992,240
Chuwa Bussan Co., Ltd.	-	2,420,013
No.4 Engineering Co., Ltd. of CCCC Second Harbor Engineering Co., Ltd.	-	12,236
Road & Bridge South China Engineering Co., Ltd	-	6,060
CCCC - SHEC Third Highway Engineering Co., Ltd.	-	3,242
	1,378,373,717	3,343,553,217

7 Balance of receivables from related parties

	Year 2019		Year 2018	
	Book balance	Provision for bad debts	Book balance	Provision for bad debts
Accounts receivable				
CCCC Financial Leasing Co., Ltd.	226,485,073	-	14,850,000	-
Jiangsu Longyuan Zhenhua Marine Engineering Co., Ltd.	204,812,244	-	101,223,377	-
CCCC First Harbor Engineering Co., Ltd.	130,700,172	-	164,008,643	-
CCCC Second Harbor Engineering Co., Ltd.	112,525,256	-	105,083,335	-
CCCC Second Highway Engineering Co., Ltd.	104,419,393	-	63,391,227	-
CCCC Tunnel Engineering Company Limited	92,085,891	-	109,822,612	-
No.1 Engineering Co., Ltd. of CCCC First Harbor Engineering Co., Ltd.	59,832,510	-	85,793,713	-
Road & Bridge International Co., Ltd.	55,526,242	-	9,118,927	-
CCCC Third Harbor Engineering Co., Ltd.	48,017,218	-	48,250,022	-
China Communications Construction Company Ltd.	44,091,360	-	34,063,397	-
CCCC First Highway Engineering Co., Ltd.	43,230,857	-	4,694,962	-
ZPMC-OTL MARINE CONTRACTOR LIMITED	33,140,688	-	49,354,814	-
China Communications 2nd Navigational Bureau 3rd Engineering Co., Ltd.	23,938,106	-	84,077,626	-
No.1 Engineering Co., Ltd. of CCCC Second Harbor Engineering Co., Ltd.	21,712,500	-	2,750,000	-
ZPMC Mediterranean Liman Makinalari Ticaret Anonim Sirketi	19,559,532	-	17,250,552	-
China Road & Bridge Corporation	18,076,000	-	167,321,393	-
Friede & Goldman, LLC.	17,890,465	-	15,970,344	-
Xiangtan CCCC Infrastructure Investment and Construction Co., Ltd.	15,052,800	-	-	-
CCCC-FHDI Engineering Co., Ltd.	14,796,000	-	12,592,000	-
CCCC First Harbor Consultants Co., Ltd.	13,290,419	-	-	-
Road & Bridge South China Engineering Co., Ltd.	13,178,839	-	26,581,168	-
CCCC Marine Engineering & Technology Research Center Co., Ltd.	12,822,927	-	1,100,000	-
CCCC Fourth Harbor Engineering Co., Ltd.	12,750,000	-	12,000,000	-
Zhenhua Marine Energy (HK) Co., Ltd.	12,013,016	-	11,818,430	-
CCCC Third Highway Engineering Co. Ltd.	11,363,591	-	22,746,125	-
CCCC - SHEC Second Highway Engineering Co., Ltd.	8,125,713	-	4,817,096	-
China Harbour Engineering Co., Ltd.	7,338,237	-	8,779,024	-
Road & Bridge International Co., Ltd.	6,953,532	-	39,658,009	-
Hainan CCCC Fourth Harbor Construction Co., Ltd.	6,200,000	-	6,200,000	-
No.2 Engineering Co., Ltd. of CCCC Second Harbor Engineering Co., Ltd.	6,199,367	-	7,808,358	-
The Sixth Engineering Co., Ltd. of CCCC First Highway Engineering Co., Ltd.	6,098,300	-	6,098,300	-
CCCC Shanghai Equipment Engineering Co., Ltd.	6,000,000	-	844,000	-
CCCC Tianjin Industry and Trade Co., Ltd.	5,058,290	-	-	-
CCCC-FHEC Urban Traffic Engineering Co., Ltd.	4,303,584	-	3,415,780	-



	Year 2019		Year 2018	
	Book balance	Provision for bad debts	Book balance	Provision for bad debts
CCCC Fourth Highway Engineering Co., Ltd.	4,000,000	-	-	-
ZPMC Southeast Asia Pte. Ltd	3,097,777	-	-	-
Hainan Industry Co., Ltd. of CCCC Tianjin Dredging Co., Ltd.	2,156,675	-	-	-
Installation Engineering Co., Ltd. of CCCC First Harbor Engineering Co. Ltd.	1,311,259	-	1,197,764	-
No.Three Engineering Co., Ltd. of CCCC First Highway Engineering Co., Ltd.	1,126,432	-	-	-
CCCC - SHEC Third Highway Engineering Co., Ltd.	1,015,313	-	5,548,004	-
CCCC - SHEC Electrical Engineering Co., Ltd.	770,321	-	-	-
Xing An Ji Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	331,860	-	331,860	-
Electrification Co., Ltd. of CCCC Tunnel Engineering Company Limited	172,787	-	-	-
CCCC Third Harbor Consultants Co., Ltd.	150,000	-	150,000	-
No.2 Engineering Co., Ltd. of CCCC First Harbor Engineering Co., Ltd.	130,500	-	5,019,557	-
CCCC Guidu Highway Construction Co., Ltd.	79,332	-	79,332	-
CCCC Guangzhou Dredging Co., Ltd.	69,200	-	-	-
Yueyang Chenglingji New Port Co., Ltd.	48,680	-	84,660	-
Hong Kong Marine Construction Limited	-	-	137,133,578	-
CCCC - SHEC Fourth Highway Engineering Co., Ltd.	-	-	7,755,561	-
No.2 Engineering Co., Ltd. of CCCC Fourth Harbor Engineering Co., Ltd.	-	-	564,537	-
CCCC SHEC Chengdu Urban Construction Engineering Co., Ltd.	-	-	277,527	-
CCCC Electrical and Mechanical Engineering Co., Ltd.	-	-	250,000	-
CCCC(Tianjin) Eco-environmental Protection Design & Research Institute Co. Ltd.	-	-	220,000	-
CCCC Guangzhou Logistics Co., Ltd.	-	-	60,000	-
	1,432,048,258	-	1,400,155,614	-
Notes receivable				
CCCC Second Harbor Engineering Co., Ltd.	-	-	36,868,000	-
Road & Bridge International Co., Ltd.	-	-	27,223,000	-
	-	-	64,091,000	-
	Year 2019			
	Book balance		Provision for bad debts	
Receivables financing				
Road & Bridge East China Engineering Co., Ltd.	46,389,055			
CCCC Second Harbor Engineering Co., Ltd.	15,998,000		-	
CCCC Fourth Harbor Engineering Co., Ltd.	8,045,547		-	
CCCC First Harbor Engineering Co., Ltd.	4,000,000			
CCCC Electrical and Mechanical Engineering Co., Ltd.	2,000,000		-	
	76,432,602			

	Year 2019		Year 2018	
	Book balance	Provision for bad debts	Book balance	Provision for bad debts
Other receivables				
Zhenhua Marine Energy (HK) Co., Ltd.	164,124,678	164,124,678	164,124,678	164,124,678
China Communications Construction Company Ltd.	47,845,576	-	54,620,094	-
CCCC Financial Leasing Co., Ltd.	20,000,000	-	176,800,000	-
ZPMC Southeast Asia Pte. Ltd	13,890,516	-	-	-
CCCC Third Harbor Engineering Co., Ltd.	11,312,360	-	-	-
CCCC East China Investment Co., Ltd.	9,129,287	-	-	-
CCCC First Highway Fifth Engineering Co., Ltd.	8,897,903	-	-	-
CCCC Highway Consultants Co., Ltd.	4,629,287	-	-	-
No.3 Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	3,975,000	-	-	-
CCCC Yancheng Construction and Development Co., Ltd.	3,357,729	-	750,908	-
CCCC Tianhe Xi'an Equipment Manufacturing Co., Ltd.	3,199,744	-	164,787	-
CCCC Second Highway Consultants Co., Ltd.	3,180,000	-	3,180,000	-
CCCC Third Highway Engineering Co. Ltd.	3,132,473	-	732,473	-
CCCC Marine Engineering & Technology Research Center Co., Ltd.	1,100,000	-	-	-
Installation Engineering Co., Ltd. of CCCC First Harbor Engineering Co. Ltd.	600,000	-	300,000	-
CCCC Second Highway Engineering Co., Ltd.	200,000	-	1,000,000	-
Shanghai Jiangtian Industrial Co., Ltd.	77,552	-	-	-
CCCC Tunnel Engineering Company Limited	60,000	-	349	-
Shanghai Zhensha Longfu Machinery Co., Ltd.	21,503	-	21,503	-
CCCC Second Harbor Engineering Co., Ltd.	10,000	-	-	-
ZPMC Changzhou Coatings Co., Ltd.	4,214	-	-	-
CCCC Nanjing Traffic Engineering Management Co., Ltd.	-	-	6,789,498	-
China Communications Construction Group Co., Ltd.	-	-	1,350,000	-
No.2 Engineering Co., Ltd. of CCCC Second Harbor Engineering Co., Ltd.	-	-	800,000	-
Road & Bridge East China Engineering Co., Ltd.	-	-	800,000	-
CCCC Third Harbor Consultants Co., Ltd.	-	-	250,000	-
CCCC Chengdu Rail Transit Investment and Construction Co., Ltd.	-	-	164,787	-
CCCC Infrastructure Maintenance Group Co., Ltd.	-	-	157,018	-
CCCC-FHEC Bridge and Tunnel Engineering Co., Ltd.	-	-	100,000	-
	298,747,822	164,124,678	412,106,095	164,124,678
Advances to suppliers				
CCCC Marine Engineering & Technology Research Center Co., Ltd.	767,382	-	-	-
ZPMC Southeast Asia Pte. Ltd	102,910	-	-	-
Chuwa Bussan Co., Ltd.	-	-	7,141,035	-
China Communications Construction Company Ltd.	-	-	1,423,515	-
CCCC Shanghai Channel Equipment Industry Co., Ltd.	-	-	354,000	-



	Year 2019		Year 2018	
	Book balance	Provision for bad debts	Book balance	Provision for bad debts
	870,292	-	8,918,550	-
Long-term receivables				
CCCC Third Highway Engineering Co. Ltd.	797,873	-	797,873	-
	797,873	-	797,873	-

8 Balance of receivables from and payables to related parties

	Year 2019	Year 2018
Accounts payable		
CCCC Fourth Highway Engineering Co., Ltd.	218,797,193	145,983,998
CCCC Third Harbor Engineering Co., Ltd.	154,812,290	142,373,233
No.2 Engineering Co., Ltd. of CCCC Fourth Harbor Engineering Co., Ltd.	125,024,626	42,885,407
CCCC Shanghai Equipment Engineering Co., Ltd.	81,410,402	41,551,721
CCCC Third Highway Engineering Co. Ltd.	81,247,665	30,977,016
CCCC Tianjin Dredging Co., Ltd.	78,800,497	69,699,557
CCCC First Highway Engineering Co., Ltd.	71,000,831	95,538,686
CCCC - SHEC Second Highway Engineering Co., Ltd.	30,900,741	125,227,201
China Communications 2nd Navigational Bureau 3rd Engineering Co., Ltd.	28,660,487	84,371,458
CCCC Second Harbor Engineering Co., Ltd.	27,440,101	140,174,674
CCCC Second Highway Consultants Co., Ltd.	25,578,962	17,087,478
No.1 Engineering Co., Ltd. of CCCC First Harbor Engineering Co., Ltd.	23,818,225	39,691,618
CCCC First Harbor Engineering Co., Ltd.	15,754,549	45,054,549
ZPMC Changzhou Coatings Co., Ltd.	15,695,707	15,543,890
Shanghai Jiangtian Industrial Co., Ltd.	13,898,988	17,535,832
Shanghai Communications Construction Contracting Co., Ltd.	13,225,998	16,046,390
CCCC Shanghai Dredging Co., Ltd.	13,133,517	30,964,342
CCCC Marine Engineering & Technology Research Center Co., Ltd.	12,919,599	10,118,782
Jiangsu Longyuan Zhenhua Marine Engineering Co., Ltd.	10,136,028	10,532,751
CCCC - SHEC Third Highway Engineering Co., Ltd.	10,012,230	19,811,475
CCCC First Harbor Consultants Co., Ltd.	8,694,176	24,254,176
No.3 Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	7,815,018	7,815,018
ZPMC Southeast Asia Pte. Ltd	7,070,528	-
CCCC Water Transportation Planning and Design Institute Co., Ltd.	6,547,891	9,547,891
CCCC National Engineering Research Center of Dredging Technology and Equipment	5,205,113	260,000
Xing An Ji Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	4,327,352	10,051,352
CCCC Tianjin Industry and Trade Co., Ltd.	3,589,681	2,452,453
CCCC North Industrial Co., Ltd.	3,228,777	-

	Year 2019	Year 2018
CCCC Highway Bridges National Engineering Research Centre Co., Ltd.	2,670,000	-
No.2 Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	1,600,000	1,600,000
CCCC Tunnel Engineering Company Limited	1,477,308	2,477,307
CCCC WuHan Harbour Engineering Design and Research Co., Ltd.	700,000	700,000
CCCC First Highway Consultants Co., Ltd.	574,560	-
Shanghai China Communications Water Transportation Design & Research Co., Ltd.	538,750	-
CCCC Electrical and Mechanical Engineering Co., Ltd.	501,000	-
CNPC & CCCC Petroleum Sales Co., Ltd.	391,056	2,660,621
CCCC Third Harbor Consultants Co., Ltd.	385,980	100,000
ZPMC Mediterranean Liman Makinalari Ticaret Anonim Sirketi	336,127	1,217,089
Construction Materials Co., Ltd, CCCC Third Harbor Engineering Co., Ltd.	150,000	16,067,701
CTTIC Shanghai Co., Ltd.	120,000	-
Installation Engineering Co., Ltd. of CCCC First Harbor Engineering Co. Ltd.	77,599	1,067,599
China Communications Materials & Equipment Co., Ltd.	30,000	242,563
Chuwa Bussan Co., Ltd.	-	272,058,371
China Communications Construction Company Ltd.	-	4,388,938
CCCC Tianjin Port Waterway Prospection & Design Research Institute Co., Ltd.	-	3,139,336
CCCC Tianhe Xi'an Equipment Manufacturing Co., Ltd.	-	304,798
CCCC Xi'an Road Construction Machinery Co., Ltd.	-	212,247
	1,108,299,552	1,501,787,518
Notes payable		
CCCC Tianjin Industry and Trade Co., Ltd.	66,393,976	60,124,526
CCCC Shanghai Equipment Engineering Co., Ltd.	42,912,082	12,667,489
CCCC National Engineering Research Center of Dredging Technology and Equipment	2,322,000	2,726,050
No.Three Engineering Co., Ltd. of CCCC First Highway Engineering Co., Ltd.	374,300	-
CCCC (Zhoushan) Dredging Co., Ltd.	246,887	-
CCCC Finance Company Ltd.	-	20,600,000
CTTIC Shanghai Co., Ltd.	-	1,088,000
CCCC Tianjin Port Waterway Prospection & Design Research Institute Co., Ltd.	-	1,269,000
CCCC Xi'an Road Construction Machinery Co., Ltd.	-	1,910,224
	112,249,245	100,385,289
Advances from customers		
CCCC Tunnel Engineering Company Limited	124,057,549	30,250,993
Binhai Environmental Protection Dredging Co., Ltd. of CCCC Tianjin Dredging Co., Ltd.	53,943,315	70,058,100
China Communications 2nd Navigational Bureau 3rd Engineering Co., Ltd.	13,651,291	8,917,608



	Year 2019	Year 2018
Wuhan Hangke Logistics Company Limited	5,801,268	-
CCCC Second Harbor Engineering Co., Ltd.	4,005,140	-
CCCC First Highway Engineering Co., Ltd.	4,000,000	-
CCCC Yancheng Construction and Development Co., Ltd.	1,340,000	-
No.8 Engineering Co., Ltd. of CCCC First Highway Engineering Co., Ltd.	1,200,000	-
CCCC SHEC Chengdu Urban Construction Engineering Co., Ltd.	942,101	-
Road & Bridge International Co., Ltd.	832,675	-
ZPMC-OTL MARINE CONTRACTOR LIMITED	749,244	-
Friede & Goldman, LLC.	713,623	-
CCCC Third Harbor Engineering Co., Ltd.	600,000	-
No.Three Engineering Co., Ltd. of CCCC First Highway Engineering Co., Ltd.	600,000	-
Jiangsu Longyuan Zhenhua Marine Engineering Co., Ltd.	366,574	-
China Harbour Engineering Co., Ltd.	346,318	736,500
Cranetech Global Sdn. Bhd.	233,005	-
CCCC Shanghai Equipment Engineering Co., Ltd.	100,000	-
Transportation Construction Engineering Branch of CCCC Third Harbor Engineering Co., Ltd.	56,758	-
No.2 Engineering Co., Ltd. of CCCC Third Harbor Engineering Co., Ltd.	-	1,891,307
ZPMC Mediterranean Liman Makinalari Ticaret Anonim Sirketi	-	558,589
No.1 Engineering Co., Ltd. of CCCC First Harbor Engineering Co., Ltd.	-	487,482
China Communications Construction Company Ltd.	-	182,513
Yueyang Chenglingji New Port Co., Ltd.	-	35,980
	213,538,861	113,119,072
Other payables		
China Communications Construction Company Ltd.	101,284,894	101,209,468
CCCC Tianjin Dredging Co., Ltd.	27,079,494	27,079,494
Chuwa Bussan Co., Ltd.	6,269,873	6,269,873
Shanghai Jiangtian Industrial Co., Ltd.	4,586,085	4,586,085
CCCC Tunnel Engineering Company Limited	4,000,000	4,000,000
China Harbour Engineering Co., Ltd.	3,625,000	3,625,000
CCCC Third Highway Engineering Co. Ltd.	2,986,596	1,286,596
China Communications Construction Group Co., Ltd.	1,600,544	1,672,705
Tianjin Dredging Co., Ltd.	1,107,559	871,856
CCCC Second Harbor Engineering Co., Ltd.	1,051,750	-
CCCC Third Harbor Engineering Co., Ltd.	804,250	12,285,000
CCCC Electrical and Mechanical Engineering Co., Ltd.	665,174	-
Road & Bridge East China Engineering Co., Ltd.	448,442	525,186
Zhenhua Engineering Co., Ltd.	346,005	346,005
CCCC Water Transportation Planning and Design Institute Co., Ltd.	319,340	319,340
CNPC & CCCC Petroleum Sales Co., Ltd.	300,000	-
Jiangsu Longyuan Zhenhua Marine Engineering Co., Ltd.	250,329	143,395
Shanghai Zhensha Longfu Machinery Co., Ltd.	150,124	146,558

	Year 2019	Year 2018
ZPMC Changzhou Coatings Co., Ltd.	108,592	108,583
No.2 Engineering Co., Ltd. of CCCC Fourth Harbor Engineering Co., Ltd.	100,000	11,400
CCCC Shanghai Equipment Engineering Co., Ltd.	89,000	89,000
CCCC First Harbor Engineering Co., Ltd.	87,893	-
CCCC Infrastructure Maintenance Group Co., Ltd.	72,477	-
CCCC Nanjing Traffic Engineering Management Co., Ltd.	21,288	-
Construction Engineering Branch of CCCC Third Highway Engineering Co. Ltd.	20,000	-
Zhen Hwa Harbour Construction Co., Ltd.	6,593	6,593
CCCC Dredging (Group) Co., Ltd.	-	88,219,383
Road & Bridge International Co., Ltd.	-	45,840,000
CCCC Marine Construction and Development Co., Ltd.	-	17,472,600
CCCC Leasing Jiahua No.1 Co., Ltd.	-	1,141,960
CCCC - SHEC Fourth Highway Engineering Co., Ltd.	-	1,000,000
CCCC Finance Company Ltd.	-	537,708
	157,381,302	318,793,788
Short-term borrowings		
CCCC Financial Leasing Co., Ltd.	414,863,968	-
CCCC Finance Company Ltd.	-	50,000,000
	414,863,968	50,000,000
Long-term borrowings		
	500,483,333	500,000,000
Non-current liabilities maturing within one year		
CCCC Leasing Jiahua No.1 Co., Ltd.	412,592,400	405,909,257
CCCC Financial Leasing Co., Ltd.	203,727,814	407,455,030
CCCC Leasing Jiahua No.2 Co. Ltd.	63,782,400	62,749,257
	680,102,614	876,113,544
Long-term payables		
CCCC Tianjin Dredging Co., Ltd.	139,682,457	131,402,483
CCCC Leasing Jiahua No.2 Co. Ltd.	131,551,201	192,169,601
CCCC Leasing Jiahua No.1 Co., Ltd.	131,551,200	535,329,601
CCCC Second Harbor Engineering Co., Ltd.	82,663,041	82,663,041
CCCC Third Harbor Engineering Co., Ltd.	16,923,594	16,923,594
No.2 Engineering Co., Ltd. of CCCC Fourth Harbor Engineering Co., Ltd.	7,788,241	7,788,241
CCCC Financial Leasing Co., Ltd.	-	203,727,814
	510,159,734	1,170,004,375

9 Monetary funds deposited in the related parties

	Year 2019	Year 2018
CCCC Finance Company Ltd.	435,344,084	1,566,030
China Communications Construction Company Ltd.	-	1,631,873
	435,344,084	3,197,903

XI. Commitments

1 Significant commitments

(1) Matters related to capital expenditure commitments

Commitments related to capital expenditure contracted for but not provided in the financial statements as at the balance sheet date:

	Year 2019	Year 2018
Buildings and constructions, machinery equipment	591,419,876	136,573,381

(2) Commitments related to operating lease

According to the irrecoverable operating lease contract concluded, the Group will at least pay rental as follows:

	Year 2019	Year 2018
Within 1 year	32,650,110	58,661,868
1-2 years	20,566,302	18,859,930
2-3 years	11,239,044	8,864,867
Over 3 years	132,596	4,849,513
	64,588,052	91,236,178

(3) L/C commitments

The Group had entrusted the bank to issue several L/Cs to purchase imported components and parts. As at December 31, 2019, the unpaid amount under the L/Cs was about RMB 1,698,125,301(as at December 31, 2018: RMB 1,764,643,618).

XII. Notes to items of the financial statements of the Company

1 Accounts receivable

Aging analysis of accounts receivable as follows:

	Year 2019	Year 2018
Within 6 months	4,189,416,138	4,140,368,920
7-12 months	4,228,767,741	1,014,352,215
1-2 years	1,279,501,456	1,484,686,447
2-3 years	1,354,366,423	592,012,402
3-4 years	476,274,707	222,037,305
4-5 years	201,083,470	106,717,390
Over 5 years	1,050,300,846	1,073,312,115
Sub-total	12,779,710,781	8,633,486,794
Less: provision for bad debts	1,590,733,335	1,496,719,907
	11,188,977,446	7,136,766,887

Changes in provision for bad debts of accounts receivable as follows:

	Balance as at December 31, 2018	Balance as at January 1, 2019	Provision in 2019	Reversal in 2019	Balance as at December 31, 2019
Year 2019	1,496,719,907	1,571,486,934	188,332,979	169,086,578	1,590,733,335
Year 2018	1,307,045,951	1,307,045,951	385,413,154	(195,739,198)	1,496,719,907

Accounts receivable are analyzed by categories as follows:

	Year 2019			
	Book balance		Provision for bad debts	
	Amount	Ratio (%)	Amount	Proportion of provision (%)
Individual provision for bad debts	753,396,385	6	591,042,385	78

	Year 2019			
	Book balance		Provision for bad debts	
	Amount	Ratio (%)	Amount	Proportion of provision (%)
Provision for bad debts by portfolio with the credit risk characteristics	12,026,314,396	94	999,690,950	8
	12,779,710,781	100	1,590,733,335	

	Year 2018			
	Book balance		Provision for bad debts	
	Amount	Ratio (%)	Amount	Proportion of provision (%)
With individually significant amount and individual provision for bad debts	588,585,831	7	440,054,331	75
Provision for bad debts by portfolio with the credit risk characteristics				
-Related party	4,308,189,575	50	-	-
-Non-related parties	3,611,463,987	42	931,418,175	25
With individually insignificant amount and individual provision for bad debts	125,247,401	1	125,247,401	100
	8,633,486,794	100	1,496,719,907	

As at December 31, 2019, accounts receivable with individual provision for bad debts are as follows:

	Book balance	Provision for bad debts	Provision ratio %	Reason for provision
Accounts receivable 1	324,708,000	162,354,000	50	Shortage of funds for the other party
Accounts receivable 2	182,958,900	182,958,900	100	Contract dispute
Accounts receivable 3	158,184,500	158,184,500	100	Shortage of funds for the other party
Accounts receivable 4	27,904,870	27,904,870	100	Contract dispute
Accounts receivable 5	26,911,147	26,911,147	100	Contract dispute
Accounts receivable 6	10,748,869	10,748,869	100	Contract dispute
Accounts receivable 7	7,815,500	7,815,500	100	Contract dispute
Accounts receivable 8	7,463,174	7,463,174	100	Contract dispute
Accounts receivable 9	3,582,135	3,582,135	100	Contract dispute
Accounts receivable 10	2,224,013	2,224,013	100	Contract dispute
Accounts receivable 11	895,277	895,277	100	Contract dispute
	753,396,385	591,042,385		

As at December 31, 2018, accounts receivable with individually significant amount and individual provision for bad debts are as follows:

	Book balance	Provision for bad debts	Provision ratio %	Reason for provision
Accounts receivable 1	183,703,331	183,703,331	100	Contract dispute
Accounts receivable 2	297,063,000	148,531,500	50	Contract dispute
Accounts receivable 3	107,819,500	107,819,500	100	Shortage of funds for the other party
	588,585,831	440,054,331		

As at December 31, 2018, accounts receivable with individually insignificant amount and individual provision for bad debts are as follows:

	Book balance	Provision for bad debts	Provision ratio %	Reason for provision
Accounts receivable 1	50,365,000	50,365,000	100	Shortage of funds for the other party
Accounts receivable 2	27,452,868	27,452,868	100	Contract dispute
Accounts receivable 3	14,854,467	14,854,467	100	Contract dispute

	Book balance	Provision for bad debts	Provision ratio %	Reason for provision
Accounts receivable 4	10,792,605	10,792,605	100	Contract dispute
Accounts receivable 5	7,847,300	7,847,300	100	Contract dispute
Accounts receivable 6	7,342,286	7,342,286	100	Contract dispute
Accounts receivable 7	3,524,112	3,524,112	100	Contract dispute
Accounts receivable 8	2,187,988	2,187,988	100	Contract dispute
Accounts receivable 9	880,775	880,775	100	Contract dispute
	125,247,401	125,247,401		

Accounts receivable subject to provisions for bad debts by the Company under aging analysis method are as follows (in 2018: accounts receivable from non-related parties):

	Year 2019			Year 2018		
	Book balance of estimated default	Expected credit Loss rate (%)	The entire duration Expected credit loss	Amount for the entire duration	Provision for bad debts Ratio (%)	Amount
Within 6 months	4,181,652,216	1	36,194,615	1,069,737,753	-	-
7-12 months	4,220,733,341	1	36,532,885	854,283,993	1	8,542,840
1 - 2 years	1,158,723,629	4	51,346,322	501,366,593	15	75,204,989
2 - 3 years	1,354,366,423	5	69,254,171	321,730,519	30	96,519,155
3 - 4 years	253,416,207	29	73,708,832	188,175,889	50	94,087,945
4 - 5 years	182,871,427	69	126,053,375	76,423,977	75	57,317,983
Over 5 years	674,551,153	90	606,600,750	599,745,263	100	599,745,263
	12,026,314,396		999,690,950	3,611,463,987		931,418,175

Top 5 of accounts receivable as December 31, 2019, presented by debtors:

	Balance	Provision for bad debts	Proportion in total balance of accounts receivable Proportion in total amount (%)
Top 5 of total of accounts receivable	6,205,808,563	30,765,484	49

Top 5 of accounts receivable as at December 31, 2018, presented by debtors:

	Balance	Provision for bad debts	Proportion in total balance of accounts receivable Proportion in total amount (%)
Top 5 of total of accounts receivable	3,680,578,755	18,169,279	43

2 Other receivables

	Year 2019	Year 2018
Other receivables	7,860,646,322	13,968,458,891
Less: provision for bad debts	10,325,607	13,312,251
	7,850,320,715	13,955,146,640

Aging analysis of other receivables is as set out below:

	Year 2019	Year 2018
Within 6 months	7,660,131,536	13,639,005,165
7-12 months	28,811,129	190,908,042
1-2 years	86,757,020	112,968,940
2-3 years	74,609,889	11,872,673
3-4 years	1,038,079	20,871
4-5 years	18,600	4,128,886
Over 5 years	9,280,069	9,554,314

	Year 2019	Year 2018
	7,860,646,322	13,968,458,891
Less: provision for bad debts of other receivables	10,325,607	13,312,251
	7,850,320,715	13,955,146,640

Classification of other receivables in terms of nature of payment as follows:

	Year 2019	Year 2018
Current accounts between subsidiaries	7,080,666,063	13,391,496,986
Bid and performance bonds	230,696,849	171,149,432
Export tax refund	214,352,290	43,627,838
Taxes on outstanding payment receivable	188,526,214	181,205,119
Customs deposits	38,241,878	63,341,536
Lease payment receivable	33,434,668	33,434,668
Money on call of on-site product service	30,215,954	46,372,659
Staff loan receivable	23,009,961	27,854,145
Others	21,502,445	9,976,508
	7,860,646,322	13,968,458,891

As at December 31, 2019, provisions for bad debts in respect of other receivables are respectively made on the basis of expected credit losses for 12 months and expected credit losses for the entire duration as follows:

	Phase 1	Phase 2	Phase 3	Total
	Expected credit losses in the next 12 months	Expected credit loss for the entire duration	Financial assets that have suffered credit impairment (Expected credit loss for the entire duration)	
Beginning balance	-	3,812,590	9,722,555	13,535,145
Provision in the current year	-	612,929	-	612,929
Reversal in the current year	-	-	(3,822,467)	(3,822,467)
Ending balance	-	4,425,519	5,900,088	10,325,607

Changes in provision for bad debts of other receivables are as follows:

	Beginning balance	Provision in the current year	Reversal in the current year	Charge-off in the current year	Ending balance
Year 2018	163,639,459	-	(150,327,208)	-	13,312,251

	As at December 31, 2018			
	Book balance		Provision for bad debts	
	Amount	Ratio (%)	Amount	Proportion of provision (%)
Provision for bad debts accrued by credit risk characteristics				
-Deposits (excluding quality deposits)	234,490,968	2	-	-
Employee borrowings and petty cash	74,226,804	1	-	-
-Others	13,650,018,564	97	3,589,696	0
With individually insignificant amount and individual provision for bad debts	9,722,555	-	9,722,555	100
	13,968,458,891	100	13,312,251	

There were no other receivables with individually significant amount and individual provision for bad debts as at December 31, 2018.

As at December 31, 2018, other receivables with individually insignificant amount and individual provision for bad debts are as follows:

	Book balance	Proportion of provision for bad debts	Proportion of provision (%)	Reason for provision
Other receivables 1	3,037,042	3,037,042	100	Contract cancellation
Other receivables 2	1,692,765	1,692,765	100	Contract cancellation
Other receivables 3	1,170,282	1,170,282	100	Contract cancellation
Others	3,822,466	3,822,466	100	
	9,722,555	9,722,555		

As at December 31, 2018, other receivables with provision for bad debts made by the Company under aging analysis method are as follows:

	Year 2018		
	Book balance		Provision for bad debts
	Amount	Ratio (%)	
Within 6 months	13,644,611,754	-	-
7-12 months	1,612,892	1	16,129
1 - 2 years	183,041	15	27,456
2 - 3 years	41,810	30	12,543
3-4 years	20,847	50	10,424
4 - 5 years	100,304	75	75,228
Over 5 years	3,447,916	100	3,447,916
	13,650,018,564		3,589,696

As at December 31, 2019, top five of other receivables are as follows:

	Balance as at December 31, 2019	Proportion in the total balance of other receivables (%)	Nature	Aging	Balance of provision for bad debts as at December 31, 2019
Other receivables 1	3,250,805,339	42	Current accounts of the subsidiaries	Within 1 year	-
Other receivables 2	1,264,426,417	16	Current accounts of the subsidiaries	Within 1 year	-
Other receivables 3	1,257,974,818	16	Current accounts of the subsidiaries	Within 1 year	-
Other receivables 4	929,804,805	12	Current accounts of the subsidiaries	Within 1 year	-
Other receivables 5	110,235,165	1	Current accounts of the subsidiaries	Within 1 year	-
	6,813,246,544	87			-

As at December 31, 2018, top five of other receivables are as follows:

	Balance as at December 31, 2019	Proportion in the total balance of other receivables (%)	Nature	Aging	Balance of provision for bad debts as at December 31, 2019
Other receivables 1	5,620,231,055	40	Current accounts of the subsidiaries	Within 1 year	-
Other receivables 2	1,705,364,678	12	Current accounts of the subsidiaries	Within 1 year	-
Other receivables 3	1,589,824,451	11	Current accounts of the subsidiaries	Within 1 year	-

	Balance as at December 31, 2019	Proportion in the total balance of other receivables (%)	Nature	Aging	Balance of provision for bad debts as at December 31, 2019
Other receivables 4	1,339,983,013	10	Current accounts of the subsidiaries	Within 1 year	-
Other receivables 5	1,232,207,999	9	Current accounts of the subsidiaries	Within 1 year	-
	11,487,611,196	82			-

3 Long-term equity investment

	Year 2019	Year 2018
Subsidiaries	5,935,939,243	5,909,665,076
Joint ventures	264,615,842	249,039,756
Associates	2,547,930,644	2,477,313,892
	8,748,485,729	8,636,018,724

(1) Subsidiaries
Year 2019

	Year 2018	Increase/decrease in 2019 Additional or reduced investment	Year 2019
Shanghai Zhenhua Port Machinery Heavy Industry Co., Ltd.	9,964,200	-	9,964,200
Shanghai Zhenhua Port Machinery (Hongkong) Co., Ltd.	-	-	-
Shanghai Zhenhua Shipping Co., Ltd.	140,260,673	-	140,260,673
ZPMC Zhangjiagang Port Machinery Co. Ltd.	4,518,000	-	4,518,000
Nantong Zhenhua Heavy Equipment Manufacturing Co., Ltd.	1,154,936,900	-	1,154,936,900
ZPMC Jiangyin Steel Structure Manufacturing Co., Ltd.	579,983	(579,983)	-
ZPMC Port Machinery General Equipment Co., Ltd.	2,201,086,744	-	2,201,086,744
ZPMC Transmission Machinery (Nantong) Co. Ltd.	300,000,000	-	300,000,000
ZPMC Electric Co., Ltd.	50,000,000	-	50,000,000
ZPMC GmbH Hamburg	207,940	-	207,940
ZPMC Netherlands Cooperatie V.A.	29,366,084	-	29,366,084
ZPMC Netherlands B.V.	-	-	-
Verspannen B.V.	-	-	-
Shanghai Zhenhua Marine Engineering Service Co., Ltd.	100,000,000	-	100,000,000
ZPMC Machinery Equipment Services Co., Ltd.	7,000,000	-	7,000,000
ZPMC Lanka Company(Private)Limited	6,183,978	-	6,183,978
Nanjing Ninggao New Channel Construction Co., Ltd.	100,000,000	-	100,000,000
ZPMC Qidong Marine Engineering Co., Ltd.	203,000,000	-	203,000,000
ZPMC Engineering Africa (Pty) Ltd.	3,084,000	-	3,084,000
ZPMC Korea Co., Ltd.	2,876,209	3,521,850	6,398,059
ZPMC Engineering (India)Private Limited	2,953,200	-	2,953,200
ZPMC Australia Company (Pty) Limited	2,708,500	-	2,708,500
ZPMC North America Inc.	18,564,520	-	18,564,520
ZPMC Southeast Asia Holding Pte. Ltd.	12,513,114	-	12,513,114
ZPMC Brazil Servio Portuários LTDA	2,936,771	-	2,936,771
ZPMC Limited Liability Company	10,172,070	-	10,172,070
CCCC Liyang Urban Investment and Construction Co., Ltd.	243,000,000	-	243,000,000



	Year 2018	Increase/decrease in 2019 Additional or reduced investment	Year 2019
CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.	242,542,999	-	242,542,999
CCCC Investment & Development Qidong Co., Ltd.	192,500,000	-	192,500,000
CCCC Zhenjiang Investment Construction Management Development Co., Ltd.	707,000,000	-	707,000,000
CCCC Rudong Construction Development Co., Ltd.	18,332,300	18,332,300	36,664,600
CCCC Yongjia Construction Development Co., Ltd.	128,000,000	-	128,000,000
CCCC Zhenhua Lvjian Technology (Ningbo) Co., Ltd.	4,000,000	-	4,000,000
ZPMC Latin America Holding Corporation	3,307,850	-	3,307,850
ZPMC Middle East Fze	5,271,120	-	5,271,120
ZPMC UK LD	2,797,921	-	2,797,921
ZPMC Fuzhou Offshore Construction Co., Ltd.	-	5,000,000	5,000,000
	5,909,665,076	26,274,167	5,935,939,243

Year 2018

	Year 2017	Increase/decrease in 2018 Additional or decreased investment	Year 2018
Shanghai Zhenhua Port Machinery Heavy Industry Co., Ltd.	9,964,200	-	9,964,200
Shanghai Zhenhua Port Machinery (Hongkong) Co., Ltd.	-	-	-
Shanghai Zhenhua Shipping Co., Ltd.	140,260,673	-	140,260,673
ZPMC Zhangjiagang Port Machinery Co., Ltd.	4,518,000	-	4,518,000
Nantong Zhenhua Heavy Equipment Manufacturing Co., Ltd.	854,936,900	-	854,936,900
ZPMC Jiangyin Steel Structure Manufacturing Co., Ltd.	579,983	-	579,983
ZPMC Port Machinery General Equipment Co., Ltd.	2,201,086,744	-	2,201,086,744
ZPMC Transmission Machinery (Nantong) Co. Ltd.	600,000,000	-	600,000,000
ZPMC Electric Co., Ltd.	50,000,000	-	50,000,000
ZPMC GmbH Hamburg	207,940	-	207,940
ZPMC Netherlands Cooperatie V.A.	26,662,579	2,703,505	29,366,084
ZPMC Netherlands B.V.	-	-	-
Verspannen B.V.	-	-	-
Shanghai Zhenhua Marine Engineering Service Co., Ltd.	100,000,000	-	100,000,000
ZPMC Machinery Equipment Services Co., Ltd.	7,000,000	-	7,000,000
ZPMC Lanka Company(Private)Limited	6,183,978	-	6,183,978
Nanjing Ninggao New Channel Construction Co., Ltd.	1,098,000,000	(998,000,000)	100,000,000
ZPMC Qidong Marine Engineering Co., Ltd.	203,000,000	-	203,000,000
ZPMC Engineering Africa (Pty) Ltd.	3,084,000	-	3,084,000
ZPMC Korea Co., Ltd.	2,876,209	-	2,876,209
ZPMC Engineering (India)Private Limited	2,953,200	-	2,953,200
ZPMC Australia Company (Pty) Limited	2,708,500	-	2,708,500
ZPMC North America Inc.	18,564,520	-	18,564,520
ZPMC Southeast Asia Holding Pte. Ltd.	3,875,949	8,637,165	12,513,114
ZPMC Brazil Servio Portuários LTDA	2,936,771	-	2,936,771
ZPMC Limited Liability Company	7,211,416	2,960,654	10,172,070
CCCC Liyang Urban Investment and Construction Co., Ltd.	183,000,000	60,000,000	243,000,000
CCCC Tianhe Mechanical Equipment Manufacturing Co., Ltd.	242,542,999	-	242,542,999

	Year 2017	Increase/decrease in 2018 Additional or decreased investment	Year 2018
CCCC Investment & Development Qidong Co., Ltd.	147,500,000	45,000,000	192,500,000
CCCC Zhenjiang Investment Construction Management Development Co., Ltd.	707,000,000	-	707,000,000
CCCC Rudong Construction Development Co., Ltd.	-	18,332,300	18,332,300
CCCC Yongjia Construction Development Co., Ltd.	-	128,000,000	128,000,000
CCCC Zhenhua Lvjian Technology (Ningbo) Co., Ltd.	-	4,000,000	4,000,000
ZPMC Latin America Holding Corporation	-	3,307,850	3,307,850
ZPMC Middle East Fze	5,271,120	-	5,271,120
ZPMC UK LD	2,797,921	-	2,797,921
	6,634,723,602	(725,058,526)	5,909,665,076

(2) Joint ventures
Year 2019

	Balance as at January 1, 2019	Changes in 2019			Balance as at December 31, 2019	Provision for impairment as at December 31, 2019
		Additional investment	Reduced investment	Investment income under the equity method		
Joint ventures						
Jiangsu Longyuan Zhenhua Marine Engineering Co. Ltd.	244,265,213	-	-	16,615,440	260,880,653	-
ZPMC Mediterranean Liman Makinalari Ticaret Anonim Sirketi	4,774,543	-	-	(1,039,354)	3,735,189	-
	249,039,756	-	-	15,576,086	264,615,842	

Year 2018

	Balance as at January 1, 2018	Changes in 2018			Balance as at December 31, 2018	Provision for impairment as at December 31, 2018
		Additional investment	Reduced investment	Investment income under the equity method		
Joint ventures						
Jiangsu Longyuan Zhenhua Marine Engineering Co. Ltd.	231,309,282	-	-	12,955,931	244,265,213	-
ZPMC Mediterranean Liman Makinalari Ticaret Anonim Sirketi	3,775,146	-	-	999,397	4,774,543	-
	235,084,428	-	-	13,955,328	249,039,756	

(3) Associates

	Balance as at December 31, 2018	Changes in accounting policies	Balance as at January 1, 2019	Changes in 2019				Balance as at December 31, 2019	Provision for impairment as at December 31, 2019
				Increase in investment	Investment income under the equity method	Adjustments to other comprehensive income	Cash dividends or profits declared to be distributed		
CCCC Marine Engineering & Technology Research Center Co., Ltd	16,252,274	-	16,252,274	-	478,530	-	-	16,730,804	-
ZPMC Changzhou Coatings Co., Ltd.	16,795,964	-	16,795,964	-	1,520,000	-	-	18,315,964	-



	Balance as at December 31, 2018	Changes in accounting policies	Balance as at January 1, 2019	Changes in 2019				Balance as at December 31, 2019	Provision for impairment as at December 31, 2019
				Increase in investment	Investment income under the equity method	Adjustments to other comprehensive income	Cash dividends or profits declared to be distributed		
CCCC Real Estate Yinxing Co., Ltd.	180,652,673	-	180,652,673	-	3,007,868	-	-	183,660,541	-
CCCC Financial Leasing Co., Ltd.	1,721,445,354	(15,525,235)	1,705,920,119	-	89,222,324	310,435	(9,750,000)	1,785,702,878	-
CCCC Yancheng Construction and Development Co., Ltd.	289,380,523	-	289,380,523	-	385,719	-	-	289,766,242	-
China Communications Construction USA Inc.	61,722,121	-	61,722,121	-	(1,945,770)	943,598	-	60,719,949	-
CCCC South American Regional Company SARL	191,064,983	-	191,064,983	-	(1,127,404)	(3,258,739)	-	186,678,840	-
Shanghai Ocean Engineering Equipment Manufacturing Innovation Center Co., Ltd.	-	-	-	6,500,000	(144,574)	-	-	6,355,426	-
	2,477,313,892	(15,525,235)	2,461,788,657	6,500,000	91,396,693	(2,004,706)	(9,750,000)	2,547,930,644	-

Year 2018

	Beginning balance	Changes in 2018				Ending balance	Provision for impairment as at December 31, 2018
		Increase in investment	Investment income under the equity method	Adjustments to other comprehensive income	Cash dividends or profits declared to be distributed		
CCCC Marine Engineering & Technology Research Center Co., Ltd.	15,849,544	-	402,730	-	-	16,252,274	-
ZPMC Changzhou Coatings Co., Ltd.	16,467,125	-	1,191,077	-	(862,238)	16,795,964	-
CCCC Real Estate Yinxing Co., Ltd.	178,099,707	-	2,552,966	-	-	180,652,673	-
CCCC Financial Leasing Co., Ltd.	1,678,550,583	-	87,246,932	647,839	(45,000,000)	1,721,445,354	-
CCCC Yancheng Construction and Development Co., Ltd.	-	289,050,000	330,523	-	-	289,380,523	-
China Communications Construction USA Inc.	67,230,450	-	(8,536,568)	3,028,239	-	61,722,121	-
CCCC South American Regional Company SARL	96,195,387	99,912,976	3,288,529	(8,331,909)	-	191,064,983	-
	2,052,392,796	388,962,976	86,476,189	(4,655,831)	(45,862,238)	2,477,313,892	-

4 Operating revenue and operating costs

	Year 2019		Year 2018	
	Revenue	Cost	Revenue	Cost
Main business	22,756,923,775	19,937,920,290	18,070,463,753	15,061,380,936
Other business	2,283,380,655	2,134,841,176	1,316,224,251	1,220,964,790
	25,040,304,430	22,072,761,466	19,386,688,004	16,282,345,726

	Year 2019		Year 2018	
	Revenue from primary business	Costs of primary business	Revenue from primary business	Costs of primary business
Port machinery	15,145,230,759	12,686,901,266	14,576,864,135	11,382,215,682
Heavy equipment	3,127,014,201	2,999,144,824	1,651,058,229	1,675,938,342
Steel structure and related income	2,695,894,313	2,622,346,875	1,527,592,932	1,712,519,900
"Building-transfer" project and engineering construction	1,788,784,502	1,629,527,325	314,948,457	290,707,012
	22,756,923,775	19,937,920,290	18,070,463,753	15,061,380,936

Other business revenue and cost listed as follows:

	Year 2019		Year 2018	
	Revenue from other business	Costs of other businesses	Revenue from other business	Costs of other businesses
Sales of materials	1,873,183,009	1,875,749,099	1,044,182,505	1,046,418,417
Equipment lease and others	410,197,646	259,092,077	272,041,746	174,546,373
	2,283,380,655	2,134,841,176	1,316,224,251	1,220,964,790

5 Investment income

	Year 2019	Year 2018
Income from long-term equity investments calculated under cost method	788,958	-
Income from long-term equity investments calculated under equity method	106,972,779	100,431,517
Investment income from the available-for-sale financial assets during holding period	-	667,732
	107,761,737	101,099,249

6 Supplementary information to the statement of cash flows

Net profit adjusted to cash flow from operating activities:

	Year 2019	Year 2018
Net profit	644,361,553	782,185,825
Plus: provision/ reversal for asset impairment	59,200,823	(25,476,619)
Losses from credit impairment	16,036,863	-
Depreciation of investment properties and fixed assets	405,982,932	466,954,562
Amortization of intangible assets	48,969,634	53,202,552
Net gain from disposal of fixed assets and intangible assets	(4,536,497)	(69,575,485)
Gains from changes in fair value	(151,121,780)	(44,481,806)
Financial expenses	1,395,060,690	1,410,797,106
Investment income	(107,761,737)	(101,099,249)
Decreases in deferred income tax assets	58,293,309	53,252,590
Increase in inventories	(833,435,956)	(1,546,854,405)
Increase / decrease in construction contracts	(106,347,164)	1,028,657,153
Decrease/increase in operating receivables	2,161,329,300	(2,198,475,931)
Decrease/increase in operating payables	(976,900,017)	829,204,147
Net cash flows from operating activities	2,609,131,953	638,290,440

Net change in cash and cash equivalents:

	Year 2019	Year 2018
Ending balance of cash	1,770,070,810	1,930,451,140
Less: beginning balance of cash	1,930,451,140	3,301,302,585
Net decrease in cash and cash equivalents	(160,380,330)	(1,370,851,445)

XIII. Post balance sheet events

Since the beginning of 2020, the COVID-19 epidemic (hereinafter referred to as "the epidemic") has spread globally. The Company actively implements and strictly enforces the regulations and requirements issued by the government for prevention and control work, and acts quickly to support and strengthen the prevention work from social responsibility and internal management aspects. As of the date of this report, the Company has resumed production in an orderly manner.

As the epidemic will have an impact on the global economy, it may have a temporary impact on the Company's

production and operations to a certain extent, depending on the prevention and control of the epidemic, its duration and the implementation of various regulatory policies.

The Company is currently unable to predict the specific amount of impact of this matter on the financial statements, and will continue to closely monitor the development of the epidemic and its impact on the Company's financial position and operating results.

XIV. Other significant events

1 Segment reporting

The Group determines operating segments based on internal organization structure, management requirements and internal reporting system, determines reporting segments based on operating segments, and disclose the information of the segments.

Operating segment refers to the component part of the Group that meet the following requirements: (1) it can generate income and expenses in daily activities; (2) the management of the Group can regularly evaluate its operating results to determine its allocation of resources and to evaluate its performance; (3) the Group is able to obtain its accounting information regarding financial position, operating results and cash flows, etc. If two or more operating segments have similar economic characteristics, and have met a certain conditions, they will be merged into one operating segment.

The Group identified the business as an operating segment for analysis and assessment based on internal organization structure, management requirement and internal report system.

Product and labor information

Income from external transactions

	Year 2019	Year 2018
Port machinery	16,458,563,164	14,983,974,898
Heavy equipment	1,491,597,749	2,746,107,406
"Building-transfer" project and engineering construction	2,564,145,018	1,465,829,799
Steel structure and related income	2,709,430,977	1,558,778,586
Shipping and others	989,117,844	826,823,397
Sales of materials	84,343,163	64,386,030
Equipment lease and others	298,389,968	166,489,528
	24,595,587,883	21,812,389,644

Geographic information

Income from external transactions

	Year 2019	Year 2018
Chinese Mainland	12,728,821,429	10,273,382,617
Asia (excluding Chinese Mainland)	3,469,961,193	4,204,353,552
Europe	3,416,405,499	1,560,574,842
North America	2,205,954,534	2,029,837,441
South America	963,140,369	1,040,540,883
Africa	761,455,510	1,508,172,239
Chinese Mainland (export sales)	697,069,989	664,121,407
Oceania	352,779,360	531,406,663
	24,595,587,883	21,812,389,644

The income from external transaction is attributable to where the customer is located.

Total current assets

	Year 2019	Year 2018
Chinese Mainland	22,450,499,096	19,922,533,912
Asia (excluding Chinese Mainland)	7,270,356,589	5,774,343,229

	Year 2019	Year 2018
Others	41,013,037	38,609,208
	29,761,868,722	25,735,486,349

The Non-current assets are attributable to where they are located, excluding financial assets, long-term equity investment, goodwill, deferred income tax assets and other non-current assets.

2 Comparative data

As explained in Note III (31), the accounting treatment and presentation of certain items in the financial statements and the amounts in the financial statements have been modified to comply with the new requirements as a result of changes in the presentation of notes and accounts receivable, notes payable and accounts payable.

1 Breakdowns of non-recurring profit or loss

	Year 2019	Year 2018
Net gains on disposal of non-current assets	49,091,913	155,557,716
Government grants included in the current profit or loss (except for the one closely related to the normal operation of the Company and gained constantly at a fixed amount or quantity according to certain standard based on state policies)	93,271,980	114,412,517
Profit or loss on changes in fair values of financial assets held for trading and financial liabilities held for trading and investment income obtained from disposal of financial assets held for trading, financial liabilities held for trading and available-for-sale financial assets	146,517,397	74,200,750
Reversal of provision for impairment of receivables subject to separate impairment test	-	150,327,138
Non-operating income and expenses other than the above-mentioned items	(18,553,180)	(67,069,856)
Effect of income tax	(43,502,506)	(74,850,113)
Affected amount of minority equity(after tax)	(23,013,076)	(30,908,588)
	203,812,528	321,669,564

2 Return on net assets and earnings per share

	Weighted average rate of return on net assets (%)		Earnings per share			
			Basic earnings per share		Diluted earnings per share	
	Year 2019	Year 2018	Year 2019	Year 2018	Year 2019	Year 2018
Net profit attributable to ordinary shareholders of the Company	3.39	2.92	0.10	0.08	0.10	0.08
Net profit attributable to ordinary shareholders of the Company after deducting non-recurring profits and losses	2.06	0.80	0.06	0.02	0.06	0.02

Section XII | List of Reference Documents

List of Reference Documents	Financial statements affixed with the signature and seal of legal representative, accounting principal and head of the accounting department
List of Reference Documents	Original of auditors' report affixed with the signature by the accounting firm and seal by CPA.
List of Reference Documents	Public disclosure of all original documents and announcement of the Company on the newspaper designated by the China Securities Regulatory Commission

Chairman: Zhu Lianyu

Date of reporting approved by the Board of Directors:
March 31, 2020

Revision information

☐Applicable ☒Not applicable