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Credit Research

Asia-Pac HG Corporates

7 March 2017

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China High Grade Handbook

A shifting landscape for corporates

The China high grade segment accounts for c.45% of the Asia high grade universe. The pipeline of bond supply from China remains robust, providing a vital funding channel for investment in energy infrastructure, power networks, as well as for M&A activities. As a percentage of Asia credit, China will account for more than 50% of Asia credit by end-2017 (end-2016: 45%), according to our credit strategists, based on an expected issuance of more than USD100bn against redemptions of USD33bn[1].

China SOE reforms – trajectory intact despite slow and bumpy progress. The step-up in investments over recent years has stretched sectors with overcapacity and stoked concerns about provincial and municipal SOEs (including LGFVs). Accordingly, the Chinese government has launched various reform measures to reduce overcapacity and inefficiencies across the SOE universe, specifically in steel and mining. Reaffirmation of the government's commitment to lower corporate leverage and reshape sectors with overcapacity issues came in the 2017 Government Work Report (GWR), delivered by Premier Li on 5 March 2017. The key highlights include a lowering in the GDP growth target to c.6.5% for 2017 (2016: 6.5-7.0%) and numerical targets for industry capacity reductions and public investment in infrastructure.

M&A a key driver of supply but such activity coming under tighter control. Over the past few years, Chinese companies have been active participants in the global M&A scene across a diverse mix of sectors – resources, power generation and high-value technology. This trend could slow this year given stricter capital controls imposed by the government, reflecting greater scrutiny on outward direct investment. Additionally, any potential acquisitions in the US, especially those related to strategic assets, are likely to be subject to tighter regulatory oversight.

In this report, we provide single-page profiles of 47 Chinese corporate issuers, excluding financial companies. We provide a summary of their credit profiles and bond support structures (onshore or offshore guarantees, keepwell deeds, direct issuance). We hope investors will find this publication helpful in comparing the major bond issuers in the China high-grade universe.

Asia Credit Research

Justin Ong
+65 6308 2155
justin.ong@barclays.com
Barclays Bank, Singapore

Eugene Tham
+65 6308 3180
eugene.x.tham@barclays.com
Barclays Bank, Singapore

Asia Credit Strategy

Xiaoyi Wang
+65 6308 3595
xiaoyi.wang@barclays.com
Barclays Bank, Singapore

www.barclays.com

[1] *Asia Credit Strategy: Supply 2017: Chinese on the menu*, 7 November 2016.

OVERVIEW

China HG: The road ahead

Justin Ong
+65 6308 2155
justin.ong@barclays.com
Barclays Bank, Singapore

Eugene Tham
+65 6308 3180
eugene.x.tham@barclays.com
Barclays Bank, Singapore

Xiaoyi Wang
+65 6308 3595
xiaoyi.wang@barclays.com
Barclays Bank, Singapore

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China SOE reforms: Slow and bumpy progress, but trajectory intact

Leverage at SOEs has increased in recent years due to rising investment, which has led to strains in sectors with overcapacity (steel and mining) and concerns about the provincial and municipal SOEs (including LGFVs). The Chinese government has launched numerous reform measures to reduce overcapacity and inefficiencies across the SOE sectors. In the latest Government Work Report (GWR) delivered by Premier Li on 5 March 2017, several key points stood out. The government reduced the GDP growth target to c.6.5% for 2017 (2016: 6.5-7%) and specified numerical targets for industry capacity reductions and public investment in infrastructure. A top priority is a reduction of corporate leverage. For details, see *China NPC – Lower 2017 growth target and some highlights in the GWR*, 6 March 2017. We list below the major sectors that will see further reforms in the coming years and likely developments.

- **Energy:** Gas tariff reform for pipeline business; separation of pipeline transmission business from CNPC/PetroChina, which eventually could lead to the independent operation of pipeline assets (more efficient industry structure).

- **Power generation**: Further progress in deregulation and linking tariffs to input costs, notably coal prices. Electricity prices in China are still heavily regulated, and there is a lag in the pass-through of input prices to the power generation companies' on-grid tariffs.

- **City gas distribution**: Three-tier pricing[2] in residential segment to support the margins of gas distribution companies. The NDRC also reduced the wholesale price twice in 2015, to help boost the consumption of city gas.

- **Steel**: Consolidation to reduce excess capacity – Baosteel Group Corp's merger with Wuhan Iron & Steel Corp will create a new entity called China Baowu Steel Group Corp Ltd. In the 2017 GWR, the government stated that China will reduce the country's steel capacity by 50mt and coal capacity by at least 150mt. Although no numerical targets were set in the 2016 GWR, last year China's steel and coal capacity were cut by 65mt and 290mt respectively.

- **Mining**: Establishment of a stronger metals and mining value chain through the merger of China Minmetals Corp and MCC Group, which was largely completed in mid-2016.

- **Infrastructure**: More public/private partnership (PPP) structures to provide support for public-sector projects. In July 2016, China's State Council reaffirmed its plan to drive the growth of PPPs in the transportation, environmental protection, energy generation and water sectors. This is consistent with its objective of attracting private investment into infrastructure construction. Additionally, in the 2017 GWR, the government highlighted its plan to invest CNY800bn in railway construction and CNY1.8trn for highway and expansion of waterways.

Other than the major sector-specific initiatives, the government has announced policy guidelines to push the SOEs to control their leverage and to prioritize sustainable growth. In October 2016, the State Council highlighted its guidance to reduce their leverage through M&A, optimization of their debt structure, implementation of debt-for-equity swaps and equity financing. The State Council also advocates a law-based bankruptcy system to

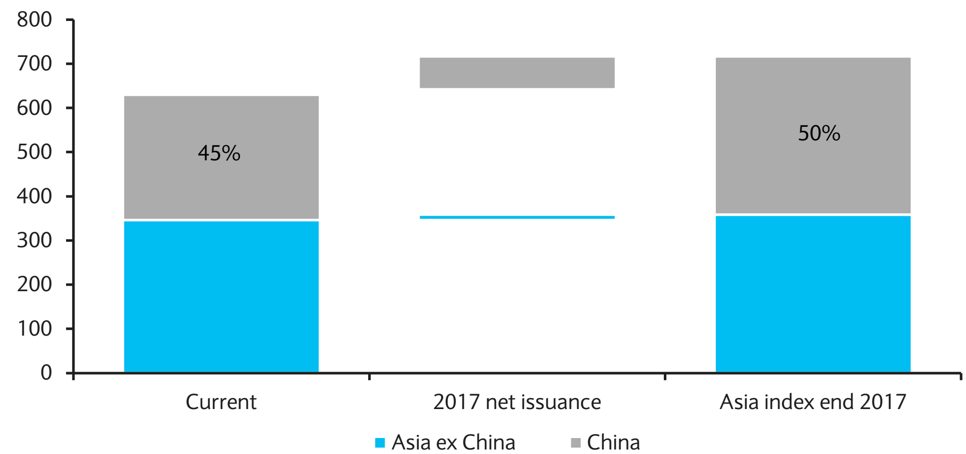
[2] The three-tiered pricing for residential gas consumption is based on volume. Tier 1 (up to 80% of average consumption volume of residential consumers); Tier 2 (80-95%); Tier 3 (>95%). The tariff increases 20% for Tier 2 and 50% for Tier 3.

manage the liquidation and insolvency of companies, as well as better fiscal and tax policies for banks to manage nonperforming assets.

Supply outlook for China HG continues to be robust: Barclays credit strategist expects Asia credit to deliver USD160-170bn of gross USD supply in 2017 (bullish estimate: close to USD200bn; bearish estimate: USD120-130bn; see *Asia Credit Outlook 2017 – Stirring the hotpot*, 11 January 2017). Within Asia, China will continue to the dominant source of supply, driven by ongoing investment in energy infrastructure, power networks, and financing for acquisitions. Overall, we estimate that China will issue more than USD100bn, against redemptions of USD33bn, and that China credit's share of Asia credit will increase to more than 50% by end-2017 from 45% currently (see Figure 1). One source of supply within China credit is the local-government financing-vehicle (LGFV) sector.

FIGURE 1

China's share of the Asia credit index is set to surpass 50%



Source: Barclays Research

LGFV bond supply: Provincial and municipal SOEs, including LGFVs, continue to depend on the offshore bond market to support the financing of public infrastructure projects, urban transportation and social development projects. Demand for these offshore bonds typically comes from the local banks and domestic asset managers – investors that are familiar with the LGFV onshore market and the credit quality of the provincial/municipal government entities. However, over time, several factors are driving the local investors to be more selective in their investment decisions. The credit quality and business profiles of the issuers varies significantly, and more maiden issuers have emerged from less affluent provinces (based on GDP/per capita such as Gansu, Guangxi, Yunnan).

So far, the participation of international investors in the LGFV offshore bond segment has been limited, in part because of the challenges in analyzing the fundamentals of local governments. Additionally, the LGFVs generally have weak standalone financial profiles, lack financial disclosures and depend heavily on subsidies and grants from local governments. However, we expect international investors (benchmarked to indices) to monitor developments in the LGFV segment given its increasing weight in the JACI indices.

M&A a key driver of supply, but tighter controls could constrain activity

China's capital controls and tighter oversight by foreign governments: Over the past few years, Chinese companies have stepped up international acquisitions in a diverse mix of sectors – resources, power generation and high-value technology. This trend is likely to slow over the coming year. In late November 2016, the Chinese government announced tighter capital controls, of which one measure was the scrutiny on outward direct investments. Specifically, China will restrict overseas investments of USD10bn and above (though certain strategic transactions would be allowed) and restrict outbound investments of at least USD1bn in industries outside the acquirer's core business. We also think any potential acquisitions in the USA, especially those related to strategic assets, will be subject to tighter regulatory oversight. Together, these two factors could reduce the scope for major M&A transactions over the coming year. Several key sectors with major M&A transactions and outbound investments over the past few years -

- **Power generation**: China Three Gorges is the second-largest private power generation company in Brazil, following its acquisition of a 30-year concession in two new projects for c.USD3.7bn in January 2016 and the acquisition of Duke Brazil for an enterprise value of USD1.2bn in October 2016. In September 2016, China General Nuclear agreed to invest jointly in the Hinkley Point C nuclear project in the UK with Electricite de France (EDF).

- **Engineering equipment (power, manufacturing, robotics):** In 2014, Shanghai Electric Group (SEG) acquired a 40% stake in Ansaldo Energia (Italy) for EUR400mn. SEG also formed two joint-ventures with the Ansaldo to manufacture gas turbines for Asian markets and set up an R&D centre in Shanghai. In 2016, Weichai Power gradually increased its stake in KION Group (second-largest global forklift manufacturer) to 43.3% from 38.25% for around EUR455mn through a new share subscription and the secondary market. In the electrical appliance sector, currently Midea Group holds a 94.55% stake in KUKA (German-based robotics company) after making a tender offer for the latter in May 2016.

- **Chemicals**: China National Chemical Corporation's proposed acquisition of Syngenta for USD43bn would expand ChemChina's geographical reach and product portfolio in crop protection products and seeds. This deal still requires approval by the US Federal Trade Commission and China's Ministry of Commerce. In 2015, ChemChina acquired Italy-based Pirelli for USD7.9bn.

- **Resources**: China Minmetals Corp acquired a 62.5% interest in the Las Bambas copper mine in Peru in July 2014, which was the largest overseas acquisition in the Chinese metals and mining industry.

CONTENTS

Bonds with Onshore Guarantees/ Issuers

Beijing Capital Group

Analyst
Justin Ong

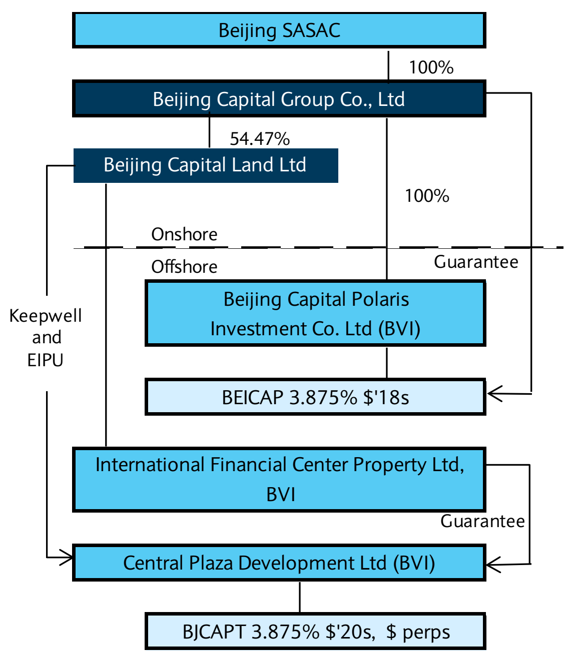
Company description: Beijing Capital Group (BJCG, Baa3/BBB-/BBB Neg), wholly owned by the Beijing SASAC, operates in the water and environmental protection, infrastructure, real estate and financing services sectors. **Water and environmental protection** – the group is a major provider of sewage treatment and water supply services, a source of recurring income for the group. At end-2015, it held a 54.3% stake in Beijing Capital Co Ltd, the leading water services company in China. **Infrastructure** – the group is involved in the construction and operation of some subway lines in Beijing through its 49%-owned joint venture, Beijing MTR Corp. It also handles toll collections for the Beijing-Tianjin Expressway (60% owned) and Jingtong Highway (wholly owned). **Real estate** – this segment is run through 54.5%-owned Beijing Capital Land Ltd (Ba2/BB Stb), which had an overall land bank of 11.6mn sqm at end-June 2016. 83% of the land bank is for property development, and 17% is for investment property and others. Beijing Capital Land's residential property developments are focused in Beijing, Tianjin, Shanghai, Chengdu and Chongqing, as well as cities in the Bohai Rim and Yangtze River Delta. It also has projects in Australia, in Sydney and Brisbane. **Financial services** – the group owns stakes in several companies – Capital Securities Co., Ltd, First Capital Securities Co, Ltd, Beijing Agriculture Investment Co Ltd (wholly owned) and Beijing Capital Investment & Guarantee. These companies offer various financial services, including insurance, fund management, asset management, guarantees and venture investments. Beijing Capital Investment & Guarantee is one of the top three guarantee companies in China.

BEICAP bonds (Baa3/BBB-/BBB)

Bonds	Amount (mn)	Issuer	On shore guarantor
BEICAP 2.875% $'18s	600	Beijing Capital Polaris Investment Co. Ltd (BVI)	Beijing Capital Group Co., Ltd

Note: Keepwell bonds include the BJCAPT '20s (Fitch: BBB) and non-rated bonds.

Bond structure

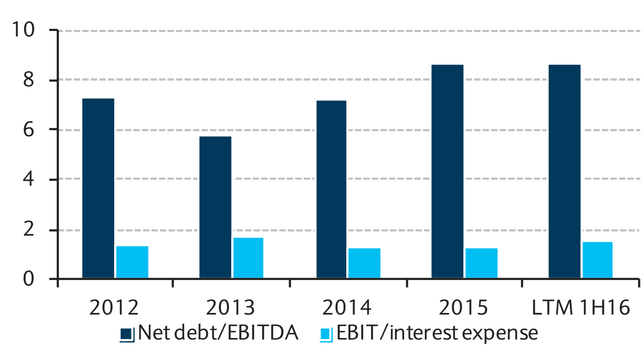


Source: Company reports

Business highlights

- **Support from Beijing municipal government** in the form of financial backing, subsidies and infrastructure operating rights/concessions. In 2014 and 2015, the group received capital injections of CNY6.4bn and CNY1.4bn, respectively, for key environmental projects in Beijing. Additionally, the municipal government provided CNY5.3bn, partly to drive agricultural investments.
- **Business profile.** Infrastructure, water and environmental segments have low volatility and profitability, and long payback periods. The real estate segment has high profitability with medium payback periods. A diversified business mix has allowed resource sharing (government relationships, brand name) and collaboration in providing water and transport infrastructure in real estate developments.
- **Subway business.** The group built Lines 4, 14 and 16, and the Daxing Line of the Beijing subway. it also holds a 49% stake in Beijing MTR Corp (other owners: MTR Corp 49%, Beijing Infrastructure 2%). Together with other SOEs, Beijing MTR Corp has invested in Lines 5 and 13 of the subway. The Beijing municipal government provides subsidies to Beijing MTR Corp to compensate for low fares, which are insufficient to cover operating costs.
- **Leverage profile and liquidity.** Net debt/EBITDA increased to 8.7x in LTM 1H16 from 5.8x in 2013, due to debt-funded growth in the property and environmental protection businesses. Cash/short-term debt was at 87% as of 1H16 (FY15: 108%). Both S&P and Moody's have a Negative Outlook on Beijing Capital's rating due to elevated leverage and the company's appetite for acquisitions. However, according to the ratings agencies, the group's diversified businesses and financial flexibility underpin its credit profile.

Credit metrics



Source: Moody's

Major business segments, as at end-2015

Segment	Revenue	GPM
Water and Environment	23%	32.4%
Infrastructure	6%	-2.0%
Real estate	53%	15.6%
Financial services	9%	74.0%
Others	10%	29.3%

Source: Bond prospectus

Bright Food Group

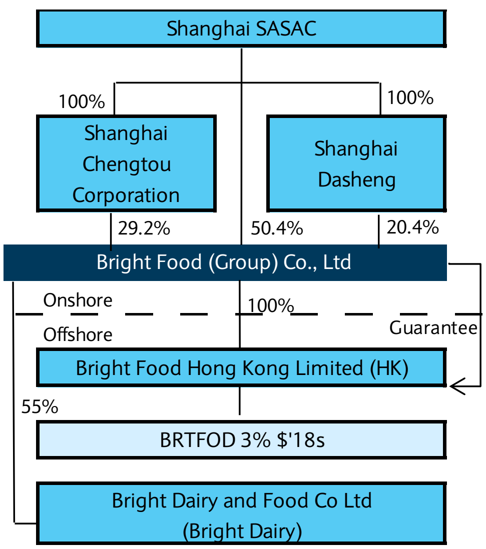
Analyst
Justin Ong

Company description: Bright Food Group (Bright Food, Baa3 Neg/BBB- Stb/A- Stb) is one of the largest food-related companies in China, with interests in logistics, taxis, retail, industrial manufacturing and real estate development. Bright Food is 100% owned by the Shanghai SASAC, via direct (6%) and indirect stakes. Bright Food has the mandate to consolidate the food assets and agricultural operations under the Shanghai SASAC. One of its key listed subsidiaries is 65%-owned Bright Dairy & Food Co Ltd (600597.CH). Other listed subsidiaries are Shanghai Jinfeng (wine), Shanghai Maling (processed and canned food), and Bright Real Estate Group. Bright Food is the largest integrated sugar company in China, with a 60-70% market share in Shanghai. Additionally, it is the third-largest dairy producer in China with a leading position in fresh milk production. Other food products include staple agriculture (production bases largely in Shanghai and Jiangsu province), meat, snacks and liquor/wine. The company has a strategy of acquiring companies; notable international acquisitions include Manassen Australia, Weetabix UK and Tnuva Israel. The group also runs a retail distribution business through supermarkets – NGS Supermarket and Shanghai First Foodmall.

BRTFOD bonds (Baa3/BBB-/A-)

Bonds	Amount (mn)	Issuer	On shore guarantor
BRTFOD 3% $'18s	500	Bright Food Hong Kong Ltd	Bright Food (Group) Co., Ltd
BRTFOD 1.625% €'19s	400	Bright Food Singapore	Bright Food (Group) Co., Ltd

Bond structure

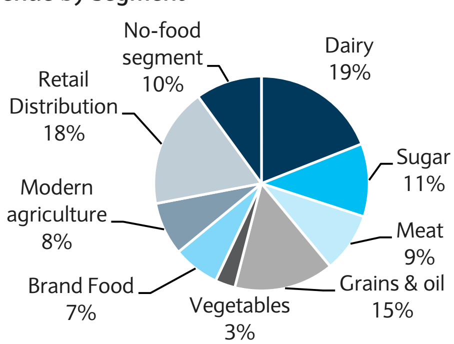


Source: Company reports

Business highlights

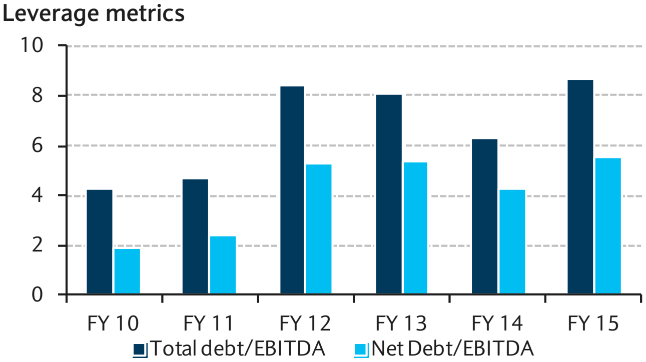
- **Strategic importance:** Bright Food is the main food producer in Shanghai, and is tasked with ensuring adequate food supply and food safety in Shanghai. Bright Food has received multiple asset injections from the Shanghai SASAC. Following the injection of Liangyou (largest grain supplier in Shanghai) from the Shanghai SASAC in 2015, Bright Food became the sole manager of grain and oil reserves for the Shanghai SASAC. In 2015, the company accounted for 70% of Shanghai's major food supplies including rice, wheat, edible oils, vegetables, dairy products and sugar.
- **Shanghai SOE status:** The Shanghai Government provides equity injections (CNY1.26bn from 2013-15) and subsidies (CNY3.9bn from 2013-15) to Bright Food. The government has also granted debt exemptions of more than CNY2bn to the company. Bright Food, being a local SOE, has access to bank facilities and has been able to roll over debt on time without difficulties, according to S&P. Its listed entities on the Shanghai Stock Exchange – Bright Dairy, Shanghai Jinfeng and Shanghai Maling – provide an avenue for equity financing.
- **Market position:** As of end-2015, Bright Food was the third-largest dairy producer in China (according to Nielsen), one of the largest sugar distributors nationwide (20.25% market share), the largest small package rice producer (61.5% market share), and the second-largest edible oil producer (20.3% market share) in Shanghai (according to Shanghai Business Information Centre).
- **Debt-funded acquisitions:** Bright Food's total debt/EBITDA and net debt/EBITDA stood at 8.7x and 5.5x in FY15, from 6.3x and 4.3x in FY14, respectively, on the back of the debt-funded acquisition of Tnuva, according to Moody's. Bright Food is reportedly looking to sell its 60%-owned Weetabix, the British breakfast cereals producer, which it bought for GBP1.2bn from Lion Capital ("Weetabix set for sale by China's Bright Food", Financial Times, 22 December 2016).

2015 revenue by segment



Source: Company reports

Leverage metrics



Source: Company reports

China Communications Construction Co Ltd

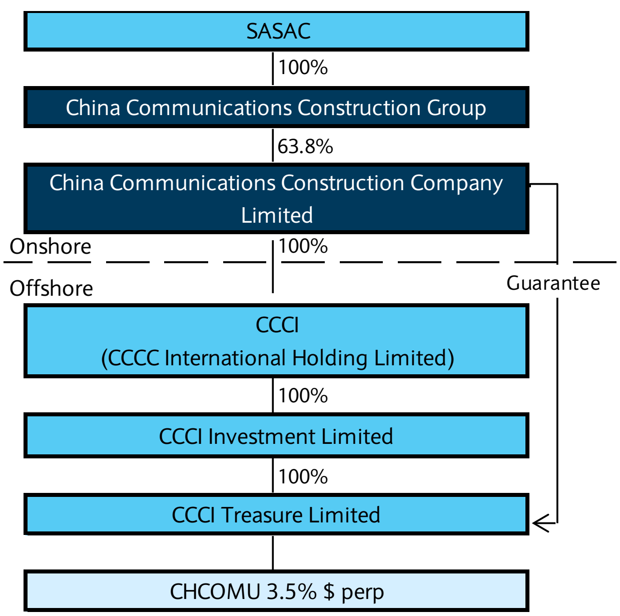
Analyst
Justin Ong

Company description: Based on 2015 revenues, China Communications Construction Co Ltd (CCCC, A3 Stb/NR/A- Stb) is the fourth-largest infrastructure construction company and the largest dredging company in the world, according to Engineering News Record. It is also the largest international contractor in the Chinese infrastructure construction market. CCCC is 63.8%-owned by the central SASAC. The company is primarily involved in construction of ports, roads, railways, tunnels and other municipal engineering projects. This segment accounted for 84% of the 1H16 revenue of CNY182.3bn. CCCC is also involved in: 1) infrastructure design (survey, design, project management, procurement and other contracting services); 2) dredging (capital dredging, maintenance, reclamation and environmental); and 3) heavy machinery manufacturing (design, manufacture and sale of port machinery, heavy marine equipment, large steel structures, road machinery and special parts). Revenue from overseas operations accounted for 21.6% of 1H16 revenue.

CHCOMU senior perp (A3/NR/NR)

Bonds	Amount (mn)	Issuer	On shore guarantor
CHCOMU 3.5% $ perp	1,100	CCCI Treasure Ltd	China Communi-cations Construction Company Limited

Bond structure



Source: Company reports

Business highlights

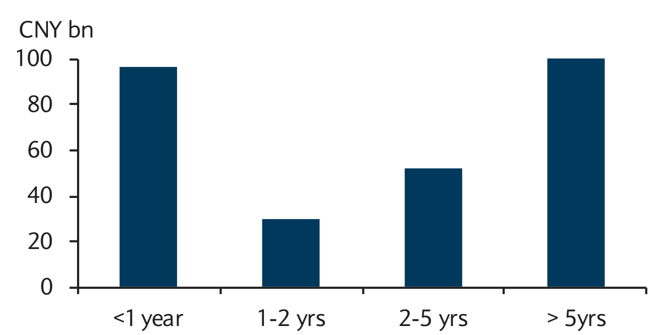
- **Government support** in the form of budget allocations, tax incentives, subsidies and R&D funding. CCCC is a 63.8%-owned core subsidiary of China Communications Construction Group. CCCC accounted for c.95% of the parent's revenue in 2015.
- **Service concession arrangements.** CCCC undertakes construction work for infrastructure projects in exchange for the right to operate the asset. Certain arrangements include provisions for tariff adjustment to reflect any increase in costs.
- **Largest provider of port construction services in China,** participating in the design and construction of almost all of the country's major ports. CCCC also has experience in bridge construction (it has participated in building some of the longest bridges in the world).
- **Order backlog** of ~CNY943bn at 1H16 (+8.6% h/h), equivalent to more than 2x annual revenue. Most of the order backlog was in its core infrastructure construction business – CNY820.7bn (+8.3% y/y). During 2012-15, CCCC's order backlog was more than twice its revenue for the corresponding year, on average.
- **Government policies.** CCCC has secured international engineering contracts worth USD37bn under the "One Belt, One Road" strategy. The government also targets a railway network of c.175,000km by 2025, including 38,000km of high-speed rail.
- **FX risk.** Foreign-currency debt accounted for 9.7% of total debt at end-1H16 while foreign-currency revenue accounted for 21.6% of total 1H16 revenue. Management expects its overseas business to account for nearly 50% of total profits in the coming years.
- **High leverage** due to investment in BT/BOT projects, which are largely financed through project loans. In 1H16, the group's capex was CNY22.8bn, of which 73% was related to BOT projects. Liquidity supported by access to bank facilities, with an undrawn amount of CNY710bn at end-1H16, and a cash balance of CNY81.3bn, versus short-term debt of CNY96.2bn.

Financial snapshot

CNY mn	LTM 1H16	2015	2014
Revenue	403,623	403,616	366,042
EBITDA	33,768	31,444	28,417
EBITDA Margin	8.4%	7.8%	7.8%
Total Debt	283,746	255,183	228,835
Net Debt	202,413	160,223	157,012
Credit Metrics			
Total Debt/EBITDA	8.4x	8.1x	8.1x
Net Debt/EBITDA	6.0x	5.1x	5.5x
EBITDA/Interest	2.3x	2.2x	2.3x
Debt/capital	62.1%	60.2%	63.5%
Revenue by geography	**LTM 1H16**	**2015**	**2014**
Mainland China	80.6%	81.4%	82.9%
Overseas	19.4%	18.6%	17.1%

Source: Company reports

Debt maturity profile at end-1H16



Source: Company reports

China General Nuclear Power/CGN New Energy

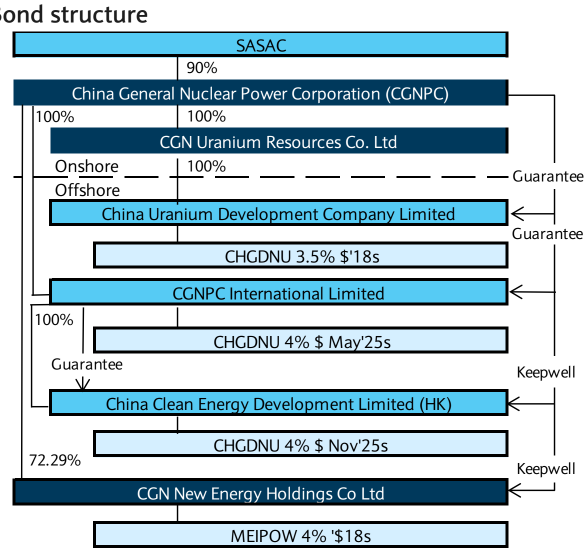
Analyst
Justin Ong

Company description: China General Nuclear Power Corp (CGNPC) is primarily involved in generation and sale of nuclear power. As of end-1H16, CGNPC's listed subsidiary, CGN Power Co., Ltd. (CGN), had 16 operating nuclear generating units, with a total installed capacity of 17.1GW, and 12 units under construction, with a combined capacity of 14.6GW. In terms of mainland China market share, CGN's total installed nuclear capacity and units under construction accounted for 59.8% and 49.7%, respectively, in 1H16, according to the company. Including other power capacity, CGN had around 31.2GW of installed capacity – nuclear (55%), wind power (27.7%), solar power (4.3%) and others (13%) – hydropower, cogeneration, gas-fired and coal-fired stations. CGN is majority owned by CGNPC with a 64.2% stake. CGNPC, in turn, is 90% owned by the central SASAC, and 10% owned by Guangdong Hengjian Investment Holdings, which is wholly-owned by the Guangdong provincial government.

CHGDNU and MEIPOW bonds

Bonds	Amt (mn)	Issuer	Guarantor	Keepwell provider
CHGDNU 3.5% $'18s (A3/NR/A+)	600	China Uranium Development Company Limited	CGNPC (onshore)	NA
CHGDNU 4% $'25s (A3/A-/A+)	600	CGNPC International Limited		
CHGDNU 4% $'25s (Baa1/NR/A+)	500	China Clean Energy Development Ltd	CGNPC International Limited (offshore)	CGNPC (onshore)
MEIPOW 4% $'18s (Fitch: A+)	350	CGN New Energy Holdings Co., Ltd	NA	

Bond structure



Note: CGN Meiya Power Holdings Co., Ltd changed its name to CGN New Energy Holdings Co., Ltd on 2 December 2015. Source: Company reports

Business highlights

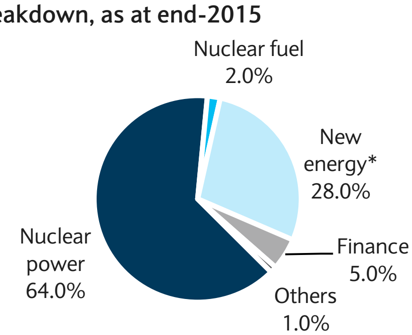
- **Market leader in China's nuclear power generation**, accounting for c.60% of the total installed nuclear power capacity as of 1H16.
- **Nuclear power expansion.** The government plans to increase installed nuclear capacity to 200GW by 2030 from just 19.9GW in 2014, representing a CAGR of 15.5%.
- **Government support, given the national shift towards clean energy.** Liquidity position supported by policy banks. CGNPC benefits from the dispatch priority clause, under which nuclear, wind and hydro power enjoy precedence over thermal, oil and natural gas-fired power.
- **High EBITDA margin** due to government's preferential tariff policies and small exposure to fuel cost volatility (ie, thermal power producers are exposed to coal prices).
- **CGN New Energy Holdings (formerly CGN Meiya Power Holdings) – non-nuclear segment**. Except for nuclear, most of CGNPC's power is generated by CGN New Energy (CGNNE) in China and Korea. At end-June 2016, CGNNE had consolidated installed capacity of 5.1GW, of which clean and renewably energy (wind, solar, gas-fired and hydro) accounted for 65.2%. The remainder comprised mainly coal-fired and oil-fired capacity. By geography, China and Korea accounted for 59.7% and 40.3% of the total installed capacity, respectively.
- **High leverage due to debt-funded growth, high capex and acquisitions.** Significant liabilities in case of nuclear accident, partly mitigated by having insurance coverage for its plants. In March 2016, CGNPC acquired Edra Global Energy in Malaysia from 1MDB for c.USD2bn.
- **Overseas expansion has increased geographical diversity.** In September 2016, CGNPC signed an agreement with Electricite de France (EDF) to jointly invest (one third stake) in the Hinkley Point C nuclear project in the UK. This project is the first new nuclear power station to be built in the UK in almost 20 years. According to the company, the Hinkley power station should eventually generate c.7% of the UK's electricity, with the first unit scheduled to be commissioned in 2025-26.

Financial snapshot of CGN (listco)

CNY mn	LTM 1H16	2015	2014
Revenue	26,747	23,263	20,719
EBITDA	15,923	14,018	12,918
EBITDA Margin	59.5%	60.3%	62.3%
Total Debt	126,623	123,271	124,369
Net Debt	116,337	113,955	95,326
Credit Metrics			
Total Debt/EBITDA	8.0x	8.8x	9.6x
Net Debt/EBITDA	7.3x	8.1x	7.4x
EBITDA/Interest	2.5x	2.1x	1.9x
Debt/capital	60.7%	61.0%	61.1%

Source: Company reports

Asset breakdown, as at end-2015



Note: *Includes wind, solar, hydro, coal-fired, biomass, geothermal, tidal, vanadium battery, solar thermal and other clean energy projects of CGN New Energy Holdings. Source: Company reports

China Minmetals Corp

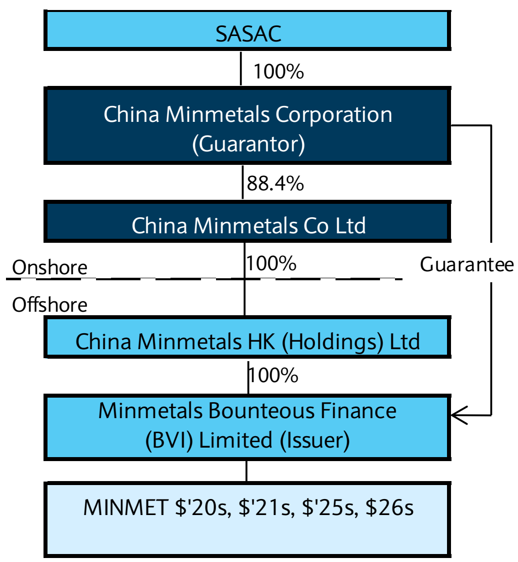
Analyst
Justin Ong

Company description: China Minmetals Corp (Baa1 Neg/NR/BBB+ Stb) is the largest metals and mining conglomerate in China. The company is wholly owned by the central SASAC. China Minmetals is involved in exploration, mining, smelting, processing and trading of copper, zinc, lead, iron ore, bauxite, tungsten, antimony, bismuth and rare earth metals. Its principal business segments are ferrous and steel (45.9% of the total revenue of CNY200.4bn in FY15) and non-ferrous metals (36.7%). The company is also one of the six largest producers of rare earths in China, which together accounted for 85% of the global rare earth mineral production in 2015. Other ancillary businesses include financial services, real estate and science and technology research. China Minmetals maintains a policy of growing its upstream mining assets through organic development and overseas M&A. The company's overseas operations accounted for 28.7% of total revenue (CNY200.3bn) and 52.8% of total assets (707.718bn) as of end-2015. The company acquired a 62.5% interest in Las Bambas mine in Peru in July 2014, the largest overseas acquisition in the Chinese metals and mining industry. China's central SASAC approved the proposed merger between China Minmetals Corp and China Metallurgical Corporation (MCC) in December 2015. The two companies have received all necessary regulatory approvals to date. MCC is a large SOE with total assets of CNY354.3bn as of FY15.

MINMET bonds (Baa1/NR/BBB+)

Bonds	Amt (mn)	Issuer	On shore guarantor
MINMET 3.50% $'20s	500	Minmetals Bounteous Finance (BVI) Limited	China Minmetals Corporations
MINMET 3.125% $'21s	300		
MINMET 4.75% $'25s	500		
MINMET 4.2% $'26s	700		

Bond structure



Source: Company prospectus, Barclays Research

Business highlights

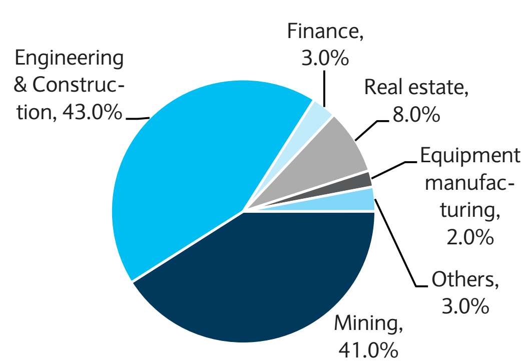
- **Government support** in the form of: 1) fund injections of c.CNY14.9bn during 2008-15; 2) subsidies and preferential tax policies; and 3) funding for R&D projects and overseas M&A are provided by China's policy banks.
- **Metal markets.** According to management, following the integration with MCC, China Minmetals will be among the largest mining companies globally by revenue. The company is China's largest producer of zinc, tungsten, antimony and bismuth. It also has the world's largest reserves of tungsten, antimony and bismuth. After the inclusion of Las Bambas' full production in 2016, China Minmetals would become China's largest copper producer and one of the top 10 copper producers worldwide, according to the company.
- **China's primary trader of metal products and primary distributor of metals and steel.** In trading metallurgical raw materials, the main products traded in 2015 were iron ore (63.5% volume traded) and coal (30.0%).
- **Merger of China Minmetals and China Metallurgical Group:** According to the two companies, the combined entity would have a stronger metals and mining value chain, and China Minmetals' financial leverage would also likely decline. According to management, the combined entity had pro forma 2015 total debt/EBITDA of 11.2x and net debt/EBITDA of 8.2x, compared with Minmetals' standalone metrics of 11.9x and 9.7x, respectively.
- **Agency ratings.** Management also stated that the combined entity had 2015 pro forma revenue of CNY421bn, gross profit of CNY44bn, EBITDA of CNY30bn and total assets of CNY708bn. S&P upgraded MCC Group one notch to BBB in July 2016 on the basis that MCC Group would be a core subsidiary of China Minmetals Corp and, hence, would benefit from government support.

Financial snapshot

CNY mn	Pro forma 2015*	Pro forma 2014*	2013
Revenue	418,425	540,593	413,032
EBITDA	23,894	27,389	17,806
EBITDA Margin	5.7%	5.1%	4.3%
Total Debt	286,871	267,549	302,039
Net Debt	199,788	191,924	239,727
Credit Metrics			
Total Debt/EBITDA	12.0x	9.8x	8.5x
Net Debt/EBITDA	8.4x	7.0x	6.7x
EBITDA/Interest	2.4x	2.1x	2.9x
Debt/capital	70.8%	68.3%	67.2%

Note: Consolidated financials of the combined entity of China Minmetals and China Metallurgical Group. Source: Company prospectus, Barclays Research

2015 pro-forma consolidated revenue by segment



Source: Company prospectus, Barclays Research

China National Offshore Oil Corp/CNOOC Ltd

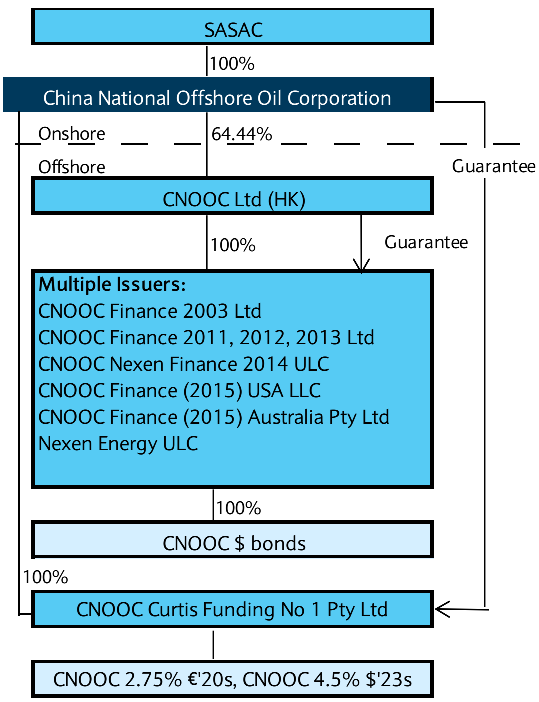
Analyst
Justin Ong

Company description: CNOOC Ltd (Aa3 Neg/A+ Neg/A+ Stb) is the third-largest state-owned oil and gas company in China, with a primary focus on offshore upstream operations and natural gas sales (largest importer in China). Parent China National Offshore Oil Corporation is wholly owned by the central SASAC and owns a 64.4% stake in CNOOC Ltd. At end-2015, CNOOC had the third-largest proved reserves in China, with 4.3bn boe of oil and natural gas, and its 2016 production level was c.476mmboe. CNOOC also owns a 50.5% stake in China Oilfield Services, and CNOOC accounts for 65-70% of COSL's annual revenue.

CNOOC bonds

Bonds	Amt (mn)	Issuer	On shore guarantor
CNOOC $ bonds (Aa3/A+/A+)	$19.2bn	Multiple issuers	CNOOC Ltd (HK)
CNOOC $'23s CNOOC 2.75% €'20s (Aa3/A+/NR)	$1.3bn €500mn	CNOOC Curtis Funding No I Pty Ltd	China National Offshore Oil Corporation (onshore parent)

Bond structure



Source: Company reports, Barclays Research

Business highlights

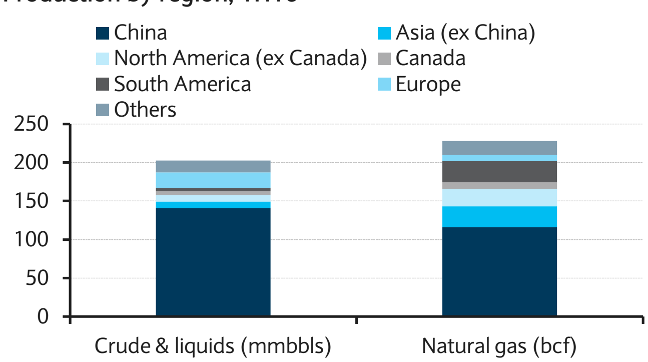
- **Strategic core SOE.** CNOOC Ltd's Aa3/A+-ratings incorporate a two-notch uplift at both Moody's and S&P to reflect the strong support from its parent company, China National Offshore Oil Corp. The government supports CNOOC through various regulatory policies: eg, reduction of oil tax level, granting rights to establish production-sharing with other international companies
- **Earnings sensitive to oil prices** given CNOOC's focus on upstream operations and its small downstream operations. 1H16 EBITDA margin dropped by ~593bp y/y to 51.9%, largely due to the sharp drop in its realized oil price (-34.5% y/y to USD37.7/bbl).
- **Target net production of 450mmboe to 460mmboe in 2017**, with five new projects to come on stream. Its overseas segment will account for an estimated c.35% of 2017 production. Management estimates 2018 net production at 455- 465mmboe and 2019 net production at 460- 470mmboe.
- **Capex discipline and cost-efficiency drive.** CNOOC Ltd guided for 2017 capex of CNY60-70bn, compared with CNY50.3bn in 2016 and CNY66.5bn in 2015. Around 52% of the 2017 capex will be spent in China, according to the company. CNOOC has focused on reducing its operating costs – the company lowered its all-in cost by 15.5% y/y to USD34.86/bbl in 1H16. The operating cost/bbl was 22.7% lower y/y at USD7.42/boe in 1H16.
- **M&A activity.** In 2013, CNOOC Ltd completed the acquisition of Canadian oil and gas producer Nexen for USD15.1bn, which boosted net production by 23% y/y. CNOOC Ltd has stakes in various international projects – Libra (in Brazil, 10% stake) and the Eagle Ford/Niobrara shale gas projects (in the US, 33.3%).
- **Financial metrics.** As of LTM 1H16, CNOOC Ltd's total debt/EBITDA was 2.2x (up 19.0% h/h) and net debt/EBITDA was 1.6x (up 6.0% h/h). CNOOC Ltd's 1H16 EBITDA declined 33.0% y/y to CNY34.7bn.
- **Multiple issuing entities.** The CNOOC Curtis bonds are guaranteed by the onshore parent, but most other CNOOC bonds are guaranteed by CNOOC Ltd. It also guarantees Nexen's bonds, which now rank pari passu with CNOOC Ltd senior unsecured debt.

Production profile at 1H16

Production	1H16	1H15	%, y/y
Production (mm boe)	241.5	240.1	0.6%
Crude and liquids (mm bbl)	202.4	200.4	1.0%
Natural gas (bcf)	227.6	232.3	-2.0%
Realized price per-unit			
Realized oil price (USD/bbl)	37.7	57.5	-34.5%
Realized gas price (USD/mcf)	5.49	6.55	-16.2%
Amount in CNY mn			
Oil and gas revenue (CNY mn)	55,083	77,034	-28.5%
Total revenue	66,832	89,589	-25.4%
Capex	22,000	33,000	-33.3%

Source: Company reports, Barclays Research

Production by region, 1H16



Source: Company reports, Barclays Research

China Oilfield Services

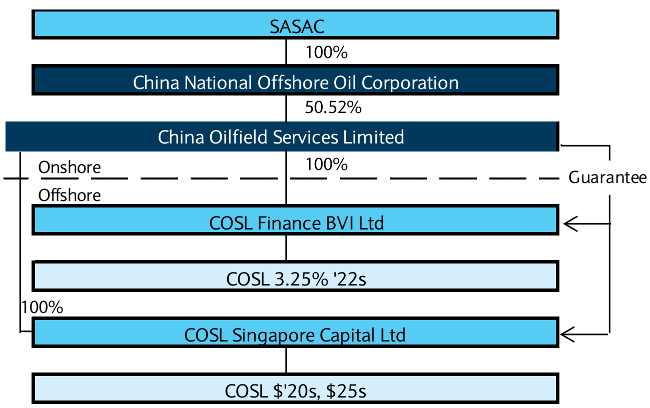
Analyst
Justin Ong

Company description: China Oilfield Services (COSL, Baa1 Neg/BBB Stb/A Stb) in an integrated provider of offshore oilfield services. The company operates in four core business segments: drilling services, well services, marine support and transportation, and geophysical and surveying services. CNOOC is the largest shareholder of COSL (50.5% stake) and its largest customer (66.8% of the total 2015 revenue of CNY23.4bn). Outside of CNOOC, the company's revenue is generated largely by international customers (33.2%).

COSL bonds (Baa1/BBB/A)

Bonds	Amt (mn)	Issuer	On shore guarantor
COSL 3.25% $'22s	1,000	COSL Finance BVI Ltd	China Oilfield Services Limited
COSL 3.5% $'20s	500	COSL Singapore Capital Ltd	
COSL 4.5% $'25s	500		

Bond structure



Source: Company reports, Barclays Research

Business highlights

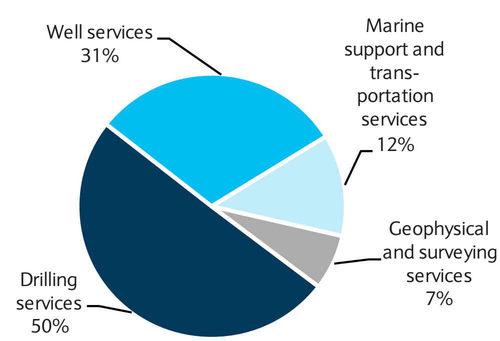
- **Operating performance linked to CNOOC's capex program.** CNOOC's capex reductions in 2016 resulted in a weaker operating performance by COSL. For 2017, CNOOC Ltd announced plans to increase its capex y/y to CNY60-70bn, compared with c.CNY50.3bn in 2016 and c.CNY66.5bn in 2015. This would be positive for COSL though it remains sensitive to oil price volatility, which could impact CNOOC's realized capex in 2017.
- **Domestic business is the key driver, but international footprint is growing**. While COSL generated the bulk (66.8%) of its FY15 revenue from the domestic market (FY14: 69.4%), its international business continues to grow (33.2% of FY15 revenue). For 2016, management's target is to generate more than 30% of revenue from the international market. The North Sea region in Europe accounted for 13.6% of FY15 revenue (FY14: 12.3%). However, we believe the key driver of its business continues to be its close relationship with CNOOC Ltd given that COSL is involved in almost all of CNOOC Ltd's offshore upstream activities.
- **Drilling services:** In 2016, COSL's largest business segment experienced a significant rise in "standby" days for its jack-up and semi-submersible drilling rigs. The calendar day utilization rate for its rigs fell further in 1H16, by 30.3pp, to 49.7%, and its average daily income shrank 30.3% y/y, to USD10,600 [(1)].
- **Revenue and profitability.** COSL's 1H16 revenue fell 42.4% y/y, to ~CNY7.0bn, and EBITDA fell 71.2%, to CNY1.2bn. This was driven by sharp declines in all of its key business segments – drilling services, well services, marine support and geophysical/surveying services. We expect both revenue and EBITDA to decline by 15% y/y in 2016, from revenue of CNY23.4bn and EBITDA of CNY7.0bn in 2015.
- **Credit metrics.** COSL's credit metrics weakened h/h in 1H16, mainly due to significantly lower EBITDA generation, despite reducing debt. The falling debt was mainly due to repayment of bank loans, which was partially offset by issuance of local bonds amounting to CNY5bn in May 16. As of LTM 1H16, COSL had gross debt/EBITDA of 8.2x (2015: 5.0x) and net debt/EBITDA of 6.2x (2015: 3.2x).

Financial snapshot

CNY mn	LTM 1H16	2015	2014
Revenue	18,278	23,417	33,217
EBITDA	4,029	7,048	12,570
EBITDA Margin	22.0%	30.1%	37.8%
Total Debt	33,207	35,325	27,137
Net Debt	25,019	22,551	20,397
Credit Metrics			
Total Debt/EBITDA	8.2x	5.0x	2.2x
Net Debt/EBITDA	6.2x	3.2x	1.6x
EBITDA/Interest	4.5x	10.0x	20.4x
Revenue by geography	**LTM 1H16**	**2015**	**2014**
Mainland China		66.8%	69.4%
Overseas		33.2%	30.6%

Source: Company reports, Barclays Research

1H16 revenue by segment



Source: Company reports, Barclays Research

China Railway Construction Corp

Analyst
Justin Ong

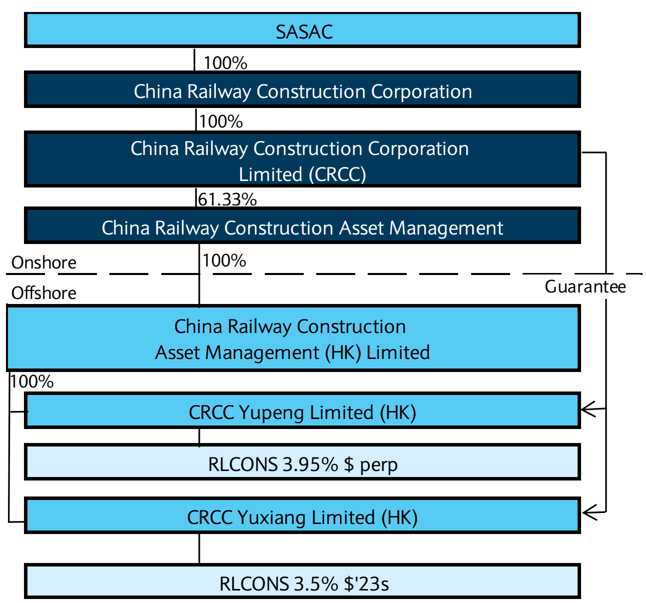
Company description: China Railway Construction Corporation (CRCC, A3 Stb/A- Neg/NR) is one of the world's largest engineering construction groups and it is wholly owned by the Chinese Government through the central SASAC. The company operates in the following areas: 1) Construction – includes development of infrastructure such as railways, highways, housing construction, metropolitan railways and municipal engineering; 2) Survey, design and consultancy related to infrastructure construction; 3) Manufacturing – includes the design, research & development, production and sale of infrastructure construction machinery; 4) Real estate; and 5) Logistics, trading and other business operations. Revenue from overseas operations accounted for 5.8% of total revenue of CNY266.7bn in 1H16.

RLCONS bonds (A3/A-/NR)

Bonds	Amt (mn)	Issuer	On shore guarantor
RLCONS 3.95% $ perps*	800	CRCC Yupeng Limited (HK)	China Railway Construction Corporation Limited
RLCONS 3.5% $'23s	800	CRCC Yuxiang Limited (HK)	

Note: * perp is rated only by Moody's (A3)

Bond structure



Source: Company reports, Barclays Research

Financial snapshot

CNY mn	LTM 1H16	2015	2014
Revenue	604,372	600,539	591,968
EBITDA	36,351	35,344	30,769
EBITDA Margin	6.0%	5.9%	5.2%
Total Debt	174,306	163,741	158,146
Net Debt	58,670	41,807	60,058
Credit Metrics			
Total Debt/EBITDA	4.8x	4.6x	5.1x
Net Debt/EBITDA	1.6x	1.2x	1.9x
EBITDA/Interest	3.8x	3.3x	3.1x
Debt/capital	55.2%	56.0%	60.6%

Source: Company reports, Barclays Research

Business highlights

- **Market shares:** Infrastructure construction generated more than 80% of its 2015 revenue and it has a market share of almost 50% in railway construction in China (duopoly with China Railway Group), according to the company.
- **Government support** in the form of policies, funding and strategy due to strategic importance of China's railway expansion plans. In July 2016, the National Development and Reform Commission (NDRC) announced plans to expand China's railway network to 150,000 km by end-2020 (end-2015: 121,000km). This is part of the 13th Five-Year Plan (2016-20), which will see an estimated CNY3.5-3.8trn of investment in railway infrastructure, including high-speed, intercity and heavy haul railways. For 2016 alone, the government estimated that investment in railway fixed assets would exceed CNY800bn, with more than 3,200km of new railway lines put into operation. We think CRCC will likely be one of the key beneficiaries, given that this investment should generate a steady stream of construction contracts. CRCC has constructed more than 60% of the country's high speed railway network.
- **Order backlog.** CRCC's outstanding orders of CNY1.8trn as of end-June 2016 amounted to c.3x of LTM1H16 revenue.

Source: Company reports

- **International presence.** New overseas contracts increased by 19.5% y/y to CNY14.6bn in 1H16.
- **Low EBITDA margin and negative free operating cash flow.** Negative working capital due to delayed payments by railway ministry and property-development cycles in CRCC's real estate segment.
- **Cyclical nature of the infrastructure business.** Changes in government policy can have an impact on investment projects given the long timeframe for such work, often 2-5 or more years.
- **Reliance on China Railway Corp** (formerly, Ministry of Railways) which subjects CRCC to delayed payments and high trade receivables due to the knock-on impact from the former's payment issues at the local and central government.

China Railway Group

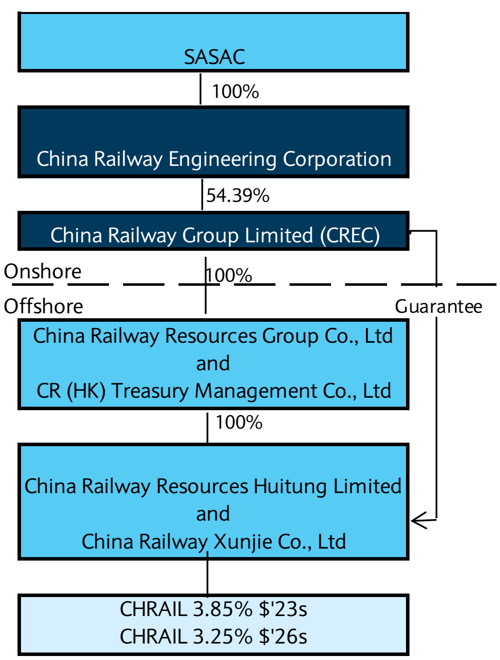
Analyst
Justin Ong

Company description: China Railway Group (CRG, A3 Stb/BBB+ Stb/A- Stb) is the second-largest construction group in the world based on 2015 construction revenues, according to *Engineering News Record*. The company is majority owned by SASAC through China Railway Engineering Corporation (54.4% stake as at June 2016). CRG is primarily involved in the construction of infrastructure such as railways, highways, housing, metropolitan railways, bridges, ports, airports, hydroelectric plants and other municipal engineering projects. This segment accounted for 85.5% of total 1H16 revenue of CNY268.4bn. Other businesses include: 1) Survey, design and consultancy related to infrastructure construction; 2) Manufacturing – includes the design, research & development, production and sale of turnouts, railway related equipment, steel structures and other infrastructure construction machinery; 3) Real estate; and 4) Mining, trading, financial services and other business operations.

CHRAIL bonds

Bonds	Amt (mn)	Issuer	On shore guarantor
CHRAIL 3.85% $'23s (NR/BBB+/A-)	500	China Railway Resources Huiting Limited	China Railway Group Limited (CREC)
CHRAIL 3.25% $'26s (A3/NR/A-)	500	China Railway Xunjie Co Ltd (BVI)	China Railway Group Limited (CREC)

Bond structure



Source: Company reports, Barclays Research

Business highlights

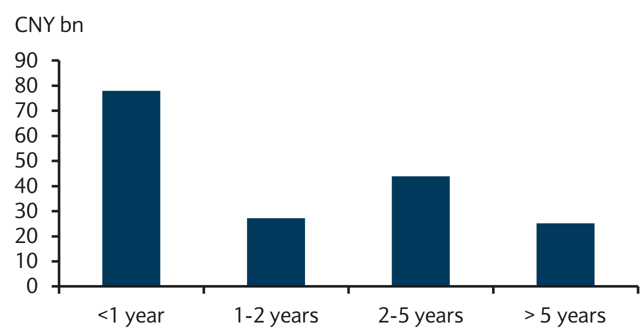
- **Government support via China Railway Engineering Corp** in the form of R&D, government subsidies, tax and other concessions.
- **Duopoly in railway construction.** CRG has a market share of 45-50% in developing railway infrastructure in China as of mid-2016, similar to China Railway Construction Corp.
- **Order backlog.** The company's order backlog amounted to CNY1.9trn as of end-June 2016, c.3.1x of LTM 1H16 revenue, largely consisting of its core infrastructure construction business (CNY1.5trn).
- **Railway investment to remain high.** The government indicated that railway investments will remain a priority in the 13th Five-Year Plan (2016-20). In January 2017, the government stated that investment to develop the railway systems would be almost equal to the amount spent in 2016 (CNY801.5bn). In July 2016, the National Development and Reform Commission (NDRC) announced plans to expand China's railway network to 150,000 km by end-2020 (end-2015: 121,000km). This is part of the 13th Five-Year Plan, which will see an estimated CNY3.5-3.8trn of investment in railway infrastructure, including high-speed, intercity and heavy haul railways. We think CRG will likely be one of the key beneficiaries, as this investment should generate a steady stream of construction contracts.
- **Cyclical nature of infrastructure business.** CRG is exposed to cost overruns on projects due to labor productivity, equipment costs, fluctuations in raw material costs and changes in the scope and length of projects (due to any unanticipated delays).
- **Debt maturity profile.** Nearly 45% of total debt repayable within 12 months as at end-1H16. Liquidity position – the company had a cash balance of CNY76.9bn at 1H16, and substantial unutilized credit facility of CNY172.9bn, versus short-term debt of CNY77.9.4bn.

Financial snapshot

CNY mn	LTM 1H16	2015	2014
Revenue	603,871	599,942	590,166
EBITDA	28,145	28,104	27,817
EBITDA Margin	4.7%	4.7%	4.7%
Total Debt	175,748	182,260	185,360
Net Debt	98,848	88,956	116,681
Credit Metrics			
Total Debt/EBITDA	6.2x	6.5x	6.7x
Net Debt/EBITDA	3.5x	3.2x	4.2x
EBITDA/Interest	2.7x	2.6x	2.3x
Debt/capital	55.3%	56.7%	63.0%

Source: Company reports, Barclays Research

Debt maturity profile at end-1H16



Source: Company reports, Barclays Research

China Three Gorges

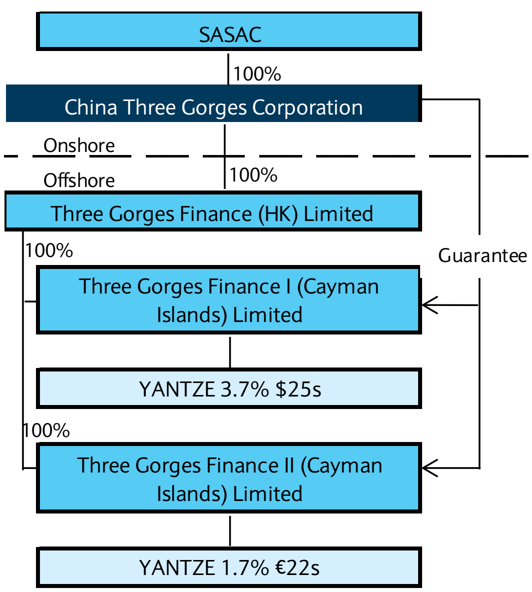
Analyst
Justin Ong

Company description: China Three Gorges (CTG, Aa3 Neg/A+ Neg/A+ Stb) is one of the largest hydropower enterprises in the world in terms of installed capacity (~58.7GW as at end-2015). The company is wholly owned by the Government of China through SASAC. As of 2015, domestic hydropower accounted for 86.3% of CTG's total installed capacity of 58.7GW (c.15.9% of the country's total hydropower capacity), followed by wind (5.1%), solar (2.2%), and overseas power projects (0.3%). In 2015, CTG generated 192.4 terawatt hours (TWH) through hydropower, 17.3% of China's total hydropower generation.

YANTZE bonds (Aa3/NR/A+)

Bonds	Amt (mn)	Issuer	On shore guarantor
YANTZE 3.7% $'25s	$700	Three Gorges Finance I (Cayman Islands) Limited	China Three Gorges Corporation
YANTZE 1.7% €'22s	€ 600	Three Gorges Finance II (Cayman Islands) Limited	

Bond structure



Source: Company reports, Barclays Research

Business highlights

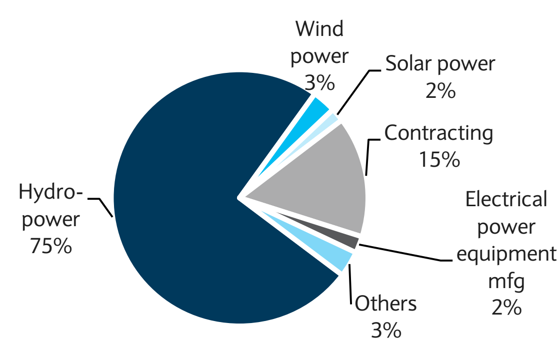
- **Scale.** CTG's Three Gorges Project is the largest hydropower project in the world (installed capacity of 22.5GW). It also operates Xiluodu (13.9GW) and Xiangjiaba (6.4GW), both commissioned in 2014, which are the third- and eighth-largest hydropower plants in the world. Stable and lower operational costs compared with thermal power. Management says that the operational start of two more hydropower plants, Wudongde (10.2GW) and Baihetan (16.0GW), by 2021, will enable CTG to achieve total installed capacity of ~70GW. CTG is the second-largest private power generation company in Brazil, following recent acquisitions in the country.
- **Mandatory Purchase and Dispatch Priority Clause.** Requires grid companies to purchase all of the electricity produced by renewable energy projects in China, or compensate these power producers for losses incurred due to any failure to fulfill these obligations. Renewable energy projects also have a higher dispatch priority over thermal and nuclear power.
- **Tariff structure moving towards market-oriented mechanism.** Pursuant to directives issued by the central government and the State Council in March 2015, tariffs for most power generation categories (including hydropower) will gradually be determined by market forces.
- **Overseas projects in developing countries** such as Pakistan, Nepal and Laos carry a higher risk profile. In January 2016, CTG acquired a 30-year concession in two new projects in Brazil, for c.USD3.7bn, making the company the second-largest private power generator in the country with a market share of 4% (installed capacity of 6.0GW). In October 2016, CTG announced an agreement to acquire Duke Brazil from Duke Energy Corporation, for an enterprise value of USD1.2bn.

Financial snapshot

CNY mn	2015	2014	2013
Revenue	63,517	62,996	42,585
EBITDA	42,569	41,484	26,615
EBITDA Margin	67.0%	65.9%	62.5%
Total Debt	195,973	148,759	145,623
Net Debt	146,778	130,465	126,885
Credit Metrics			
Total Debt/EBITDA	4.6x	3.6x	5.5x
Net Debt/EBITDA	3.4x	3.1x	4.8x
EBITDA/Interest	5.9x	5.8x	4.1x
Debt/capital	38.8%	35.1%	37.1%
Revenue by geography	**2015**	**2014**	**2013**
Mainland China	85.6%	85.9%	79.8%
Overseas	14.4%	14.1%	20.2%

Source: Company reports, Barclays Research

FY15 revenue by segment



Source: Company reports, Barclays Research

Chongqing Nan'an Urban Construction & Development

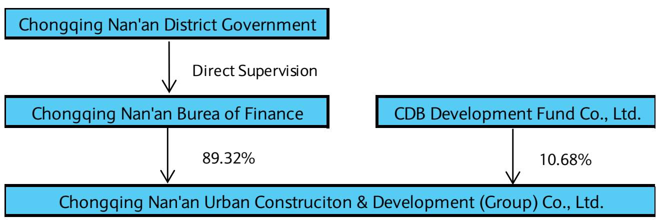
Analyst
Xiaoyi Wang

Company description: Chongqing Nan'an Urban Construction & Development (NAUCD, NR/BBB+/BBB+) is involved in the construction and financing of infrastructure investment in Nan'an district, one of the nine core districts in Chongqing. Its six main business areas are: 1) primary land development; 2) infrastructure construction; 3) property leasing and management; 4) loan financing; 5) supply-chain finance; and 6) tourism. Chongqing Nan'an District government owns a 90% equity stake, held through its finance bureau. NAUCD's land reserves represent around 72% of the total land reserves in the district while its assets amount to more than 50% of the total assets of state enterprises owned by the District Government.

CQNANA bonds (NR/BBB+/BBB+)

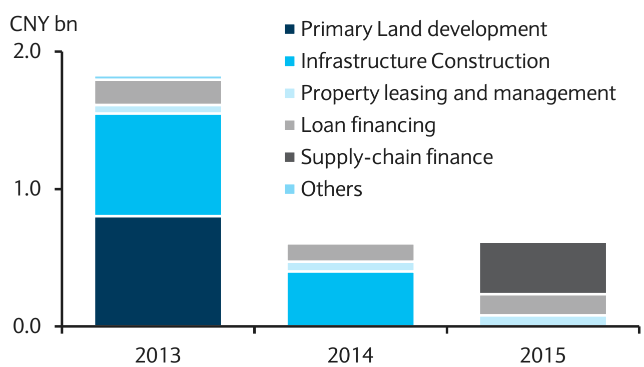
Bonds	Amount (mn)	Issuer
CQNANA 2.875% $ '19s	300	Chongqing Nan'an Urban Construction & Development (Group) Co., Ltd
CQNANA 3.625% $ '21s	500	
CQNAN 4.5% $ '26s	200	

Bond structure



Source: Company reports, Barclays Research

Revenue breakdown by segment



Source: Company bond prospectus

Key points to highlights

- Strategically important to Chongqing Nan'an District government. NAUCD is involved in 80% of infrastructure construction and financing in Nan'an district, which includes roads, bridges, and stadiums.
- **Revenue volatility due to significant presence of non-recurring sources of income.** Within its six different business areas, primary land development and infrastructure construction are non-recurring in nature. During FY15, the company did not have any revenue from these two segments, whereas they accounted for 84.7% of FY13 revenue. However, NAUCD's recurring revenue share is increasing mainly because of its supply chain financing business, which started operations in FY15.
- **Delay in receivables from government.** Collection of receivables is heavily dependent on payments by the government. Payments of buyback amounts and land development fees are usually made by installments over periods ranging from two to five years, and they can be delayed due to various reasons, such as changes in the budget of the District Government, which is beyond NAUCD's control. As of end-FY13, -FY14 and -FY15, the NAUCD's account receivables totaled CNY8.2bn, CNY7.7bn and CNY6.2bn, respectively, representing 21.0%, 18.5% and 13.5% of its total assets for these periods.
- **Significant inventory pipeline that has not been recognized as income yet.** As of FY13, FY14 and FY15, the balance of NAUCDs inventories totaled CNY17.4bn, CNY18.5bn and CNY19.5bn, respectively, representing 44.8%, 44.7% and 42.4% of the group's total assets for these periods. These inventories are mainly the land use rights of land allocated to NAUCD by the District Government for its primary land development before 2013 and completed infrastructure projects that have not been purchased by the District Government. High levels of inventories not only increase pressure on the group's cash flow, but could also cause NAUCD to make provisions for potential asset impairments.

Huawei Investment & Holding Co Ltd.

Analyst
Eugene Tham

Company description: Huawei is a leading information and communication technology solutions provider globally. The company has leading market shares across the industries that it operates in, particularly in multiple niche markets in the global carrier business, and in enterprise infrastructure. It was also a top five smartphone maker in LTM 3Q16 (source: IDC). Its revenue is diversified by segment (59% carrier, 33% consumer, 7% enterprise, and 1% others) and region (42% China, 32% EMEA, 13% Asia-Pac ex-China, 10% Americas, and the rest from other regions). Huawei was founded in 1987, and remains a private company wholly owned by employees. Its founder, Ren Zhengfei, owns a c.1% stake, while the Huawei Union is made up of 79,563 employees (as at 31 December 2015).

HUAWEI bonds (NR)

Bonds	Amount (mn)	Issuer	Offshore guarantor
HUAWEI 4.125% $'25s	1,000	Proven Honour Capital	Huawei Investment & Holding Co., Ltd.
HUAWEI 4.125% $'26s	2,000		
HUAWEI 3.25% $'22s	1,000	Proven Glory Capital	
HUAWEI 4.000% $'27s	500		

Financial snapshot

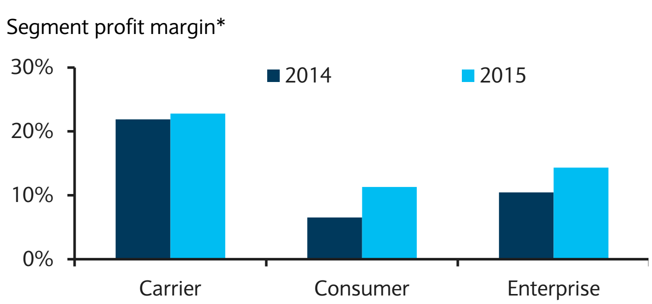
CNY mn	2015	2014	2013
Revenue	395,009	288,197	239,025
Gross Profit	164,697	127,451	98,020
Gross Profit Margin	41.7%	44.2%	41.0%
EBITDA	51,587	42,280	32,424
EBITDA Margin	13.1%	14.7%	13.6%
Total Debt	28,986	28,107	23,033
Net Debt/ (Cash)	(96,222)	(77,930)	(58,911)
Credit Metrics			
Total Debt/EBITDA	0.6x	0.7x	0.7x
Net Debt/EBITDA	n.m.	n.m.	n.m.
EBITDA/Interest	14.1x	11.9x	9.8x
Debt/Capital	19.6%	21.9%	21.1%
Reported operating profit by segment	**2015**	**2014**	**2013**
Carrier	69.0%	66.4%	58.8%
Consumer	23.7%	25.9%	32.7%
Enterprise	6.4%	6.7%	7.0%
Others	0.9%	1.0%	1.5%

Source: Company reports, Barclays Research

Business highlights

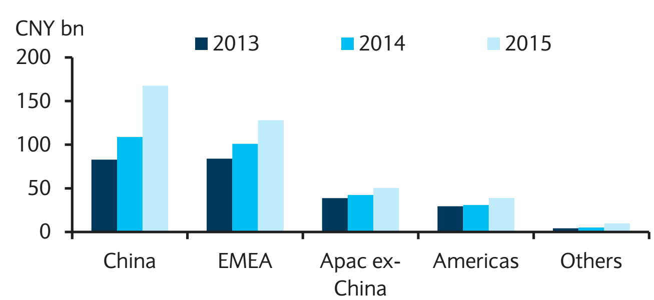
- **Strong market positions and long-term contracts provide earnings stability.** The global carrier networks market favors incumbents that possess scale, given high barriers to entry and relatively slower response to technological changes. Huawei has built up long-term relationships with customers, has economies of scale, and a defendable competitive advantage. Contracts with carriers tend to have a long-term horizon, with the likelihood of repeat business.
- **Strong financial position and cash flow generation.** In our view, Huawei's financial strength is similar to mid- and high-single A rated internet companies such as Alibaba and Tencent. Net cash (total debt minus cash and cash equivalents) was CNY96.2bn at end-2015, supported by consistent cash flow generation – FFO was CNY60.1bn in 2015, up from CNY36.4bn in 2013. We think a robust balance sheet helps support the company's growth ambitions into other businesses.
- **Increasing diversification should see Consumer segment accounting for a bigger share of revenue.** Apart from smartphones, Huawei has stated that it intends to grow its laptop business, having entered the Korean and Japanese markets in 2H16. Overall margins may be depressed as a result, although this push should continue the company's strong revenue growth, in our view. Increasing focus on branding should help drive up margins in the medium term – high-end smartphones accounted for 30% of smartphone sales in 2015, up from 18% in 2014, and has been accompanied by a doubling in segment margins.
- **High dividend payout policy.** Dividends paid over 2013-15 were between CNY15.2bn and CNY23.1bn – equivalent to 83-97% of prior year net incomes. Retained cash flow is significantly reduced.
- **Governance and regulatory risks.** We think lack of listing and ratings, as well as an opaque shareholding structure, have contributed to the spread premium of Huawei bonds over its TMT peers. Management has attempted to improve corporate transparency, including limiting a participating employee's interest in the union's company ownership to within 2.0%, as well as more public releases and investor engagement through regular annual and interim results publication.

Business segment profitability



* Segment profit before tax. Source: Company reports, Barclays Research

Revenue by geography



Source: Company reports, Barclays Research

Power Construction Corp of China

Analyst
Justin Ong

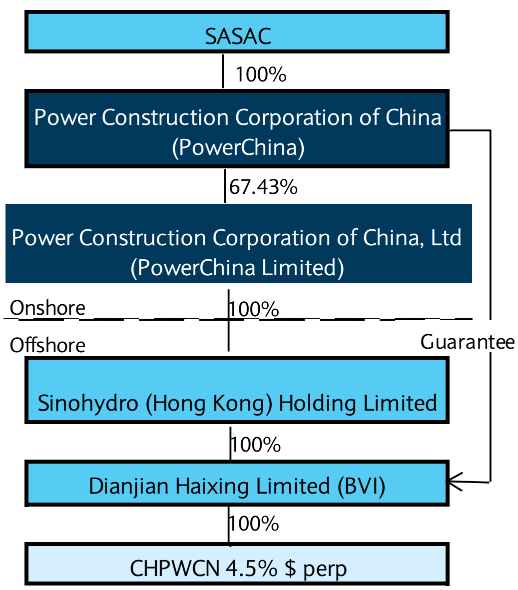
Company description: Power Construction Corporation of China (PowerChina, Baa1/NR/NR) is a large central SOE that is involved in the construction and development of power plants (hydro, wind, thermal), power grids and other large infrastructure projects. PowerChina was formed through the consolidation of Sinohydro Corporation and HydroChina Corporation in September 2011. PowerChina's major business is construction contracting and engineering design (c.84% group of FY15 revenue), followed, in order of importance, by 1) energy project investment and operations; and 2) equipment leasing and manufacturing. Within construction contracting, hydropower accounted for c.38% of revenue in FY15 (thermal and new energy 34%, large infrastructure 28%). PowerChina has been involved in the construction of more than 65% of medium-large hydropower and water conservancy projects in China, representing over 200 domestic mid-to-large size hydropower plants and over 200GW of installed capacity of hydropower projects since the 1950s. Over the same period, the group was involved in 50% of the thermal power station construction projects in China. PowerChina owns a 67.43% stake in PowerChina Limited (SH: 601669).

CHPWCN bonds (Baa1/NR/NR)

Bonds	Amt (mn)	Issuer	On shore guarantor
CHPWCN 4.050% $ perps	500	Dianjian Haixing Ltd (BVI)	Power Construction Corporation of China

The senior perp is only rated by Moody's (Baa1)

Bond structure

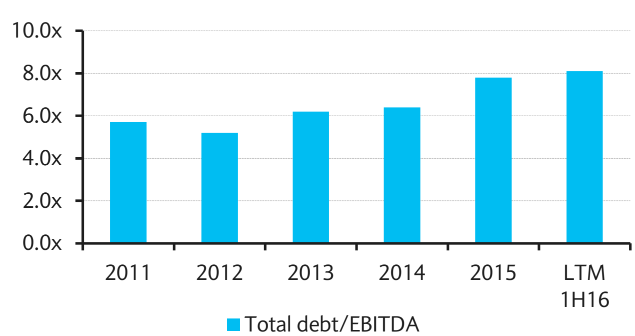


Source: Company reports

Business highlights

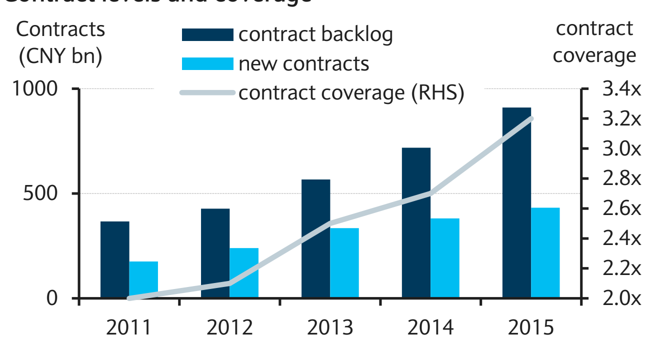
- **Government support** for PowerChina's strategic role in developing the hydropower and the renewable energy sector. China's central SASAC wholly owns PowerChina (BBB+), which underpins a three-notch uplift in credit ratings from Moody's and S&P. The company has benefitted from key policies to develop western China such as electricity transfer and water diversion projects. PowerChina also receives favorable access to bank funding and support from China's policy banks (China Development Bank and EXIM).
- **Dominant position in power construction and engineering design.** PowerChina is the leader in hydro power construction and ranks second in thermal power construction in China according to 2015 market share. The company's engineering design & consultancy division has also participated in the construction of 80% of the country's hydropower projects and 50% of thermal power projects since the 1950s.
- **Participation in landmark projects.** PowerChina has been involved in several landmark hydropower projects (ie, Three Gorges, Xiaolangdi and hydropower stations in Longtan and Ertan), as well as large-scale infrastructure developments in railways (Beijing-Shanghai High-Speed Railway), roads and airports (Shanghai Pudong airport and Kunming).
- **Order backlog.** In 2016, PowerChina was mandated to develop c45% and 60% of China's thermal power stations and alternative energy construction, respectively. At end-2015, the group had a CNY910bn order backlog (+26.7% y/y), or c.3.2x of FY15 revenue (FY14: c2.7x). New order wins totaled CNY432bn in FY15 (+13.4% y/y). China's long-term investments in the electricity and power generation sector, together with a focus on clean energy, are likely to support PowerChina's order pipeline.
- **International growth.** PowerChina operates in c.116 countries, which together generated 26% of FY15 revenue (+100bp y/y). Exposure to foreign-currency risk comes from the mismatch between its costs (largely CNY) and its foreign-currency-denominated revenue (largely USD, EUR).
- **Leverage.** Total debt/EBITDA rose to 8.1x at end-1H16 on significant investment in long-term projects.

Debt/EBITDA trend



Source: Moody's

Contract levels and coverage



Note: Contract coverage refers to contract backlog/revenue.
Source: Company reports

Shanghai Construction Group

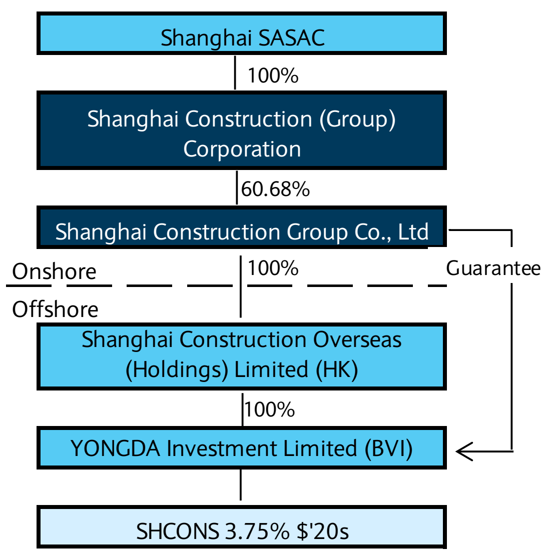
Analyst
Justin Ong

Company description: Shanghai Construction Group (SCG, Baa1 Neg/BBB Stb/BBB Stb) is the largest construction conglomerate in Shanghai and ranked 7th-largest among Chinese construction companies and 10th-largest among the world's construction companies, according to ENR (based on 2015 revenues). The Shanghai SASAC indirectly controls SCG via a 60.68% stake through its wholly owned subsidiaries Shanghai Construction (Group) Corp (31.68% stake) and Shanghai Guosheng Group Co. Ltd (29.0%). SCG is primarily involved in the design and construction of high-rise buildings, bridges, culture and sports facilities, public transportation projects, underground space development, landscaping, industrial plants and environmental protection projects. These areas accounted for more than 80% of its LTM 1H16 revenue of CNY125.8bn. The company is also involved in: 1) real estate (3.1% of 1H16 revenue); 2) construction-related industries – includes the production and sale of precast, concrete, concrete mixing trucks and transporters; 3) import and export– involves international and domestic bidding, overseas construction contracting, engineering advisory, integrated purchase and trading of equipment sets; 4) infrastructure projects – covers investment and construction of urban infrastructure including highways, expressways, metro lines and subway stations; and 5) other businesses – including project management, advisory, labor dispatch services and others. Around 3.7%of SCG's total revenue in LTM 1H16 came from overseas operations.

SHCONS bonds (Baa1/BBB/BBB)

Bonds	Amt (mn)	Issuer	On shore guarantor
SHCONS 3.75% $'20s	400	YONGDA Investment Ltd (BVI)	Shanghai Construction Group Co., Ltd

Bond structure

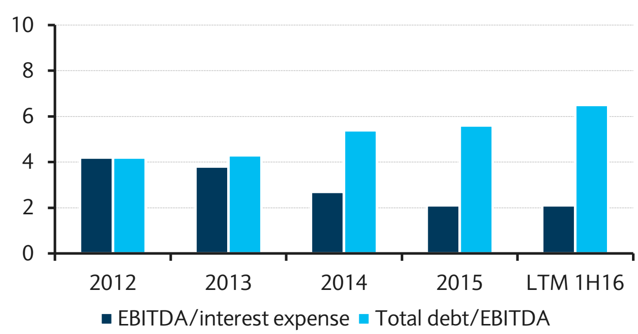


Source: Company reports

Business highlights

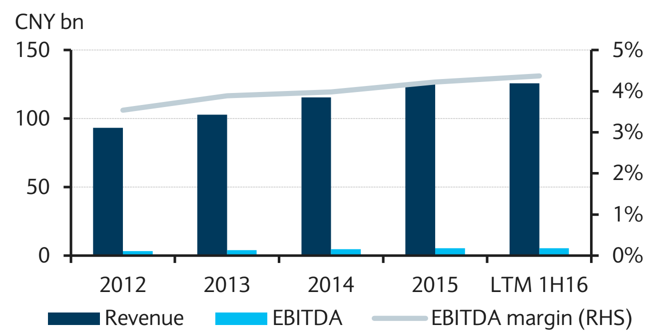
- **Fifth-largest SOE under the Shanghai SASAC** (based on 2014 revenues). Support from Shanghai government comes in the form of asset injections, subsidies, preferential tax treatment, and favorable loan rates from state-owned banks.
- **More than 60 years of industry experience.** SCG has constructed many of Shanghai's iconic landmarks, including Shanghai Tower (the tallest building in China and second-tallest globally), Lupu bridge (the world's second-longest steel arch bridge), Maglev Train (the world's first maglev system in commercial operation), Canton Tower (China's tallest observational tower).
- **Order backlog.** In 1H16, SCG's total new contracts rose 17.7% y/y to CNY105.5bn.
- **Liquidity.** At end-1H16, net cash totaled CNY33.4bn, which was more than 3x short-term debt of CNY10.8bn.
- **Credit metrics.** SCG's adjusted debt/EBITDA was 6.5x in 1H16 (FY15: 5.6x), driven by higher debt funding of real estate inventories and prepayment of land purchases (source: Moody's).
- **Cyclical nature of construction business.** Long-term nature of construction projects and volatility in materials costs can lead to cost over runs. This risk can be mitigated by price adjustment clauses in some construction contracts.
- **Concentration.** More than 60% of SCG's new construction contracts by value are located in Shanghai. It generated c.63% of its FY15 revenue from Shanghai. The group is expanding beyond Shanghai by focusing on five areas – Beijing-Tianjin, Pearl River Delta, North-eastern China, Central China and the Chengdu-Chongqing region.

Credit metrics



Source: Company reports, Moody's, Barclays Research

Revenue and EBITDA margin



Source: Company reports, Moody's, Barclays Research

Shanghai Electric Group

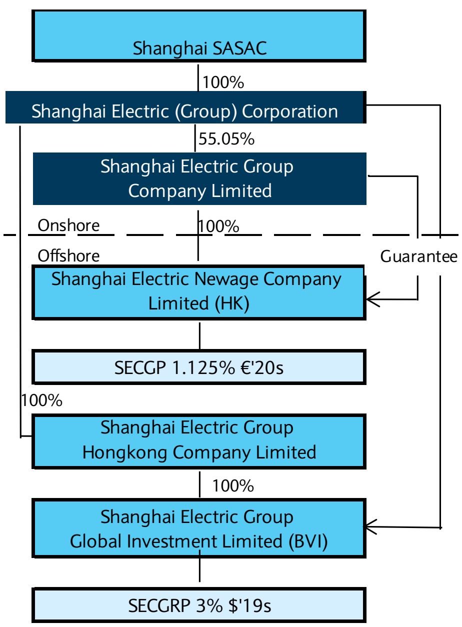
Analyst
Justin Ong

Company description: Shanghai Electric (Group) Corp (SEG, A2/A/A Stb) is the largest energy and industrial equipment conglomerate in China and is wholly owned by the Shanghai SASAC. SEG has several listed subsidiaries and associates – its core subsidiary is Shanghai Electric Group Co Ltd (SEGCL), which accounted for c.80% of SEG's total assets and revenues in 2015. SECGL operates in four main segments: 1) New energy & environmental protection equipment (15% of LTM 1H16 revenue of CNY77.8bn), which produces nuclear power, wind power, heavy machinery, solid waste, sewage treatment equipment; 2) High efficiency and clean energy equipment (33%), which produces thermal and conventional nuclear power generation, transmission and distribution equipment; 3) industrial equipment (29%), which primarily involves elevators (c18% of total revenue in 2015); 4) modern services (22%), which mainly includes integrated services (installation, operation, maintenance, etc.) for projects in power and other sectors, coupled with financial and leasing services. SEGCL also has other business units such as a central research institute. About 10% of SEGCL's LTM 1H16 revenue came from international operations.

SECGRP bonds (A2/A/A)

Bonds	Amt (mn)	Issuer	On shore guarantor
SECGRP 3% $ '19s	500	Shanghai Electric Group Global Investment Limited (BVI)	Shanghai Electric (Group) Corporation
SECGRP 1.125% €'20s	600	Shanghai Electric Newage Company Limited (HK)	Shanghai Electric Group Company Limited

Bond structure



Source: Company reports, Barclays Research

Business highlights

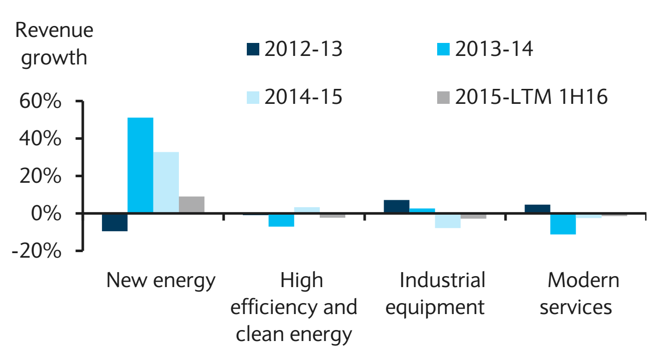
- **Operates in various equipment markets.** SEGCL is the largest thermal and nuclear power equipment supplier in China with a market share of c.33% and c.50%, respectively, as of 2015. It is also the largest operator in the domestic elevator market.
- **Order backlog.** SEGCL's order backlog decreased to CNY224.6bn (-10.5% y/y) in 1H16. During 2010-LTM 1H16, its order backlog for each year was around three times the corresponding year's revenue. During 1H16, new orders increased to CNY49.5bn (+54.9% y/y), on higher orders for new energy and environmental protection equipment (+17.9% y/y), high efficiency and clean energy equipment (+39.2% y/y), and modern services (+42.9% y/y).
- **Strategic importance:** SEG ranks second in terms of total assets and fourth in terms of revenue among the listed companies under the Shanghai SASAC. SEGCL also receives support from parent SEC in the form of subsidies, equity and asset injections. SEGCL received subsidies of CNY906mn in FY14 and CNY565mn in FY15.
- **13th Five-Year Plan** to boost growth of renewable energy sector. China plans to increase the combined installed capacity of renewable energy to 800-1000 GW by 2030, which would be the same level as currently installed thermal capacity. SEG is one of the leading companies in new energy equipment. Falling revenue from thermal power equipment sales is being offset by rising new energy equipment sales.
- **Low EBITDA margin** due to stiff competition and shift in investment from thermal power to lower-margin cleaner energy.
- **Overseas projects in developing countries** (Middle East, Africa, other Asian countries), including the manufacture of nuclear equipment for power stations in South Africa and the construction of power plants in Pakistan. The international operations generated 10% of LTM 1H16 revenue (FY15: 11.2%, FY14: 14%, FY13: 16.8%).

Financial snapshot (SEGCL listco)

CNY mn	LTM 1H16	2015	2014
Revenue	77,751	78,009	76,785
EBITDA	9,270	8,886	5,703
EBITDA Margin	11.9%	11.4%	7.4%
Total Debt	14,118	12,864	7,856
Net Cash *	13,400	24,106	17,258
Credit Metrics			
Total Debt/EBITDA	3.0x	2.9x	1.4x
Net Debt/EBITDA	nm	nm	nm
EBITDA/Interest	8.3x	8.7x	19.2x
Debt/capital	20.9%	19.8%	14.7%
Revenue by geography	**LTM 1H16**	**2015**	**2014**
Mainland China	90.0%	88.8%	86.3%
Overseas	10.0%	11.2%	13.7%

*Cash level was higher than total debt for all the three periods
Source: Company reports, Barclays Research

Growth in new energy equipment sales (SEGCL listco)



Source: Company reports, Barclays Research

Shanghai Electric Power

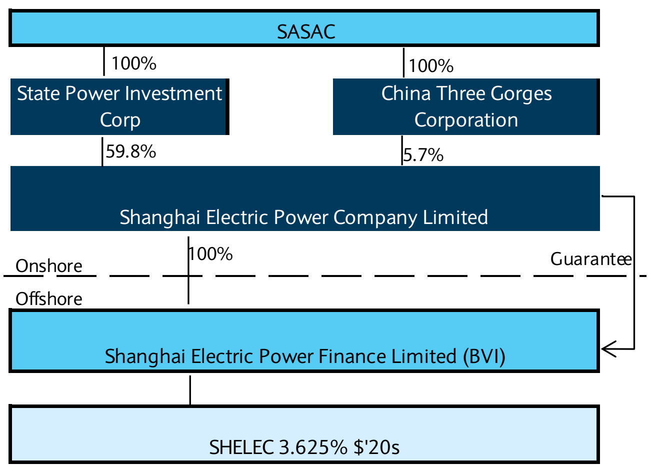
Analyst
Justin Ong

Company description: Shanghai Electric Power (SEP, Baa2 Neg/BBB Watch Neg/BBB+ Stb) primarily operates in the Yangtze River Delta region. It is the second-largest utility company in Shanghai, with additional presence in Jiangsu, Zhejiang and Anhui. As of 2015, SEP generated 21% of installed capacity and c.25% of the total power output in Shanghai. SEP primarily uses coal to generate power, with its coal-fired plants accounting for 69.2% of the company's total attributable installed capacity of 9.4GW as of 1H16 (capacity of an individual plant multiplied by equity ownership in that plant), followed by gas (22.1%), wind (4.5%) and solar (4.2%). The company generated 35.2TWh of electricity during 2015. SEP is 60% owned by State Power Investment Corporation (SPIC), which is one of the five largest power producers in China and is wholly owned by the central SASAC.

SHELEC bonds (Baa2/BBB/BBB+)

Bonds	Amt (mn)	Issuer	On shore guarantor
SHELEC 3.625% $'20s	500	Shanghai Electric Power Finance Limited (BVI)	Shanghai Electric Power Company Limited

Bond structure

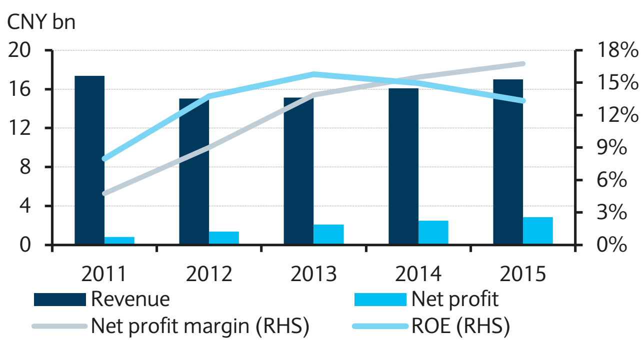


Source: Company reports, Barclays Research

Business highlights

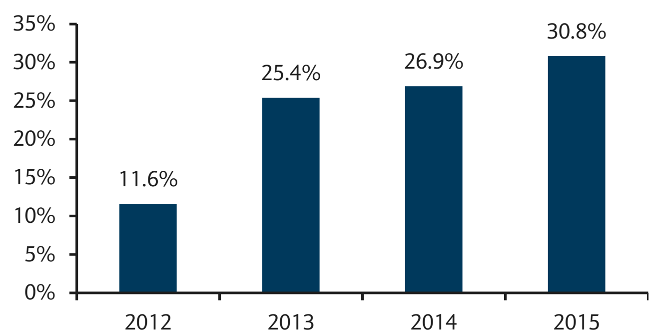
- **Power demand in Shanghai was moderate in 2015, but rebounded modestly in 9M16.** Power consumption in Shanghai increased by 2.5% y/y in 2015, and growth accelerated to 6.8% y/y in 9M16.
- **Support from State Power Investment Corp and the Chinese government** in the form of credit facilities at favorable interest rates, coal supply, subsidies and tax incentives. Higher on-grid tariffs than national average.
- **Cost-efficient fuel.** SEP's coal consumption is lower than industry peers due to the large capacity of its coal-fired units, with individual plant capacity of 600MW to 1GW. SEP's coal consumption declined from 291.5g/kWh in 2012 to 283.6g/kWh in 2015.
- **Clean energy portfolio.** SEP's installed capacity of clean energy accounted for 30.8% of total installed capacity of 9.4 GW in 2015, up from 11.1% in 2010. The company aims for its clean energy portfolio to account for c.50% of its total capacity by 2020, according to management.
- **Falling utilization rate** (ratio of annual electricity generated to total installed capacity) – the utilization rate declined from 5,315 hours in 2012 to 3,936 hours in 2015. Lower priority for the dispatch of coal-fired power.
- **Overseas business expansion** in 19 countries, including Malta, Tanzania, Turkey and Japan. In October 2016, SEP announced that it planned to acquire a 66.4% stake in K-Electric (KE) for USD1.7bn. KE has exclusive distribution rights for Karachi and its adjoining areas in Pakistan, serving 2.5mn consumers. It is involved in thermal power generation and distribution. According to Moody's, based on pro-forma 2015 statements, KE would account for 28%, 40% and 27% of SEP's assets, revenue and EBITDA, respectively. Moody's and S&P have placed SEP's credit rating on Negative watch as the acquisition would expose the group to a higher level of geopolitical and execution risk. According to management, SEP intends to increase its overseas capacity to 5.7GW by 2020, from 2.4MW in 2014.
- **Liquidity.** Short-term debt was 62.0% of total debt of CNY21.6bn as of 3Q16, versus cash/short-term debt of 32.1%. SEP had undrawn credit facilities of CNY26.4bn as of June 2016.
- **High capital requirements for construction of new projects** due to outlay in building, maintaining and operating production facilities as well as the purchase of manufacturing equipment.

Revenue and net profit



Source: Company reports, Barclays Research

Growing proportion of clean energy as % of overall capacity



Source: Company reports, Barclays Research

SINOPEC Corp/SINOPEC Group

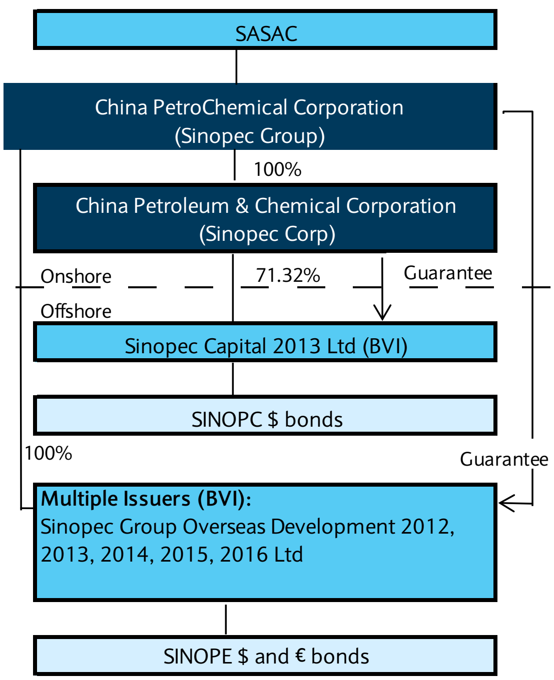
Analyst
Justin Ong

Company description: Sinopec Group (Aa3 Neg/A+ Neg), together with 71.32%-owned subsidiary Sinopec Corp (Aa3 Neg/A+ Neg/A+ Stb), is China's largest downstream oil and gas company (largest refining capacity, largest retail distribution network and largest petrochemical producer) and its second-largest oil and gas producer. Sinpoec Group is also the world's largest refined oil producer in terms of crude oil throughput, with a capacity of c.300mn tonnes as of 2015. In 2015, Sinopec Corp accounted for more than 60% of Sinopec Group's assets and 90% of its revenue. At end-2015, Sinopec Group had the second-largest proved reserves among Chinese oil companies, with 4,130mmboe of oil and natural gas. Sinopec's refining throughput accounted for 45.7% of China's total throughput in 2015, and its ethylene production (chemical segment) represented 64.8% of the country's total. In retail distribution of refined products, Sinopec accounted for 62.1% of domestic sales volume. The group's diversification mitigates the impact of crude oil price fluctuations: low oil prices are adverse for its upstream segment, but lower input costs are positive for its refining and petrochemical segments.

SINOPC/SINOPE bonds (Aa3/A+)

Bonds	Amt (mn)	Issuer	On shore guarantor
SiNOPC $ bonds	$3.5bn	Sinopec Capital 2013 Ltd (BVI)	Sinopec Corp
SINOPE $ bonds SINOPE € bonds	$23bn €2.05bn	Multiple issuers	Sinopec Group

Bond structure



Source: Company reports, Barclays Research

Business highlights

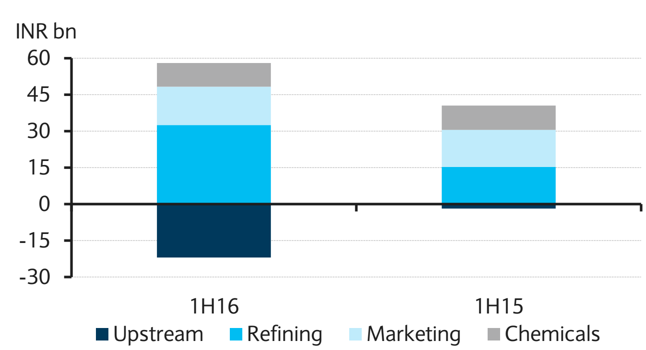
- **Core strategic SOE.** Sinopec Corp's Aa3/A+ ratings benefit from uplifts of three notches at Moody's and two notches at S&P, owing to strong backing from the government and Sinopec Group. Sinopec Group's Aa3/AA- rating benefits from the uplifts: three notches at Moody's and two at S&P. Sinopec Group has supported Sinopec Corp through asset injections that increased the crude oil reserves of Sinopec Corp.
- **Government policies.** China's shift towards a more market-oriented pricing framework for refined products (adjusted to be more sensitive to changes in crude prices) since March 2013 improves transparency in the refining business; however, under a subdued oil price regime, this has negatively impacted Sinopec Corp. The National Development and Reform Commission (NDRC) lowered retail prices of gasoline and diesel three times between November 2015 and January 2016, by a cumulative CNY370 and CNY355/tonne, respectively.
- **Capex.** Sinopec Corp cut capex by 42.7% y/y 1H16 to CNY13.5bn. The company guided for FY16 capex of CNY100.4bn (down 10.5% y/y). Its lifting cost of USD16.0/bbl in 1H16 was 9.5% lower y/y.
- **Growing international footprint in upstream gas projects.** Sinopec's domestic crude production met c.16.6% of its refining capacity as of 2015. To expand its upstream segment, Sinopec has acquired stakes in international projects – Australia Pacific LNG (37.5% stake) and Pacific NorthWest LNG (10%). Sinopec Group has invested in Brazilian oil companies – it has a 30% stake in Galp Energia and a 40% stake Repsol Sinopec Brasil.
- **Potential IPO of marketing and distribution business.** In March 2015, Sinopec Corp sold a 29.9% stake in its oil marketing business (low margins but stable cash flow) to 25 domestic and foreign investors for CNY105bn. Sinopec is reportedly evaluating a potential IPO for this segment, which could potentially raise USD12bn according to press reports ("Sinopec mandates six banks to advise on unit revamp ahead of IPO", Reuters, 4 January 2017).

Production profile of Sinopec Corp at 1H16

Production	1H16	1H15	%
Production (mm boe)	219.0	233.0	-6.0%
Crude and liquids (mm bbl)	154.2	174.1	-11.4%
China	128.4	147.5	-12.9%
Overseas	25.8	26.6	-3.0%
Natural gas (bcf)	388.7	353.3	10.0%
Realized price per-unit			
Realized oil price (USD/bbl)	33.19	49.33	-32.7%
Realized gas price (USD/mcf)	5.53	7.34	-24.7%
Refinery			
Throughput (mn tonnes)	115.9	118.89	-2.5%
Refining Margin (USD/bbl)	10.72	7.72	38.9%
Amount in CNY mn			
Revenue	879,220	1,041,131	-15.6%
EBITDA	84,213	86,791	-3.0%

Source: Company reports, Barclays Research

Operating profit by segment



Source: Company reports, Barclays Research

State Grid Corp of China

Analyst
Justin Ong

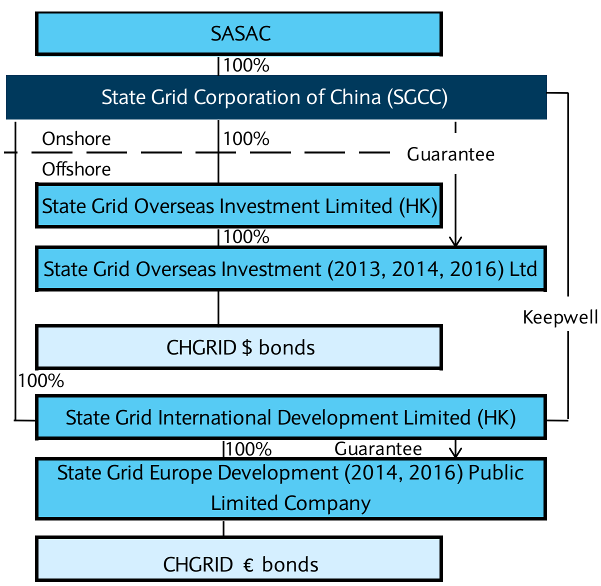
Company description: State Grid Corporation of China (State Grid, Aa3 Neg/AA- Neg/A+ Stb) is the largest power grid construction and operating company by revenue in China. It is also the largest public utility company in the world by revenue. State Grid's power grid network covers 26 provinces (over 88% of China's territory) and it serves more than 1.1 billion consumers. The group is wholly owned by the central SASAC. State Grid International Development Ltd (SGID, wholly owned by State Grid) is largely involved in investing and operating State Grid's regulated electricity overseas transmission and distribution businesses, notably in Australia, Brazil, the Philippines, Portugal and Italy. State Grid has commercialized UHV AC/DC transmission and smart grid technology on a large scale. The group also develops its own UHV transmission technology to improve its operational efficiency.

CHGRID bonds

Bonds	Amount (mn)	Issuer	Guarantor	Keepwell provider	EIPU	Liquidity support
CHGRID $ senior unsecured	6,500	State Grid Overseas Investment 2013 Ltd State Grid Overseas Investment 2014 Ltd State Grid Overseas Investment 2016 Ltd	State Grid Corporation of China (onshore guarantor)	NA	NA	NA
CHGRID 1.25% €'22s, 1.75% €'25s	1,000	State Grid Overseas Investment 2016 Ltd	State Grid Corporation of China (onshore guarantor)	NA	NA	NA
CHGRID 1.5% €'22s, 2.45% €'27s	1,000	State Grid Europe Development (2014) Public Limited Company	State Grid International Development Limited (HK) – offshore guarantor	State Grid Corporation of China	Yes	Yes

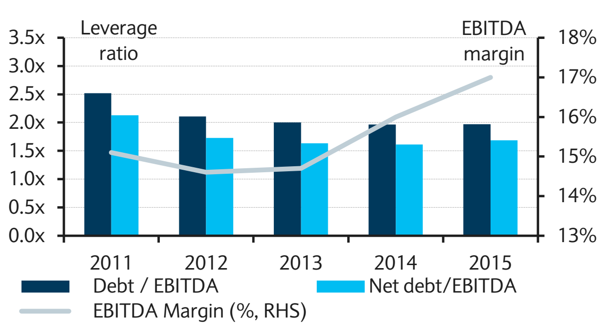
Note: CHGRID $ bonds are rated Aa3/AA-/A+. CHGRID EUR bonds are rated A1/A+/A+. Amount of CHGRID $ senior unsecured refers to aggregate amount outstanding as of February 2017. Source: Company report

Bond structure



Source: Company reports, prospectus

Leverage ratio and EBITDA margin



Source: Company reports, S&P

Business highlights

- **Government support** due to State Grid's dominant role in power transmission and distribution. Financial support in the shape of preferential financing and tax exemptions for certain projects, subsidies and capital injections.
- **Regulatory control of tariffs and electricity prices – reforms are underway.** The NDRC reviews key electricity prices, including 1) the on-grid tariffs (based on fuel types) that State Grid pays to power generating companies, and 2) the electricity sales prices that State Grid receives from end customers.
- **Tariff mechanism.** The NDRC's tariff-setting framework is not transparent and there is no automatic cost pass-through mechanism to adjust for fuel cost changes, which are subject to the NDRC's review. In March 2015, the NDRC launched a pilot program in Shenzhen to trial a more transparent price mechanism. At present, 13 of the 26 provinces are participating in the pilot tariff program. The regulator announced that it plans to implement the program on a national scale by 2017. The new tariff framework will improve transparency in revenue generation by shifting to a "cost plus reasonable return" approach.
- **Significant investment over the next few years to expand power infrastructure.** According to the National Energy Administration, China will invest at least CNY2trn (c.USD300bn) in power distribution between 2015 and 2020.
- **Acquisitions of controlling stakes in overseas projects.** As of FY15, overseas assets and profits accounted for 3.6% and 6.5% of State Grid's assets and profits, respectively. In October 2016, SGID acquired a 24% stake in ADMIE, a Greek power grid operator wholly owned by Public Power Corp. (PPC), the largest government-owned integrated power company in Greece, for c.EUR320mn. In January 2017, SGID received regulatory approval to acquire a controlling stake (54.64%) in CPFL Energia in Brazil for ~USD5.6bn. CPFL is the largest electricity distribution company in Brazil.

State Power Investment Corp

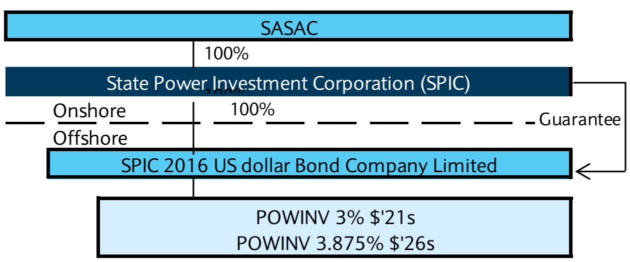
Analyst
Justin Ong

Company description: State Power Investment Corp (SPIC, A2/A-/A Stb) is the fifth-largest power producer in China, with total installed capacity of 107.4GW as of end-2015. Thermal power accounted for 63.6% of total installed capacity, followed by hydropower (19.5%), wind power (9.3%), photo voltaic (PV) power (4.5%), and nuclear (3.1%). SPIC has two nuclear power plants under construction, with an estimated combined installed capacity of 5.86GW. The group's power generation totaled 380.8TW in FY15. In addition to power generation, which accounted for 61.8% of FY15 revenue of CNY192.4bn, the group is involved in aluminum production (23.6%), the heat supply business (3.0%), coal (2.1%), ancillary services (1.3%) and others, including financial services (8.3%). SPIC is wholly owned by the central SASAC, and was formed following the merger of State Nuclear Power Technology (SNTPC) into China Power Investment Corp (CPI).

POWINV bonds (A2/NR/A)

Bonds	Amt (mn)	Issuer	On shore guarantor
POWINV 3% $'21s	900	SPIC 2016 US dollar Bond Co Ltd	State Power Investment Corporation (SPIC)
POWINV 3.875% $'26s	300		

Bond structure



Source: Company reports

Business highlights

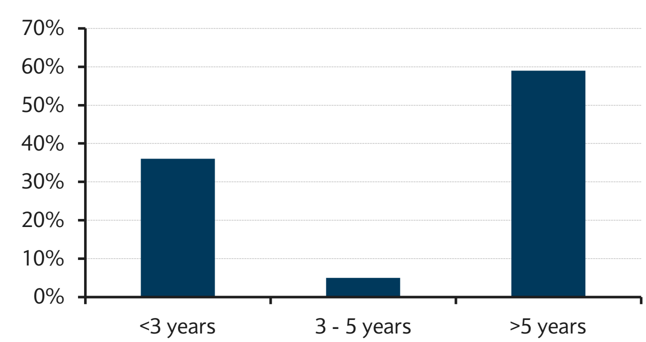
- **Fifth-largest power producer in China, with strong market positions in various segments.** SPIC accounted for 7% of China's total installed capacity and power generation in FY15. According to the company, the group ranked first by share of effective hydropower in China at end-FY15, and has the largest PV power capacity in the world. SPIC is also the leader among the top 5 producers in China by effective thermal generator units (0.6GW thermal generator units and above) as at end-2015.
- **Strategic importance.** SPIC is one of the 52 state-owned enterprises supervised by the central SASAC. Historically, the central government injected various municipal power plants and R&D assets into the group. According to the company, SPIC plays a key role in policy formulation and implementation in the power sector. Financial support from the government increased during 2013-15.
- **Leader in nuclear power technology.** SPIC is sole owner of the latest CAP1400 nuclear technology in China, which is one of the country's 17 national sci-tech projects. SPIC also had first-mover advantage in the introduction of third-generation nuclear reactors (AP1000) in China, under the authority of the government.
- **Growing clean energy assets.** Clean energy (comprising nuclear, hydro, wind and PV power) as a percentage of SPIC's total installed capacity increased from 29.9% in FY13 to 34.4% in FY15. SPIC has the highest proportion of clean power assets among China's top 5 power producers.
- **Leverage and liquidity.** On a gross and net basis, SPIC's debt/EBITDA ratio has weakened since 2014. However, as at end-Q316, SPIC had cash of CNY21.1bn and undrawn credit facilities of CNY661.3bn, compared with short-term debt of CNY133.4bn.

Financial snapshot of SPIC

CNY mn	LTM 3Q16	2015	2014
Revenue	182,621	192,404	193,235
EBITDA	56,362	59,462	56,230
EBITDA Margin	30.9%	30.9%	29.1%
Total Debt	522,850	480,138	443,641
Net Debt	501,763	453,353	422,374
Credit Metrics			
Total Debt/EBITDA	9.3x	8.1x	7.9x
Net Debt/EBITDA	8.9x	7.6x	7.5x
EBITDA/Interest	2.9x	2.5x	2.5x
Debt/capital	78.3%	77.9%	80.6%

Source: Company reports

Debt maturity profile at end- FY15



Source: Company reports

Yunnan Metropolitan Construction Investment Group

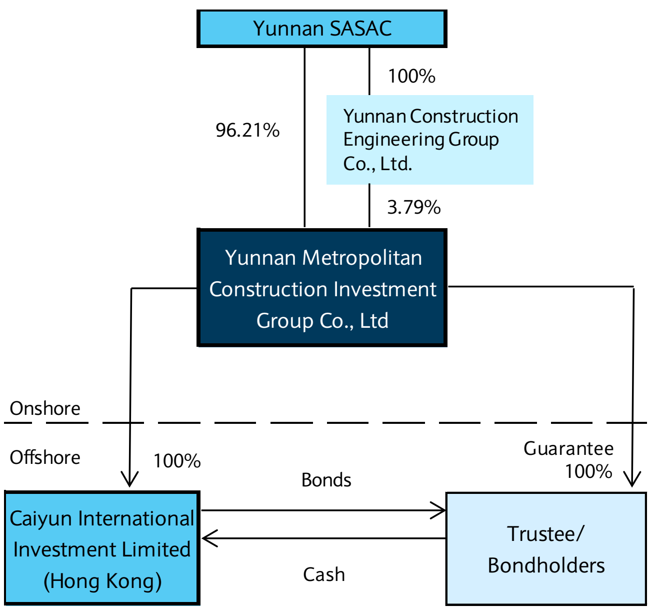
Analyst
Xiaoyi Wang

Company description: Yunnan Metropolitan Construction Investment Group is the only provincial-level platform for large infrastructure development in China's south-western border province of Yunnan. It is involved in the provincial government's plans to develop large-scale urban infrastructure, including water works, social housing projects and the province's tourism resources. The company's five main business areas are: 1) urban development, including profit-maximizing real estate development and not-for-profit urban infrastructure projects; 2) urban environment, mainly urban sewage and solid waste treatment facilities; 3) leisure and travel, integrating upstream and downstream production; 4) healthcare services; and 5) others, including professional training and financial services. Yunnan Metropolitan Construction is wholly owned by the Yunnan SASAC.

YUNMET bonds (NR/NR/BBB+)

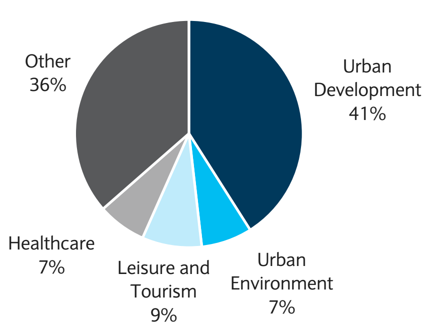
Bonds	Amt (mn)	Issuer	On shore guarantor
YUNMET 3.125% $'19s	500	Caiyun International Investment Limited (Hong Kong)	Yunnan Metropolitan Construction Investment Group Co., Ltd

Bond structure



Source: Company reports, Barclays Research

Revenue by segment as of end-2015



Source: Company reports, Barclays Research

Business highlights

- **Only platform for managing land reserve operations:** Yunnan Metropolitan Construction has a 40% stake in Yunnan Land Reserve Operation Company, the only entity that is permitted by the government to manage land reserves in Yunnan province due to central government restrictions. This joint venture is 50% owned by the Yunnan Provincial Department of Finance and 10% by Yunnan Metropolitan Construction Investment Real Estate, which is the company's listed arm.
- **"One Belt, One Road" initiative:** The company supports the central government's implementation of its "One Belt, One Road" initiative through infrastructure investment (waste and bilateral corporation projects) in ASEAN countries.

Bonds with Offshore Guarantees/ Issuers

Alibaba Group Holdings

Analyst
Eugene Tham

Company description: Alibaba (A1/A+/A+ Stb) is the largest retail commerce company globally by gross merchandise volume (FY16). The three main marketplaces operated by the company – Taobao, Tmall, and Juhuasuan – generated a combined GMV of CNY3.1trn (c.USD485bn) in FYE March 2016. In the same period, the marketplaces catered to 423mn active buyers. Through affiliate Alipay, payment and escrow services are also offered to buyers and sellers, while logistical services are provided by third-party providers, which work closely with Alibaba's 48%-owned Cainiao Logistics through a central logistics information system. Listed in September 2014 on the New York Stock Exchange, the company, which operates a dual-class shareholding structure, has a market capitalization of c.USD257bn (as of 24 February 2017).

Alibaba public USD bonds (A1/A+/A+)

Bonds	Amount (mn)	Issuer
BABA 1.625% $ '17s	1000	
BABA 2.5% $ '19s	2250	
BABA 3.125% $ '21s	1500	Alibaba Group Holding Ltd
BABA 3.6% $ '24s	2250	
BABA 4.5% $ '34s	700	

Financial snapshot

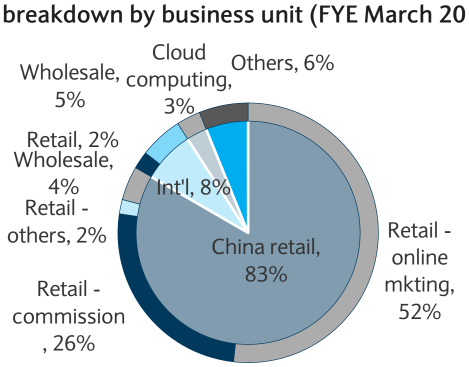
CNY mn	FY 16	FY 15	FY 14
Revenue	101,143	76,204	52,504
Gross Profit	66,788	52,370	39,135
Gross Profit Margin	66.0%	68.7%	74.5%
EBITDA	52,340	40,753	30,731
EBITDA Margin	51.7%	53.5%	58.5%
Total Debt	57,771	52,593	41,075
Net Debt/ (Cash)	(55,093)	(72,045)	(7,478)
Credit Metrics			
Total Debt/EBITDA	1.1 x	1.3 x	1.3 x
Net Debt/EBITDA	n.m.	n.m.	n.m.
EBITDA/ Interest	26.9 x	14.8 x	14.0 x
Total Debt/Capital	18.8%	25.0%	50.2%
PC vs mobile GMV	**FY 15**	**FY 14**	**FY 13**
PC	37%	70%	93%
Mobile	63%	30%	7%

Note: Fiscal year ends 31 March. Source: Company reports, Barclays Research

Business highlights

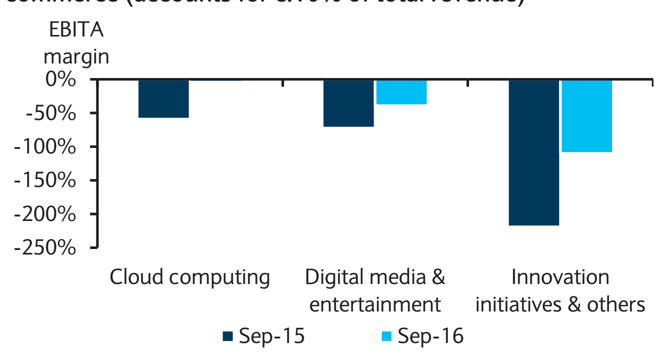
- **Dominant market position:** More than 80% of online retail sales have passed through Alibaba's online portals since 2009, according to iResearch estimates. Its platforms form a comprehensive ecosystem, from consumer gateways such as Taobao and B2B platforms where merchants can source products, to marketing services provided by Alimama as well as payment and escrow services offered by Alipay. This integrated value chain provides strong network effects, generating recurring activities and interaction on the various platforms.
- **Strong financial profile:** Alibaba's high single-A rating is underpinned by its solid and growing cash flow generation, as well as a robust balance sheet. EBITDA margins are in the low- to mid-50% area, due to its asset-light business model. The company's net cash position, although reduced in recent quarters following acquisitions (CNY19.7bn at end-September 2016), remains supportive of its ongoing M&A activities.
- **Aggressive growth appetite:** Alibaba and its affiliates had been active in acquiring businesses in the internet space, announcing or undertaking investments of more than USD10bn in 2015 (source: Bloomberg), as well as large-ticket acquisitions in 2016 such as the USD4.8bn investment in Suning and USD3.6bn acquisition of the stake in Youku-Tudou that it did not already own. While the pace of acquisitions could slow, we think Alibaba is likely to remain focused on growth.
- **Issues of counterfeit goods and accounting practices:** Counterfeit goods continue to represent a reputation problem for Alibaba, given the limited control that its online marketplace has over the quality of goods sold. In May 2016, Alibaba announced that the US Securities and Exchange Commission is looking into the company's accounting practices and reported data, which could pose legal and regulatory risks.

Revenue breakdown by business unit (FYE March 2016)



Source: Company reports, Barclays Research

Shrinking losses in other businesses apart from core e-commerce (accounts for c.10% of total revenue)



Source: Company reports

Baidu Inc

Analyst
Eugene Tham

Company description: Baidu (A3/NR/A Stb) is the leading internet search provider in China, with a c.73% share of search engine page views as of November 2016, according to iResearch. Baidu delivers online marketing services to approximately 524,000 active online marketing customers (3Q 2016), which are served by a direct sales force and a network of third-party distributors across China. Mobile revenues accounted for 64% of total revenue in 3Q 2016 (3Q 2015: 54%). Mobile search monthly active users (MAU) reached 660mn in September 2016, while mobile map MAUs stood at 348mn. Apart from its core PC and mobile search services, Baidu owns a group-buying platform (Nuomi), and provides various services to end-users – including Baidu Wallet, Deliveries, Maps, and targeted news feeds. For its transaction services (Nuomi, Wallet and Deliveries), gross merchandise value was CNY68.1bn in LTM 3Q16, up 51% y/y. Baidu was listed on the New York Stock Exchange in 2005 and has a market capitalization of c.USD61bn (as of 24 February 2016).

Baidu public USD bonds (A3/NR/A)

Bonds	Amount (mn)	Issuer
BIDU 2.25% $ '17s	750	Baidu Inc.
BIDU 3.25% $ '18s	1000	
BIDU 2.75% $ '19s	1000	
BIDU 3% $ '20s	750	
BIDU 3.5% $ '22s	750	
BIDU 4.125% $ '25s	500	

Financial snapshot

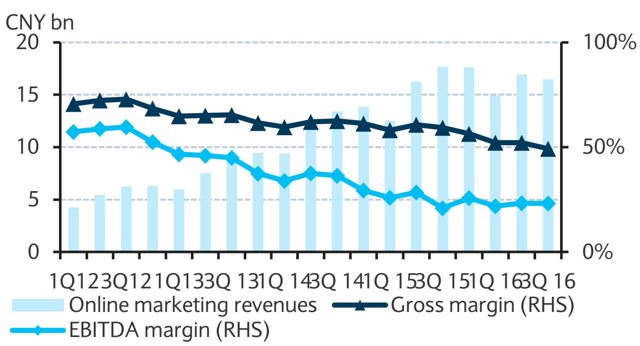
CNY mn	2015	2014	2013
Revenue	66,382	49,052	31,944
Gross Profit	38,924	30,167	20,472
Gross Profit Margin	58.6%	61.5%	64.1%
EBITDA	16,660	16,755	13,819
EBITDA Margin	28.5%	36.2%	44.9%
Total Debt	35,071	25,875	17,659
Net Debt/ (Cash)	(32,954)	(32,209)	(21,027)
Credit Metrics			
Total Debt/EBITDA	2.0 x	1.6 x	1.5 x
Net Debt/EBITDA	n.m.	n.m.	n.m.
EBITDA/ Interest	6.8 x	10.8 x	12.8 x
Total Debt/Capital	32.8%	35.9%	35.2%
Operating statistics	**2015**	**2014**	**2013**
Active online marketing customers	1,049,000	813,000	753,000
Average revenue per customer (CNY)	60,500	59,400	42,200

Source: Company report, Barclays Research

Business highlights

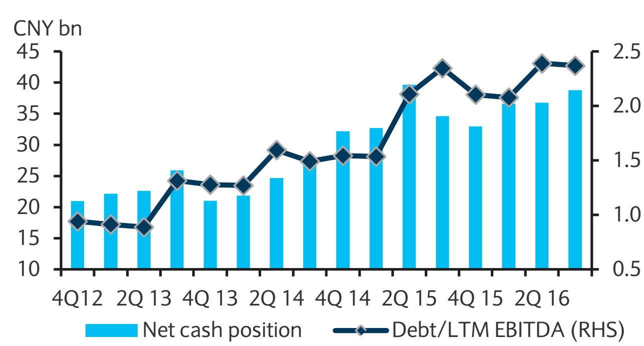
- **Dominant search engine in China:** Baidu's search engine boasts a well-established brand and user base – by revenue, Baidu had a 78% market share in 2016, according to iResearch estimates.
- **Positive cash flow generation drives strong credit profile:** Baidu has consistently generated CNY4-5bn of quarterly positive operating cash flow since 2Q15, with the exception of Q3 2016, when its results were affected by new regulations enforcing registration and verification of advertisers' accounts. This steady cash flow generation helped Baidu build a strong net cash position of CNY38.8bn at end-September 2016.
- **Cloudy outlook on longer-term growth drivers:** Potential medium-term revenue drivers, such as video ads and O2O services, face stiff competition and diminishing margins. Artificial intelligence shows promise in improving Baidu's search business. Longer term, self-driving cars remain a highly uncertain venture, both in terms of potential and timing. Baidu's 25% interest in Ctrip provides exposure to the fast-growing travel market.
- **Earnings likely to remain depressed near term:** New regulations and the government's response to exercise oversight on advertisements by healthcare-related companies negatively affected Baidu's 3Q 2016 earnings (revenue flat y/y and gross profit -17% y/y). Management expects actions taken to comply with these new regulations to weigh on the company's revenue and costs for another couple of quarters. Nevertheless, credit metrics are likely to remain relatively stable – we expect gross debt/EBITDA to remain in the 2.3-2.5x range.

Profitability pressured by elevated costs



Source: Company reports

Net cash rising, but so is gross leverage



Source: Company reports

Beijing Enterprises Holdings

Analyst
Justin Ong

Company description: Beijing Enterprises Holdings (BEH, Baa1/BBB+ Neg) is a diversified conglomerate with operations in natural gas transmission & distribution, brewery, and sewage & water treatment. The company's principal and wholly owned subsidiary, Beijing Gas, is involved in natural gas distribution in the Greater Beijing Area. 1H16 gas volumes rose 21.0% y/y to 7.31bcm, with demand generated by the Guohua, Gaojing, Jingxi and Gaoantun power plants. At end-September 2016, BEH had a 22.95% stake in China Gas, which provides natural gas supply via 311 city piped-gas projects to 14.7mn residential customers in 25 provinces. BEH owns a 40% equity interest in PetroChina Beijing Pipeline, which provides natural gas transmission services from the second-largest gas field in Changqing to the Beijing, Tianjin and Hebei regions. The transmission capacity volume is 35bn cubic meters annually (c.16.6bcm transmitted in 1H16). BEH has a 57.6% stake in Yanjing Brewery, one of the largest breweries in China by production volume. Its total beer sales volume was 2.67kl in 1H16. Piped gas operations accounted for 74.5% of BEH's LTM 1H16 revenue, followed by brewery operations (19.8%), while the rest came from solid waste treatment and other operations. The company also operates a sewage & water treatment business through its associate, Beijing Water (43.9% stake), which operates in 18 provinces, two autonomous regions and three municipalities across China. Beijing Water has 282 sewage treatment services, 100 water distribution services, eight reclaimed water plants and one seawater desalination plant with a total design capacity of 24.9mt (million tonnes) daily, as of 1H16. Beijing SASAC owns 62.0% of BEH.

BEIENT bonds (Baa1 /BBB+)

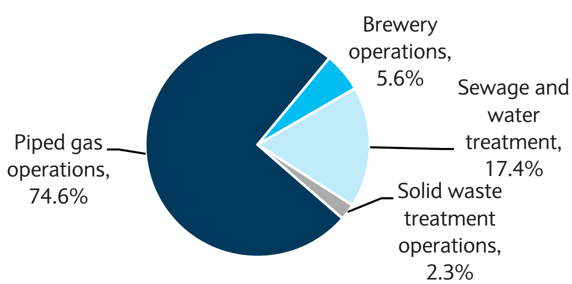
Bonds	Amount (mn)	Issuer	Offshore guarantor
BEIENT 1.435% €'20s	750	Talent Yield Euro Ltd	Beijing Enterprises Holdings Limited (HK)
BEIENT 5% $'21s	600	Mega Advance Investments Ltd	
BEIENT 4.5% $'22s	800	Talent Yield Investments Ltd	
BEIENT 6.375% $'41s	400	Mega Advance Investments Ltd	

Financial snapshot

HKD mn	LTM 1H16	2015	2014
Revenue	59,258	60,150	47,936
Gross Profit	8,755	9,051	8,576
Gross Profit Margin	14.8%	15.0%	17.9%
EBITDA	4,670	4,461	4,440
EBITDA Margin	7.9%	7.4%	9.3%
Total Debt	50,722	34,756	37,215
Net Debt	38,065	21,062	26,007
Credit Metrics			
Total Debt/EBITDA	10.9x	7.8x	8.4x
Net Debt/EBITDA	8.2x	4.7x	5.9x
EBITDA/Interest	3.6x	3.4x	3.7x
Debt/capital	42.2%	33.6%	35.4%
Gross profit margin by operations	**LTM 1H16**	**2015**	**2014**
Piped gas operations	9.8%	9.6%	10.7%
Brewery operations	31.0%	31.9%	33.1%

Source: Company reports

LTM 1H16 profit before tax by segment



Source: Company reports

Business highlights

- **Strategic asset and support from Beijing Municipal Government.** BEH is the Beijing Municipal Government's only platform to supply natural gas and water to China's capital city. The monopoly right to distribute natural gas in Beijing spans a 25-year period extending to 2032. The relationship between the municipal government and the central government has helped Beijing Water to expand its operations nationwide. The Municipal Government also helped BEH to acquire GSE Investment Corporation. GSE operates three solid waste treatment projects, including the Gaoantun Waste-to-Energy Project in Beijing, which is the largest single-line plant in Asia.
- **Diversified businesses providing recurring and stable cash flows.** BEH benefits from growing natural gas usage in Beijing, consistent with the Central Government's policy stance to increase the use of natural gas in China's energy mix. BEH also benefits from the geographical diversification of its natural gas business through its stake in China Gas. Subsidiary Yanjing Brewery has a market share of more than 85% in Beijing and 11% nationwide in a fragmented industry of more than 400 brewers at mid-2016.
- **Reduction in natural gas prices supported volumes.** China cut benchmark city gate natural gas prices in November 2015 by CNY0.7/m3 for non-residential users. This reduced the average city gate price nationwide by 28%. This was the second price cut in 2015, the first occurring in April when the previous two-tier gas pricing systems ("existing" and "incremental" supply) were merged into a unified structure through an increase in gas rates under "existing supply" and a reduction in the rates under "incremental supply". These successive reductions led to a 21% y/y increase in gas sales volumes, to 7.3bn m^3 in 1H16. However, this was below the industry growth rate of 9.8%.
- **Reduction in gas transportation cost to boost gas volumes, and positively impact margins.** In October 2016, the National Development & Reform Commission (NDRC) announced that the investment yield in natural gas pipelines would be reduced to 8%, from 10-12%, effective January 2017. The NDRC plans to adjust gas transportation costs every three years. This would reduce the cost of transporting natural gas and could boost demand in our view.
- **Increase in solid waste treatment capacity and revenue following acquisition of EEW project in Germany.** BEH acquired EEW (the largest waste incineration power enterprise in Germany) in March 2016 for c.EUR1.4bn, which increased BEH's solid waste operations capacity by 13,000 tons/day. For 1H16, EEW reported revenue of HKD1.5bn, waste treatment volume of 1.5mn tons and electricity sales of 945.2mn kwh. As a result, BEH's revenue from solid waste treatment operations increased nearly 4.5x y/y to HKD2.1bn in 1H16.
- **Potential acquisition of 20% stake in Verkhnechonskneftegaz could weaken credit metrics.** On 7 November 2016, BEH's wholly owned subsidiary, Beijing Gas, announced it had agreed to acquire a 20% stake in Verkhnechonskneftegaz (a Russian upstream oil & gas company and subsidiary of Rosneft) for USD1.1bn. We believe the transaction is likely to be mainly debt funded, which could negatively impact the credit metrics further. BEH's credit metrics weakened h/h following the debt-funded acquisition of EEW, and Moody's downgraded BEH to Baa1 in mid-February 2017.

Binhai Investment Co Ltd

Analyst
Justin Ong

Company description: Binhai Investment Company Limited (Binhai Investment. Ba1 Neg/NR/BBB- Stb) is involved principally in the construction and operation of LPG pipeline networks, which transport LPG from the company's gas stations to commercial and residential properties. Binhai Investment operates in six provinces – Hebei, Shandong, Jiangsu, Zhejiang, Jiangxi and Hunan – and two cities – Beijing and Tianjin. As of 1H16, the company's pipeline network spanned around 2,035 km. Its customer base consisted of more than 2,200 commercial/industrial units (accounting for 82% of the volume of gas sold in 1H16) and c.1mn residential customers (c.18%). Binhai Investment operates in three segments: 1) Piped gas – operation of pipeline network through which LPG and mixed gas are supplied to commercial and residential customers; 2) Connection services – construction of gas pipelines and connecting those pipelines to the company's main networks; and 3) Bottled gas – involved in bottled gas retailing services to residential customers. Binhai Investment is majority owned by the Tianjin SASAC (56.47%) through its wholly owned subsidiary TEDA (Tianjin Economic-Technological Development Area) Investment.

BINHIN bonds

Bonds	Amount (mn)	Issuer	Letter of support provider
BINHIN 3.25% $'18s (Ba1/NR/BBB-)	200	Binhai Investment Co Ltd (Ba1 Neg/NR/BBB- Stb)	Tianjin TEDA Investment Holding Co

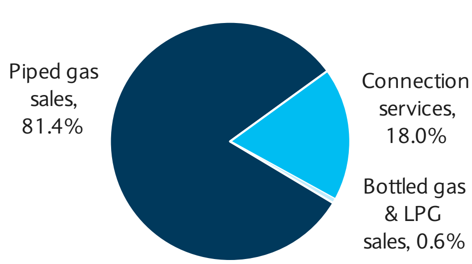
Note: Bond credit ratings – Moody's/S&P/Fitch. NR = not rated by the agency. Source: Company reports

Financial snapshot

CNY mn	LTM 1H16	2015	2014
Revenue	2,301	2,555	2,543
Gross Profit	517	543	465
EBITDA	446	463	376
EBITDA Margin	19.4%	18.1%	14.8%
Total Debt	1,819	1,799	1,809
Net Debt	1,250	1,468	1,346
Total equity	1,166	1,179	1,083
Total Assets	4,182	3,968	3,989
Credit Metrics			
Total Debt/EBITDA	4.1 x	3.9 x	4.8 x
Net Debt/EBITDA	2.8 x	3.2 x	3.6 x
EBITDA/interest expense	4.0 x	3.1 x	2.5 x
Total Debt/Equity	156.0%	152.6%	167.0%
Total Debt/Total capital	60.9%	60.4%	62.5%
Gross Profit%	**LTM 1H16**	**2015**	**2014**
Piped gas sales	49.0%	42.5%	18.5%
Connection services	50.9%	57.8%	81.2%
Bottled gas & LPG sales	0.1%	-0.3%	0.3%

Source: Company reports

Revenue by segment, LTM 1H16



Source: Company reports

Business highlights

- **Presence in key provinces and municipalities.** Binhai Investment's core market is the Tianjin Binhai New Area, within Tianjin Municipality, the third-largest municipal city in China by GDP in 2015. The company also operates in some of the most economically developed provinces, including Jiangsu, Shandong, Zhejiang and Hebei, which ranked 2nd, 3rd, 4th and 7th, respectively, in terms of 2015 GDP. Binhai Investment enters into long-term contracts of up to 50 years with local governments to operate piped gas business within a province/municipality.
- **Natural gas prices lowered in late 2015.** China cut benchmark city gate natural gas prices in November 2015 by CNY0.7/m3 for non-residential users. This reduced the average city gate price nationwide by 28%. This was the second cut in 2015; the first occurred in April when the previous two-tier gas pricing systems ("existing" and "incremental" supply) were merged into a unified structure through an increase in gas rates under "existing supply" and a reduction in the rates under "incremental supply". Following these price reductions, Binhai Investment's sales volumes to non-residential customer rose by 11.2% y/y to 8.9bn joules in 1H16.
- **Lower gas transportation costs.** In October 2016, the National Development & Reform Commission (NDRC) announced that the investment yield in natural gas pipelines would be reduced to 8%, from 10-12%, effective January 2017. The NDRC plans to adjust transportation costs every three years. This reduction would lower the cost of transporting natural gas. Binhai Investment's gross margin from piped gas sales was 14.3% in 1H16 (1H15: 9.9%).
- **Geographic concentration and high related-party transactions.** Binhai Investment's operations are concentrated in the Tianjin Binhai New Area, which accounted for c.60% of total sales in 2015. The TEDA group accounted for c.30% of gas volume sold in 2015. Related-party transactions declined 26.7% y/y in 1H16, to CNY292.6mn, which represented 27.2% of Binhai Investment's total revenue.
- **Agency ratings.** In April 2016, Moody's downgraded its rating for Binhai to Ba1 with a Negative Outlook, citing the weaker credit profile of Binhai's parent company, TEDA Investment, due to a decline in the latter's steel pipe manufacturing business, and property and financial services. Moody's also removed the on-notch uplift from Binhai's credit ratings, which had been based on likely support from Tianjin TEDA.

China Mengniu Dairy

Analyst
Justin Ong

Company description: China Mengniu Dairy (Baa1 Stb/A- Watch Neg) is one of the largest manufacturers of dairy products in China, producing: 1) liquid milk products (ultra high temperature (UHT) milk, the most common form of liquid milk sold in China), milk-based beverages and yogurt; 2) ice cream; 3) infant milk products targeted at mid- and high-end customers; and 4) others, including cheese and plant-based foods. As of 1H16, Mengniu had 33 production bases across China and one in New Zealand, with total annual production capacity of 9.11mn tonnes. COFCO (China's largest supplier of food and agricultural products, wholly owned by the central SASAC) owns 16.3% of Mengniu. Danone (the world's largest fresh dairy enterprise) owns 9.9%, and Arla Foods (Europe's largest dairy products supplier) owns 5.3%.

CHMEDA bond (Baa1/A-)

Bonds	Amount (mn)	Issuer	Offshore guarantor
CHMEDA 3.5% $'18s	500	China Mengniu Dairy Co Ltd	NA

Financial snapshot

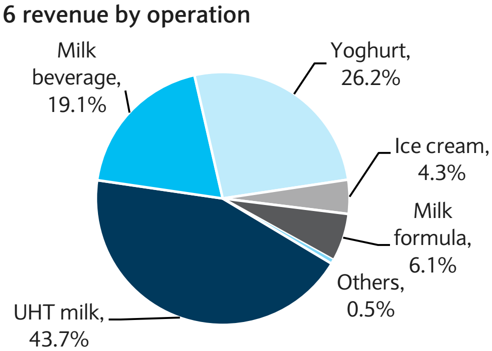
CNY mn	LTM 1H16	2015	2014
Revenue	50,719	49,027	50,049
Gross Profit	16,414	15,375	15,434
Gross Profit Margin	32.4%	31.4%	30.8%
EBITDA	4,157	3,960	4,266
EBITDA Margin	8.2%	8.1%	8.5%
Total Debt	10,432	11,467	10,177
Net Debt	5,225	3,536	5,527
Credit Metrics			
Total Debt/EBITDA	2.5x	2.8x	2.3x
Net Debt/EBITDA	1.2x	0.8x	1.2x
EBITDA/Interest	12.4x	12.4x	12.6x
Debt/capital	27.6%	29.4%	28.9%
Revenue by segment	**LTM 1H16**	**2015**	**2014**
Liquid Milk	89.0%	88.4%	86.0%
Ice cream	4.3%	4.4%	5.4%
Milk formula	6.1%	6.6%	7.9%
Others	0.5%	0.7%	0.7%

Source: Company reports

Business highlights

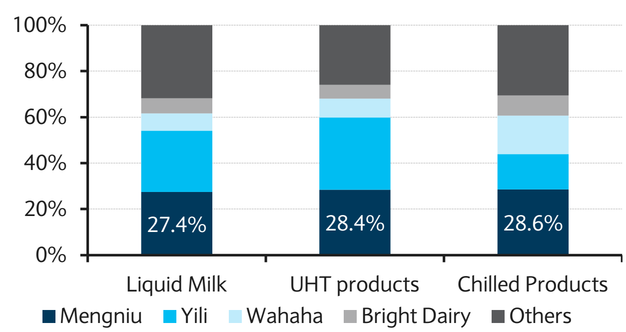
- **Mengniu is COFCO's sole business platform for dairy products,** which represents an integral part of China's food industry. As part of a Government mandate, COFCO's responsibility is to ensure continuous supply of quality dairy products. Subsidiary Yashili is also the only milk formula brand in China with its own factory in New Zealand.
- **Shares of key markets.** Mengniu had a market share by sales of 27.4% as of 1H16 in the domestic liquid milk market – comprising a 28.4% share of the UHT products segment, and a 28.6% share of the chilled products category (which includes chilled yogurt, pro-biotic milk beverages, pasteurized milk, etc.).
- **Stringent regulation.** The Chinese government has continued to tighten regulations on infant milk formulation through stringent quality checks, which has resulted in some enterprises exiting the business. The relaxation of China's one-child policy in 2015 could also boost the demand of milk formula over the long term.
- **Gross margin; promotional spending.** Mengniu's gross margin increased to 32.4% in LTM 1H16, from 24.9% in 2012, as the revenue contribution from premium brand products continued to grow (from 30.5% in 2012, to 40.1% in 2015 and 41.3% in 1H16). However, the EBITDA margin was 8.7% in 1H16 and has declined steadily from 7.1% in 2012. Management attributed the margin pressure to intense competition in the sector.
- **Vertical integration.** In the past few years, Mengniu has expanded upstream into dairy farms and downstream into distribution networks. Upstream, it acquired a 25.4% stake in China Modern Dairy (CMD), which accounts for c.15% of Mengniu's raw milk supply. In January 2017, Mengniu agreed to buy an additional 16.7% stake in CMD. This would raise its interest to 39.9%, and triggered a mandatory general offer for CMD. Downstream, Mengniu has expanded its distribution channels by co-investing in key distributors and establishing direct sales points. On the other hand, execution risks are present for M&A, as highlighted by the integration between Mengniu and Yashili, which took more than two years to finalize.

LTM 1H16 revenue by operation



Source: Company reports

Mengniu's market share in 1H16



Source: Company reports

China Merchants Port Holdings

Analyst
Justin Ong

Company description: China Merchants Port Holdings (CMPH, Baa1 Neg/BBB+ Neg) is the largest port operator in China. The company is also involved in: 1) the operation of bonded logistics parks (facilities outside ports where e-commerce companies store imported goods without paying customs duties); and 2) container manufacturing operations through its associate China International Marine Containers (25.24% stake), the largest container manufacturer in the world and the largest road transportation vehicle manufacturer in China. CMPH has a presence in seven of the top 10 container ports in China and Hong Kong, and handles approximately one-third of the total market share of China's container throughput. The company's port operations are located in Hong Kong and Shenzhen (Pearl River Delta), Ningbo and Shanghai (Yangtze River Delta), Qingdao, Tianjin and Dalian (Bohai Coastal area), Zhangzhou (Xiamen Bay Economic Zone), and Zhanjiang (Guangdong Province). The company is also increasing its international presence by acquiring interests in ports; namely, Tin Can Island Container Terminal in Nigeria, the South Container Terminal in Sri Lanka, Port de Djibouti in Djibouti City, the Lomé Container Terminal in Togo, and Terminal Link (involved in container and bulk cargo business situated along major international sea-lanes across eight countries in four continents). For the 11 months to November 2016, CMPH handled c.87.7mn TEUs (up 14.8% y/y) and c.416.7mn tonnes of bulk cargo (up 29.6% y/y). The bonded logistics facilities are located in Shenzhen, Qingdao and Tianjin. The company is majority owned by Central SASAC through China Merchants Group (54.2%).

CMHI Bonds (Baa1/BBB+)

Bonds	Amount (mn)	Issuer	Offshore guarantor
CMHI 3.5% $'20s	200	China Merchants Finance Co Ltd	China Merchants Port Holdings Co Ltd
CMHI 5% $'22s	500		
CMHI 4.75% $'25s	500		

Financial snapshot

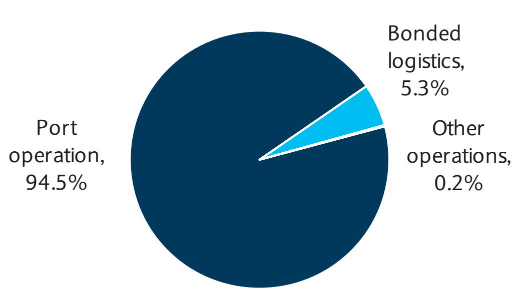
HKD mn	LTM 1H16	2015	2014
Revenue	8,000	8,233	8,257
Gross Profit	6,331	6,522	14,481
Gross Margin	79.1%	79.2%	175.4%
EBITDA	3,856	4,034	3,764
EBITDA Margin	48.2%	49.0%	45.6%
Total Debt	22,543	19,145	19,971
Net Debt	17,280	8,852	10,470
Credit Metrics			
Total Debt/EBITDA	5.8x	4.7x	5.3x
Net Debt/EBITDA	4.5x	2.2x	2.8x
EBITDA/Interest	4.1x	4.4x	3.1x
Debt/capital	23.3%	20.0%	21.0%
Revenue by geography	**LTM 1H16**	**2015**	**2014**
China, Hong Kong & Taiwan	86%	88%	96%
International	14%	12%	4%

Source: Company reports

Business highlights

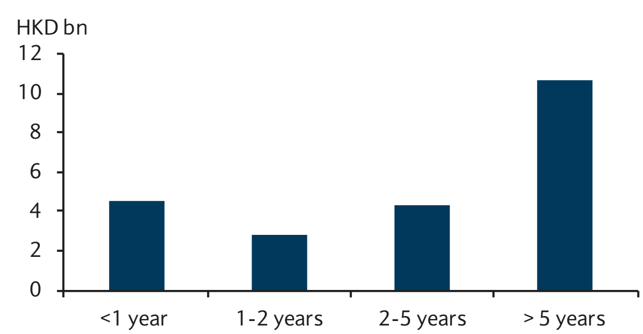
- **Growing international business.** The contribution from outside China and Hong Kong increased to 15.0% of total revenue in 1H16 (including share of revenue from joint ventures and associates) from 2.5% in 2012. International container throughput increased 6.6% y/y to 8.5mn TEUs in 1H16.
- **Container volumes.** Container volume growth for the 11 months to November 2016 was 14.8% y/y, compared with 3.5% for full-year 2015. CMPH's volume of container throughput increased by a CAGR of 7.4% during FY13-November 16. However, CMPH's cargo container sales volumes declined to 0.26mn TEUs in 1H16 (down 68.3% y/y).
- **Profitability of core business.** CMPH's core port operating business reported EBITDA margins of 51.2%, 49.3% and 43.5% in FY14, FY15 and 1H16, respectively.
- **Free trade zone.** CMPH's Shenzhen bonded logistics facility has been included in the Guangdong Free Trade Zone, which will benefit from initiatives to promote foreign trade. The operating contracts of international port operations are long term in nature, ranging from 11 to 35 years.
- **Financial support from parent.** CMPH received USD1.0bn loans from China Merchants Group (CMG) at favorable rates. Subsidiaries also receive loans from CMG at lower than market rates. CMG was the underwriter of mandatory convertible shares of c.HKD15bn issued by CMPH in 2014.
- **Not all planned overseas acquisitions going smoothly:** In mid-February 2017, CMPH said that the planned acquisition of an 80% stake in Sri Lanka's Hambantota deep sea port under a 99-year lease for c.USD1.1bn will be delayed until May 2017. The deal, which was announced in December 2016 between China's Ministry of Development Strategies and International Trade and the Sri Lankan government, has faced strong opposition from local unions.

LTM 1H16 revenue by segment



Source: Company reports

Debt maturity profile at end-1H16



Source: Company reports

China Overseas Land & Investment

Analyst
Eugene Tham

Company description: China Overseas Land & Investment (COLI) is one of the top 10 property developers in China by contracted sales (HKD210.6bn from sales area of 13.0mn sqm in 2016). Its stock market capitalization was HKD263bn as of 27 February 2017. The central SASAC effectively owns 34.4% of COLI through China State Construction Engineering Corp (CSCEC). CSCEC holds 56.26% of China State Construction Engineering Corp Ltd (CSCECL), which, through 100%-owned China Overseas Holding Ltd, holds 61.18% of COLI. At June 2016, COLI had an attributable land bank of 34.3mn sqm (excluding any attributable interest in China Overseas Grand Oceans Group's (COGO) attributable land bank of 8.9mmn sqm, as well as the attributable land bank acquired from CITIC Ltd in September 2016) across 35 cities including Hong Kong and Macau. COLI focuses on Tier 1 and 2 cities in China and through 38%-owned associate COGO has a presence in lower-tier cities.

COLI public USD bonds (Baa1/BBB+/A- Stb)

Bonds	Amt (mn)	Issuer	Offshore guarantor
CHIOLI 5.5% $ '20s	1,000	China Overseas Finance Cayman II	China Overseas Land & Investment Ltd
CHIOLI 3.375% $ '18s	500	China Overseas Finance Cayman III	
CHIOLI 5.375% $ '23s	500		
CHIOLI 6.375% $ '43s	500		
CHIOLI 3.95% $ '22s	700	China Overseas Finance Cayman V	
CHIOLI 5.35% $ '42s	300		
CHIOLI 4.25% $ '19s	800	China Overseas Finance Cayman VI	
CHIOLI 5.95% $ '24s	700		
CHIOLI 1.75% € '19s	600	China Overseas Land International Cayman Ltd	

Financial snapshot

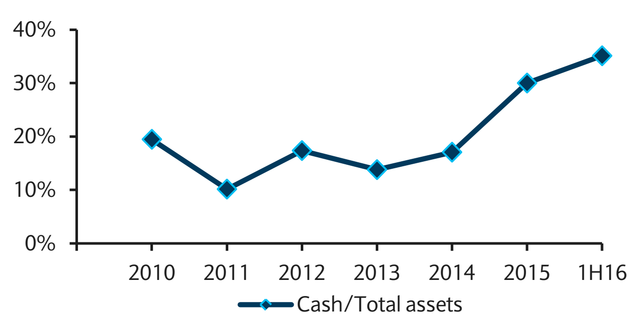
HKD mn	2015	2014	2013
Revenue	148,074	119,997	82,469
Gross Profit	42,312	39,238	26,822
Gross Profit Margin	28.6%	32.7%	32.5%
EBITDA	38,186	35,783	24,114
EBITDA Margin	25.8%	29.8%	29.2%
Total Debt	115,456	97,358	72,700
Net Debt	13,011	37,510	31,824
Credit Metrics			
Total Debt/EBITDA	3.0x	2.7x	3.0x
Net Debt/EBITDA	0.3x	1.0x	1.3x
EBITDA/Interest	8.3x	9.7x	10.1x
Total Debt/Capital	37.0%	41.3%	39.6%
Revenue by segment	**2015**	**2014**	**2013**
Property development	97.0%	96.8%	95.3%
Property investments	1.3%	1.2%	1.0%
Others	1.7%	2.1%	3.6%

Source: Company reports, Barclays Research

Business highlights

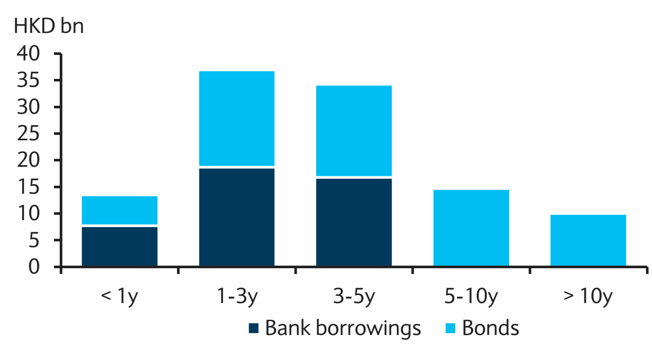
- **Geographically diversified.** COLI is one of China's 10 largest developers, with properties across 33 cities, including Hong Kong and Macau. The bulk of COLI's standalone property portfolio is in Tier 2 cities: Jinan/Zibo (15.1%), Shenyang (12.0%), and Chongqing (8.5%) are the largest on an attributable GFA basis. On the other hand, most of COGO's property portfolio is located in Tier 3 cities.
- **Acquisition of CITIC's residential property business increases scale.** In March 2016, COLI agreed to buy CITIC Ltd's residential property development projects in China in exchange for 10% of the enlarged share capital and some commercial property assets. COLI completed the purchase in September 2016. This transaction helped COLI to acquire a land bank of gross floor area (GFA) of 23.5mn sqm across 25 cities. The cost of the acquired land bank is c.CNY3,550/sqm.
- **Contracted sales:** 2016 contracted sales rose 16.6% y/y to HKD210.6bn, matching its revised full-year guidance, which was raised to HKD210bn from HKD185bn.
- **Liquidity profile.** As of end-June 2016 – before the acquisition of CITIC Ltd's property portfolio – COLI had a net cash position (cash of HKD118bn versus total debt of HKD109.3bn). Cash has amounted to more than 10% of total assets in each of the past five years.
- **Credit metrics.** Over the past five years, credit metrics have been stable even though debt has doubled. COLI benefits from good access to financing, according to Moody's, and is the only HG Chinese developer with 30y bonds outstanding. Its average funding cost of 3.97% is one of the lowest among HG Chinese developers., according to S&P.
- **Limited business diversification.** Non-property development revenue, which includes rental income, revenue from property management and design consultancy services, contributed just 1.7% to total 1H16 revenue (1H15: 3.6%).

COLI's liquidity position (up to end-June 2016)



Note: Excludes restricted deposits. Source: Company reports, Barclays Research

Debt maturity profile at end-1H16



Source: Company reports, Barclays Research

China Resources Gas

Analyst
Justin Ong

Company description: China Resources Gas (CR Gas, Baa1/BBB+/BBB+ Stb) is one of the largest city gas distributors in China. The company is principally involved in piped natural gas sales to commercial and residential properties and construction and operation of gas pipeline networks. The company is also involved in the construction and operation of CNG and LNG refueling stations for vehicles and the sale of gas appliances. As of 1H16, CR Gas operated in 224 projects in 22 provinces of China including 13 provincial capitals and three direct administrative municipalities. The company's pipeline network spans 123,066 km. Its customer base consists of 182,676 commercial/industrial units (accounting for 61.1% of the 8.3bcm, billion cubic meters of gas sold in 1H16), c.24.8mn residential customers (28.8%) and 329 refueling stations, including 221 CNG, 71 LNG and 37 liquefied CNG stations (12.4%). CR Gas is majority owned by Central SASAC (63.95%) through its wholly owned subsidiary China Resources Holding (CRH). CRH is one of the largest conglomerates with operations in retail, power utility, real estate, cement, city-gas and pharmaceutical businesses.

CHIRES bonds (Baa1/NR/BBB+)

Bonds	Amount (mn)	Issuer	Offshore guarantor
CHIRES 4.5% $'22s	750	China Resources Gas Group Ltd (Bermuda)	NA

Note: S&P assigned the BBB+ issuer rating to China Resources Gas in July 2015. The CHIRES bond, issued in 2012, is only rated by Moody's and Fitch.

Financial snapshot

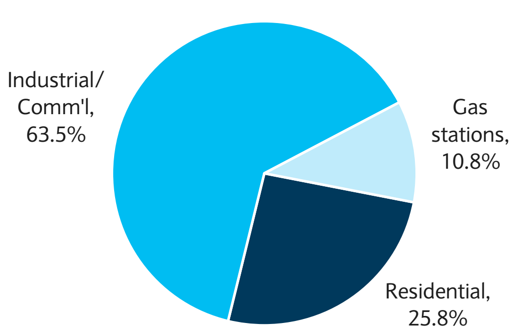
HKD mn	LTM 1H16	2015	2014
Revenue	30,911	31,096	28,717
Gross Profit	10,610	9,789	8,716
Gross Profit Margin	34.3%	31.5%	30.4%
EBITDA	6,570	5,813	5,385
EBITDA Margin	21.3%	18.7%	18.8%
Total Debt	14,816	14,899	14,929
Net Debt	8,502	4,148	5,222
Credit Metrics			
Total Debt/EBITDA	2.3x	2.6x	2.8x
Net Debt/EBITDA	1.3x	0.7x	1.0x
EBITDA/Interest	13.1x	10.7x	10.0x
Debt/capital	38.3%	39.9%	41.5%
Gross profit margin by operations	**1H16**	**2015**	**2014**
Gas sales	28.4%	23.7%	22.2%
Connection fee	64.9%	58.9%	59.8%

Source: Company reports, Barclays Research

Business highlights

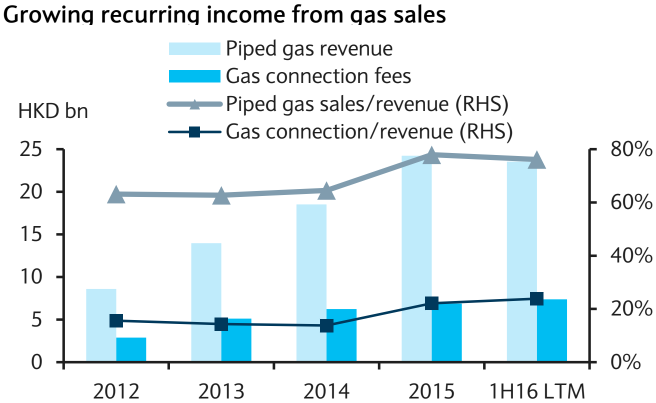
- **Long-term exclusive contracts with local governments for piped gas operations.** CR Gas enters into long-term contracts ranging from 20 to 30 years with local governments to operate piped gas businesses within a city or a particular area. The contracts are exclusive in nature, which implies that the company faces little or no competition in the areas where it supplies piped gas.
- **Geographical diversification mitigates regional policy risks.** CR Gas operates in 22 provinces across China. Most projects are on the developed eastern coast, in densely populated provincial capitals or in areas where there are existing or potential piped natural gas supplies. This geographical spread mitigates regional policy and political risks and lowers procurement costs.
- **Reduction in natural gas prices supports volumes.** Following the reduction in benchmark city gate natural gas prices (in Apr and Nov 2015), CR Gas' sales volumes rose by 15.3% y/y in 1H16, to 8.3bcm, above the industry growth rate of 9.8%.
- **Transmission pipelines – gas tariff reform.** In October 2016, the National Development & Reform Commission (NDRC) announced that the investment yield in natural gas pipelines would be reduced to 8%, from 10-12%, effective January 2017. This would also lower natural gas prices and, if the cost reduction is passed through to end-users, natural gas consumption could grow further.
- **Significant exposure to commercial and industrial (C&I)** customers allows timely pass-through of any increase in upstream gas costs to end-users. Almost two-thirds of CR Gas's gas volumes are sold to the C&I segment, in which CR Gas has the flexibility to quickly adjust gas prices. For the residential segment (c.26% of gas volumes), any cost pass-through is subject to a public-hearing process, which can result in a time lag of 6-12 months.
- **Continued benefit of higher margins from residential customers.** As of 1H16, CR Gas had adopted the three-tiered progressive gas tariff system for 67% of its residential customers. Management's stated intention is to include all residential customers in the step-pricing system by end-2016 (users with high volume gas consumption pay higher unit gas prices), which we think should result in stronger margins from residential customers in the coming years. The dollar margin of residential customers increased by CNY0.11/m^3 y/y to CNY0.42/m^3 in 1H16. In contrast, we think the high-margin connection fee income (c.44% of 1H16 operating income) could grow more slowly, in line with any slowdown in new property development.

1H16 LTM gas volume by customer



Source: Company reports, Barclays Research

Growing recurring income from gas sales



Source: Company reports, Barclays Research

China State Construction International

Analyst
Justin Ong

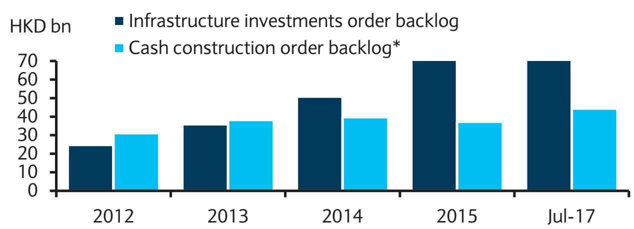
Company description: China State Construction International (CSCI, Baa2/BBB/BBB+ Stb) is one of the largest construction companies in Hong Kong and Macau, with a growing presence in China since 2007, along with limited overseas businesses. The company is primarily involved in: 1) building construction and civil engineering works in Hong Kong and Macau; 2) affordable housing and infrastructure, especially BT (Build-Transfer) and BOT (build-operate-transfer) projects in China; and 3) the "facade" contracting business through its subsidiary Far East Global (FEG) Group. Of the LTM 1H16 total revenue HKD39.7bn, the company generated 39.9% in Hong Kong, 36.3%in China and 19.1% in Macau, with FEG contributing 4.7%. CSCI is 62.1% owned by China Overseas Holdings Limited (COHL), which in turn, is wholly owned by China State Construction Engineering Corp Ltd (CSCECL), a central SASAC SOE and the largest construction company in China.

CHCONS/CHSCOI bonds

Bonds	Amount (mn)	Issuer	Guarantor
CHSCOI 3.125% $'18s (Baa2/BBB/BBB+)	500	China State Construction Finance Cayman I Ltd	China State Construction International Holdings (offshore)
CHCONS 2.95% $'20s (A2/A/A)	500	CSCEC Finance Cayman I Ltd	China State Construction Engineering Corp Ltd (onshore)
CHCONS 2.25% $'19s (A2/A/A)	500	CSCEC Finance Cayman II Ltd	

Financial snapshot of CSCI

HKD mn	LTM 1H16	2015	2014
Revenue	39,741	37,913	34,440
Gross Profit	4,791	5,030	4,743
Gross Profit Margin	12.1%	13.3%	13.8%
EBITDA	3,982	4,375	4,030
EBITDA Margin	10.0%	11.5%	11.7%
Total Debt	19,768	17,777	14,823
Net Debt	5,672	9,751	7,371
Credit Metrics			
Total Debt/EBITDA	5.0x	4.1x	3.7x
Net Debt/EBITDA	1.4x	2.2x	1.8x
EBITDA/Interest	6.2x	7.1x	4.6x
Debt/capital	44.2%	43.3%	42.6%
Gross profit by geography	**LTM 1H16**	**2015**	**2014**
Hong Kong	16.9%	19.0%	21.3%
China	69.1%	72.3%	75.4%
Macau	10.3%	5.3%	2.0%
Overseas	-0.3%	-0.3%	-0.6%
Far East Global	4.0%	3.7%	1.9%

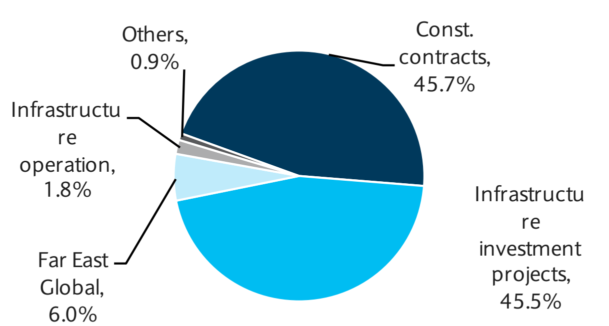


* Orders where payments are received on a regular basis based on value of the work done. Source: Company reports

Business highlights

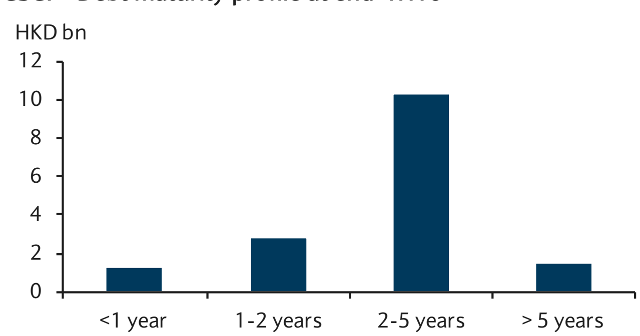
- **Order value.** Between 2012 and July 2016, aggregate and new contracts increased by CAGRs of 31.1% and 23.4%, respectively, to HKD245.2bn and HKD76.3bn. The aggregate contracts/ revenue ratio increased from 4.2x in 2012 to 6.2x as of July 2016, while the new contracts/revenue ratio rose marginally to 1.9x in LTM 1H16 (FY12:1.7x). Due to improvements in the Public-Private Partnerships (PPP) platform in China, CSCI revised its new contract target for 2016 to HKD83bn (from previous guidance of HKD78bn), of which 59.3% had been achieved at by- July 2016.
- **Order backlog of HKD42.3bn as of July 2016** (28.5% of total order book of HKD148.3bn) from Hong Kong and Macau, remain strong despite being lower 1.9% y/y. Most projects in Hong Kong and Macau are normally paid upfront to CSCI by its customers, which generate stable cash flow.
- **Around 83% of CSCI's customers include the Government of Hong Kong and local governments** in China with strong financial profiles. This lowers the risk of payment uncertainties normally associated with private developers.
- **Debt maturity and liquidity profile.** As of 1H16, CSCI reported a cash balance of HKD14.1bn versus short-term debt of HKD1.3bn. Additionally, undrawn credit facilities amounted to HKD18.9bn.
- **Limited deleveraging due to more infrastructure investment projects,** which require upfront investment by CSCI. Infrastructure projects (including affordable housing) tend to be on a BT/BOT basis and are mainly located in China. Since 67.2% of the order backlog as of July 2016 relates to work in China, investment in infrastructure projects is likely to remain at an elevated level in the future. However, contracts include provisions that require fund allocations (to buyback properties upon completion by CSCI) in local governments' fiscal budgets. During 1H16, CSCI received buy-backs of c.HKD8.1bn (nearly 3x times that of 1H15), which improved its FCF.
- **CSCECL, the parent of CSCI.** The CHCONS $'20s, issued in November 2015, is guaranteed by CSCECL. The CHCONS $'20s (A2/A/A) is higher rated than CHCONS $'18s given the strategic importance and large scale of CSCECL as the nation's largest construction company. CSCECL is 56.26% owned by CSCEC (China State Construction Engineering Corporation), which is 100% owned by the Central SASAC.

CSCI – 1H16 LTM revenue by business activity



Source: Company reports

CSCI – Debt maturity profile at end-1H16



Source: Company reports

China Travel Service (Holdings) Hong Kong

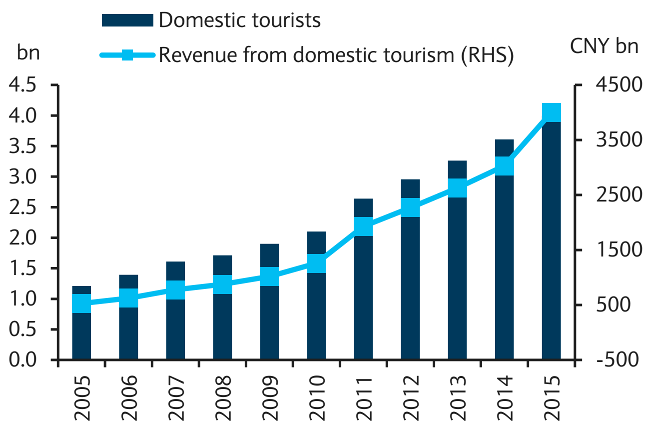
Analyst
Justin Ong

Company description: China Travel Service (Holdings) Hong Kong (CTS, Baa3/BBB+ Stb) is one of the largest travel agency groups in China with additional business interests in real estate and logistics. The company's core travel and tourism business consists of six divisions: 1) tourist attraction services; 2) travel agency & travel document services; 3) hotel operations; 4) passenger transportation; 5) golf club operations; and 6) performing arts. CTS operates five hotels in Hong Kong and Macau, and two hotels in mainland China under the "Metropark" brand. It is also developing 14 real estate projects across 11 cities in the Bohai-Rim, Yangzi River Delta and the southern region of China, according to the company. CTS is wholly owned by the central SASAC through China National Travel Service (HK) Group Corporation.

CHITRA bonds (Baa3/BBB+/NR)

Bonds	Amount (mn)	Issuer	Offshore guarantor
CHITRA 3.875% $'19s	300	King Power Capital Ltd	China Travel Service Holdings Hong Kong
CHITRA 5.625% $'24s	700		

Growth in domestic tourism



Source: Company reports

Business highlights

- **Strategic government asset.** CTS is the sole agency in Hong Kong authorized by the Chinese government to provide mainland China travel permits (Home Return Permits) for Chinese citizens residing in Hong Kong and Macau. This service is critical to ensure sovereign unity under the "One country, two systems" structure. The company is also the only agency authorized to issue mainland travel permits for Taiwan residents (Taiwan Compatriot Pass).
- **Strong growth in tourism, especially domestic.** Domestic tourism in China has increased by a CAGR of 12.7% during the past 11 years, from 1.2bn tourists in 2005 to 4.0bn in 2015. Revenue from domestic tourism has also increased significantly, from CNY529bn in 2005 to CNY4.0tn in 2015 (CAGR of 22.4%).
- **Market leader in fragmented travel industry and controls popular theme parks.** The company owns majority stakes in three of the most popular theme parks in China, Splendid China Miniature Scenic Spot, China Folk Cultural Villages, and the Window of the World.
- **Disposal of China Guofeng.** CTS's previous iron and steel business (China Guofeng) was cyclical in nature, which led to volatility in earnings. In 2015, CTS transferred its 58.5% stake in China Guofeng to SASAC of Hebei Province. Following this disinvestment, CTS's overall revenue declined 43.7% y/y to CNY25.1bn in 2015, but earnings stabilized.
- **Revenue and margins from property.** CTS reported contracted sales of CNY3.5bn with 10 available for sale projects in 1H16, compared with CNY6.3bn and 10 available for sale projects in 2015, and CNY803mn with 8 projects in 2014. Gross margin from real estate improved to 31.6% in 2015 (2014: 20.2%).
- **Merger between parent, China National Travel Service (CNTS), and China International Travel Service Group (CITS).** In July 2016, SASAC approved a merger between CITS and CNTS. Moody's said this was credit positive for CTS as improved efficiency and a stronger competitive position of the combined entity translates to stronger support to CTS. In October 2016, S&P upgraded CTS by a notch to BBB+ to reflect the scope for improved financial profile following the merger.
- **Leverage.** CTS's debt/EBITDA ratio increased to 6.9x in 2015 following the sale of the steel business (2014: 6.3x).

CITIC Ltd

Analyst
Eugene Tham

Company description: CITIC Ltd is a large diversified conglomerate in China, with leading positions across multiple industries. Within the financial division, CITIC is involved in banking, securities, trust and insurance services. The non-financial operations are divided into the following segments: 1) Resources and energy – which includes oil, coal, aluminum, iron ore; manganese, trading; 2) Manufacturing – includes special steel, heavy machinery, aluminum wheel and casting; 3) Engineering contracting – infrastructure contracting, housing and industrial construction; 4) Real estate and infrastructure – real estate development and infrastructure construction, operation and investment; and 5) Other – IT, distribution, general aviation, publishing, outsourcing, tourism, and a football club. The financial services segment, which mainly comprises CITIC Bank, is the biggest contributor to revenue (53% of total in 1H16) and profit before tax (85%). CITIC Ltd's largest shareholder is CITIC Group (a wholly owned SOE of the central SASAC), which owns a 58.1% stake, followed by CT Bright (20%) and the rest is free float. CT Bright is joint venture between Charoen Pokphand Group (CPG) of Thailand and ITOCHU Corporation of Japan. CPG group is a conglomerate, involved in agro-industrial, retail and telecommunications business with a pan Asia presence. ITOCHU is one of the largest commodity trading companies in the world.

CITLTD bonds

Bonds	Amount (mn)	Issuer
CITLTD 6.875% $ '18s	1100	CITIC Ltd
CITLTD 6.375% $ '20s	500	
CITLTD 6.625% $ '21s	750	
CITLTD 2.8% $'21s	500	
CITLTD 3.125% $'22s	500	
CITLTD 6.8% $ '23s	1400	
CITLTD 3.7% $'26s	750	
CITLTD 3.875% $'27s	750	
CITLTD 8.625% $ perp	1000	

Senior unsecured CITLTD bonds are rated A3/A-. CITLTD perps do not have bond ratings.

Financial snapshot

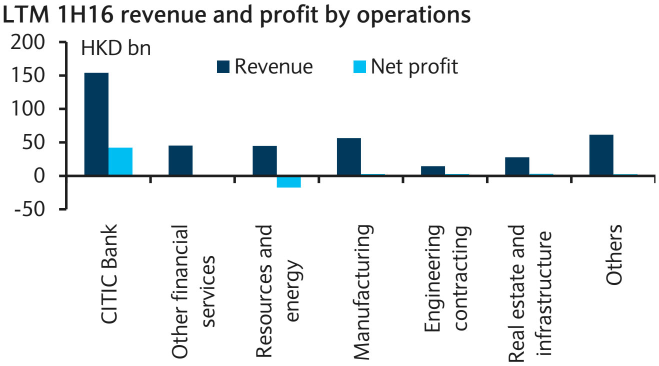
HKD mn	LTM 1H16	2015	2014
Revenue	404,225	416,813	402,124
Gross Profit	234,564	241,890	203,667
Gross Profit Margin	58.0%	58.0%	50.6%
EBITDA	101,011	112,739	98,967
EBITDA Margin	25.0%	27.0%	24.6%
Total Debt	727,756	610,829	505,953
Credit Metrics			
Total Debt/EBITDA	7.2x	5.4x	5.1x
EBITDA/Interest	6.4x	6.3x	5.5x
Debt/capital	52.9%	48.5%	47.4%

Note: CITLTD perps are accounted for as 100% debt.

Business highlights

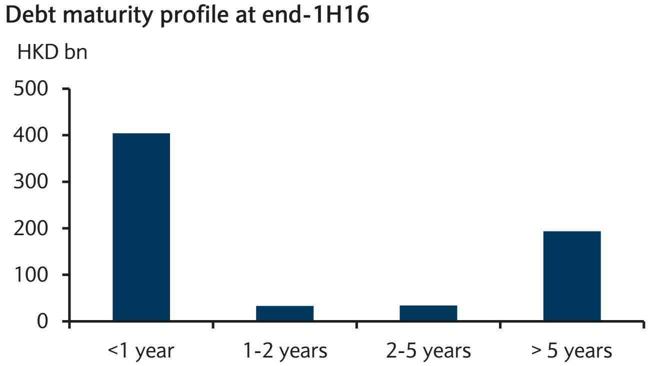
- **Strategic importance to the SASAC.** CITIC Ltd's importance to the Chinese government was highlighted by its role as a pioneer for the SOE reform agenda with the CITIC Group's restructuring. CITIC Ltd accounted for more than 95% of CITIC Group's assets in 2015. CITIC Bank (65.18% owned by CITIC Ltd) is one of the 10 largest commercial banks in China by assets as of 1H16. CITIC Securities and CITIC Trust are the largest investment bank and trust company in China, respectively, by total assets. CITIC has also made overseas acquisitions, such as the purchase of the Sino Iron project in Australia in 2006 and KSM Castings (a leading European powertrain segment supplier) in 2011, as well as interests in projects such as the Las Bambas copper mine in Peru (minority stake).
- **Diversified profile reduces sector specific risks.** Almost all of CITIC's non financial businesses are under pressure due to low oil prices, subdued demand for steel products and heavy machinery equipment amid the slowing economy, and oversupply in certain sectors. However, this weakness has been mitigated by earnings growth from CITIC Bank, primarily driven by fees and commission income.
- **Banking system key to watch in year of political transition.** The financial unit remains the key earnings contributor; while we think rising yields are positive for net interest margins and should support profit growth, we maintain a negative view on the outlook for asset quality. We expect asset quality pressure to continue as the government targets capacity cuts in oversupplied sectors. However, with 2017 being a year of key appointment changes, social and economic stability will likely be prioritized, in our view.
- **Resources rebound positive, but demand recovery remains fragile.** We think higher resources prices since early 2016 should have benefitted CITIC, and, on the demand side, although still fragile, the Chinese economy appears to have stabilized, with industrial production and fixed asset investment numbers picking up marginally in 2H16. Early signs continue to suggest slowing activity in both property investment growth and floor space starts, which may be a downside risk for resources-related companies.

LTM 1H16 revenue and profit by operations



Source: Company reports

Debt maturity profile at end-1H16



Source: Company reports

COFCO Corp/COFCO Hong Kong Ltd

Analyst
Eugene Tham

Company description: COFCO Corp is an integrated agri-food company and is one of the largest diversified products and services suppliers in the agribusiness and food industry in China (2015 revenue: CNY401bn). Through its wholly owned largest subsidiary, COFCO (Hong Kong), COFCO Corp is involved in: 1) Agricultural products (through China Agri) – oilseeds processing, biochemical and biofuel, rice processing and trading, wheat processing, and brewing; 2) Branded consumer products (China Foods) – core products include wine, beverages, kitchen foods and confectionery, and bottling and distribution of Coca-Cola beverages in certain regions of China; 3) Packaging products (CPMC Holdings) – mainly engaged in the manufacturing of packaging products for consumer goods, such as food, beverages and household chemical products; 4) Real Estate (COFCO Property) –property development, property investment leasing and hotel operations mainly in Tier 1 and Tier 2 cities; and, 5) Others – includes dairy products, meat, e-commerce and other business lines. COFCO Corp is wholly owned by the central SASAC.

COFCO bonds (A3/BBB+/A-)

Bonds	Amount (mn)	Issuer	Offshore guarantor
COFCO 3% $'18s	500	Prosperous Ray Limited (BVI)	COFCO (Hong Kong) Limited
COFCO 4.625% $'23s	500		

- **Acquisition of the "2Ns"** – The acquisitions of Nidera and Noble Agri (2Ns, the largest overseas acquisitions in the Chinese food sector) gave COFCO access to some of the world's top grain and vegetable oil producing regions, including Brazil, Argentina, Indonesia and the Black Sea area. This further diversifies China's grain-importing channels and reduces dependence on the Big 4 global agricultural traders, which include ADM and Cargill.
- **High leverage following acquisitions**. Rating agencies have taken negative actions following the acquisitions – Moody's moved the Outlook to Negative after a Review for Downgrade, while S&P downgraded the rating by one notch. Leverage remains high – Moody's estimate of COFCO HK's annualized 1H16 net debt/EBITDA was 8.2x, above the downgrade trigger of 6.5x, but the agency expects the company to take deleveraging measures to improve the credit profile.

Business highlights

- **Key asset of the Central SASAC.** COFCO Corp is the biggest food and agricultural product supplier in China by revenue. The company plays a strategic role in national food safety, and is also central to the import and export of bulk agricultural products in China. S&P expects COFCO Corp to continue to receive government subsidies to support profitability and bank funding to manage refinancing.
- **Diversified business lines.** China Agri is one of the largest edible oil, oilseed meal, corn processors, suppliers of packaged rice, rice exporter and importer, and wheat processors in China. According to the company, China Foods' domestic wine brand, Greatwall, is the largest in terms of market share, while CPMC is the largest manufacturer of metal-based packaging materials.
- **COFCO Corp's support for COFCO HK.** COFCO Corp injected key acquired assets such as Noble Agri and Nidera (the "2Ns") into COFCO HK. In 2014, COFCO Corp also injected a portfolio of mixed-use complexes and commercial properties (located in major Chinese cities) into Joy City, the property subsidiary of COFCO HK. Moody's estimates that COFCO HK accounted for ~74% of COFCO Corp's revenue and 60% of assets in 2015. Additionally, COFCO Corp has a record of providing financial support to COFCO HK: a HKD12.3bn perpetual loan and capital injections of ~HKD24bn as of FY14.

ENN Energy Holdings

Analyst
Justin Ong

Company description: ENN Energy (Baa3 Pos/BBB/BBB Stb) is one of the largest privately owned piped gas operators in China. The company is principally involved in the supply of piped gas to residential and commercial customers, construction and management of LPG pipeline infrastructure, and LPG and CNG vehicle/ship refueling in China. ENN Energy operates in 146 cities, with 158 projects. As of 1H16, the company's pipeline network spanned 31,204 km. The customer base for piped natural gas consisted of 61,688 commercial/industrial units (accounting for 57.8% of the volume of natural gas sold of 6.5bcm in 1H16) and c.13.2mn residential customers (14.7%). ENN Energy had 587 vehicle refueling stations and 161 natural gas processing plants as of 1H16. The company is also involved in the wholesale of natural gas, sales of bottled gas, and sales of gas appliances such as stoves, water heaters, chimney hoods, heaters and sterilization cabinets. ENN Energy supplies wholesale gas mainly to refueling stations operated by Sinopec in Zhejiang, Guangdong and Guangxi provinces, and to customers who are not yet served by pipeline supplies of natural gas. Chairman Wang Yusuo is ENN Energy's largest shareholder with a 30.4% stake.

XINAOG bonds (Baa3/BBB/BBB)

Bonds	Amount (mn)	Issuer	Offshore guarantor
XINAOG 6% $'21s	365.5	ENN Energy Holdings Ltd	NA

In December 2016, ENN Energy bought back USD349mn of its XINAOG $'21s.

Financial snapshot

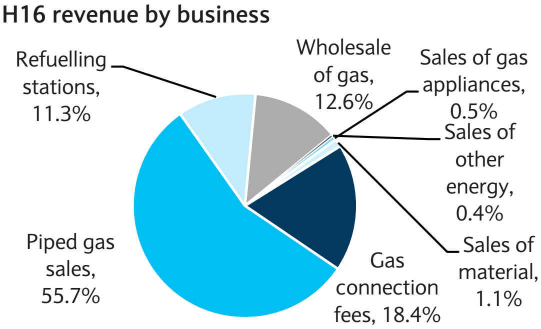
CNY mn	LTM 1H16	2015	2014
Revenue	31,815	32,063	29,087
Gross Profit	7,355	6,866	6,069
Gross Profit Margin	23.1%	21.4%	20.9%
EBITDA	5,655	5,226	4,574
EBITDA Margin	17.8%	16.3%	15.7%
Total Debt	10,199	15,680	14,543
Net Debt	4,795	8,325	4,040
Credit Metrics			
Total Debt/EBITDA	1.8x	3.0x	3.2x
Net Debt/EBITDA	0.8x	1.6x	0.9x
EBITDA/Interest	8.9x	8.7x	9.1x
Debt/capital	37.4%	49.3%	50.0%
Gross profit margin by operations	**LTM 1H16**	**2015**	**2014**
Gas connection fees	64.5%	62.9%	63.1%
Piped gas sales	17.3%	15.3%	15.2%
Refueling stations	9.7%	10.2%	13.5%
Wholesale of gas	1.3%	1.0%	1.6%
Sales of other energy	18.1%	19.3%	1.9%
Sales of gas appliances	35.7%	39.9%	40.0%
Sales of material	8.6%	11.6%	9.7%

Source: Company reports

Business highlights

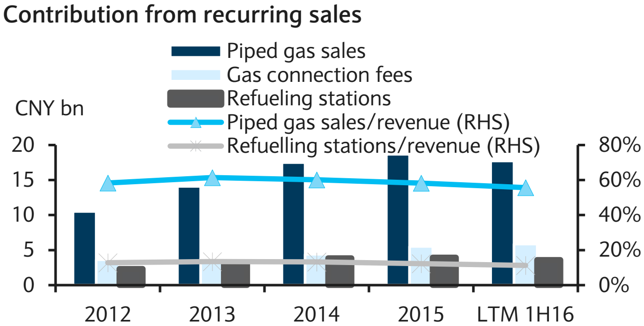
- **Long-term exclusive contracts with local governments for piped gas operations.** ENN Energy enters into long-term contracts (25-30 years) with local governments to operate a piped gas business. The contracts are exclusive, which means the company faces little or no competition in cities where it supplies piped gas.
- **Lower recurring revenue from natural gas offset by rising gas connection fees.** Recurring revenue from natural gas declined to 55.7% of the total for LTM 1H16 (2015: 58.3%; 2014: 60.1%). This was mainly due to lower gas prices despite higher volume sales. However, the decline was more than offset by higher gas connection fees due to increasing demand. Although gas connections fees are non-recurring, they generate higher margins than gas sales.
- **Gas volumes.** ENN Energy's wholesale gas volume increased to 1.0bcm in 1H16 (up 95.9% y/y), driven by sales to customers who are yet to be covered by natural gas networks, as well as by LNG distribution services to Sinopec and CNOOC from its LNG terminals. ENN's total sales volume increased by 17.0% y/y to 6.5bn m^3, above the industry growth rate of 9.8%. Given the government's intention to support natural gas consumption, lower gas prices, current modest penetration rates, and management's intention improve the wholesale business, we expect natural gas sales to continue to increase.
- **Lower gas transportation cost to boost gas volumes further, and positively impact margins.** In October 2016, the National Development & Reform Commission (NDRC) announced that the investment yield in natural gas pipelines would be reduced to 8%, from 10-12%, effective January 2017. The NDRC plans to adjust the transportation cost every three years. This reduction would lower the cost of transporting natural gas, which in turn should boost demand. We expect ENN Energy to benefit not only from higher gas sales but also from increasing connection fees resulting from new connections. Connection fees generate higher margins, and we therefore expect ENN Energy's operating margins to continue to improve this year.
- **Higher margins from residential customers.** As of 1H16, ENN Energy had adopted the three-tiered progressive gas tariff system for c.66% of its residential customers. We expect margins from residential customers to improve in the coming years as the company implements this tier-pricing mechanism for its remaining projects.

LTM 1H16 revenue by business



Source: Company reports

Contribution from recurring sales



Source: Company reports

Kunlun Energy

Analyst
Justin Ong

Company description: Kunlun Energy (A1 Neg/A+ Neg/A Stb) is one of the largest integrated natural gas companies in China and the largest LNG supplier to vehicles and end-users. The company is PetroChina's flagship platform for its downstream natural gas business. Kunlun is primarily involved in natural gas transmission and sales, LNG processing, LNG terminals, and exploration & production. As of 1H16, the company operates in 31 provinces, autonomous regions all across China. Kunlun has city gas network of over 27,000km and branch pipeline over 2,700km, serving over 7mn accumulative users through 1,500 LNG/CNG filling stations. In 1H16, it sold more than 16,000 mcm (million cubic meters) of natural gas and 6.3mt of LPG. Kunlun Energy is involved in eight E&P projects in six countries. PetroChina owns 58.4% of Kunlun Energy and CNPC (the major shareholder of PetroChina) directly owns 3.4%.

KUNLEG bonds (A1/A+/A)

Bonds	Amount (mn)	Issuer	Offshore guarantor
KUNLEG 2.875% $'20s	500	Kunlun Energy Company Limited	NA
KUNLEG 3.75% $'25s	500		

Financial snapshot

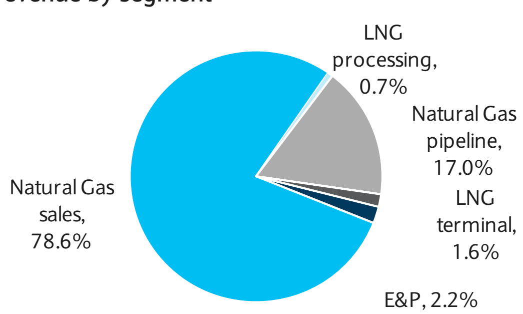
HKD mn	1H16	1H15	2015
Revenue	39,892	49,289	N.C.
EBITDA	8,636	9,481	N.C.
EBITDA Margin	21.6%	19.2%	N.C.
Total Debt	26,115	N.C.	25,264
Net Debt	6,425	N.C.	8,119
Credit Metrics			
Debt/Equity	35.8%	N.C.	28.5%
Cash/ST debt	2.1 x	N.C.	2.9 x
EBITDA/Interest	14.2x	13.4x	N.C.
Debt/capital	26.4%	N.C.	22.2%
Reported EBIT margin by segment	**1H16**	**1H15**	**2015**
Natural gas transmission	71.1%	69.2%	66.9%
LNG terminal	33.3%	37.3%	28.3%
Natural gas sales	5.4%	5.3%	1.6%
LNG processing	N.A.	N.A.	N.A.
E&P	N.A.	N.A.	N.A.

Source: Company reports

Due to the unavailability of restated financial figures for FY15 incorporating the acquisition of Kunlun Gas, some figures are not comparable (N.C.).

- **Support from PetroChina and CNPC.** As part of the SOE reforms to boost competitiveness and financial flexibility in the oil and gas sector, in December 2015, PetroChina announced a plan to integrate its wholly-owned gas distribution business (PetroChina Kunlun Gas) into Kunlun Energy with a consideration payable of CNY14.8bn. As of 1H16, Kunlun Energy had paid ~30% of this sum and had completed the acquisition. According to the company, the merger will improve synergies and operational efficiencies as well as eliminate internal competition within the PetroChina group. The transaction will increase the strategic significance of Kunlun Energy to PetroChina and CNPC. The acquisition was debt financed. Kunlun Energy's credit rating outlook is Negative (Moody's and S&P), which partly reflects the Negative Outlook on the sovereign and CNPC.

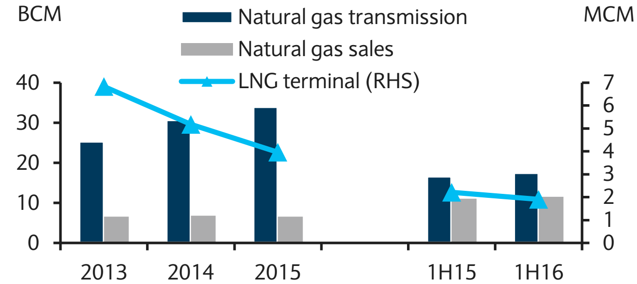
1H16 revenue by segment



Source: Company reports

Business highlights

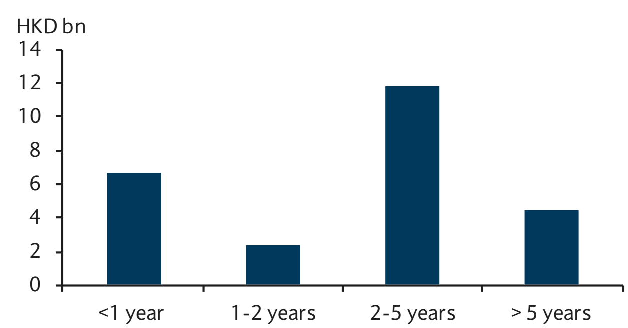
- **Market position.** With the company's Shaan-Jing Lines I, II and III, Kunlun Energy owns the main midstream gas pipeline serving Beijing, Tianjin and the Hebei region. It is also the only downstream gas pipeline operator in Beijing.
- **Demand for natural gas and LNG**



Note: Before inter-company adjustments. Source: Company reports

- **Steady growth in natural gas transmission volume.** Transmission of natural gas is increasing steadily in China, expanding by a CAGR of 15.8% during 2013-2015. Volumes increased a further 5.6% q/q in 1H16. Recent policy changes by the government have lowered gas prices, and boosted demand for natural gas and LNG. Management expects the addition of five new LNG processing plants (capacity of 9.2MCM) and the completion of the Shaanxi-Beijing Pipeline IV (scheduled for end-2017) to boost the company's LNG processing and gas transmission businesses. The 1,082km-long Shaanxi-Beijing Pipeline IV will have a transmission capacity of 25bn m^3 per year.
- **Volatility in oil and gas prices.** Kunlun Energy operates primarily midstream and downstream businesses, which are largely shielded from downturns in oil and gas prices. E&P accounted for just 2.2% of its 1H16 revenue.
- **Government aims to boost demand for gas.** According to China's Energy Development Strategy Action Plan unveiled in November 2014, the government aims to increase the share of natural gas in the country's primary energy supply to above 10% in 2020 from 5.1% in 2013. Furthermore, in April 2015, China merged its two-tier gas pricing framework ("existing" and "incremental" supplies) into a unified pricing system by increasing gas rates under "existing supply" and reducing the rates under "incremental supply."

Debt maturity profile at end-1H16



Source: Company reports

Shenzhen International/Shenzhen Expressway

Analyst
Justin Ong

Company description: Shenzhen International Holdings (SZIH, Baa2/BBB/BBB Stb) and its 50.9%-owned key subsidiary Shenzhen Expressway Company Limited (Baa2/BBB/BBB Stb) are involved in toll road operations and logistics. SZIH directly or indirectly controls 17 expressways, most of which are located in the Shenzhen region (177km of toll roads) and other areas of Guangdong Province (268km). It also operates 92km of toll roads in other provinces of China. SZIH's logistics business generates revenue from logistics parks, ports and services. The company's logistics parks are located in Shenzhen, Nanjing and Yantai, with a combined area of 3.85mn sqm. Additionally, the company has begun to invest in projects related to the China Urban Integrated Logistics Hub. These projects are spread across 15 major gateway cities, including Shenyang, Wuxi, Wuhan, Tianjin, Shijiazhuang, Changsha, Nanchang and Hefei, with area of 4.21mn sqm (1H15: 0.24mn sqm) under construction. SZIH's port business comprises five bulk cargo terminals with annual capacities of 50,000- 70,000-tonnes in Nanjing Xiba Port. The planned annual throughput of Nanjing Xiba Port is over 25mn tonnes. Logistics services include supply-chain management, value-chain integration and modern value-added services. The Shenzhen Municipal SASAC owns 43.9% of SZIH.

SZIHL bond (Baa3/BBB-/NR)

Bonds	Amount (mn)	Issuer
SZEXPR 2.875% $'21s	300	Shenzhen Expressway
SZIHL 4.375% $'17s	300	Shenzhen International Holdings Ltd

Financial snapshot

HKD mn	LTM 1H16	2015	2014
Revenue	7,386	6,738	6,370
Gross Profit	3,032	2,865	3,142
Gross Profit Margin	41.1%	42.5%	49.3%
EBITDA	3,935	3,605	4,109
EBITDA Margin	53.3%	53.5%	64.5%
Total Debt	11,719	13,037	15,747
Net Debt	3,470	nm	8,586
Credit Metrics			
Total Debt/EBITDA	3.0x	3.6x	3.8x
Net Debt/EBITDA	0.9x	nm	2.1x
EBITDA/Interest	2.9x	3.4x	4.2x
Debt/capital	29.3%	31.2%	37.1%
Reported operating profit by segment	**LTM 1H16**	**2015**	**2014**
Toll road	91.3%	89.3%	92.5%
Logistics business	8.7%	10.7%	7.5%
- Logistics parks	6.1%	7.7%	5.6%
-Logistics services	0.4%	0.6%	0.6%
-Port	2.2%	2.4%	1.4%

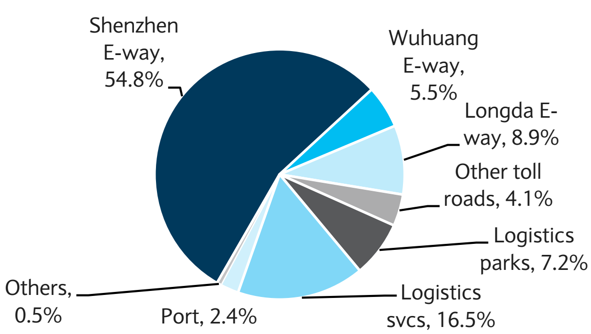
Source: Company reports

Business highlights

- **Toll road operations located in one of the most developed provinces in China:** About 80.3% of the company's toll road highways are in Guangdong province, which is the largest province in China in terms of GDP (2015). Shenzhen is the fourth-largest city in China in terms of GDP (2015). The city also has the highest passenger traffic density in China and has one of the highest rates of private vehicle ownership, with more than 2.5mn vehicles as of 2013. Private cars accounted for 75% of total traffic volume in the expressways operated by SZIH.
- **Largest toll road operator in Shenzhen**, with a 50.9%% stake in Shenzhen Expressway Company Limited (SZEC). Expressways constructed and operated by SZEC account for 75% of the total expressways in Shenzhen. Average daily traffic volume on the company's roads increased by 11-36% y/y in 1H16, while average daily toll revenue increased by 2-8% y/y (Jihe East saw a 5% y/y fall due to the road being closed for a period of maintenance).
- **Recurring revenue from toll roads, with long concession periods.** Revenue from toll road operations accounted for over 70% of total revenue during 2012-15, and for 78% in 1H16 (1H15: 74%). Almost all of the company's toll roads have remaining concession periods ranging from 10 to 20 years.

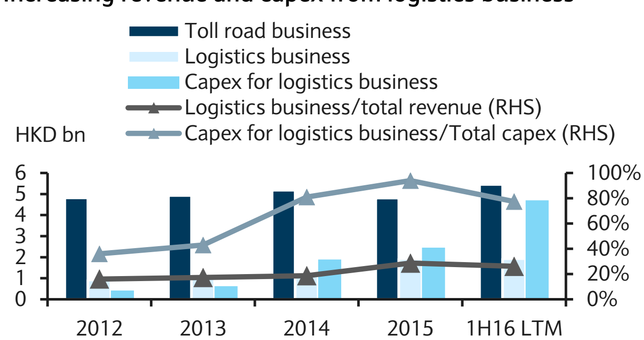
  Capex needs for logistics business and Outer Ring Road Expressway project. Revenue from the logistics business has been increasing due to strong demand for warehouses and increasing cargo terminal capacity at the Nanjing port. The average occupancy rate at the logistics parks improved to 97% in 1H16 (1H15: 94%). Because of the significant investments in Meilin Checkpoint Urban Renewal Project and China Urban Integrated Logistics Hub, capex increased by more than 3x to HKD5.2bn in 1H16. SZIH guided its capex at ~HKD8.0bn for 2016 (nearly double of 2015) mainly due to investments in logistics business, especially, China Urban Integrated Logistics Hub, and Outer ring road development.

LTM 1H16 revenue by operations



Source: Company reports

Increasing revenue and capex from logistics business



Source: Company reports

Sinochem Hong Kong

Analyst
Justin Ong

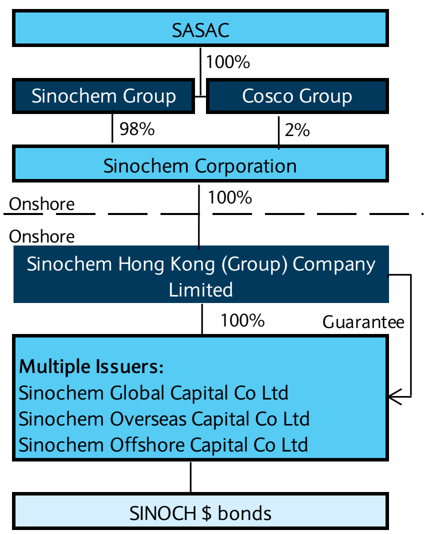
Company description: Sinochem Group (onshore parent) owns a 98% stake in Sinochem Hong Kong (Group) Company Limited (Sinochem HK, A3/A-/A- Stb) through Sinochem Corporation. Sinochem HK generally serves as Sinochem Group's main platform for its international business and offshore financing. Sinochem HK's key business segments are upstream oil and gas, fertilizer (52.65% stake in Sinofert) and real estate (62.87% stake in China Jinmao). Sinochem's upstream oil and gas segment is the fourth largest in China, with a production volume of 22.37mmboe in 2014 (relatively small compared with CNOOC Ltd's 432.5mmboe).

SINOCH bonds

Bonds	Amount (mn)	Issuer	Offshore guarantor
SINOCH 5% $ perp	*600*	Sinochem Global Capital Co Ltd	Sinochem Hong Kong (Group) Company Limited
SINOCH 4.5% $'20s	1,500	Sinochem Overseas Capital Co Ltd	
SINOCH 6.3% $'40s	500		
SINOCH 3.25% $'19s	500	Sinochem Offshore Capital Co Ltd	

SINOCH senior unsecured bonds are rated A3/A-/A-. SINOCH perps are rated Baa2/BBB by Moody's and Fitch respectively.

Bond structure



Source: Company reports, Barclays Research

Business highlights

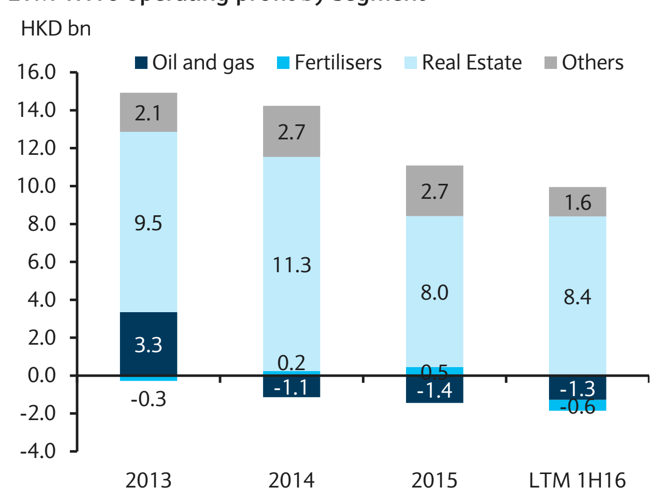
- **SOE with strategic roles in managing the nation's fertilizer reserves and growing its upstream oil and gas sector.** Sinochem HK's A3/A- ratings include a four-notch uplift at Moody's and S&P to reflect the strong support from the Chinese government via Sinochem Group. Sinochem HK generated more than c.70% of Sinochem Group's EBITDA in 1H16 LTM. The government has supported the Sinochem Group through equity injections, and the group has access to domestic bank facilities.
- **Diversified portfolio.** The oil trading, upstream production and fertilizer (Sinofert) businesses are sensitive to commodity price movements, and the property development business (China Jinmao) is cyclical. Most of the gross operating profit was derived from real estate business of China Jinmao (accounting for 65.0% - 103.7% of the overall gross operating profit during 2013 – LTM 1H16), which helped to offset operating losses at Sinochem HK's oil and gas business, and fertilizer segment.
- **Sharp decline in oil prices to impact revenue and profitability.** Sale of crude oil and petroleum products accounted for 82% of total 1H16 revenue and hence, lower oil prices can negatively impact profitability.
- **Oil and chemicals trading business.** Low but relatively stable margins, and subject to inventory writedowns during periods of sharp drops in crude oil prices.
- **Sinofert – strategic role in agricultural sector.** 52.65%-owned Sinofert is the largest fertilizer company in China, and it imports potash for domestic needs. Sinofert manages the nation's fertilizer reserves and is vulnerable to inventory write-offs when prices decline. Potash Corp of Saskatchewan (largest global potash producer, c.20% global potash capacity) owns a 22.26% stake in Sinofert.
- **International growth strategy with stakes in 36 projects in 9 countries** (net proved and probable reserves of 800mmboe at end-2015). Key international asset is its 40% stake in the Peregrino oilfield in Brazil, acquired from Statoil for USD3.07bn. In February, Sinochem was reported to be in early talks to acquire a stake in Noble Group (*Financial Times*, 14 February 2017).

Financial snapshot

HKD mn	LTM 1H16	2015	2014
Revenue	299,809	339,546	504,041
Gross Profit	20,996	22,300	28,297
Gross Profit Margin	3.5%	3.3%	2.8%
EBITDA	18,367	20,497	26,333
EBITDA Margin	6.1%	6.0%	5.2%
Total Debt	84,756	82,646	83,330
Net Debt	64,946	64,096	66,318
Credit Metrics			
Total Debt/EBITDA	9.2x	8.1x	6.3x
Net Debt/EBITDA	7.1x	6.3x	5.0x
EBITDA/Interest	2.0x	2.2x	3.2x
Debt/capital	45.3%	44.7%	44.6%

Source: Company reports, Barclays Research

LTM 1H16 operating profit by segment



Source: Company reports, Barclays Research

Tencent Holdings

Analyst
Eugene Tham

Company description: Tencent Holdings (A2 Stb/A Pos/A+ Stb) is a leading integrated internet services company in China. It ranked top across listed online gaming companies in China by 2015 revenue, with a 52.5% market share among the top 15 companies, based on iResearch estimates. At end-September 2016, the company operated the largest instant messaging community in China with c.877mn monthly active users (MAUs) on its QQ platform, and c.846mn MAU on its mobile Weixin and Wechat platforms. Value-added services, consisting mainly of online games and social network services, accounted for 73.4% of total revenues in LTM 3Q16. 17.6% of its revenue is derived from online advertising, mainly through its news and video portals. Listed in 2004 on the Hong Kong Stock Exchange, the company has a market capitalization of c.HKD1.94trn (3 February 2017).

Tencent public USD bonds (A2/A/A+)

Bonds	Amount (mn)	Issuer
TENCNT 2% $ '17s	500	
TENCNT 3.375% $ '18s	600	
TENCNT 3.375% $ '19s	2000	Tencent Holdings Ltd
TENCNT 2.875% $ '20s	1100	
TENCNT 3.8% $ '25s	900	

Financial snapshot

CNY mn	2015	2014	2013
Revenue	102,863	78,932	60,437
Gross Profit	61,232	48,059	32,659
Gross Profit Margin	59.5%	60.9%	54.0%
EBITDA	45,844	32,710	21,734
EBITDA Margin	44.6%	41.4%	36.0%
Total Debt	65,329	35,584	15,053
Net Debt/ (Cash)	(15,440)	(27,101)	(28,929)
Credit Metrics			
Total Debt/EBITDA	1.5x	1.2 x	0.8 x
Net Debt/EBITDA	n.m.	n.m.	n.m.
EBITDA/ Interest	25.5x	27.6 x	32.2 x
Total Debt/Capital	35.5%	31.8%	24.1%
MAUs* on different platforms (mn users)	**2015**	**2014**	**2013**
QQ	853	815	808
Qzone	640	629	625
Weixin/Wechat	697	500	355

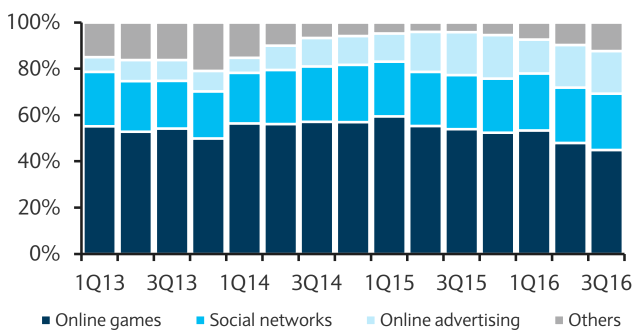
*Monthly active users at end of period.

Source: Company reports, Barclays Research

Business highlights

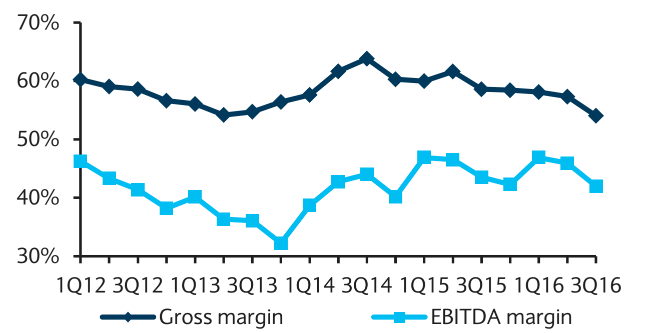
- **Solid execution track record and sound M&A strategy.** Tencent has an established record of making and integrating acquisitions in recent years. Its acquisition strategy has largely been disciplined, focusing on minority stakes in market leaders with key O2O verticals, as a result reducing execution risks while building a comprehensive O2O ecosystem around its core user platforms. Its online games business continues to grow at a double-digit pace, reflecting management's execution capability. The company has also shown a willingness to restructure businesses that are unprofitable and facing intense competition, such as its e-commerce segment, which Tencent divested in return for a minority stake and strategic agreement with online retailer JD.com.
- **Strong financial position anchored by robust liquidity.** Tencent built a strong financial profile on the back of consistent cash flow from its online games business. Average quarterly operating cash flow generated in LTM 3Q16 was c.CNY16bn. Cash (including restricted cash and short term deposits) totaled CNY95.7bn at end-Sep 2016, versus total debt of CNY92.0bn. While net cash has fallen sharply – from CNY15bn at end-2015 to CNY3.0bn at Sep 2016 – this was largely due to prepayments for its investment in Supercell.
- **Sticky user base with monetization progress.** Through its instant messaging (QQ) and mobile communication (Weixin and Wechat) platforms, Tencent has access to a huge user base. The company has made progress on monetization by introducing games and social advertising on its mobile platforms, and there remains scope for further monetization to drive future revenue growth.
- **Increasing revenue diversification.** While online games and social networks have been the cornerstone for Tencent, its earlier investments in a number of different verticals have helped improve the breadth of revenue drivers – online advertising and other businesses such as cloud and payment related services have taken an increasing share of revenue, helping drive growth.

Revenue breakdown by segment



Note: Others segment includes payment related services and cloud services as of 3Q16. Source: Company reports

Margin trends



Source: Company reports

Bonds with Keepwell Structures

Aluminum Corp of China Ltd

Analyst
Justin Ong

Company description: Aluminum Corp of China Ltd (Chalco, NR/BBB-/BBB+ Stb) is the largest producer of alumina and primary aluminum in China. Together with its subsidiaries, the group is also involved in bauxite mining, operating coal and electricity businesses, and trading nonferrous metal products. The group processes bauxite to make alumina, which together with other raw material, is used to produce primary aluminum for sale to fabrication plants. Parent company Chinalco, a central SOE, is involved in mineral resources development, the processing and smelting of nonferrous metals and other trading and engineering services. Chalco is trying to improve the integration of its aluminum operations with its energy segment. In 2013 it acquired Ningxia Energy (R&D and producer of energy products, including coal, thermal power and renewables), and has developed power plants close to its aluminum plants to increase its energy self-sufficiency. Chalco sold its loss-making aluminum fabrication assets (some alumina assets of Guizhou Aluminum Plant) and Chalco Iron Ore Holdings Ltd (Simandou iron ore project), to Chinalco for an aggregate amount of CNY21.6bn in 2013.

CHALUM bonds

Bonds	Amount (mn)	Issuer	Offshore guarantor	Keepwell provider	EIPU	Liquidity support deed
CHALUM 6.625% $ Perp NC'18s (Fitch: BBB)	350	Chalco Hong Kong Investment Co Ltd (BVI)	Chalco Hong Kong Ltd and other subsidiaries	Aluminum Corp of China Ltd (Chalco, NR/BBB-/BBB+ Stb)	Yes	No
CHALUM 4.25% $Perp NC'21s (Fitch: BBB)	500		Chalco Hong Kong Ltd			

Note: Bond credit ratings – Moody's/S&P/Fitch. NR = not rated by the agency. Source: Company reports

Financial snapshot

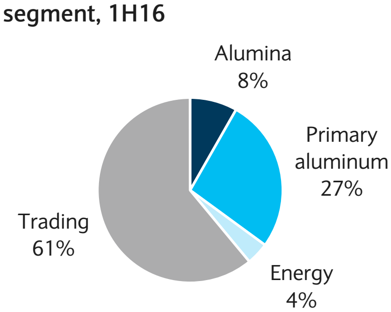
CNY mn	2015	2014	2013
Revenue	123,446	142,000	169,431
Gross Profit	2,519	671	2,751
EBITDA	7,305	2,082	6,058
EBITDA Margin	5.9%	1.5%	3.6%
Total Debt	108,149	120,128	119,643
Net Debt	87,395	103,860	108,261
Credit Metrics			
Total Debt/EBITDA	14.8 x	57.7 x	19.7 x
Net Debt/EBITDA	12.0 x	49.9 x	17.9 x
Debt/asset	57.1%	62.3%	73.1%
Revenue by geography	**2014**	**2014**	**2013**
Mainland China	98.2%	97.7%	96.5%
Outside China	1.8%	2.3%	3.5%

Source: Company reports

Business highlights

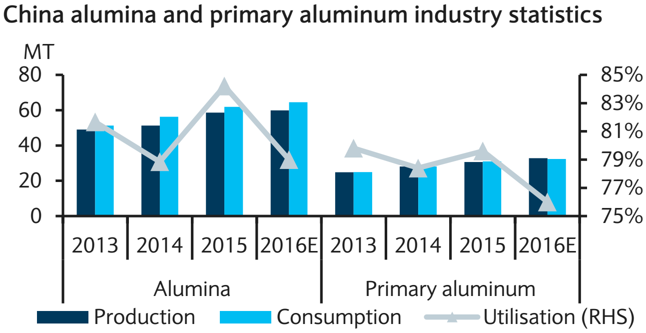
- **SOE ownership and support.** Aluminum Corp of China (Chinalco) is Chalco's single largest shareholder. Together with its subsidiaries, Chinalco's aggregate stake in Chalco was 35.77% at 30 June 2016. Chinalco is wholly owned by China's central SASAC. In the past, Chinalco has provided financial support to Chalco by acquiring the latter's non-core businesses.
- **Leading market positions and vertical integration.** Chalco has leading domestic market shares in alumina (22.8% in 2015) and primary aluminum (10.7%). Chalco has increased its self-sufficiency in bauxite – its mines accounted for c.55% of bauxite requirements in 2014-15 – and has a lower dependence on imported bauxite, at c.20%, than the domestic industry average.
- **High-cost producer.** Given its limited captive power supply, Chalco depends on electricity from the state grid, which increases its aluminum production costs. Electricity accounted for 38-43% of primary aluminum production costs in 2013-15, the most significant cost component. Recent electricity pricing reforms and construction of captive power plants have helped to lower electricity costs.
- **Price pressures in 2015 from overcapacity have eased.** Domestic alumina output rose 11% y/y in 2015 as alumina capacity built in prior years came online. Together with sluggish domestic demand, this led to pressure on prices – at one point in November 2015, Shanghai aluminum futures fell below CNY10,000/MT. Futures prices have recovered, and are now trading around CNY13,500/MT.
- **Leverage profile.** Liability/asset ratio of 72.6% at end-June 2016 versus 73.3% at end-2015, and 79.4% at end-2014.

Revenue by segment, 1H16



Note: Revenue from external customers and excluding corporate and other operating segments. Source: Company reports

China alumina and primary aluminum industry statistics



Utilization rate for 2016E is based on 1H16 utilization rates.
Source: Antaike, company reports

Baoshan Iron & Steel /China Baowu Steel Group

Analyst
Justin Ong

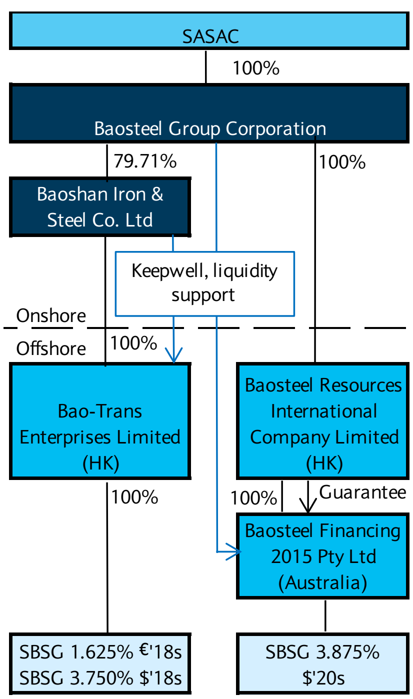
Company description: Baoshan Iron & Steel Co Ltd (Baoshan, Baa1 Neg/BBB+ Watch Neg/A- Watch Evolving) is a subsidiary of China Baowu Steel Group Corp (100% owned by China's central SASAC). Baowu (previously Baosteel Group Corp) announced a merger with Wuhan Steel Group in September 2016, which will be completed through a share swap. Baoshan specializes in the production of carbon steel products and has large market shares in hot-rolled and cold-rolled automotive steel sheets, and home appliance steel sheets. Baoshan's exports of iron and steel products generate c.12% of its revenue.

SBSG bonds

Bonds	Amount (mn)	Issuer	Offshore guarantor	Keepwell provider	EIPU	Liquidity support deed
SBSG 1.625% €'18s SBSG 3.75% $'18s (Baa2/BBB+/A-)	300 500	Bao-trans Enterprises Ltd (HK), Baa2/BBB+/A-	NA	Baoshan Iron & Steel Co Ltd (Baa1 Neg/BBB+ Watch Neg/A- Watch evolving)	No	Yes
BAORES 3.875% $ '20s (Baa2/BBB/A-)	500	Baosteel Financing 2015 Pty Ltd (Australia), Baa2/BBB/A-	Baosteel Resources International Co Ltd (HK)	China Baowu Steel Group Corp (Baa1 Neg /BBB+ Watch Neg/A- Watch evolving)	No	Yes

Note: Bond credit ratings – Moody's/S&P/Fitch. Source: Company reports

Structure chart

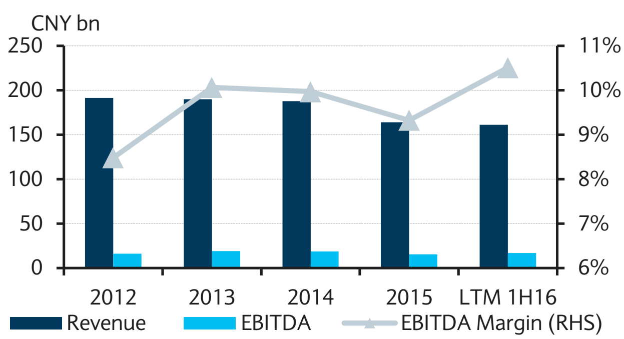


Source: Company reports

Business highlights

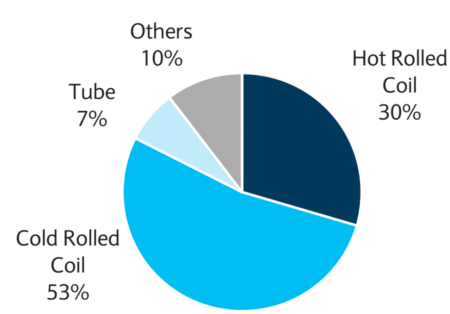
- **Parent support.** Baoshan's two-notch ratings uplift at Moody's and three-notch uplift at S&P reflect expected support from parent Baosteel. In addition, Baosteel has acquired loss-making businesses from Baoshan in the past.
- **Bao-Trans Enterprises (HK)** is the primary offshore procurement and financing platform of Baoshan. Bao-Trans is also involved in iron ore trading, financing for iron ore trading and freight services. This entity is rated Baa2/A-/A-; the one-notch lower rating at Moody's (compared with Baoshan's Baa1 rating) is due to the absence of a guarantee from Baoshan to Bao-Trans.
- **Baosteel Resources International Company Limited (HK)** is Baosteel Group Corp's second-largest subsidiary. It is involved in resources development and the international trading of iron ore and other raw materials. Its credit ratings are Baa2/BBB/A-; Moody's rated it one notch lower than Baosteel Group to reflect the absence of a guarantee from the onshore parent.
- **Merger with Wuhan Iron & Steel could strengthen market position, but raise leverage and weaken profitability.** The rating agencies expect increased market share, given that Baosteel Group and Wuhan Iron & Steel Group are among the top five steelmakers in China. In addition, industry consolidation is likely to continue as smaller, inefficient steel mills close. On the other hand, the agencies expect synergies from the integration to take time to play out, and Wuhan Iron & Steel has higher debt and lower profitability than Baosteel.

Revenue and EBITDA– Baoshan Iron & Steel Co Ltd



Source: Company reports

Baoshan's 1H16 iron & steel segment revenue by product



Source: Company reports

Beijing Infrastructure Investment

Analyst
Justin Ong

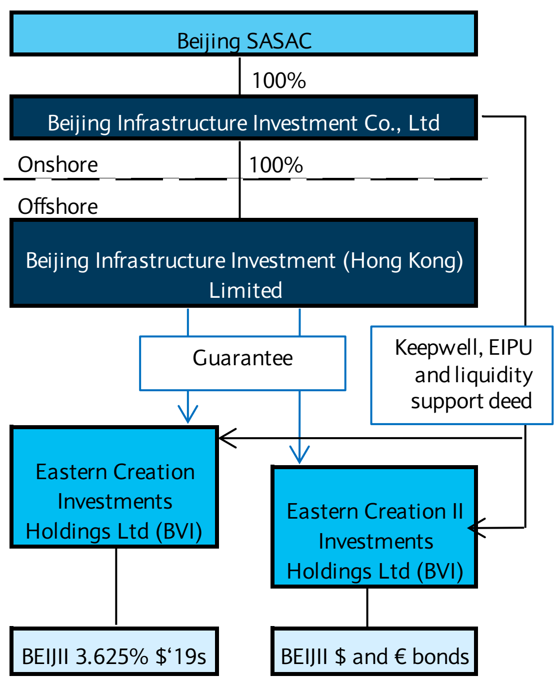
Company description: Beijing Infrastructure Investment (BII, A1 Neg/A+ Stb/A+ Stb) is the investment and financing platform for the Beijing subway. Its three business segments are: 1) urban infrastructure investment, construction and operation (railway transport); 2) resource development (land and real estate development); and 3) equity investments (eg, railway transit, finance, other urban infrastructure construction, and equipment-based financial leasing). The Beijing subway network comprises 18 interconnecting lines with 553.8km of subway track as of 2015. BII operates 15 of the 18 lines. Land and real estate development generally involves residential and commercial properties above or adjacent to the railway lines or railway facilities; the additional income helps support the construction of railway projects. 9M16 revenue was CNY8.6bn, of which fare revenue accounted for 66% (FY15: 30%).

BEIJII bonds

Bonds	Amount (mn)	Issuer	Offshore guarantor	Keepwell provider	EIPU	Liquidity support deed
BEIJII 3.625% $'19s	300	Eastern Creation Investment Holdings Ltd (BVI)	Beijing Infrastructure Investment (Hong Kong) Ltd(NR/A/NR)	Beijing Infrastructure Investment Co Ltd (A1 Neg/A+/A+ Stb)	Yes	Yes
BEIJII 2.625% $'17s	925	Eastern Creation II Investment Holdings (BVI)				
BEIJII 3.25% $ '20s	300					
BEIJII 1.000% €'18s	500					
BEIJII 1.500% €'19s	600					

Note: Bond credit ratings (A2/A/A+) – Moody's/S&P/Fitch. Source: Company reports

Structure chart

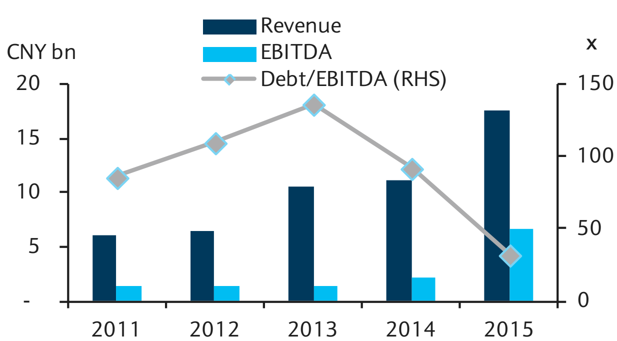


Source: Company reports

Business highlights

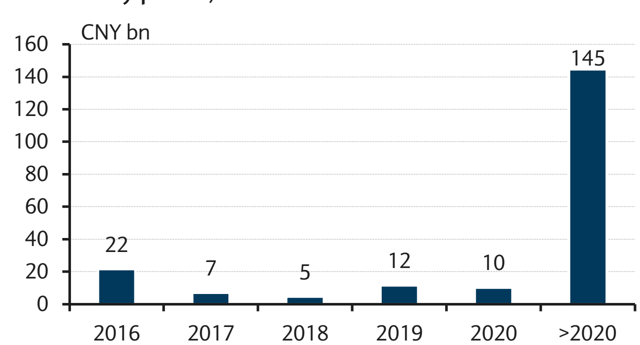
- **Strategic importance.** The Beijing municipal government closely monitors BII's financing and debt level, allocating funds to BII on an annual basis. Its rail network development also needs approval from the NDRC. The municipal government's fund allocation typically covers c.40% of BII's financing requirements for its urban railway projects, and is committed to provide CNY29.5bn a year in capital grants during 2016-45, according to Fitch.
- **Monopolistic control in Beijing metro operations.** BII is the sole investment and financing platform for metro operations of the Beijing municipal government. The company's market share in urban rail transit in Beijing is over 85%, and it accounted for 47% of Beijing's public transport in 2015.
- **Changes in fare mechanism are supportive.** At end-2014, BII shifted to a distance-based fare model from a flat fare structure. This resulted in revenue nearly doubling to CNY6.5bn in 2015 (+96% y/y); however, the impact on EBITDA will be limited due to the offsetting decline in government subsidies (source: S&P).
- **Business diversification.** BII's primary land development projects follow a cost-plus-8% margin structure, as committed by Beijing's municipal government. Its property development business (through 29.8%-owned Metro Land Corp, or MCL) started pre-sales in 2014 and will continue to drive a higher contribution from the property business (2015: 49.2% of total revenue). In 2016, BII planned to operate a toll road to the new airport in the Daxing district (still pending completion), and to build and operate municipal mixed-use underground pipelines.

Revenue, EBITDA and debt



Source: Company reports, S&P

Debt maturity profile, 2015



Source: Company reports, S&P

Beijing State-Owned Assets Management

Analyst
Justin Ong

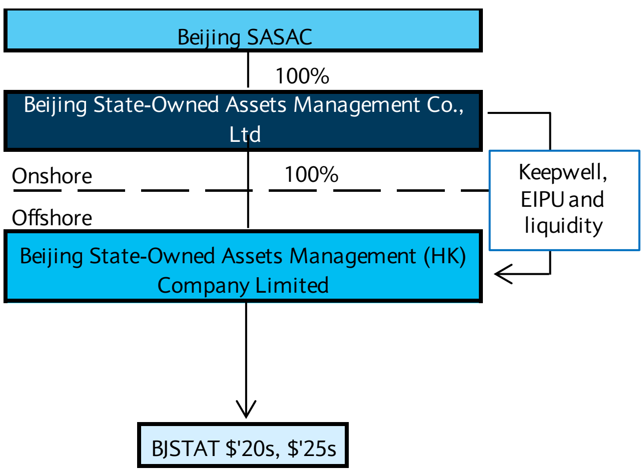
Company description: Beijing State-Owned Assets Management (BSAM, A2/A/A Stb) is an investment and financing platform wholly owned by the Beijing municipal government. BSAM is charged with helping the Beijing municipal government meet government-mandated targets and policy milestones (eg, it was involved in the construction of the 2008 Olympic venues and with hosting the 2014 APEC meetings). BSAM has four major segments: 1) financial services (equity exchange, asset management, financial leasing); 2) urban functional area development, environment protection and social services (eg, investments in Beijing Science Park, Dynagreen, Beijing CHJ-Care and Capital Healthcare); 3) technology, modern manufacturing and clean energy; and 4) culture, creative, leisure and sports.

BJSTAT bonds

Bonds	Amount (mn)	Issuer	Offshore guarantor	Keepwell provider	EIPU	Liquidity support deed
BJSTAT 3% $'20s BJSTAT 4.125% $'25s (A3/A-/A)	300 700	Beijing State-Owned Assets Management (Hong Kong) Company Limited	NA	Beijing State-Owned Assets Management Co, Ltd (BSAM. A2/A/A)	Yes	Yes

Note: Bond credit ratings – Moody's/S&P/Fitch. Source: Company reports

Structure chart

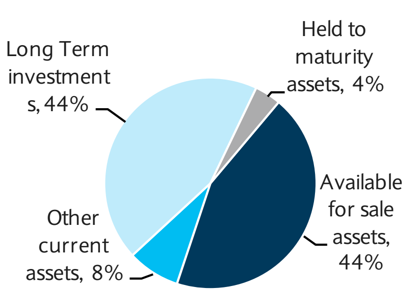


Source: Company reports

Business highlights

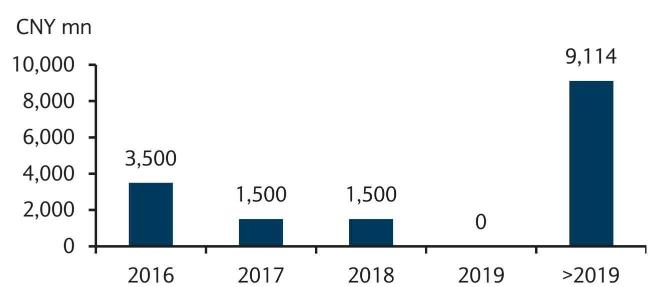
- **Ratings uplift owing to support from Beijing government.** BSAM's baseline rating at Moody's is baa3, and S&P's standalone credit profile is bb; its final A2/A ratings benefit from a four-notch uplift at Moody's and six-notch uplift at S&P. The Beijing government has provided support through capital injections (over CNY11.8bn between 2002 and 2015, according to BSAM, which accounted for 30% of its FY15 consolidated equity), land-use rights, financial/tax subsidies and supportive industry policies. The bonds' issue ratings are one-notch lower than BSAM's issuer rating due to the lack of guarantees (only keepwell agreements).
- **Invests in a diversified portfolio of companies** that operate in several industries in Beijing. At end-2015, its investment portfolio had a reported value of about CNY35.6bn. BSAM's top three investment companies, Bank of Beijing, Rural and Commercial Bank of Beijing, and Beijing Industrial Development Investment Management Co, accounted for ~40% of the book value of the investment portfolio.
- **Asset disposals.** During 2010-15, BSAM sold ~CNY17bn of its investments. The group has exited some investments (eg, BAIC Motor, BOE Technology). BSAM gradually disposed of its stake in BAIC Motor beginning in 2014 for aggregate proceeds of c.CNY4.6bn (invested amount was c.CNY1.4bn). Along with proceeds from asset sales and cash dividends from portfolio companies, BSAM uses debt to finance its investment plans.
- **Dividend policies of portfolio companies vary significantly.** Changes in dividend payments can affect BSAM. New investments may take time to generate solid cash flow, and expected returns on investments are subject to execution risks (eg, operational issues, delays, cost overruns).

Breakdown of BSAM's investment portfolio, 2015



Source: Company reports and Barclays Research

Debt maturity profile at end-2015



Source: Company reports and Barclays Research

China National Bluestar/China National Chemical Corp

Analyst
Justin Ong

Company description: China National Bluestar (Bluestar, Baa2 Neg/BBB Stb/BBB+ Watch Pos) is the largest manufacturer of specialty chemicals and materials in China, according to the company. The company operates in three main business segments. Its new chemical materials and special chemical products segment manufactures silicon products, polyurethane, rubber, and ion-exchange membrane electrolysers, used in a wide variety of industries. The nutritional science segment produces animal nutritional additives and solutions. The performance chemicals and intermediates segment includes petroleum products, organic chemicals and inorganic products, and also supplements the new chemical materials segment. Bluestar's overseas presence is reflected in sales in over 120 countries accounting for 64.5% of total revenue in 2015. China National Chemical Corp (ChemChina), wholly owned by the central SASAC, holds a 63.6% stake in Bluestar, its largest subsidiary. ChemChina is the largest chemical company in China and ranked in the top five globally by revenue (CNY260.3bn) in 2015.

CNBG bonds

Bonds	Amount (mn)	Issuer	Onshore guarantor	Keepwell provider	EIPU	Liquidity support deed
CNBG 3.500% $'18s CNBG 4.375% $'20s CNBG 4.375% $ perp (Baa3/BBB/BBB+)	500 500 500	Bluestar Finance Holdings Ltd (BVI)	China National Bluestar (Group) Co Ltd (Baa2 Neg/BBB Stb/BBB+ RWP)	China National Chemical Corp	Yes	No
CNBG 3.125% $'19s CNBG 3.500% $'21s (NR/BBB/BBB+)	500 600			NA	NA	NA

Note: Bond credit ratings – Moody's/S&P/Fitch. CNBG 4.375% $ perp is a senior NC '18 hybrid. Source: Company reports

Financial snapshot

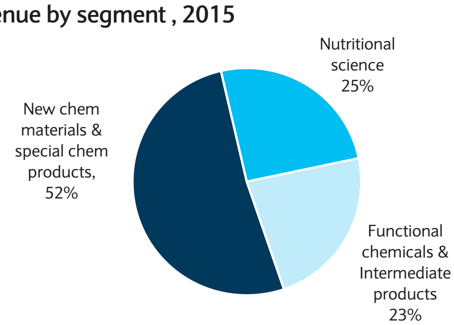
CNY mn	2015	2014	2013
Revenue	48,165	51,084	47,573
Gross Profit	12,141	9,217	7,304
EBITDA	8,953	5,911	4,472
EBITDA Margin	18.6%	11.6%	9.4%
Reported Operating Profit	3,385	166	-2,272
Total Debt	48,932	44,260	47,431
Net Debt	37,043	39,257	42,280
Total Equity	24,096	16,153	13,168
Total Assets	90,496	77,226	81,842
Credit Metrics			
Total Debt/EBITDA	5.5 x	7.5 x	10.6 x
Net Debt/EBITDA	4.1 x	6.6 x	9.5 x
EBITDA/Interest Expense	3.8 x	2.5 x	2.0 x
Total Debt/Total Capital	67.0%	73.3%	78.3%
Revenue breakdown	**2015**	**2014**	**2013**
China	36%	45%	46%
Overseas	65%	55%	54%

Source: Company reports

Business highlights

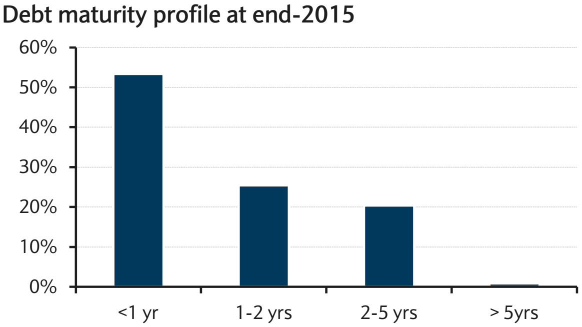
- **Leading market positions globally in product segments** including animal nutritional additives and solutions (second largest); ion-exchange membrane electrolysers (third largest); and organosilicon monomer, PPE and paste PVC resin (third-largest).
- **Global footprint.** Bluestar derived 64.5% of its 2015 revenue from overseas markets. Through acquisitions, it also owns subsidiaries with leading market positions and know-how, such as Adisseo (world's second-largest producer by sales of methionine), Elkem (providing world-class silicon manufacturing technologies), and Qenos (largest polyethylene producer in Australia).
- **Strategic importance to ChemChina and support from parent/government.** Owing to its links to ChemChina, Bluestar has received government grants, subsidies, tax benefits and favorable loan rates. ChemChina views Bluestar as a core platform – in 2015, it accounted for c.19% of ChemChina's revenue, 37% of its reported EBITDA, and 24% of its assets.
- **Importance to China's aerospace/space program.** – Bluestar is one of only two companies in China that produces advanced aerospace propellants. It has contributed to research and development of specialty materials applied to Shenzhen spaceships and Long March III rockets. Bluestar's silicones seal gum is widely used in Airbus airplanes and high-speed trains.
- **Leverage and debt maturity profile.** Net debt/EBITDA fell to 4.1x in 2015 from 6.6x in 2014 and 9.5x in 2013, following the closure of loss-making operations and an increased focus on profitable businesses. Moody's has a Negative Outlook on Bluestar's rating, on the potential weakening of parent ChemChina's credit metrics if its proposed USD43bn acquisition of Syngenta is completed.

Revenue by segment , 2015



Source: Company reports and Barclays research

Debt maturity profile at end-2015



Source: Company reports and Barclays research

China National Petroleum Corp

Analyst
Justin Ong

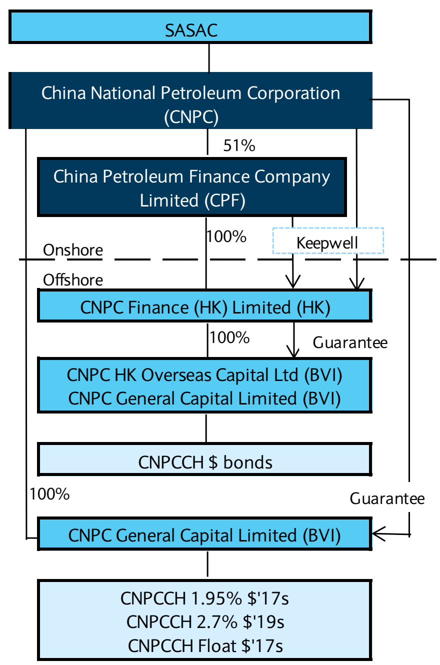
Company description: China National Petroleum Corp (CNPC, Aa3 Neg/AA- Neg/A+ Stb) is China's largest producer and supplier of oil and gas, accounting for 60% of the country's production in 2015 – 166.57mmt of crude (domestic production: 111.43mmt) and 116.67bcm of gas (domestic: 95.48bcm). In the midstream segment, CNPC's domestic pipeline network represented 76.2% of China's natural gas network, 69.8% of the crude oil network and 46.3% of the refined products network. In the downstream segment, the company sold 195.24mmt of crude (domestic: 151.32mmt), 116.25mmt of domestic refined product and 122.7bn m³ of natural gas (accounting for 68% of China's total) in 2015. CNPC also had 12 LNG plants in operations with a total capacity of 7mn m³/day and produced 560mn m³ during 2015. As of December 2015, CNPC's domestic proved oil reserves were 728.2mn tons and proved gas reserves of 570.2bn m³, which accounted for 60% of China's oil and gas reserves. CNPC's largest subsidiary, PetroChina, had a reserve life of 14.4 years as of 2015. CNPC is wholly owned by the central SASAC.

CNPCCH bonds

Bonds	Amount (mn)	Issuers	Guarantors	Keepwell provider
CNPCCH USD bonds, issued prior to November 2014 (A1/A+/A+)	6,500	CNPC HK Overseas Capital Ltd (BVI) CNPC General Capital Ltd (BVI)	CNPC Finance HK (offshore) (A1/A+/A+ Stb)	China National Petroleum Corp (Aa3/AA-/A+ Stb) China Petroleum Finance Co Ltd (CPF)
CNPCCH USD bonds, issued in November 2014 (Aa3/AA-/A+)	1,500	CNPC General Capital Ltd (BVI)	China National Petroleum Corp (onshore, Aa3/AA-/A+ Stb)	NA

Note: Different bonds ratings for CNPCCH bonds (issued prior to November 2014, and those issued in November 2014). Source: Company reports

Bond structure



Source: Company reports and Barclays research

Business highlights

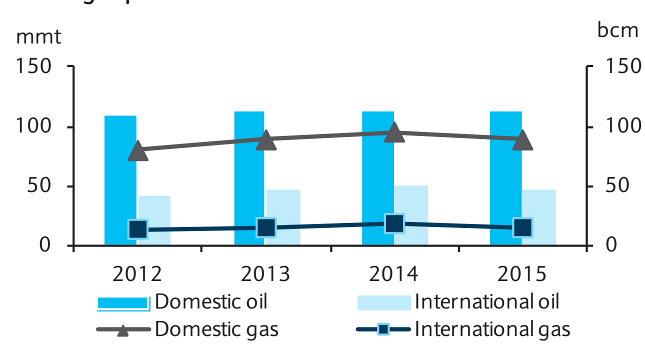
- **One of the three national oil companies.** CNPC is charged with developing and securing China's energy supplies. It had a reserve life of 12 years and a reserve/replacement ratio of more than 70%.
- **Balanced business profile reduces price-related volatility.** CNPC's 2015 revenue contribution by segment – refining and chemicals segment (33%), marketing and sales business (27%), exploration and production (26%), and natural gas and pipelines (14%). CNPC has a strong retail network, with 20,714 domestic service stations covering every province in China in 2015.
- **Key subsidiaries.** PetroChina (87% stake) and Kunlun Energy (53.9%). CNPC has a direct 3.4% stake in Kunlun Energy, which is 58.3% owned by PetroChina. CNPC's LNG operations are run through both PetroChina and Kunlun Energy.
- **Liquidity profile.** Cash balance of CNY317bn, liquid financial investments of ~CNY30bn and significant unused credit facility at end-2015 versus short-term debt maturities of ~CNY194bn.
- **Natural gas and pipeline segments supported by the government's price reforms.** CNPC's natural gas production has increased gradually and accounted for 35% of total production volume in 2015. The refining segment benefits from higher prices for better-quality domestic refined products in accordance with China V emission standards.
- **Recovery of oil prices should improve profitability.** According to Barclays forecasts, Brent will rise to USD57/bbl in 2017 and USD67/bbl in 2018, from USD45/bbl in 2016. CNPC's EBITDA margin may improve in 2017, which, coupled with cost controls, may drive moderate improvement in credit metrics.

Financial snapshot

CNY mn	2015	2014	2013
Revenue	2,016,757	2,729,956	2,759,303
EBITDA	267,446	390,012	366,524
EBITDA Margin	13.3%	14.3%	13.3%
Total Debt	479,708	465,085	507,833
Net Debt	136,935	153,005	185,458
Total equity	2,398,289	2,223,316	2,057,025
Total Assets	4,034,098	3,906,296	3,759,308
Credit Metrics			
Total Debt/EBITDA	1.8 x	1.2 x	1.4 x
Net Debt/EBITDA	0.5 x	0.4 x	0.5 x
Total Debt/Equity	20.0%	20.9%	24.7%
Total Debt/Total capital	16.7%	17.3%	19.8%

Source: Company reports and Barclays research

Oil and gas production



Source: Company reports and Barclays research

China Shenhua Energy

Analyst
Justin Ong

Company description: China Shenhua Energy Co Ltd (Shenhua, Aa3/AA-/A+ Neg) is an integrated state-owned coal company. Shenhua operates in six business segments – coal, power, railways, ports, shipping, and coal chemicals. It is the largest coal producer the world by sales volume (2015: 370.5mn tonnes), with most of its coal produced at five coal mining areas in the Inner Mongolia, Shaanxi and Shanxi provinces. As of June 2016, Shenhua's marketable coal reserves totaled 8.79bn tones, representing a reserve life of more than 25 years. At end-2015, the company also had 54,128MW of installed power generation capacity; controlled and operated 2,155km of railway trade in western Shanxi, northern Shaanxi and southern Inner Mongolia; operated ports and berths with approximately 180mn tons/year of seaborne operation capability; owned a shipping transportation team with 2.2mn tons of loading capacity; and operated 0.6mn tons/year of coal-to-olefins chemical processing business. Shenhua is 73% owned by the central SASAC through wholly government-owned Shenhua Group Corp, which was established in 1995 as an integrated energy company in China.

SHENGY bonds

Bonds	Amount (mn)	Issuer	Offshore guarantor	Keepwell provider	EIPU	Liquidity support deed
SHENGY 2.5% $'18s	500	China Shenhua Overseas Capital Co Ltd	Shenhua Hong Kong Ltd (NR/A+ Neg/NR)	China Shenhua Energy Co Ltd (Aa3/AA-/A+ Neg)	Yes	No
SHENGY 3.125% $'20s	500					
SHENGY 3.875% $'25s	500					

Note: Bond credit ratings – A1/A+/A+. Source: Company reports

Financial snapshot

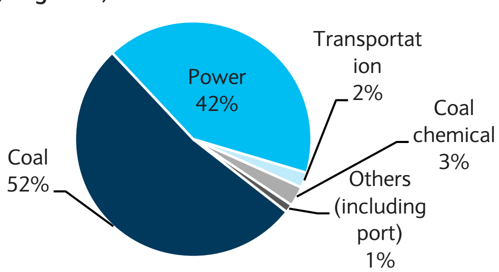
CNY mn	LTM 1H16	2015	2014
Revenue	165,791	177,069	248,360
Gross Profit	51,077	53,728	73,517
EBITDA	65,713	67,420	84,807
EBITDA Margin	39.6%	38.1%	34.1%
Total Debt	108,221	106,655	91,049
Net Debt	39,631	63,416	53,818
Total equity	372,294	363,921	361,599
Total Assets	565,447	559,791	538,897
Credit Metrics			
Total Debt/EBITDA	1.6 x	1.6 x	1.1 x
Net Debt/EBITDA	0.6 x	0.9 x	0.6 x
EBITDA/interest expense	11.9 x	11.5 x	14.8 x
Total Debt/Equity	29.1%	29.3%	25.2%
Total Debt/Total capital	22.5%	22.7%	20.1%
Gross Profit% (before inter segment eliminations)	**LTM 1H16**	**2015**	**2014**
Coal	22%	26%	40%
Power	41%	43%	31%
Railway	29%	23%	21%
Port	4%	3%	3%
Shipping	1%	0%	1%
Coal chemical	0%	2%	2%
Others	3%	3%	2%

Source: Company reports

Business highlights

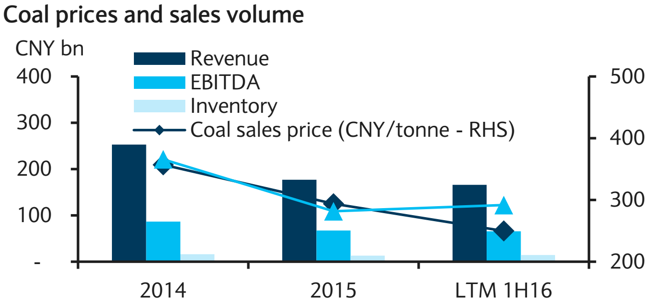
- **World's largest coal producer, with significant vertical integration.** Domestic coal sales volume accounted for 10-11% of China's consumption. The company is also the second-largest listed power generation company in China, accounting for 3.6% of the nation's installed power capacity as of 1H16, and it owns and operates the second-largest coal railway network in China. Its downstream businesses hedge exposure to coal price volatility.
- **Strategic importance.** Shenhua is Shenhua Group's main operating platform, holding most of its key assets. Shenhua has received support from the Chinese government for several key projects and was selected for pilot projects to develop advanced technologies related to ultra-low-emission power generation. As of end-1H16, 52.9% of the company's coal-fired generation capacity was ultra-low emission, up from 5.7% at end-2014.
- **Long-term contracts with SOE customers.** Shenhua supplies coal to five of the largest power-generating companies in China – China Huaneng, China Datang, China Guodian, China Huadian and China Power Investment. The term of company's contracts with most of its major customers exceeds five years.
- **Liquidity and leverage:** As of 1H16, the group had cash of CNY68.6bn compared with short-term debt of CNY12.6bn (c.11.6% of total debt). Gross debt was stable, but net debt fell as cash collection increased on reduced receivables.
- **Outlook for coal industry remains mixed.** Demand is lackluster, given the mix of slowing economic growth and preferential dispatch for renewable energy projects over coal-fired plants. Also, supply-side reforms in China are likely to continue to reduce excess capacity, and reforms to the power market could help bring coal supply/demand back into balance.

Revenue by segment, LTM 1H16



Source: Company reports

Coal prices and sales volume



Source: Company reports

Qingdao City Construction Investment

Analyst
Eugene Tham

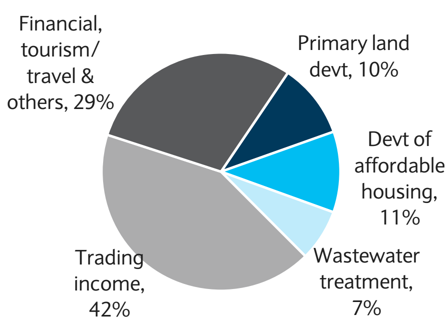
Company description: Qingdao City Construction Investment Limited (QCGI, NR/BBB/BBB+ Stb) is an investment and financing entity of the Qingdao municipal government and is wholly owned by the Qingdao SASAC. Situated on the east coast of China, Qingdao ranked 11th among 36 major cities in the country in terms of 2015 GDP (No.1 in Shandong province). QCGI's business segments are: 1) infrastructure development – a non-profit segment involved in public infrastructure development in both rural and urban areas of Qingdao; 2) primary land development – includes creation of land bank that is sold by the municipal government to potential buyers via public bidding, auction and sale-by-listing; 3) construction of affordable housing and commodity housing; 4) wastewater treatment; 5) financial services – QCGI provides credit guarantees, microfinance, finance leasing and fund management services; and 6) tourism and travel services.

QDCCIZ bonds

Bonds	Amount (mn)	Issuer	Offshore guarantor	Keepwell provider	EIPU	Liquidity support deed
QDCCIZ 4.75% $'20s QDCCIZ 5.95% $'25s QDCCIZ 4.9% $ perp	300 500	Hong Kong International (Qingdao) Company Limited (NR/BBB- Stb/NR)	–	Qingdao City Construction Investment (Group) Limited (NR/BBB/BBB+ Stb)	Yes	No

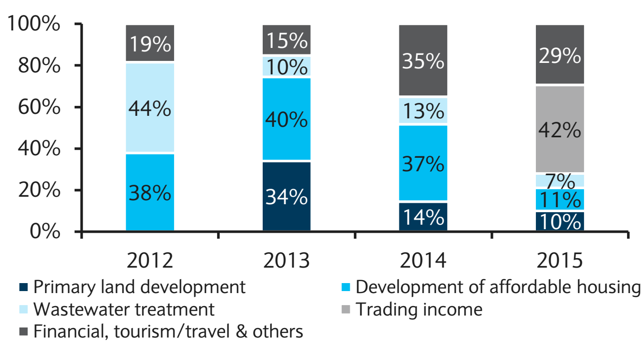
Note: Bond credit ratings – Moody's/S&P/Fitch. NR = not rated by the agency. Senior bullets are rated NR/BBB-/BBB+, while the perps are unrated. Source: Company reports

2015 revenue breakdown by segment



Source: Company reports

2012-2015 trend – growing contribution from recurring sources but in more competitive sectors



Source: Company reports

Business highlights

- **According to the "One Belt, One Road" framework** proposed by the government, Qingdao is positioned as an important connector of major cities in Asia and Europe, and the starting point of four of the five seaways that are intended to connect China with Southeast Asia, Oceania and North Africa.
- **A circular released by the State Council of China in December 2014 stated that not-for profit operations**, such as infrastructure construction, will be funded by the issuance of local government bonds instead of corporate bonds issued by local government financing platforms such as QCGI. Following the Chinese government's announcement of a CNY3.2trn debt-swap program in 2015, the Qingdao municipal government allotted QCCI a debt-swap quota of CNY1.3bn for that year and pledged to swap the remaining debt of CNY14.6bn for the municipality's own debt over the next three years. Fitch expects the swap program to lower QCCI's funding cost (2015: 6.25%).
- **Government support.** QCCI's investments accounted for ~47% of the total infrastructure development in Qingdao. The group received CNY379mn of subsidies and a CNY2.1bn capital injection from the Qingdao government in 2015.
- **Recurring income** from wastewater treatment, tourism and travel, and financial services. Although the diversification into competitive and commercial businesses provides operating cash flow to support the company capacity to take on more infrastructure projects, also it could lower its importance in key infrastructure construction projects, according to S&P.

Shanghai Huayi (Group) Co

Analyst
Justin Ong

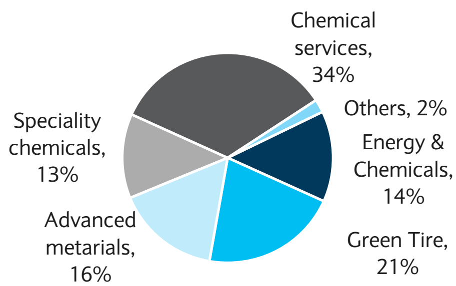
Company description: Shanghai Huayi (Group) Co (Huayi, Baa3 Neg/BBB- Neg/BBB- Stb), is one of the largest chemical manufacturers in China. The company primarily operates in five business segments: energy and chemicals (main products are methanol, ethylic acid and acetic ether, and key brands include Shangjiao and Wujing); Green Tire (primary product is all-steel radial tires, and key brands include Double Coin and Warrior); advanced materials (main products are polyvinyl chloride, fluorine polymer materials and caustic soda, and key brands include Shenfeng and 3F); specialty chemicals (chief products are coatings, paints, resins, iron and chrome pigments and paint additives, and key brands include Feihu and Yipin); and chemical services (includes chemical logistics and trade, project contracting, real estate development and property leasing management, foreign investment management and IT services. Huayi is wholly owned by the Shanghai SASAC.

HUAYI bonds

Bonds	Amount (mn)	Issuer	Offshore guarantor	Keepwell provider	EIPU	Liquidity support deed
HUAYI 4% $'19s (Ba1/BB+/BBB-)	350	Huayi Finance I Ltd	Huayi Group (HK) Ltd (NR/BB+ Neg/NR)	Shanghai Huayi (Group) Co (Baa3 Neg/BBB- Neg/BBB- Stb)	Yes	Yes

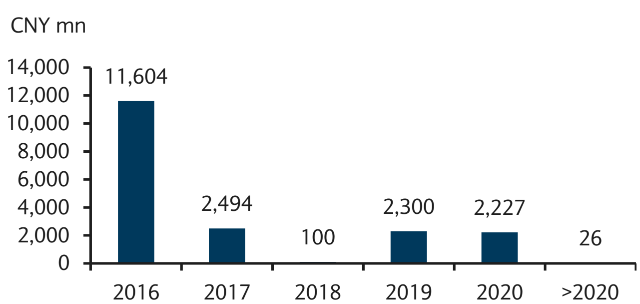
Note: Bond credit ratings – Moody's/S&P/Fitch. Source: Company reports

Revenue by segment, 2015



Source: Company reports, Moody's

Debt maturity profile, 2015



Source: Company reports, S&P

Business highlights

- **Government support.** The Shanghai municipal government provides tax incentives, capital and asset injections, and subsidies.
- **Market position.** Huayi is the leading domestic producer of many energy and chemical products, and has been in business for 50 years. It is one of the largest chemical companies in China based on LTM 1H16 revenue of CNY60bn. Huayi mostly operates integrated chemical sites located near suppliers and customers.
- International relationships. Joint ventures with DuPont (specialty chemicals) BASF, Sinopec, Huntsman, Bayer, Arkema and Michelin (passenger car tires).
- Fragmented industry that is vulnerable to price competition and prices of raw materials (eg, rubber, fluorite, coal, feedstocks). Most of Huayi's products (>90%) are commodity chemicals.
- **Large minority interest negatively affecting debt-servicing capability at holding company level.** In July 2016, Huayi announced that it will transfer a 27.6% stake in its largest subsidiary, Shanghai Huayi Group Corp Ltd (Shanghai Huayi), to Shanghai Guosheng Group (wholly owned by Shanghai SASAC) and receive no compensation. The transfer will reduce the net profit available to Huayi, thus limiting the cash available at holding company level to service debt. After the transfer, Huayi's ownership in the subsidiary reduced to 42.2%.
- **Profitability rising modestly.** Huayi's gross and EBITDA margins were 6.5% and 5.4% in 2015, given that its low-margin commodity chemicals and chemical trading businesses account for 30-40% of revenues. Prices of many chemical products have rebounded in 2016 on improving demand in Huayi's key consumer segments, including the real estate and automotive sectors. Huayi's gross margin rose to 7.5% in 9M16.
- **Credit metrics and ratings.** Huayi's total debt/EBITDA rose to 8.5x in 2015 from 5.8x in 2014. At end-9M16, the company had ~CNY9.0bn of cash and short-term investments, which was equal to about 57% of its gross debt. Huayi has significant land reserves in Shanghai as well as some idle assets, including abandoned factories, that could be sold to reduce debt. S&P and Moody's have a Negative Outlook on Huayi, citing the further weakening of credit metrics and profitability.

Tianjin Binhai New Area Construction & Investment Group

Analyst
Justin Ong

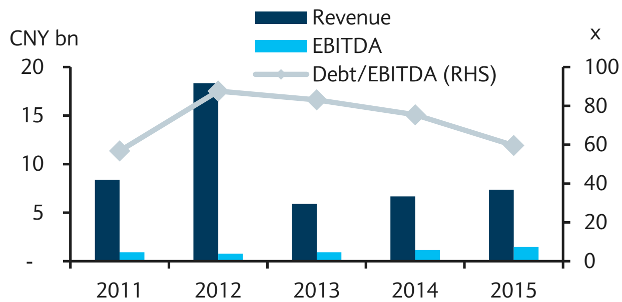
Company description: Tianjin Binhai New Area Construction & Investment Group (Tianjin Binhai, A3 Neg/A- Stb/A- Stb) is the sole investment and financing entity of New Area government, incorporated in 2006 by the Tianjin government to undertake investments in major projects in Tianjin Binhai New Area. Tianjin Binhai is wholly owned by the Tianjin SASAC and is involved in: 1) transportation infrastructure construction – includes construction and operation of municipal roads, bridges, expressways and rail transportation within the New Area; 2) civil projects – primarily senior citizen care centers, schools and nursing homes; 3) environmental protection and clean energy – mainly waste disposal, power generation and sewage treatment; 4) regional development and supporting facilities construction – involved in primary and secondary land development and real estate business; and 5) other ancillary businesses – materials trading, asset operation and management, and financial services.

BINHCO bonds

Bonds	Amount (mn)	Issuer	Offshore guarantor	Keepwell provider	EIPU	Liquidity support deed
BINHCO 3.1% $'18s BINHCO 4% $'20s (Baa1/BBB+/A-)	300 500	Zhaohai Investment (BVI) Ltd	Binhai Jiantou (Hong Kong) Development Ltd (NR/BBB+/NR)	Tianjin Binhai New Area Construction & Investment Group Co Ltd (A3 Neg/A- Stb/A- Stb)	Yes	Yes

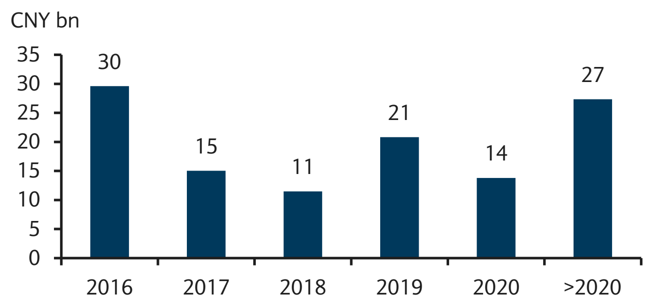
Note: Bond credit ratings – Moody's/S&P/Fitch. Source: Company reports

Revenue, EBITDA and debt



Source: Company reports, S&P

Debt maturity profile, FY15



Source: Company reports, S&P

Business highlights

- **Role in the New Area.** Tianjin Binhai is involved in construction of over 70% of the urban transportation network in the New Area. It is the district's largest expressway construction company and holds the concession (25 years from the start of operations) to operate the expressways. The company is also a major developer of the railway network in the New Area and will become its sole operator following completion (scheduled for 2020). In addition, Tianjin Binhai has the largest waste disposal and sewage treatment operations in the New Area.
- **Tinajin's ranking.** Tianjin province reported GDP per capita of USD17,334, highest among all Chinese provinces in 2015. Tianjin New Area accounted for 56% of Tianjin's GDP and 30% of its revenue. Tianjin city's GDP was the fifth highest in China in 2015. The Tianjin Free Trade Zone (located mostly within the New Area) would be the first and the largest in northern China.
- **Tianjin government support.** From 2006 to 2012, the company received ~CNY10.6bn of capital injections from the Tianjin government. It also obtained government grants of ~CNY24.5bn during 2006-15. During FY15, ~CNY3.4bn of Tianjin Binhai's debt was swapped into municipal bonds under China's debt-swap program. The company planned to swap ~CNY12-15bn of debt in FY16.
- **New Area government support:** The New Area Government fully guarantees the company's debt repayments. It will also bear any rise in construction costs incurred for infrastructure development projects. Payments to the company for transport infrastructure are part of the government's annual budget. Tianjin Binhai also receives land resources and tax benefits.
- **Significant leverage due to high capex,** exacerbated by long payback periods for infrastructure projects. As of 2015, total debt/EBITDA was 63.2x. Tianjin Binhai had ~35 contracts amounting to CNY63bn with the Binhai government, receivables of CNY41bn and CNY22bn of construction in progress. The company had cash of CNY12.9bn as of end-2015.

Analyst Certification

We, Justin Ong, Eugene Tham and Xiaoyi Wang, hereby certify (1) that the views expressed in this research report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this research report and (2) no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

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Materially Mentioned Issuers/Bonds

ALIBABA GROUP HOLDING LTD, Market Weight, CD/CE/J/K/M/N
Representative Bond: BABA 3.6 11/28/24 (USD 100.58, 06-Mar-2017)

ALUMINUM CORP OF CHINA LTD, A/CD/CE/D/J/L

BAIDU INC, Market Weight, CD/CE/J
Representative Bond: BIDU 2.25 11/28/2017 (USD 100.34, 06-Mar-2017)

BAOSHAN IRON & STEEL CO LTD, CD/J

BEIJING CAPITAL GROUP CO LTD, CD/J

BEIJING ENTERPRISES HOLDINGS LTD, Underweight, CD/J
Representative Bond: BEIENT 4 1/2 04/25/22 (USD 105.03, 06-Mar-2017)

BEIJING INFRASTRUCTURE INVESTMENT CO LTD, CD/J

BEIJING STATE-OWNED ASSETS MANAGEMENT CO LTD, CD/J

BINHAI INVESTMENT CO LTD, CD/J

BRIGHT FOOD GROUP CO LTD, A/CD/D/J/K/L/M/N

CGN New Energy Holdings Co Ltd, Market Weight, CD/D/J/L
Representative Bond: MEIPOW 4 08/19/18 (USD 101.49, 06-Mar-2017)

CHINA BAOWU STEEL GROUP CORP LTD, CD/J

CHINA COMMUNICATIONS CONSTRUCTION CO LTD, CD/D/J/L

CHINA GENERAL NUCLEAR POWER CORP, Overweight, CD/D/J/L
Representative Bond: CHGDNU 4 05/19/25 (USD 101.09, 06-Mar-2017)

CHINA MENGNIU DAIRY CO LTD, CD/J

CHINA MERCHANTS PORT HOLDINGS CO LTD, CD/J/K/M

CHINA MINMETALS CORP, A/CD/D/J/K/L/N

CHINA NATIONAL BLUESTAR GROUP CO LTD, CD/D/E/J/K/L/M/N

CHINA NATIONAL CHEMICAL CORP, CD/D/J/K/L/M/N

CHINA NATIONAL OFFSHORE OIL CORP, CD/D/J/L

CHINA NATIONAL PETROLEUM CORP, Market Weight, CD/D/J/K/L/M/N
Representative Bond: CNPCCH 3.4 04/16/23 (USD 100.59, 06-Mar-2017)

CHINA OILFIELD SERVICES LTD, Underweight, CD/D/J/L
Representative Bond: COSL 4 1/2 07/30/25 (USD 102.50, 06-Mar-2017)

CHINA OVERSEAS LAND & INVESTMENT LTD, J

CHINA PETROCHEMICAL CORP, Market Weight, CD/J
Representative Bond: SINOPE 3.9 05/17/22 (USD 103.30, 06-Mar-2017)

CHINA PETROLEUM & CHEMICAL CORP, Market Weight, CD/CE/J
Representative Bond: SINOPC 3 1/8 04/24/23 (USD 98.26, 06-Mar-2017)

CHINA RAILWAY CONSTRUCTION CORP LTD, Overweight, CD/D/E/J/K/L/M/N
Representative Bond: RLCONS 3.5 05/16/2023 (USD 100.59, 06-Mar-2017)

CHINA RAILWAY GROUP LTD, Overweight, CD/J
Representative Bond: CHRAIL 3.85 02/05/23 (USD 101.46, 06-Mar-2017)

CHINA RESOURCES GAS GROUP LTD, Market Weight, CD/J
Representative Bond: CHIRES 4 1/2 04/05/22 (USD 104.84, 06-Mar-2017)

CHINA SHENHUA ENERGY CO LTD, CD/J

CHINA STATE CONSTRUCTION ENGINEERING CORP LTD, CD/J

CHINA STATE CONSTRUCTION FINANCE CAYMAN I LTD, Market Weight, CD/J
Representative Bond: CHCONS 3.125 04/02/2018 (USD 100.49, 06-Mar-2017)

CHINA STATE CONSTRUCTION INTERNATIONAL HOLDINGS LTD, CD/J

CHINA THREE GORGES CORP, CD/J

CHINA TRAVEL SERVICE HOLDINGS HONG KONG LTD, J

CHONGQING NAN'AN URBAN CONSTRUCTION & DEVELOPMENT GROUP CO LTD, CD/J

CITIC LTD, Overweight, CD/D/J/K/L/M/N
Representative Bond: CITLTD 3.7 06/14/26 (USD 98.58, 06-Mar-2017)

CNOOC LTD, Market Weight, CD/CE/D/J/L
Representative Bond: CNOOC 3 7/8 05/02/22 (USD 103.11, 06-Mar-2017)

COFCO CORP, CD/D/E/J/K/L/M/N

COFCO HONG KONG LTD, D/E/J/K/L/M/N

ENN ENERGY HOLDINGS LTD, Market Weight, CD/J
Representative Bond: XINAOG 6 05/13/21 (USD 109.94, 06-Mar-2017)

HUAWEI INVESTMENT & HOLDING CO LTD, J/K/M/N

KUNLUN ENERGY CO LTD, CD/D/J/K/L/M/N

POWER CONSTRUCTION CORP OF CHINA, CD/D/E/J/K/L/M/N

PROVEN GLORY CAPITAL LTD, CD/J/K/M/N
HUAWEI 3 1/4 02/21/22, Market Weight (USD 99.53, 06-Mar-2017)
HUAWEI 4 02/21/27, Market Weight (USD 99.00, 06-Mar-2017)

PROVEN HONOUR CAPITAL LTD, CD/J/K/M/N
HUAWEI 4 1/8 05/06/26, Market Weight (USD 99.88, 06-Mar-2017)
HUAWEI 4 1/8 05/19/25, Market Weight (USD 100.50, 06-Mar-2017)

QINGDAO CITY CONSTRUCTION INVESTMENT GROUP CO LTD, CD/J

SHANGHAI CONSTRUCTION GROUP CO LTD, CD/J

SHANGHAI ELECTRIC GROUP CO LTD, CD/J

SHANGHAI ELECTRIC GROUP CORP, CD/J

SHANGHAI ELECTRIC POWER CO LTD, CD/J

SHANGHAI HUAYI GROUP CO, CD/J

SHENZHEN EXPRESSWAY CO LTD, CD/J

SHENZHEN INTERNATIONAL HOLDINGS LTD, CD/J

SINOCHEM CORP, CD/D/E/J/K/L/N

SINOCHEM HONG KONG GROUP CO LTD, D/E/J/K/L/N

STATE GRID CORP OF CHINA, CD/J

STATE POWER INVESTMENT CORP, CD/D/J/L

TENCENT HOLDINGS LTD, Market Weight, CD/D/J/K/L/M/N
Representative Bond: TENCNT 2 7/8 02/11/20 (USD 100.84, 06-Mar-2017)

TIANJIN BINHAI NEW AREA CONSTRUCTION & INVESTMENT GROUP CO LTD, CD/J

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For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to exceed the six-month excess return of the relevant index.
For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to exceed the six-month total return of the relevant index.

Market Weight (MW):
For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to be in line with the six-month excess return of the relevant index.
For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to be in line with the six-month total return of the relevant index.

Underweight (UW):
For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to be less than the six-month excess return of the relevant index.
For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to be less than the six-month total return of the relevant index.

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Overweight (OW): The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to exceed the six-month expected excess return of the relevant sector.
Market Weight (MW): The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to be in line with the six-month expected excess return of the relevant sector.
Underweight (UW): The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to be less than the six-month expected excess return of the relevant sector.
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Overweight (OW): The analyst expects the six-month total return of the debt security subject to this rating to exceed the six-month expected total return of the relevant sector.
Market Weight (MW): The analyst expects the six-month total return of the debt security subject to this rating to be in line with the six-month expected total return of the relevant sector.
Underweight (UW): The analyst expects the six-month total return of the rated debt security subject to this rating to be less than the six-month expected total return of the relevant sector.
Rating Suspended (RS): The rating has been suspended temporarily due to market events that make coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where the Investment Bank of Barclays Bank PLC is acting in an advisory capacity in a merger or strategic transaction involving the company.
Coverage Suspended (CS): Coverage of this issuer has been temporarily suspended.
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Overweight (OW): The analyst expects the six-month total returns of the issuer's rand-denominated fixed rate notes or floating rate notes (as applicable) to exceed the six-month expected total returns the South African Credit Fixed Market Index (CFIX95) or the South African Credit Floating Market Index (CFL020), respectively.
Market Weight (MW): The analyst expects the six-month total returns of the issuer's rand-denominated fixed rate notes or floating rate notes (as applicable) to be in line with the six-month expected total returns the South African Credit Fixed Market Index (CFIX95) or the South African Credit Floating Market Index (CFL020), respectively..
Underweight (UW): The analyst expects the six-month total returns of the issuer's rand-denominated fixed rate notes or floating rate notes (as applicable) to be below the six-month expected total returns the South African Credit Fixed Market Index (CFIX95) or the South African Credit Floating Market Index (CFL020), respectively..
Rating Suspended (RS): The rating has been suspended temporarily due to market events that make coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where the Investment Bank of Barclays Bank PLC is acting in an advisory capacity in a merger or strategic transaction involving the company.
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54% have been assigned Market Weight rating which, for purposes of mandatory regulatory disclosures, is classified as a Hold rating; 57% of bonds with this rating category are investment banking clients of the Firm; 80% of the issuers with this rating have received financial services from the Firm.
25% have been assigned an Underweight rating which, for purposes of mandatory regulatory disclosures, is classified as a Sell rating; 57% of bonds with this rating category are investment banking clients of the Firm; 75% of the issuers with this rating have received financial services from the Firm.

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Market Weight (MW):
The analyst expects the three-month excess return of the country's index eligible bonds to be in line with the three-month excess return of the Bloomberg Barclays EM USD Sovereign Index.
Underweight (UW):
The analyst expects the three-month excess return of the country's index eligible bonds to be less than the three-month excess return of the Bloomberg Barclays EM USD Sovereign Index.
Rating Suspended (RS):
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34% have been assigned Market Weight rating which, for purposes of mandatory regulatory disclosures, is classified as a Hold rating; 17% of issuers with this rating category are investment banking clients of the Firm; 92% of the issuers with this rating have received financial services from the Firm.
34% have been assigned an Underweight rating which, for purposes of mandatory regulatory disclosures, is classified as a Sell rating; 50% of issuers with this rating category are investment banking clients of the Firm; 83% of the issuers with this rating have received financial services from the Firm.

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